



■ *ISS45 Version 8 Transaction File*  
■ *Technical Reference*  
■ *Version 8.1.5.4*  
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## ISS45 V8 Transaction File Technical Reference

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|                                                      |            |
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## Overview

This document contains all the descriptions, specifications and record formats of the ISS45 v8 Transaction Files.

Transaction numbers missing from this document are either not defined for use, or are reserved for internal use only.

The document represents all the Transactions currently on the system; however, it is ongoing and there will be future updates to be added.

## General



Every POS terminal has a Transaction File and all events are recorded as Transactions. Transactions are generated by the PCs for cashier functions and inventory purposes.



The Back Office Server collects all the data from all the POS terminals, and saves it in one file. In this file all the information on the POS terminal operations are stored. For example, the Sale of an Item, Sale of Department, Discounts, Credit Card Transactions, Start and End of Shift, Reports etc.



Every Transaction made at the POS terminal sends out a type of command, which is called an Opcode. Opcode numbers are set, e.g., the Opcode number for the Sale of an Item is 01.

## Opcodes

Opcodes are the code for all operations. It is the operation performed from the start of a ticket to the end, including the in-between operations, e.g., reports. For each ticket there is a set framework, and within this framework there are 'Informative Bytes'. The transaction file is binary. A byte is a unit of data that is eight binary digits long. In one transaction there are 64 bytes. 1 byte is equal to 2 digits. Each digit is equal to 4 bits. Each bit has a purpose within the transaction. A bit can have one of two values, either 0 – where the bit is 'Not used' or 1 where the bit is 'Used'.

An Opcode has a general structure representing transactions:

```
struct trs_general_  
{  
    unsigned char Opcode;  
    unsigned char sub_opcode;  
    unsigned char data[trans_Len - 2 - sizeof (struct trans_tail_)];  
    struct trans_tail_ tail;  
}
```

### Description:

1 Byte – Opcode  
1 Byte – Sub-Opcode  
42 Bytes – Data  
20 Bytes – Tail

Total of **64** Bytes.

The first byte is represented by the Start command Opcode number 21.

The second byte is represented by the Sub Opcode functions.

The data is shown in the next 42 bytes.

The last line is the tail, which represents 20 bytes.

Every Opcode has a tail, always made up of 20 bytes. (This is explained in detail, further on.)

## Sub Opcode

A Sub Opcode is included in the structure when there are two Opcodes with similar functions. The Sub Opcode describes the function.

For example, all Opcodes with the number 0x60 are informative transactions. To differentiate between them there is a Sub Opcode with another number or alphabetic character, which describes the type of information transaction involved.



## Transaction File Reference Document

### File Number 15

|             |                        |
|-------------|------------------------|
| Name        | TRANSACT.QDX           |
| File Type   | QuickDex FIFO file     |
| Record Size | 64                     |
| Flag Offset | 63                     |
| File Size   | Dependent on disk size |

**Description** This file contains the POS transaction records information and is the main means of transferring information from the POS to the server.

All events are recorded as transactions. Transactions can be generated by the PCs for cashier functions and inventory movement purposes.

At the end of each transaction is a 20-byte tail.

## Transaction File, Tail Format

**Explanation:** At the end of every transaction is the 20-byte tail (from offset 44-64). In the tail general data specifies which POS performed the transaction, transaction version, ticket number, date, time, kind of ticket transacted, TV number, etc.

| Bytes | From | To | Data                                                         | Bits    | Explanation                                                                                                                                                                                                                                                                                                   | Remarks                                                       |
|-------|------|----|--------------------------------------------------------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|
| 1     | 0    | 1  | Seq_No2<br>(Transaction Sequential No2) 1 byte from 3 bytes. |         | The seq_no is built from 3 bytes. The other 2 bytes are located in offset 60.<br>For example:<br>If the POS is in SEQ=661230 (Decimal) A16EE:<br>The field seq_no with 2 bytes will contain the value 5870 (Decimal) 16EE (HEX)<br>The field seq_no2 with 1 byte will contain the value 10 (Decimal) A (HEX). |                                                               |
| 1     | 1    | 2  | Flag                                                         | Bit 0   | Two PO checker sign                                                                                                                                                                                                                                                                                           | For two person operation                                      |
|       |      |    |                                                              | Bit 1   | Opt master trans                                                                                                                                                                                                                                                                                              | Master transaction of events                                  |
|       |      |    |                                                              | Bit 2   | Opt don't process                                                                                                                                                                                                                                                                                             | In QSR scenarios, when marked, don't process this transaction |
|       |      |    |                                                              | Bit 3   | Opt saved bad record                                                                                                                                                                                                                                                                                          | Retains original bad record value when necessary              |
|       |      |    |                                                              | Bit 4   | Not Used                                                                                                                                                                                                                                                                                                      |                                                               |
|       |      |    |                                                              | Bit 5   | Not Used                                                                                                                                                                                                                                                                                                      |                                                               |
|       |      |    |                                                              | Bit 6   | Not Used                                                                                                                                                                                                                                                                                                      |                                                               |
|       |      |    |                                                              | Bit 7   | Not Used                                                                                                                                                                                                                                                                                                      |                                                               |
| 1     | 2    | 3  | External POS Number                                          |         |                                                                                                                                                                                                                                                                                                               |                                                               |
| 1     | 3    | 4  | Flag Options:                                                | bit 0-3 | External device number                                                                                                                                                                                                                                                                                        | Came from self scanning                                       |
|       |      |    |                                                              | bit 4   | Quick POS terminal                                                                                                                                                                                                                                                                                            |                                                               |
|       |      |    |                                                              | bit 5   | Docking POS terminals                                                                                                                                                                                                                                                                                         |                                                               |
|       |      |    |                                                              | bit 6   | Scanpoint Item POS terminal                                                                                                                                                                                                                                                                                   |                                                               |
|       |      |    |                                                              | bit 7   | Skip Transaction                                                                                                                                                                                                                                                                                              |                                                               |
| 2     | 4    | 6  | Ticket Number                                                |         |                                                                                                                                                                                                                                                                                                               |                                                               |
| 3     | 6    | 9  | Date                                                         |         | 6 Digits YYMMDD                                                                                                                                                                                                                                                                                               |                                                               |

| Bytes | From | To | Data                                                                   | Bits  | Explanation                                              | Remarks                                                                   |
|-------|------|----|------------------------------------------------------------------------|-------|----------------------------------------------------------|---------------------------------------------------------------------------|
| 3     | 9    | 12 | Time                                                                   |       | 6 Digits HHMMSS                                          |                                                                           |
| 1     | 12   | 13 | Options                                                                | bit 0 | Return Ticket                                            |                                                                           |
|       |      |    |                                                                        | bit 1 | Training Mode                                            |                                                                           |
|       |      |    |                                                                        | bit 2 | PC Generated                                             |                                                                           |
|       |      |    |                                                                        | bit 3 | POS Off-line                                             |                                                                           |
|       |      |    |                                                                        | bit 4 | Void Ticket                                              |                                                                           |
|       |      |    |                                                                        | bit 5 | Bad Record                                               |                                                                           |
|       |      |    |                                                                        | Bit 6 | Store count                                              | Store stock count<br>TRS Tesco                                            |
|       |      |    |                                                                        | bit 7 | Wastage mode                                             | Tesco                                                                     |
| 2     | 13   | 15 | Cashier Number                                                         |       |                                                          |                                                                           |
| 1     | 15   | 16 | POS Number (Hex)                                                       |       | MFS1 241<br>MFS2 242                                     |                                                                           |
| 2     | 16   | 18 | Seq_no (2 bytes from 3 bytes)                                          |       | Transaction Sequential No.                               | The Seq_No is built from 3 bytes. The third byte is located at offset 44. |
| 1     | 18   | 19 | PC_No ( 4 bits)<br>1/2b TV# + 1/2b PC#(0-15)<br>Trans version (4 bits) |       | PC Number      0-3 (0-15)<br>TV#              4-7 (0-15) | Receiving trs from POS                                                    |
| 1     | 19   | 20 | Not Used byte for QuickDex must be 0                                   |       |                                                          |                                                                           |
| 20    |      |    | Tail Total                                                             |       |                                                          |                                                                           |

## 01 – Full Line Item Record (Item Sale Transaction)

0 X 01

**Explanation:** Full line item (all PLU sales) is recorded within this command: Item Code, Quantity, Amount, Department, etc. **Note:** This opcode has the same data as opcode 0x91 used for Stock Count.

| Bytes | From | To | Data          | Bits  | Explanation           | Remarks                                            |
|-------|------|----|---------------|-------|-----------------------|----------------------------------------------------|
| 1     | 0    | 1  | Opcode No. 01 |       | 01 Full line item     |                                                    |
| 7     | 1    | 8  | Code          |       | Item Code (BCD)       |                                                    |
| 1     | 8    | 9  | Flag 1        | bit 0 | Extension record      |                                                    |
|       |      |    |               | bit 1 | Subtract              | Item was subtracted                                |
|       |      |    |               | bit 2 | Cancel                | Item was canceled                                  |
|       |      |    |               | bit 3 | Negative              | Negative item                                      |
|       |      |    |               | bit 4 | Was canceled          | Fuel item sale canceled                            |
|       |      |    |               | bit 5 | Supplier promotion    | Item flagged s being on supplier promotion         |
|       |      |    |               | bit 6 | Staff discountable    |                                                    |
|       |      |    |               | bit 7 | Accept price override |                                                    |
| 1     | 9    | 10 | Flag 2        | bit 0 | Item on Sale          |                                                    |
|       |      |    |               | bit 1 | Price Override        |                                                    |
|       |      |    |               | bit 2 | Manual Price          | Price was keyed                                    |
|       |      |    |               | bit 3 | Manual Price allowed  |                                                    |
|       |      |    |               | bit 4 | Weight from Scale     | Weight read from scale                             |
|       |      |    |               | bit 5 | Qty is weight         | Weighted item sold                                 |
|       |      |    |               | bit 6 | Qty is Decimal Qty    | Decimal quantity item (e.g. meters)                |
|       |      |    |               | bit 7 | Qty is fuel gallons   | Fuel item sold in gallons                          |
| 1     | 10   | 11 | Flag 3        | bit 0 | Chained previous item | Item was sold as a result of link to previous item |
|       |      |    |               | bit 1 | Promotion             |                                                    |
|       |      |    |               | bit 2 | Reduction             |                                                    |
|       |      |    |               | bit 3 | Offer                 |                                                    |
|       |      |    |               | bit 4 | Non Merchandise       |                                                    |
|       |      |    |               | bit 5 | Store Coupon          |                                                    |
|       |      |    |               | bit 6 | Vendor Coupon         |                                                    |
|       |      |    |               | bit 7 | Item Discount Flag    |                                                    |
| 1     | 11   | 12 | Flag 4        | bit 0 | Scanned Item          |                                                    |
|       |      |    |               | bit 1 | Read from PC          | Item read from front office                        |

## Main Opcodes

| Bytes | From | To | Data                     | Bits  | Explanation                                     | Remarks                           |
|-------|------|----|--------------------------|-------|-------------------------------------------------|-----------------------------------|
|       |      |    |                          | bit 2 | Next Info                                       | An informative record follows     |
|       |      |    |                          | bit 3 | Non Rx                                          |                                   |
|       |      |    |                          | bit 4 | External Promotion                              | Item on member promotion          |
|       |      |    |                          | bit 5 | Price Embedded                                  |                                   |
|       |      |    |                          | bit 6 | FF drags modifier                               | Coffee-shop great 8 item          |
|       |      |    |                          | bit 7 | Opt WIC CVV                                     |                                   |
| 1     | 12   | 13 | Flag 5                   |       |                                                 |                                   |
|       |      |    |                          | bit 0 | Offer Discount                                  | 03 will follow                    |
|       |      |    |                          | bit 1 | Offer Continue                                  | Continuation offer                |
|       |      |    |                          | bit 2 | Offer First                                     | 01 & 03 will follow               |
|       |      |    |                          | bit 3 | Manual Tare Weight                              |                                   |
|       |      |    |                          | bit 4 | Return 2 Stock                                  | Tesco taken from return structure |
|       |      |    |                          | bit 5 | Cost Plus                                       | Cost Plus Item                    |
|       |      |    |                          | bit 6 | Freq. Shopper Discount                          | FS discount given                 |
|       |      |    |                          | bit 7 | FS Payment                                      | Payment by food stamps allowed    |
| 2     | 13   | 15 | Department Number        |       |                                                 |                                   |
| 1     | 15   | 16 | Multi Sell Unit          |       | Multi Sell Unit                                 |                                   |
| 1     | 16   | 17 | Return type              |       | Return type number                              |                                   |
| 1     | 17   | 18 | Tax Pointer              |       | Tax flags                                       |                                   |
| 4     | 18   | 22 | Qty                      |       | Quantity sold                                   |                                   |
| 4     | 22   | 26 | Price                    |       | Item price                                      |                                   |
| 4     | 26   | 30 | Amount                   |       | Amount received for this item                   |                                   |
| 4     | 30   | 34 | No Tax Price             |       |                                                 |                                   |
| 4     | 34   | 38 | No Tax Amount            |       |                                                 |                                   |
| 4     | 38   | 42 | Return Surcharge Percent |       |                                                 |                                   |
| 1     | 42   | 43 | Product Code             |       | Used in Fuel Receipts to report to Fuel Company | Tesco: taken from department      |
| 1     | 43   | 44 | Flags                    |       |                                                 |                                   |
|       |      |    |                          | Bit 0 | Opt RSS item sale                               |                                   |
|       |      |    |                          | Bit 1 | Markdown                                        | Markdown given on this item       |
|       |      |    |                          | Bit 2 | Member discount                                 | Members as frequent               |

## Main Opcodes

| Bytes | From | To | Data  | Bits  | Explanation                | Remarks                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-------|------|----|-------|-------|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|       |      |    |       |       |                            | shopper, discount given.                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|       |      |    |       | Bit 3 | Bottle Deposit             | Bottle deposit/refund                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|       |      |    |       | Bit 4 | Bottle Refund              | Bottle deposit/refund                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|       |      |    |       | Bit 5 | RX                         | Legal requirements for USA, bit for prescription items. The basic requirement is to track the healthcare items at the item and department levels. A regulatory change came in January 01, 2008 that forced this change on retailers if they were to support a specific credit card that is used for healthcare type items. Part of the requirement is that the retailer can be audited. These bits identify the items as Rx or non-Rx for the audit/data storage purposes. |
|       |      |    |       | Bit 6 | Limited Quantity Promotion | A's Limited quantity promotion (ROW)                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|       |      |    |       | Bit 7 | Quantity case              | Case Item Sale                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 20    | 44   | 64 | Tail  |       |                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 64    |      |    | TOTAL |       |                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

## 02 – Department Sale

0 X 02

**Explanation:** Department Sales are recorded when a sale is made from a Department. The transaction sends the data from the POS specifying the Department Number, Amounts and Quantities, etc.

| Bytes | From | To | Data              | Bits  | Explanation                   | Remarks                                            |
|-------|------|----|-------------------|-------|-------------------------------|----------------------------------------------------|
| 1     | 0    | 1  | Opcode            |       | Department Sales              |                                                    |
| 2     | 1    | 3  | Department Number |       |                               |                                                    |
| 1     | 3    | 4  | Flag 1            | bit 0 | Extension record              | TRS 0x12                                           |
|       |      |    |                   | bit 1 | Subtract                      | Was subtracted                                     |
|       |      |    |                   | bit 2 | Cancel                        | Was canceled                                       |
|       |      |    |                   | bit 3 | Negative                      | Negative item                                      |
|       |      |    |                   | bit 4 | Was Canceled                  | Fuel item sale canceled                            |
|       |      |    |                   | bit 5 | Bottle deposit /refund        | Bottle Deposit/Refund                              |
|       |      |    |                   | bit 6 | Bottle deposit/refund         | Bottle Deposit/Refund                              |
|       |      |    |                   | bit 7 | Not Used                      | Pharmacy Script                                    |
| 1     | 4    | 5  | Flag 2            | bit 0 | Not found sale                | Sold after item was not found                      |
|       |      |    |                   | bit 1 | Price Override                |                                                    |
|       |      |    |                   | bit 2 | Manual Price                  | Price was keyed                                    |
|       |      |    |                   | bit 3 | Manual Price allowed for item |                                                    |
|       |      |    |                   | bit 4 | Weight from Scale             | No manual weight entry                             |
|       |      |    |                   | bit 5 | Qty is Weight                 | Weighted item is sold                              |
|       |      |    |                   | bit 6 | Qty is Decimal Qty            | Decimal quantity item                              |
|       |      |    |                   | bit 7 | Qty is Fuel Gallons           | Fuel item sold in gallons                          |
| 1     | 5    | 6  | Flag 3            | bit 0 | Chained previous item         | Item was sold as a result of link to previous item |
|       |      |    |                   | bit 1 | Cost Plus                     | Cost plus                                          |
|       |      |    |                   | bit 2 | Promotion                     | Item promotion flag                                |
|       |      |    |                   | bit 3 | Non Merchandise               | Non merchandize Dep.                               |
|       |      |    |                   | bit 4 | Store Coupon                  | Store Coupon Dep.                                  |
|       |      |    |                   | bit 5 | Vendor Coupon                 | Vendor Coupon Dep.                                 |
|       |      |    |                   | bit 6 | Department Discount Flag      | Discount allowed for this Dep.                     |
|       |      |    |                   | bit 7 | FS payment                    | Payment by food stamps allowed                     |

## Main Opcodes

| Bytes | From | To | Data                          | Bits  | Explanation                       | Remarks                                                                                                                                                                                                                                                                                                                                                                            |
|-------|------|----|-------------------------------|-------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1     | 6    | 7  | Flag 4                        | bit 0 | Cost Plus item                    |                                                                                                                                                                                                                                                                                                                                                                                    |
|       |      |    |                               | bit 1 | External Promotion                | Item on member promotion                                                                                                                                                                                                                                                                                                                                                           |
|       |      |    |                               | bit 2 | Staff discountable                | Staff discounts allowed                                                                                                                                                                                                                                                                                                                                                            |
|       |      |    |                               | bit 3 | Counter department                | (TESCO)                                                                                                                                                                                                                                                                                                                                                                            |
|       |      |    |                               | bit 4 | Don't display weight and quantity |                                                                                                                                                                                                                                                                                                                                                                                    |
|       |      |    |                               | bit 5 | Fee                               | (TESCO) Service fee                                                                                                                                                                                                                                                                                                                                                                |
|       |      |    |                               | bit 6 | Refund department                 |                                                                                                                                                                                                                                                                                                                                                                                    |
|       |      |    |                               | bit 7 | Department additional data        |                                                                                                                                                                                                                                                                                                                                                                                    |
| 1     | 7    | 8  | Return Type                   |       |                                   |                                                                                                                                                                                                                                                                                                                                                                                    |
| 1     | 8    | 9  | Tax Pointer                   |       |                                   | Tax flags                                                                                                                                                                                                                                                                                                                                                                          |
| 1     | 9    | 10 | Product Code                  |       | ISS45 Fuel Sale                   | (Tesco, taken from dept.)                                                                                                                                                                                                                                                                                                                                                          |
| 1     | 10   | 11 | Pre Pay Pump Number           |       | POS Pump Pre-Pay                  |                                                                                                                                                                                                                                                                                                                                                                                    |
| 4     | 11   | 15 | Cancelled Pre Pay Sync Number |       | POS Pump Pre-Pay                  |                                                                                                                                                                                                                                                                                                                                                                                    |
| 1     | 15   | 16 | Flags                         | Bit 0 | Surcharge                         | Indicates Surcharge Department                                                                                                                                                                                                                                                                                                                                                     |
|       |      |    |                               | Bit 1 | Delivery Charge                   | Indicates Delivery Charge Department Sale                                                                                                                                                                                                                                                                                                                                          |
|       |      |    |                               | Bit 2 | Info                              | FS1866 DEP Sale apportionment (info flag).                                                                                                                                                                                                                                                                                                                                         |
|       |      |    |                               | Bit 3 | Charge Amount per Tax Calculation | Indicate dep sell apportionments trans (#10194)                                                                                                                                                                                                                                                                                                                                    |
|       |      |    |                               | Bit 4 | Markdown                          |                                                                                                                                                                                                                                                                                                                                                                                    |
|       |      |    |                               | Bit 5 | RX                                | FSA Legal requirements for USA, bit for prescription items. The basic requirement is to track the healthcare items at the item and department levels. A regulatory change came in January 01, 2008 that forced this change on retailers if they were to support a specific credit card that is used for healthcare type items. Part of the requirement is that the retailer can be |



| Bytes | From | To | Data                        | Bits  | Explanation                | Remarks                                                                                     |
|-------|------|----|-----------------------------|-------|----------------------------|---------------------------------------------------------------------------------------------|
|       |      |    |                             |       |                            | audited. These bits identify the items as Rx or non-Rx for the audit/data storage purposes. |
|       |      |    |                             | Bit 6 | Non RX                     |                                                                                             |
|       |      |    |                             | Bit 7 | WIC CVV                    |                                                                                             |
| 4     | 16   | 20 | Qty                         |       |                            | Quantity sold                                                                               |
| 4     | 20   | 24 | Price                       |       |                            |                                                                                             |
| 4     | 24   | 28 | Amount                      |       |                            | Amount received for this item                                                               |
| 4     | 28   | 32 | Nt_price                    |       | Tax exclusive price (ROW)  |                                                                                             |
| 4     | 32   | 36 | Nt_amount                   |       | Tax exclusive amount (ROW) |                                                                                             |
| 4     | 36   | 40 | At Qty                      |       |                            |                                                                                             |
| 4     | 40   | 44 | Return Surcharge<br>Percent |       |                            |                                                                                             |
| 20    | 44   | 64 | Tail                        |       |                            |                                                                                             |
| 64    |      |    | Total                       |       |                            |                                                                                             |

## 03 – Discount/Promotion

0 X 03

**Explanation:** Discounts are recorded when a discount is given on an item. The transaction sends the data from the POS specifying the Item Code, Department No., Type of Discount (if it was due to a promotion), and Percent etc. In addition, it is used to record extra points during a promotion.

| Bytes | From | To | Data           | Bits  | Explanation                     | Remarks                                       |
|-------|------|----|----------------|-------|---------------------------------|-----------------------------------------------|
| 1     | 0    | 1  | Opcode         |       | 03 – Discount                   |                                               |
| 7     | 1    | 8  | Item Code      |       | 14 Digits BCD                   | Item number (if discount is given to an item) |
| 2     | 8    | 10 | Department No. |       |                                 |                                               |
| 1     | 10   | 11 | Flag 1         | bit 0 | Info Transaction                | Ignore this transaction                       |
|       |      |    |                | bit 1 | Non Merchandise                 |                                               |
|       |      |    |                | bit 2 | Subtract                        | Item was subtracted                           |
|       |      |    |                | bit 3 | Cancel                          | Item was canceled                             |
|       |      |    |                | bit 4 | Negative                        | Negative item                                 |
|       |      |    |                | bit 5 | Upcharge                        | Negative discount                             |
|       |      |    |                | bit 6 | Additive                        | Additive discount                             |
|       |      |    |                | bit 7 | Delivery charges                | (was progressive)                             |
| 1     | 11   | 12 | Flag 2         | bit 0 | Manual                          | Manual discount                               |
|       |      |    |                | bit 1 | Percent                         | Percentage discount                           |
|       |      |    |                | bit 2 | Cost Plus                       | Cost plus item/department                     |
|       |      |    |                | bit 3 | FS Payment                      | Foodstampable item                            |
|       |      |    |                | bit 4 | Store Promotion                 | Not used                                      |
|       |      |    |                | bit 5 | Total Transaction Discount      | Ticket discount                               |
|       |      |    |                | bit 6 | PLU Transaction Discount        | Item discount                                 |
|       |      |    |                | bit 7 | Department Transaction Discount |                                               |
| 1     | 12   | 13 | Flag           | Bit 0 | Promotion                       | Promotion type given                          |
|       |      |    |                | Bit 1 | Reduction                       | Promotion type (reduction given)              |
|       |      |    |                | Bit 2 | Offer                           | Promotion type (offer given)                  |
|       |      |    |                | Bit 3 | Multi Saver                     |                                               |
|       |      |    |                | Bit 4 | Ext Promotion                   |                                               |
|       |      |    |                | Bit 5 | Not Net Promotion               |                                               |

## Main Opcodes

| Bytes | From | To | Data                         | Bits  | Explanation               | Remarks                                                             |
|-------|------|----|------------------------------|-------|---------------------------|---------------------------------------------------------------------|
|       |      |    |                              | Bit 6 | Member Discount           | Frequent shopper discount                                           |
|       |      |    |                              | Bit 7 | Discount Flag             | Item/department discount allowed flag. Used in cases of promotions. |
| 1     | 13   | 14 | Discount Type                |       |                           |                                                                     |
| 4     | 14   | 18 | Percent                      |       |                           |                                                                     |
| 1     | 18   | 19 | Return Type                  |       |                           |                                                                     |
| 1     | 19   | 20 | Tax Pointer or Discount Item |       |                           | Tax flags of discountable items                                     |
| 4     | 20   | 24 | Qty                          |       | Item quantity             |                                                                     |
| 4     | 24   | 28 | Price                        |       | Item price                |                                                                     |
| 4     | 28   | 32 | Amount                       |       | Discount amount           |                                                                     |
| 1     | 32   | 33 | Flag4                        |       |                           |                                                                     |
|       |      |    |                              | bit 0 | Points given as a reward  |                                                                     |
|       |      |    |                              | bit 1 | Customer Account Discount |                                                                     |
|       |      |    |                              | bit 2 | Ext Trs                   | Extended trs                                                        |
|       |      |    |                              | bit 3 | Automatic Discount        |                                                                     |
|       |      |    |                              | bit 4 | Delayed Promotion         | (Lucky)                                                             |
|       |      |    |                              | bit 5 | Report as tender          | Report discount as tender (Lucky)                                   |
|       |      |    |                              | bit 6 | Not Net FS                | Non-netted promotions/frequent shopper                              |
|       |      |    |                              | bit 7 | Staff discount            | (ROW)                                                               |
| 1     | 33   | 34 | Multiple Selling Unit (MSU)  |       |                           | Item MSU                                                            |
| 2     | 34   | 36 | Tender                       |       |                           | Tender number (Lucky)                                               |
| 4     | 36   | 40 | No Tax Amount                |       |                           |                                                                     |
| 4     | 40   | 44 | Return Surcharge Percent     |       |                           |                                                                     |
| 20    | 44   | 64 | Tail                         |       |                           |                                                                     |
| 64    |      |    | Total                        |       |                           |                                                                     |

## 04 – Media

0 X 04

**Explanation:** Media refers to the type of payment at the POS terminals. This Opcode is recorded when a payment is made at the POS terminals. The transaction records the Number, Type, Time and Day, Amounts etc.

| Bytes | From | To | Data   | Bits  | Explanation                            | Remarks                              |
|-------|------|----|--------|-------|----------------------------------------|--------------------------------------|
| 1     | 0    | 1  | Opcode |       |                                        |                                      |
| 2     | 1    | 3  | Media  |       | Tender number                          |                                      |
| 1     | 3    | 4  | Flag 1 | bit 0 | Change                                 | Change given                         |
|       |      |    |        | bit 1 | Rounding                               | Rounding done                        |
|       |      |    |        | bit 2 | Subtract                               | Tender subtracted                    |
|       |      |    |        | bit 3 | Cancel                                 | Tender canceled                      |
|       |      |    |        | bit 4 | Was Canceled                           | Fuel: tender canceled                |
|       |      |    |        | bit 5 | Return                                 | Not used                             |
|       |      |    |        | bit 6 | Given as a reward redemption           | Redemption                           |
|       |      |    |        | bit 7 | Tender Purchase                        |                                      |
| 1     | 4    | 5  | Flag 2 | bit 0 | Multi part receipt                     | Print multi part receipt             |
|       |      |    |        | bit 1 | Confirm signature                      |                                      |
|       |      |    |        | bit 2 | Charge Posting                         | Charge posting tender                |
|       |      |    |        | bit 3 | ECCA                                   | Use ECCA with this tender            |
|       |      |    |        | bit 4 | ECCA defined                           | ECCA record defined                  |
|       |      |    |        | bit 5 | Issue number Used<br>opt_issue_no_used |                                      |
|       |      |    |        | bit 6 | Accept Issue Date                      |                                      |
|       |      |    |        | bit 7 | Accept Exp. Date                       |                                      |
| 1     | 5    | 6  | Flag 3 | bit 0 | MCR Used                               | Magnetic Card Reader used            |
|       |      |    |        | bit 1 | Authorization checked                  | Authorization done                   |
|       |      |    |        | bit 2 | Not Authorized                         | Authorization not done               |
|       |      |    |        | bit 3 | Account                                | Account number field used            |
|       |      |    |        | bit 4 | EFT print data                         |                                      |
|       |      |    |        | bit 5 | Acc auth Alpha                         | Account number transaction follows   |
|       |      |    |        | bit 6 | Media_ext                              | Media extensions transaction follows |

| Bytes | From | To | Data              | Bits    | Explanation                | Remarks                              |
|-------|------|----|-------------------|---------|----------------------------|--------------------------------------|
|       |      |    |                   | bit 7   | Accept auth number         | Account number entered manually      |
| 1     | 6    | 7  | Flag 4            | bit 0   | Next Car Info              | Car info TRS follows                 |
|       |      |    |                   | bit 1   | Buyaid                     | Tender is a buy aid                  |
|       |      |    |                   | bit 2   | ECCA New                   | New ECCA record                      |
|       |      |    |                   | bit 3   | EFT Authorization          | Authorized by EFT                    |
|       |      |    |                   | bit 4   | Coupon sale                |                                      |
|       |      |    |                   | bit 5   | Next chq guarantee         | Check guarantee TRS follows          |
|       |      |    |                   | bit 6   | Cashback                   |                                      |
|       |      |    |                   | bit 7   | Reverse balancing          | Customer account purchase or payment |
| 1     | 7    | 8  | Type              |         | Tender type or Class       |                                      |
| 4     | 8    | 12 | Amount            |         | Tender amount or cash back |                                      |
| 4     | 12   | 16 | Foreign Amount    |         | Foreign currency amount    |                                      |
| 4     | 16   | 20 | Foreign Rate      |         | Foreign currency rate      |                                      |
| 2     | 20   | 22 | Issue Date        |         |                            |                                      |
| 10    | 22   | 32 | Account Number    |         |                            |                                      |
| 2     | 32   | 34 | State Code        |         | USA State Code             |                                      |
| 2     | 34   | 36 | Exp Date          |         |                            |                                      |
| 4     | 36   | 40 | Auth Number       |         |                            |                                      |
| 1     | 40   | 41 | Card Range Number |         |                            |                                      |
| 1     | 41   | 42 | Flag 5            | bits0-4 | Account length             |                                      |
|       |      |    |                   | bit 5   | Forced positive amount     |                                      |
|       |      |    |                   | bit 6   | Opt deposit from           |                                      |
|       |      |    |                   | bit 7   | Media extension 2 follows  | Media Extension 2 follows            |
| 1     | 42   | 43 | Issue Number      |         |                            |                                      |
| 1     | 43   | 44 | Count             |         | Tender count               |                                      |
| 20    | 44   | 64 | Tail              |         |                            |                                      |
| 64    |      |    | Total             |         |                            |                                      |

## 05 – Ticket Total

0 X 05

**Explanation:** Ticket total refers to the total amount displayed at the end of a transaction, and is recorded when the customer pays the amount due, sending the following fields: Ticket Number, Value, Number of Items, etc. It also specifies the type of ticket, for example, a Coupon Tender.

| Bytes | From | To | Data          | Bits  | Explanation                                   | Remarks                                           |
|-------|------|----|---------------|-------|-----------------------------------------------|---------------------------------------------------|
| 1     | 0    | 1  | Opcode        |       | 0x05 Ticket Total (End of Ticket Transaction) |                                                   |
| 1     | 1    | 2  | Flag1         | Bit 0 | Ticket Total                                  | 1 – Ticket total<br>0 – Not a ticket total<br>TRS |
|       |      |    |               | Bit 1 | Voided Ticket                                 |                                                   |
|       |      |    |               | Bit 2 | Saved Ticket                                  |                                                   |
|       |      |    |               | Bit 3 | Recalled Transaction                          |                                                   |
|       |      |    |               | Bit 4 | Drive-off (Garage)                            |                                                   |
|       |      |    |               | Bit 5 | Quick Store (Quick)                           | TESCO: Quick Terminal                             |
|       |      |    |               | Bit 6 | Info. to update PC with post Grand Total      | Grand total transaction                           |
|       |      |    |               | Bit 7 | Tender Purchase                               | Tender Purchase Ticket                            |
| 1     | 2    | 3  | Flag2         | Bit 0 | Coupon Ticket                                 | First item was a coupon                           |
|       |      |    |               | Bit 1 | Tender Ticket                                 | First item was a tender                           |
|       |      |    |               | bit 2 | IH Payment                                    | First item is IH payment                          |
|       |      |    |               | bit 3 | IH Purchase                                   | First item is IH purchase                         |
|       |      |    |               | bit 4 | op_send_to_email                              | Send ticket by email                              |
|       |      |    |               | bit 5 | Send to Q-Buster                              | Send to Q-Buster @POS                             |
|       |      |    |               | bit 6 | Not Used                                      |                                                   |
|       |      |    |               | bit 7 | Not Used                                      |                                                   |
| 2     | 3    | 5  | Ticket Number |       |                                               |                                                   |
| 4     | 5    | 9  | Tax Value     |       |                                               |                                                   |
| 2     | 9    | 11 | Items         |       | Number of items                               |                                                   |
| 4     | 11   | 15 | Amount        |       | Total ticket value                            |                                                   |
| 4     | 15   | 19 | Discount      |       | Not Used                                      |                                                   |
| 4     | 19   | 23 | Nt_Amount     |       | Not Used                                      |                                                   |
| 4     | 23   | 27 | Nt_Discount   |       | Not Used                                      |                                                   |
| 6     | 27   | 33 | Grand Total   |       | POS grand total sales value                   |                                                   |
| 1     | 33   | 34 | Return Type   |       | Return type number (if a return ticket)       |                                                   |

| Bytes | From | To | Data                              | Bits | Explanation                               | Remarks |
|-------|------|----|-----------------------------------|------|-------------------------------------------|---------|
| 4     | 34   | 38 | Food Stamp Real Payment           |      |                                           |         |
| 4     | 38   | 42 | Amount Without Electronic Coupons |      | Total amount excluding electronic coupons |         |
| 2     | 42   | 44 | Reserved                          |      |                                           |         |
| 20    | 44   | 64 | Tail                              |      |                                           |         |
| 64    |      |    | Total                             |      |                                           |         |

## 06 – Tax

0 X 06

**Explanation:** This Opcode records the taxes paid or exempted. The data recorded includes Tax Numbers, Taxable Amounts, and the actual Tax Amount, etc. The opcode also reflects reward by tender tax data. The tax data structure is the same for both opcodes 0x06 and 0x0D, but the tax calculations are based on different taxable amounts.

| Bytes | From | To | Data                       | Bits  | Explanation            | Remarks                 |
|-------|------|----|----------------------------|-------|------------------------|-------------------------|
| 1     | 0    | 1  | Opcode                     |       | Ticket Tax information |                         |
| 1     | 1    | 2  | Tax Number                 |       |                        |                         |
| 4     | 2    | 6  | Taxable Amount             |       |                        |                         |
| 4     | 6    | 10 | Tax Amount                 |       |                        |                         |
| 1     | 10   | 11 | Flag 1                     | bit 0 | Exemptible             | Tax exempt given        |
|       |      |    |                            | bit 1 | Tax Included           | GST inclusive tax       |
|       |      |    |                            | bit 2 | Not Used               |                         |
|       |      |    |                            | bit 3 | Not Used               |                         |
|       |      |    |                            | bit 4 | Not Used               |                         |
|       |      |    |                            | bit 5 | Not Used               |                         |
|       |      |    |                            | bit 6 | Not Used               |                         |
|       |      |    |                            | bit 7 | Not Used               |                         |
| 10    | 11   | 21 | Tax Exempt Number          |       |                        | 19 digits right justify |
| 4     | 21   | 25 | Food Stamp Forgive Taxable |       |                        |                         |
| 4     | 25   | 29 | Food Stamp Forgive Tax     |       |                        |                         |
| 4     | 29   | 33 | No Tax Amount              |       |                        | Not used by UK          |
| 4     | 33   | 37 | Tax Refund Amount          |       |                        |                         |
| 7     | 37   | 44 | Reserved                   |       | Not Used               |                         |
| 20    | 44   | 64 | Tail                       |       |                        |                         |
| 64    |      |    | Total                      |       |                        |                         |



## 07 – Float

0 X 07

**Explanation:** The Float is the amount of cash originally registered at the start of a shift. The data recorded includes how much money in the Float, how much money was added to the Float, the Amount, the Tender Number, POS No., etc.

| Bytes | From | To | Data              | Bits  | Explanation                                                    | Remarks |
|-------|------|----|-------------------|-------|----------------------------------------------------------------|---------|
| 1     | 0    | 1  | Opcode            |       | 07 Float                                                       |         |
| 1     | 1    | 2  | Function          |       | 01- Opening Float<br>02- Add on float<br>03- POST add on float |         |
| 4     | 2    | 6  | Amount            |       |                                                                |         |
| 2     | 6    | 8  | Count             |       |                                                                |         |
| 1     | 8    | 9  | Tender Number     |       |                                                                |         |
| 4     | 9    | 13 | Total             |       | PC generated options                                           |         |
| 1     | 13   | 14 | Flag              | bit 0 | Previous period                                                |         |
|       |      |    |                   | bit 1 | Don't update Employee record                                   |         |
|       |      |    |                   | bit 2 | Reprocess                                                      | B/O Use |
|       |      |    |                   | bit 3 | Remote                                                         | B/O Use |
|       |      |    |                   | bit 4 | Amount_int64                                                   | B/O Use |
|       |      |    |                   | bit 5 | Not Used                                                       |         |
|       |      |    |                   | bit 6 | Not Used                                                       |         |
|       |      |    |                   | bit 7 | Not Used                                                       |         |
| 1     | 14   | 15 | PC_no             |       |                                                                |         |
| 1     | 15   | 16 | POS_no            |       |                                                                |         |
| 4     | 16   | 20 | Supervisor No.    |       |                                                                | SAL54   |
| 4     | 20   | 24 | Safe Number       |       |                                                                | B/O Use |
| 8     | 24   | 32 | Amount 2          |       |                                                                | B/O Use |
| 4     | 32   | 36 | Carry Over Amount |       | Amount kept                                                    |         |
| 2     | 36   | 38 | Carry Over Count  |       | Amount kept                                                    |         |
| 6     | 38   | 44 | Not Used          |       |                                                                |         |
| 20    | 44   | 64 | Tail              |       |                                                                |         |
| 64    |      |    | Total             |       |                                                                |         |

## 08 – Coupon

0 X 08

**Explanation:** This Opcode refers to the type of Coupon Tender used. Data recorded includes Quantities, Amounts, Tender Numbers, Tender Type, Coupon Department, Name and Code, etc.

| Bytes | From | To | Data          | Bits  | Explanation                        | Remarks            |
|-------|------|----|---------------|-------|------------------------------------|--------------------|
| 1     | 0    | 1  | Opcode        |       | 08 – Coupon                        |                    |
| 1     | 1    | 2  | Flag 1        | bit 0 | Subtract                           |                    |
|       |      |    |               | bit 1 | Cancel                             |                    |
|       |      |    |               | bit 2 | Suppress Bonus Coupon              |                    |
|       |      |    |               | bit 3 | Ext coupon information transaction |                    |
|       |      |    |               | bit 4 | Department net                     |                    |
|       |      |    |               | bit 5 | Bonus Coupon followed              |                    |
|       |      |    |               | bit 6 | Cost Plus                          |                    |
|       |      |    |               | bit 7 | Chained Previous Item              |                    |
| 1     | 2    | 3  | Flag 2        | bit 0 | Store Coupon                       |                    |
|       |      |    |               | bit 1 | Vendor coupon                      |                    |
|       |      |    |               | bit 2 | Bonus coupon                       |                    |
|       |      |    |               | bit 3 | UPC5 coupon                        |                    |
|       |      |    |               | bit 4 | FS Payment                         | Food stamp payment |
|       |      |    |               | bit 5 | Discount Allowed                   |                    |
|       |      |    |               | bit 6 | Manual entered amount              |                    |
|       |      |    |               | bit 7 | Manual entered department          |                    |
| 4     | 3    | 7  | Qty           |       |                                    |                    |
| 4     | 7    | 11 | Amount        |       |                                    |                    |
| 2     | 11   | 13 | Tender Number |       |                                    |                    |
| 1     | 13   | 14 | Tender Type   |       |                                    |                    |
| 2     | 14   | 16 | Coupon Dept.  |       |                                    |                    |
| 7     | 16   | 23 | Coupon Code   |       |                                    |                    |
| 16    | 23   | 39 | Coupon Name   |       |                                    |                    |
| 1     | 39   | 40 | Tax Pointer   |       |                                    |                    |
| 2     | 40   | 42 | Minimum Qty   |       |                                    |                    |
| 2     | 42   | 44 | Plus Amount   |       |                                    |                    |
| 20    | 44   | 64 | Tail          |       |                                    |                    |
| 64    |      |    | Total         |       |                                    |                    |

## 09 – Cash Lift

0 X 09

**Explanation:** Cash Lift refers to the money taken out of the drawer. The data records Amounts, Counts, Tender Numbers, Number of POS, etc. This is the opposite process to when the Float Opcode is transacted.

| Bytes | From | To | Data                            | Bits  | Explanation                      | Remarks |
|-------|------|----|---------------------------------|-------|----------------------------------|---------|
| 1     | 0    | 1  | Opcode                          |       | 09 – Cash Lift                   |         |
| 1     | 1    | 2  | Function                        |       | 01 – Regular<br>02 – POST pickup |         |
| 4     | 2    | 6  | Amount                          |       |                                  |         |
| 2     | 6    | 8  | Count                           |       |                                  |         |
| 1     | 8    | 9  | Tender                          |       |                                  |         |
| 4     | 9    | 13 | Reserved                        |       |                                  |         |
| 1     | 13   | 14 | Flag                            |       |                                  |         |
|       |      |    |                                 | bit 0 | Previous period                  |         |
|       |      |    |                                 | bit 1 | Don't update employee record     |         |
|       |      |    |                                 | bit 2 | Reprocess                        | B/O Use |
|       |      |    |                                 | bit 3 | Remote                           |         |
|       |      |    |                                 | bit 4 | Not Used                         |         |
|       |      |    |                                 | bit 5 | Not Used                         |         |
|       |      |    |                                 | bit 6 | Not Used                         |         |
|       |      |    |                                 | bit 7 | Not Used                         |         |
| 1     | 15   | 15 | POS_no                          |       |                                  |         |
| 1     | 15   | 16 | PC_no                           |       |                                  |         |
| 4     | 16   | 20 | Supervisor<br>number for pickup |       |                                  | SAL54   |
| 2     | 20   | 22 | Cashier Number                  |       |                                  |         |
| 22    | 22   | 42 | Not Used                        |       |                                  |         |
| 20    | 44   | 64 | Tail                            |       |                                  |         |
| 64    |      |    | Total                           |       |                                  |         |

## 10 – Non-Scanned Department

0 X 10

**Explanation:** Non-Scanned Department is recorded when an item is not scanned during a sale, recording the Department Number, Options available, POS Terminal Number and Amounts.

| Bytes | From | To | Data                   | Bits | Explanation                 | Remarks |
|-------|------|----|------------------------|------|-----------------------------|---------|
| 1     | 0    | 1  | Opcode                 |      | 10 – Non-Scanned Department |         |
| 2     | 1    | 3  | Department             |      |                             |         |
| 1     | 3    | 4  | Option                 |      | Not used                    |         |
| 1     | 4    | 5  | Option 1               |      | Not used                    |         |
| 1     | 5    | 6  | POS Terminal<br>Number |      |                             |         |
| 1     | 6    | 7  | Product Code           |      |                             |         |
| 4     | 7    | 11 | Amount                 |      |                             |         |
| 33    | 11   | 44 | Not Used               |      |                             |         |
| 20    | 44   | 64 | Tail                   |      |                             |         |
| 64    |      |    | Total                  |      |                             |         |

## 11 – PLU Sale Extension Record

0 X 11

**Explanation:** The PLU Sale Extension record is the PLU sales recorded over and above the regular sales, for example, Garage sales, including Fuel Transactions, Pump, Fuel Grade, Quantities, Prices and Amounts.

| Bytes | From | To | Data                    | Bits  | Explanation                      | Remarks                                  |
|-------|------|----|-------------------------|-------|----------------------------------|------------------------------------------|
| 1     | 0    | 1  | Opcode                  |       | 11 – PLU Sale Extension Record   |                                          |
| 7     | 1    | 8  | PLU Code                |       |                                  |                                          |
| 1     | 8    | 9  | Flag 1                  |       |                                  |                                          |
|       |      |    |                         | bit 0 | Pump Test                        | Fuel pump test trs                       |
|       |      |    |                         | bit 1 | Fuel Transaction                 | Fuel transaction                         |
|       |      |    |                         | bit 2 | Recalled Transaction             | ALB Fuel/TESCO Garage. Fuel recalled trs |
|       |      |    |                         | bit 3 | Drive Off                        | ALB Fuel drive off.                      |
|       |      |    |                         | bit 4 | Prepay Transaction               | ALB Fuel pre paid trs.                   |
|       |      |    |                         | bit 5 | Post pay accepted                | Index/defect                             |
|       |      |    |                         | bit 6 | Post pay paid                    | Index/defect                             |
|       |      |    |                         | bit 7 | Manual Fuel                      |                                          |
| 1     | 9    | 10 | Flag 2                  |       |                                  |                                          |
|       |      |    |                         | bit 0 | CS Tax Comb.                     |                                          |
|       |      |    |                         | bit 1 | Self Scanning Additional Item    |                                          |
|       |      |    |                         | Bit 2 | External modify                  |                                          |
|       |      |    |                         | Bit 3 | Void sequence number             |                                          |
|       |      |    |                         | Bit 4 | Void sequence number cancel line |                                          |
|       |      |    |                         | Bit 5 | PLU price original               |                                          |
|       |      |    |                         | bit 6 | Opt Lane Hawk item               |                                          |
|       |      |    |                         | bit 7 | Not Used                         |                                          |
| 1     | 10   | 11 | Pump Number             |       |                                  |                                          |
| 1     | 11   | 12 | Fuel Grade              |       | Grade Number                     |                                          |
| 4     | 12   | 16 | Pump Transaction Number |       |                                  | Synch number                             |
| 1     | 16   | 17 | Nozzle                  |       |                                  |                                          |
| 4     | 17   | 21 | Quantity                |       |                                  | Copy of values from PLU transaction –    |

| Bytes | From | To | Data                    | Bits | Explanation                                                                          | Remarks                                     |
|-------|------|----|-------------------------|------|--------------------------------------------------------------------------------------|---------------------------------------------|
|       |      |    |                         |      |                                                                                      | needed for SQL tables,<br>not used in TESCO |
| 4     | 21   | 25 | Price                   |      |                                                                                      |                                             |
| 4     | 25   | 29 | Amount                  |      |                                                                                      |                                             |
| 4     | 29   | 33 | Fuel Display Price      |      |                                                                                      | 3 decimal digits                            |
| 4     | 33   | 37 | Amount                  |      |                                                                                      | Non GST amount                              |
| 4     | 37   | 41 | External sale<br>handle |      |                                                                                      | QSR Merge Diff                              |
| 2     | 41   | 43 | Prepay ticket no.       |      | Need to know original prepay<br>ticket number in case of<br>multiple prepay recalls. |                                             |
| 1     | 43   | 44 | Publication issue       |      |                                                                                      |                                             |
| 20    | 44   | 64 | Tail                    |      |                                                                                      |                                             |
| 64    |      |    | Total                   |      |                                                                                      |                                             |

## 12 – Department Sale Extension Record

0 X 12

**Explanation:** The Department Sale Extension Record records Department Sales over and above the regular Department Sales, for example, Garage and Fuel connected sales. The data refers to the Pump Number, Fuel Transaction, Price, Amount, Quantity, etc.

| Bytes | From | To | Data                              | Bits  | Explanation                                | Remarks                    |
|-------|------|----|-----------------------------------|-------|--------------------------------------------|----------------------------|
| 1     | 0    | 1  | Opcode                            |       | 12 – Department Sale<br>Extenuation Record |                            |
| 2     | 1    | 3  | Department<br>Number              |       |                                            |                            |
| 1     | 3    | 4  | Flag 1                            |       |                                            |                            |
|       |      |    |                                   | bit 0 | Pump Test                                  |                            |
|       |      |    |                                   | bit 1 | Fuel Transaction                           |                            |
|       |      |    |                                   | bit 2 | Recalled Transaction                       | Alb Fuel / TESCO<br>Garage |
|       |      |    |                                   | bit 3 | Current Transaction                        | TESCO Garage               |
|       |      |    |                                   | bit 4 | Drive off                                  | ALB Fuel                   |
|       |      |    |                                   | bit 5 | Self scanning additional item              |                            |
|       |      |    |                                   | bit 6 | Post pay accepted                          |                            |
|       |      |    |                                   | bit 7 | Post pay paid                              |                            |
| 1     | 4    | 5  | Flag 2                            |       |                                            |                            |
|       |      |    |                                   | bit 0 | Opt prepay transaction                     |                            |
|       |      |    |                                   | bit 1 | Opt void sequence number                   |                            |
|       |      |    |                                   | bit 2 | Opt void sequence number<br>cancel line    |                            |
|       |      |    |                                   | bit 3 | Not Used                                   |                            |
|       |      |    |                                   | bit 4 | Not Used                                   |                            |
|       |      |    |                                   | bit 5 | Not Used                                   |                            |
|       |      |    |                                   | bit 6 | Not Used                                   |                            |
|       |      |    |                                   | bit 7 | Not Used                                   |                            |
| 1     | 5    | 6  | Pump number                       |       |                                            |                            |
| 1     | 6    | 7  | Fuel Grade                        |       |                                            |                            |
| 4     | 7    | 11 | POS Pump<br>Transaction<br>Number |       |                                            |                            |
| 1     | 11   | 12 | Nozzle                            |       |                                            | Copy of values from        |

**Main Opcodes**

| Bytes | From | To | Data               | Bits | Explanation | Remarks                                                           |
|-------|------|----|--------------------|------|-------------|-------------------------------------------------------------------|
|       |      |    |                    |      |             | DEP transaction –<br>needed for SQL tables,<br>not used in TESCO. |
| 4     | 12   | 16 | Quantity           |      |             |                                                                   |
| 4     | 16   | 20 | Price              |      |             |                                                                   |
| 4     | 20   | 24 | Amount             |      |             |                                                                   |
| 4     | 24   | 28 | Fuel Display Price |      |             | (3 decimal digits)                                                |
| 16    | 28   | 44 | Reserved           |      |             |                                                                   |
| 20    | 44   | 64 | Tail               |      |             |                                                                   |
| 64    |      |    | Total              |      |             |                                                                   |



## 13 – Discount Ext

0 X 13

**Explanation:** This opcode is recorded when a discount is given on an item, and you are specifying the mark down department, from which the discount is calculated. In addition, target messages are recorded, and supported by Organized Receipt.

| Bytes | From | To | Data                 | Bits  | Explanation                                     | Remarks                                                                                                                                                                |
|-------|------|----|----------------------|-------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1     | 0    | 1  | Opcode               |       | 13 – Discount Ext.                              |                                                                                                                                                                        |
| 7     | 1    | 8  | Number               |       | Item number (if a discount is given to an item) |                                                                                                                                                                        |
| 2     | 8    | 10 | Department Number    |       |                                                 |                                                                                                                                                                        |
| 1     | 10   | 11 | Flags                |       |                                                 |                                                                                                                                                                        |
|       |      |    |                      | bit 0 | Markdown department                             | Indicates the markdown department in which the discount was given.                                                                                                     |
|       |      |    |                      | bit 1 | Not Used                                        |                                                                                                                                                                        |
|       |      |    |                      | bit 2 | Not Used                                        |                                                                                                                                                                        |
|       |      |    |                      | bit 3 | Not Used                                        |                                                                                                                                                                        |
|       |      |    |                      | bit 4 | Not Used                                        |                                                                                                                                                                        |
|       |      |    |                      | bit 5 | Not Used                                        |                                                                                                                                                                        |
|       |      |    |                      | bit 6 | Not Used                                        |                                                                                                                                                                        |
|       |      |    |                      | bit 7 | Not Used                                        |                                                                                                                                                                        |
| 2     | 11   | 13 | Message Reward Limit |       |                                                 | Reflection of the promotion's configuration.                                                                                                                           |
| 6     | 13   | 19 | Multi Reward         |       |                                                 | For target message. Code support 6 multi rewards but currently only 2 are used. If in the future more are required they could be added in another transaction.         |
| 12    | 19   | 31 | Dec Multi Reward     |       |                                                 | For target message. Code support 6 decimal multi rewards but currently only 2 are used. If in the future more are required they could be added in another transaction. |

**Main Opcodes**

| <b>Bytes</b> | <b>From</b> | <b>To</b> | <b>Data</b>     | <b>Bits</b> | <b>Explanation</b> | <b>Remarks</b>                       |
|--------------|-------------|-----------|-----------------|-------------|--------------------|--------------------------------------|
| 10           | 31          | 41        | Target Template |             |                    | The name of the target message name. |
| 3            | 41          | 44        | Not Used        |             |                    |                                      |
| 20           | 44          | 64        | Tail            |             |                    |                                      |
| 64           |             |           | Total           |             |                    |                                      |

## 14 – Media Extension Record

0 X 14

**Explanation:** The Media Extension Records are advanced details on the Media types, and records fields such as Fee Types, Media Numbers, Table Numbers, Bank Account, and Check Numbers. Flags are included defining whether the MICR is used or not, or if in a certain department, for example, the WIC Department, whether the tax is exempt or not.

| Bytes | From | To | Data                  | Bits  | Explanation           | Remarks                      |
|-------|------|----|-----------------------|-------|-----------------------|------------------------------|
| 1     | 0    | 1  | Opcode record         |       | 14 – Media extension  |                              |
| 2     | 1    | 3  | Number                |       |                       |                              |
| 1     | 3    | 4  | Fee type              |       |                       |                              |
| 1     | 4    | 5  | Table Number          |       |                       |                              |
| 1     | 5    | 6  | Flag 1                |       |                       |                              |
|       |      |    |                       | bit 0 | Tender_req_add_fee    |                              |
|       |      |    |                       | bit 1 | Fee Tender            |                              |
|       |      |    |                       | bit 2 | Payment is change     |                              |
|       |      |    |                       | bit 3 | MICR used             |                              |
|       |      |    |                       | bit 4 | WIC Tax Exempt        |                              |
|       |      |    |                       | bit 5 | Tender Correction     |                              |
|       |      |    |                       | bit 6 | Duplicate Receipt     |                              |
|       |      |    |                       | bit 7 | Barcoded tender       | Coinstar                     |
| 21    | 6    | 27 | Extension Description |       |                       |                              |
| 9     | 27   | 36 | Bank Account          |       |                       |                              |
| 6     | 36   | 42 | Check Number          |       |                       |                              |
| 1     | 42   | 43 | Flag 2                |       |                       |                              |
|       |      |    |                       | bit 0 | Deposit               |                              |
|       |      |    |                       | bit 1 | Withdrawal            |                              |
|       |      |    |                       | bit 2 | Coupon Coin Sale      |                              |
|       |      |    |                       | bit 3 | opt_bag_refund        |                              |
|       |      |    |                       | bit 4 | Cashback balance      | Cashback balance transaction |
|       |      |    |                       | bit 5 | EFT_ext               |                              |
|       |      |    |                       | bit 6 | EFT Force Transaction |                              |
|       |      |    |                       | bit 7 | Debit savings         |                              |
| 1     | 43   | 44 | Flag                  |       |                       |                              |
|       |      |    |                       | bit 0 | PIN used              |                              |
|       |      |    |                       | bit 1 | Tender rewarded       |                              |

**Main Opcodes**

| Bytes | From | To | Data  | Bits     | Explanation | Remarks |
|-------|------|----|-------|----------|-------------|---------|
|       |      |    |       | bits 2-7 | Not Used    |         |
| 20    | 44   | 64 | Tail  |          |             |         |
| 64    |      |    | Total |          |             |         |

## 15 – Media Extension Record 2

0 X 15

**Explanation:** The Media Extension Record 2 is an Opcode that records enhanced media records when transacted, including the EFT Reference and Tender Numbers. The records are additional information to those in the Media and Media Extension Records.

| Bytes | From | To | Data               | Bits  | Explanation                | Remarks                    |
|-------|------|----|--------------------|-------|----------------------------|----------------------------|
| 1     | 0    | 1  | Opcode record 2    |       | 15 – Media extension       |                            |
| 11    | 1    | 12 | Reference No.      |       | EFT Reference Number       |                            |
| 1     | 12   | 13 | Flags              |       |                            |                            |
|       |      |    |                    | Bit 0 | Enhanced MPR Voucher print |                            |
|       |      |    |                    | Bit 1 | Print Cash Balance         |                            |
|       |      |    |                    | Bit 2 | Print Food stamps Balance  |                            |
|       |      |    |                    | Bit 3 | Void Tender not allowed    |                            |
|       |      |    |                    | Bit 4 | Voucher Tender             | Return Voucher Redemption  |
|       |      |    |                    | Bit 5 | Voucher                    | Loyalty Voucher Redemption |
|       |      |    |                    | Bit 6 | Media Ext 3                |                            |
|       |      |    |                    | Bit 7 | Print Gift Card Balance    |                            |
| 2     | 13   | 15 | EFT Tender No.     |       |                            |                            |
| 8     | 15   | 23 | Settlement Date    |       |                            | Quest DDYYMM               |
| 1     | 23   | 24 | Card Type          |       |                            | Quest                      |
| 2     | 24   | 26 | Account Type       |       |                            | Quest                      |
| 2     | 26   | 28 | Transaction Type   |       |                            | Quest                      |
| 5     | 28   | 33 | Sequence Number    |       |                            |                            |
| 11    | 33   | 44 | EBT Voucher Number |       |                            |                            |
| 20    | 44   | 64 | Tail               |       |                            |                            |
| 64    |      |    | Total              |       |                            |                            |

## 16 – Payout/Receipt Record

0 X 16

**Explanation:** The Payout/Receipt Record Opcode is used when payouts and receipts are transacted, recording the Expense Code, References, Amounts and VAT Amounts, Tender Number etc.

| Bytes | From | To | Data              | Bits  | Explanation                  | Remarks |
|-------|------|----|-------------------|-------|------------------------------|---------|
| 1     | 0    | 1  | Opcode            |       | 16 – Payout/Receipts         |         |
| 1     | 1    | 2  | Expense Code      |       |                              |         |
| 10    | 2    | 12 | Expense Reference |       | 10 Characters                |         |
| 4     | 12   | 16 | Amount            |       |                              |         |
| 1     | 16   | 17 | Tender number     |       | For future use               |         |
| 1     | 17   | 18 | Flags             |       |                              |         |
|       |      |    |                   | bit 0 | POS accountability           |         |
|       |      |    |                   | bit 1 | Reprocess                    | B/O Use |
|       |      |    |                   | bit 2 | Not Used                     |         |
|       |      |    |                   | bit 3 | Not Used                     |         |
|       |      |    |                   | bit 4 | Not Used                     |         |
|       |      |    |                   | bit 5 | Not Used                     |         |
|       |      |    |                   | bit 6 | Paid Out                     |         |
|       |      |    |                   | bit 7 | Receipt                      |         |
| 4     | 18   | 22 | Expense Code      |       | Enhanced expense code number |         |
| 4     | 22   | 26 | VAT Amount        |       |                              |         |
| 18    | 26   | 44 | Not Used          |       |                              |         |
| 20    | 44   | 64 | Tail              |       |                              |         |
| 64    |      |    | Total             |       |                              |         |

## 17 – Information T7E

0 X 17

**Explanation:** V7 EFT for Philippines

| Bytes | From | To | Data           | Bits  | Explanation                                                                                          | Remarks |
|-------|------|----|----------------|-------|------------------------------------------------------------------------------------------------------|---------|
| 1     | 0    | 1  | Opcode         |       | 17 – Trans_Info_T7E                                                                                  |         |
| 6     | 1    | 7  | Invoice Number |       |                                                                                                      |         |
| 1     | 7    | 8  | Err_t7e_no     |       | 1 – T7 of-line (sale)<br>2 – T7 of-line (void)<br>3 – Bank of-line (sale)<br>4 – Bank of-line (void) |         |
| 2     | 8    | 10 | Tender Number  |       |                                                                                                      |         |
| 6     | 10   | 16 | Approval Code  |       |                                                                                                      |         |
| 4     | 16   | 20 | Ticket Amount  |       |                                                                                                      |         |
| 4     | 20   | 24 | Amount         |       |                                                                                                      |         |
| 1     | 24   | 25 | Flags          |       |                                                                                                      |         |
|       |      |    |                | bit 0 | Void without invoice                                                                                 |         |
|       |      |    |                | bit 1 | Cancel_subtract_eft_t7e                                                                              |         |
|       |      |    |                | bit 2 | Non EDC                                                                                              |         |
|       |      |    |                | bit 3 | Post void transaction                                                                                |         |
|       |      |    |                | bit 4 | Save transaction t7                                                                                  |         |
|       |      |    |                | bit 5 | Not Used                                                                                             |         |
|       |      |    |                | bit 6 | Not Used                                                                                             |         |
|       |      |    |                | bit 7 | Not Used                                                                                             |         |
| 1     | 25   | 26 | cc_t7          |       |                                                                                                      |         |
| 2     | 26   | 28 | err_comm_t7    |       |                                                                                                      |         |
| 2     | 28   | 30 | Response Code  |       |                                                                                                      |         |
| 14    | 30   | 44 | Reserved       |       |                                                                                                      |         |
| 20    | 44   | 64 | Tail           |       |                                                                                                      |         |
| 64    |      |    | Total          |       |                                                                                                      |         |

## 18 – Media Extension Record 3

0 X 18

**Explanation:** The Media Extension Record 3 is an Opcode that records enhanced media records when transacted, providing additional information to the records in the Media and Media Extension Records previously defined.

| Bytes | From | To | Data            | Bits  | Explanation                         | Remarks |
|-------|------|----|-----------------|-------|-------------------------------------|---------|
| 1     | 0    | 1  | Opcode          |       | 18 – Media extension 3              |         |
| 11    | 1    | 12 | EBT Gen Number  |       |                                     |         |
| 26    | 12   | 38 | EBT Case Number |       |                                     |         |
| 1     | 38   | 39 | Flags           | Bit 0 | Signature Capture Failed            |         |
|       |      |    |                 | Bit 1 | ECC in Sequence                     |         |
|       |      |    |                 | Bit 2 | Fleet Card                          |         |
|       |      |    |                 | Bit 3 | Media Extension 4                   |         |
|       |      |    |                 | Bit 4 | EFT Card Data Is Masked             |         |
|       |      |    |                 | Bit 5 | Media Extension 5                   |         |
|       |      |    |                 | Bit 6 | Biometrics EFT Transaction Flag     |         |
|       |      |    |                 | Bit 7 | Display Negative Tender Amount Flag |         |
| 1     | 39   | 40 | Flags           | Bit 0 | Barcode Tender Coupon               |         |
|       |      |    |                 | Bit 1 | Not Used                            |         |
|       |      |    |                 | Bit 2 | Not Used                            |         |
|       |      |    |                 | Bit 3 | Not Used                            |         |
|       |      |    |                 | Bit 4 | Not Used                            |         |
|       |      |    |                 | Bit 5 | Not Used                            |         |
|       |      |    |                 | Bit 6 | Not Used                            |         |
|       |      |    |                 | Bit 7 | Not Used                            |         |
| 4     | 40   | 44 | Cashback Value  |       |                                     |         |
| 20    | 44   | 64 | Tail            |       |                                     |         |
| 64    |      |    | Total           |       |                                     |         |



## 19 – Media Extension Record 4

0 X 19

**Explanation:** The Media Extension Record 4 is an Opcode that records enhanced media records when transacted, providing additional information to the records in the Media and Media Extension Records previously defined. It is mainly for the addition of locally issued barcodes identified in a transaction.

| Bytes | From | To | Data                      | Bits | Explanation            | Remarks |
|-------|------|----|---------------------------|------|------------------------|---------|
| 1     | 0    | 1  | Opcode                    |      | 19 – Media extension 4 |         |
| 10    | 1    | 11 | Fleet Vehicle ID          |      |                        | BCD     |
| 1     | 11   | 12 | Fleet Vehicle ID Length   |      |                        |         |
| 5     | 12   | 17 | Fleet Odometer            |      |                        | BCD     |
| 1     | 17   | 18 | Fleet Odometer Length     |      |                        |         |
| 2     | 18   | 20 | EFT Card Type ID          |      |                        | ASCII   |
| 16    | 20   | 36 | EFT Card Type Description |      |                        |         |
| 6     | 36   | 42 | EFT Trace Number          |      |                        | BCD     |
| 2     | 42   | 44 | EFT Slot Number           |      |                        | BCD     |
| 20    | 44   | 64 | Tail                      |      |                        |         |
| 64    |      |    | Total                     |      |                        |         |

## 20 – Log Function

0 X 20

**Explanation:** The Log Function records all the Logs generated. The functions include all details from the time the POS is on-line to the time it is off-line, including sign on time, the POS Terminal Mode, Reports printed by the POS, Starting and Ending special printouts, as well as the POS status. In addition, the Cashier Number, Ticket Number, Passwords, Type of Transaction and Drawer in use, are also fields registered within the Log Function. The Log Function also records long cashier passwords entered at the POS.

| Bytes | From | To | Data     | Bits | Explanation                                | Remarks                               |
|-------|------|----|----------|------|--------------------------------------------|---------------------------------------|
| 1     | 0    | 1  | Opcode   |      | 20 – Log Function                          |                                       |
| 1     | 1    | 2  | Function |      | 01 – Power Up                              |                                       |
|       |      |    |          |      | 02 – Store Open                            |                                       |
|       |      |    |          |      | 03 – Store close (EOD)                     |                                       |
|       |      |    |          |      | 04 - Automatic Recover Ticket              |                                       |
|       |      |    |          |      | 11 – Sign On                               |                                       |
|       |      |    |          |      | 12 – Sign Off                              |                                       |
|       |      |    |          |      | 13 – Enter Secure mode                     |                                       |
|       |      |    |          |      | 14 – Exit Secure mode                      |                                       |
|       |      |    |          |      | 15 – Enter Wait mode                       |                                       |
|       |      |    |          |      | 16 – Exit Wait mode                        |                                       |
|       |      |    |          |      | 17 – Enter Training mode                   |                                       |
|       |      |    |          |      | 18 – Exit Training mode                    |                                       |
|       |      |    |          |      | 19 – Password Change                       |                                       |
|       |      |    |          |      | 20 – Cashier Locking (zero cashier totals) |                                       |
|       |      |    |          |      | 21 – Transfer current shift to previous    | Move totals to previous, Zero current |
|       |      |    |          |      | 22 – X Read                                |                                       |
|       |      |    |          |      | 23 – POS Report                            |                                       |
|       |      |    |          |      | 24 – POS total to previous, zero current   |                                       |
|       |      |    |          |      | 25 – Reserved for PC Usage                 |                                       |
|       |      |    |          |      | 26 – Start Special Printout                |                                       |
|       |      |    |          |      | 27 – End Special Printout                  |                                       |
|       |      |    |          |      | 28 - Store Board Message                   |                                       |
|       |      |    |          |      | 29 – START Reorg Print                     |                                       |
|       |      |    |          |      | 30 – END Reorg Print                       |                                       |
|       |      |    |          |      | 99 – PC Start of Day                       |                                       |

## Main Opcodes

| Bytes | From | To | Data                | Bits  | Explanation          | Remarks                           |
|-------|------|----|---------------------|-------|----------------------|-----------------------------------|
| 2     | 2    | 4  | Cashier number      |       |                      |                                   |
| 2     | 4    | 6  | Secret Number       |       |                      |                                   |
| 1     | 6    | 7  | Flag 1              |       |                      |                                   |
|       |      |    |                     | bit 0 | Off-line exe         |                                   |
|       |      |    |                     | bit 1 | Remote command       |                                   |
|       |      |    |                     | bit 2 | Reprocess            | Process only if in reprocess mode |
|       |      |    |                     | bit 3 | Force CMD            |                                   |
|       |      |    |                     | bit 4 | Not Used             |                                   |
|       |      |    |                     | bit 5 | Not Used             |                                   |
|       |      |    |                     | bit 6 | Not Used             |                                   |
|       |      |    |                     | bit 7 | End of Period        |                                   |
| 1     | 7    | 8  | POS Status          |       |                      |                                   |
|       |      |    |                     |       | 0x00 Cold Stand by   |                                   |
|       |      |    |                     |       | 0x01 Stand by        |                                   |
|       |      |    |                     |       | 0x02 Idle            |                                   |
|       |      |    |                     |       | 0x04 No Sale         |                                   |
|       |      |    |                     |       | 0x08 Sale            |                                   |
|       |      |    |                     |       | 0x10 Tender          |                                   |
|       |      |    |                     |       | 0x20 Idle Stand by 1 |                                   |
|       |      |    |                     |       | 0x40 Idle Stand by 2 |                                   |
| 2     | 8    | 10 | Ticket Number       |       |                      |                                   |
| 2     | 10   | 12 | Old Password        |       |                      |                                   |
| 2     | 12   | 14 | New Password        |       |                      |                                   |
| 1     | 14   | 15 | POS Number          |       |                      |                                   |
| 2     | 15   | 17 | Used Drawer 1       |       |                      |                                   |
| 2     | 17   | 19 | Used Drawer 2       |       |                      |                                   |
| 21    | 19   | 40 | Text                |       |                      |                                   |
| 1     | 40   | 41 | Cashier Message No. |       |                      |                                   |
| 1     | 41   | 42 | Flag                |       |                      |                                   |
|       |      |    |                     | Bit 0 | Reset Message        |                                   |
|       |      |    |                     | Bit 1 | Set Message          |                                   |
|       |      |    |                     | Bit 2 | Not Used             |                                   |
|       |      |    |                     | Bit 3 | Not Used             |                                   |
|       |      |    |                     | Bit 4 | Not Used             |                                   |
|       |      |    |                     | Bit 5 | Not Used             |                                   |

**Main Opcodes**

| Bytes | From | To | Data  | Bits  | Explanation | Remarks |
|-------|------|----|-------|-------|-------------|---------|
|       |      |    |       | Bit 6 | Not Used    |         |
|       |      |    |       | Bit 7 | Not Used    |         |
| 2     | 42   | 44 | Code  |       |             |         |
| 20    | 44   | 64 | Tail  |       |             |         |
| 64    |      |    | Total |       |             |         |

## 21 – Ticket Frame

0 X 21

**Explanation:** Every ticket printed by the POS terminal starts with the Opcode number 21. It is part of the framework of a ticket. Numbers of the POS, Cashier Number, Ticket Number, Type of Ticket, etc. are all recorded.

| Bytes | From | To | Data                 | Bits      | Explanation          | Remarks                                      |
|-------|------|----|----------------------|-----------|----------------------|----------------------------------------------|
| 1     | 0    | 1  | Opcode               |           | 21 – Ticket Frame    |                                              |
| 1     | 1    | 2  | Flag 1               |           |                      |                                              |
|       |      |    |                      | Bit 0     | Start                |                                              |
|       |      |    |                      | bit 1     | No Sale              | Drawer is open                               |
|       |      |    |                      | bit 2     | Negative             | Tesco                                        |
|       |      |    |                      | bit 3     | EOD progress         | Tesco                                        |
|       |      |    |                      | bit 4     | Save Transaction     | Ticket was saved                             |
|       |      |    |                      | bit 5     | Recall Transaction   | Ticket was recalled                          |
|       |      |    |                      | bit 6     | Void Transaction     | Post-void                                    |
|       |      |    |                      | bit 7     | Tender Purchase      |                                              |
| 1     | 2    | 3  | Flag 2               |           |                      |                                              |
|       |      |    |                      | bit 0     | Factura ticket       |                                              |
|       |      |    |                      | bit 1     | WIC Ticket           | WIC transaction                              |
|       |      |    |                      | bit 2     | Frequent Shopper     | Frequent shopper ticket                      |
|       |      |    |                      | bit 3     | Charge Payment       | Account payment                              |
|       |      |    |                      | bit 4     | Reverse Payment      | Account payment reversal                     |
|       |      |    |                      | bit 5     | Confirm price        |                                              |
|       |      |    |                      | bit 6     | Give Cash only       | On a return transaction give cash only       |
|       |      |    |                      | bit 7     | Multi Tender allowed | On a return transaction allow multi tenders. |
| 1     | 3    | 4  | Return Type          |           |                      | Return type number                           |
| 2     | 4    | 6  | Ticket number        |           |                      | Ticket number                                |
| 2     | 6    | 8  | Void Ticket No.      |           |                      | Post-void: original ticket number            |
| 2     | 8    | 10 | Recall Ticket number |           |                      | Recall the original (saved) ticket no.       |
| 2     | 10   | 12 | Factura number       |           |                      |                                              |
| 15    | 12   | 27 | Factura ID           |           |                      |                                              |
| 2     | 27   | 29 | WIC Issue Date       | bits 0-4  | Wic issue day        |                                              |
|       |      |    |                      | bits 5-15 | Wic issue year       |                                              |

| Bytes | From | To | Data              | Bits      | Explanation                                    | Remarks                      |
|-------|------|----|-------------------|-----------|------------------------------------------------|------------------------------|
| 2     | 29   | 31 | Wic Exp Date      | Bits 0-4  | Wic exp day                                    |                              |
|       |      |    |                   | Bits 5-15 | Wic exp year                                   |                              |
| 4     | 31   | 35 | Wic Info          | Bits 0-3  | Wic issue month                                |                              |
|       |      |    |                   | Bits 4-7  | Wic exp month                                  |                              |
|       |      |    |                   | Bits 8-31 | Wic amount                                     |                              |
| 3     | 35   | 38 | Store number      |           |                                                |                              |
| 1     | 38   | 39 | Recall POS Number |           |                                                | Recall original POS number   |
| 1     | 39   | 40 | Garage flags      | bit 0     | Opt_balancing<br>Drive off<br>balancing ticket |                              |
|       |      |    |                   | Bit 1     | Opt_ctp                                        | lay by (was customer to pay) |
|       |      |    |                   | bit 2     | Drive off                                      |                              |
|       |      |    |                   | bit 3     | Fuel Test                                      |                              |
|       |      |    |                   | bit 4     | Family-favorite<br>choices                     |                              |
|       |      |    |                   | bit 5     | Store count                                    | Not a garage flag            |
|       |      |    |                   | bit 6     | QSR pre pack                                   |                              |
|       |      |    |                   | bit 7     | Take away                                      |                              |
| 1     | 40   | 41 | Stuttafords flag  | bit 0     | Account cheque<br>payment                      |                              |
|       |      |    |                   | bit 1     | Charge enquiry                                 |                              |
|       |      |    |                   | bit 2     | Account payment                                |                              |
|       |      |    |                   | bit 3     | Account fast<br>payment                        |                              |
|       |      |    |                   | bit 4     | Credit reentry                                 |                              |
|       |      |    |                   | bit 5     | Self scanning<br>ticket                        |                              |
|       |      |    |                   | bit 6     | Cash Deposit<br>Withdrawal                     | Cash deposit                 |
|       |      |    |                   | bit 7     | Express Order                                  | Express ticket               |
| 1     | 41   | 42 | Other flags       | bit 0     | WIC issue date                                 |                              |
|       |      |    |                   | bit 1     | Coupon Ticket                                  | First item is coupon         |
|       |      |    |                   | bit 2     | Home shopping                                  |                              |
|       |      |    |                   | bit 3     | Tender Ticket                                  | First item is a tender       |
|       |      |    |                   | bit 4     | IH Payment                                     | First item is an IH payment  |
|       |      |    |                   | bit 5     | IH Purchase                                    | First item is an IH purchase |
|       |      |    |                   | bit 6     | Cash Purchase                                  | Cash tender purpose          |

| Bytes | From | To | Data                           | Bits  | Explanation             | Remarks  |
|-------|------|----|--------------------------------|-------|-------------------------|----------|
|       |      |    |                                | bit 7 | Deposit Ticket          |          |
| 1     | 42   | 43 | Home Shopping<br>Origin Number |       |                         | Tesco    |
| 1     | 43   | 44 | Scan Point flags               |       |                         |          |
|       |      |    |                                | bit 0 | Not Used                |          |
|       |      |    |                                | bit 1 | Not Used                |          |
|       |      |    |                                | bit 2 | WIC CVV ticket          |          |
|       |      |    |                                | bit 3 | Self Scanning<br>Void   |          |
|       |      |    |                                | bit 4 | Barcoded Tender         | Coinstar |
|       |      |    |                                | bit 5 | Processed late<br>swipe |          |
|       |      |    |                                | bit 6 | Self Scanning<br>Rescan |          |
|       |      |    |                                | bit 7 | Fuel Post Void          |          |
| 20    | 44   | 64 | Tail                           |       |                         |          |
| 64    |      |    | Total                          |       |                         |          |

## 22 – PLU Sale Extension Record 2

0 X 22

**Explanation:** The PLU Sale Extension Record is used to record Liquor and Tobacco sales. The Code and Liquor Type are recorded.

| Bytes             | From | To | Data                   | Bits  | Explanation                                                   | Remarks                              |
|-------------------|------|----|------------------------|-------|---------------------------------------------------------------|--------------------------------------|
| 1                 | 0    | 1  | Opcode                 |       | 0x22 – PLU Sale Extension Record 2                            |                                      |
| 7                 | 1    | 8  | Code                   |       | PLU Code                                                      |                                      |
| 1                 | 8    | 9  | Liquor Type            |       | Liquor/Tobacco type                                           |                                      |
| 1                 | 9    | 10 | Flag                   | Bit 0 | Bonus Item                                                    |                                      |
|                   |      |    |                        | Bit 1 | Pick Quantity Zero                                            |                                      |
|                   |      |    |                        | Bit 2 | Home Delivery Charge                                          | Indicates delivery charge PLU sale.  |
|                   |      |    |                        | Bit 3 | Parcel Pick Charge                                            | Indicates delivery charge PLU sale.  |
|                   |      |    |                        | Bit 4 | Extra Code                                                    | Indicates extra code value is valid. |
|                   |      |    |                        | Bit 5 | Price Override Calculation                                    | CC & C pricing                       |
|                   |      |    |                        | Bit 6 | Online Purchase Item                                          |                                      |
|                   |      |    |                        | Bit 7 | Lay By Fee Sale                                               |                                      |
| <b>IF PRJ ROW</b> |      |    |                        |       |                                                               |                                      |
| 4                 | 10   | 14 | Quantity               |       | Quantity sold                                                 |                                      |
| 4                 | 14   | 18 | Price                  |       | Item price                                                    |                                      |
| 4                 | 18   | 22 | Amount                 |       | Amount Taken                                                  |                                      |
| 1                 | 22   | 23 | Price Type             |       | Price Type                                                    |                                      |
| 2                 | 23   | 25 | Multi Sell Unit        |       | MSU                                                           |                                      |
| 5                 | 25   | 30 | Out of stock code      |       |                                                               |                                      |
| <b>Else</b>       |      |    |                        |       |                                                               |                                      |
| 20                | 10   | 30 | Extra Code             |       | Extra Code                                                    |                                      |
| <b>IF PRJ ROW</b> |      |    |                        |       |                                                               |                                      |
| 7                 | 30   | 37 | BCD Internal Item Code |       | BCD Internal Item Code                                        |                                      |
| <b>Else</b>       |      |    |                        |       |                                                               |                                      |
| 7                 | 30   | 37 | BCD Original Item Code |       | BCD Original Item Code (The item code filtered from the drill |                                      |



## Main Opcodes

| Bytes | From | To | Data                      | Bits     | Explanation                             | Remarks                                                                     |
|-------|------|----|---------------------------|----------|-----------------------------------------|-----------------------------------------------------------------------------|
|       |      |    |                           |          | down of an item)                        |                                                                             |
| 1     | 37   | 38 | Flag 1                    |          |                                         |                                                                             |
|       |      |    |                           | Bit 0    | Additional Receipt Item                 |                                                                             |
|       |      |    |                           | Bit 1    | Prohibit Discount                       |                                                                             |
|       |      |    |                           | Bit 2    | Gift Card Balance Item Sale             |                                                                             |
|       |      |    |                           | Bit 3    | Not Found Sale                          | Used for not found sale with PLU groups.                                    |
|       |      |    |                           | Bit 4    | Item Sold By Barcode Programming        |                                                                             |
|       |      |    |                           | Bit 5    | Lay By Modify Refund Item               |                                                                             |
|       |      |    |                           | Bit 6    | Delivery Item                           |                                                                             |
|       |      |    |                           | Bit 7    | External POS Item                       |                                                                             |
| 1     | 38   | 39 | External Item Ref         |          |                                         |                                                                             |
| 1     | 39   | 40 | Flag 2                    |          |                                         |                                                                             |
|       |      |    |                           | Bit 0    | Depositable Item                        |                                                                             |
|       |      |    |                           | Bit 1    | Stock Allocation Type                   |                                                                             |
|       |      |    |                           | Bits 2-6 | Stock Mng. Bits                         |                                                                             |
|       |      |    |                           | Bit 7    | Option Bill Payments                    |                                                                             |
| 1     | 40   | 41 | Flag                      |          |                                         |                                                                             |
|       |      |    |                           | Bit 0    | Do not increase item count              |                                                                             |
|       |      |    |                           | Bit 1    | Online purchase item include commission |                                                                             |
|       |      |    |                           | Bit 2    | Extra Fee Sale                          |                                                                             |
|       |      |    |                           | Bit 3    | Cancelled Item                          |                                                                             |
|       |      |    |                           | Bit 4    | Not Used                                |                                                                             |
|       |      |    |                           | Bit 5    | Not Used                                |                                                                             |
|       |      |    |                           | Bit 6    | Not Used                                |                                                                             |
|       |      |    |                           | Bit 7    | Not Used                                |                                                                             |
| 1     | 41   | 42 | Not Used1                 |          |                                         |                                                                             |
| 2     | 42   | 44 | Original PLU Sequence No. |          |                                         | The sequence number of the PLU in the original ticket (Before save/recall). |
| 20    | 44   | 64 | Tail                      |          |                                         |                                                                             |
| 64    |      |    | Total                     |          |                                         |                                                                             |

## 24 – Media UK Ext

0 X 24

| Bytes | From | To | Data     | Bits  | Explanation        | Remarks |
|-------|------|----|----------|-------|--------------------|---------|
| 1     | 0    | 1  | Opcode   |       | 24 – Media UK Ext. |         |
| 2     | 1    | 3  | Number   |       |                    |         |
| 1     | 3    | 4  | Flags    |       |                    |         |
|       |      |    |          | bit 0 | ICC Used           |         |
|       |      |    |          | bit 1 | Not Used           |         |
|       |      |    |          | bit 2 | Not Used           |         |
|       |      |    |          | bit 3 | Not Used           |         |
|       |      |    |          | bit 4 | Not Used           |         |
|       |      |    |          | bit 5 | Not Used           |         |
|       |      |    |          | bit 6 | Not Used           |         |
|       |      |    |          | bit 7 | Not Used           |         |
| 40    | 4    | 44 | Not Used |       |                    |         |
| 20    | 44   | 64 | Tail     |       |                    |         |
| 64    |      |    | Total    |       |                    |         |

## 25 – Dummy Ticket Total

0 X 25

**Explanation:** Refer to the transaction number 0x05 – Ticket Total for further details.

## 26 – Media Ext5

0 X 26

**Explanation:** This is the 5<sup>th</sup> extended Media Transaction. The Media Extension records are advanced details on the Media Types and record fields such as: Fee types, Media numbers, Table numbers, Bank accounts, Check numbers, etc.

| Bytes | From | To | Data                        | Bits     | Explanation                          | Remarks         |
|-------|------|----|-----------------------------|----------|--------------------------------------|-----------------|
| 1     | 0    | 1  | Opcode                      |          | 26 – Media Ext. 5                    |                 |
| 6     | 1    | 7  | PO Number                   |          | POS Number                           |                 |
| 1     | 7    | 8  | PO Number Length            |          | POS Number Length                    |                 |
| 4     | 8    | 12 | RX Tender Amount            |          | Prescription tender amount.          |                 |
| 4     | 12   | 16 | Non RX Tender amount        |          | Non Prescription tender amount       |                 |
| 1     | 16   | 17 | External Validation Against |          |                                      | 0 –None, 1- LPE |
| 7     | 17   | 24 | Triggering Coupon           |          | The coupon that generated the tender |                 |
| 3     | 24   | 27 | Expiration Date             |          |                                      | BCD - YYMMDD    |
| 2     | 27   | 29 | CVV Index                   |          |                                      |                 |
| 1     | 29   | 30 | Flag                        | Bit 0    | Is WIC CV Voucher Info Available     |                 |
|       |      |    |                             | Bits 1-7 | Not Used                             |                 |
| 13    | 30   | 43 | Not Used                    |          |                                      |                 |
| 1     | 43   | 44 | Flag                        | Bit 0    | Media Ext 6                          |                 |
|       |      |    |                             | Bit 1    | Opt FSA Tender                       |                 |
|       |      |    |                             | Bit 2    | Opt MTX Receipts Retrieved           |                 |
|       |      |    |                             | Bit 3    | Coupon Generated Tender              |                 |
|       |      |    |                             | Bit 4    | Accepted In Sale Mode                |                 |
|       |      |    |                             | Bit 5    | ECC In Sequence                      |                 |
|       |      |    |                             | Bit 6    | Signature Capture In Sequence        |                 |
|       |      |    |                             | Bit 7    | Signature Is Confirmed               |                 |
| 20    | 44   | 64 | Tail                        |          |                                      |                 |
| 64    |      |    | Total                       |          |                                      |                 |

## 27 – Discount Ext2

0 X 27

| Bytes | From | To | Data         | Bits | Explanation              | Remarks |
|-------|------|----|--------------|------|--------------------------|---------|
| 1     | 0    | 1  | Opcode       |      | 27 – Trans Discount Ext2 |         |
| 10    | 1    | 11 | Offer Code   |      | Offer code number        |         |
| 4     | 11   | 15 | Bonus Points |      |                          |         |
| 29    | 15   | 44 | Not Used     |      |                          |         |
| 20    | 44   | 64 | Tail         |      |                          |         |
| 64    |      |    | Total        |      |                          |         |

## 50 – Transaction Info Ticket Frame

0 X 50

**Explanation:** This opcode is recorded at the start and end of a transaction recording the action that calls start/end info ticket frame.

| Bytes | From | To | Data   | Bits  | Explanation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Remarks                                           |
|-------|------|----|--------|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| 1     | 0    | 1  | Opcode |       | 50 Transaction Info Ticket Frame                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                   |
| 1     | 1    | 2  | Flag   | Bit 0 | Start Info Ticket                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Indication of start/end ticket transaction        |
|       |      |    |        | Bit 1 | Print discount total amount                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 1 Not used                                        |
|       |      |    |        | Bit 2 | Not used                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                   |
|       |      |    |        | Bit 3 | Not used                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                   |
|       |      |    |        | Bit 4 | Not used                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                   |
|       |      |    |        | Bit 5 | Not used                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                   |
|       |      |    |        | Bit 6 | Not used                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                   |
|       |      |    |        | Bit 7 | Not used                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                   |
| 4     | 2    | 6  | Action |       | The actions are:<br>1 – Sign On Action<br>2 – Sign Off Action<br>3 X Report Action<br>4 – End Of Day Action<br>5 – Doc Setting Action<br>6 – Gift Receipt Action<br>7 – Gift Card Enq Action<br>8 – Reorg Receipt Finish Media<br>9 – Doc Local Print Action<br>10 Add Float Action (trs number 0x07)<br>11 – Pickup Action (trs number 0x09)<br>12 – Declaration action (trs number 0x0B)<br>13 – Payout Action (trs number 0x16)<br>14 – Receipt Action (trs number 0x16)<br>15 – POS Shift Action<br>16 – Price Update Action | 2 - Action that calls start/end info ticket frame |

**Main Opcodes**

| <b>Bytes</b> | <b>From</b> | <b>To</b> | <b>Data</b> | <b>Bits</b> | <b>Explanation</b>                | <b>Remarks</b> |
|--------------|-------------|-----------|-------------|-------------|-----------------------------------|----------------|
| 2            | 6           | 8         | Shift ID    |             | Shift management in Remote Office |                |
| 36           | 8           | 44        | Not used    |             |                                   |                |
| 20           | 44          | 64        | Tail        |             |                                   |                |
| 64           |             |           | Total       |             |                                   |                |

## Opcode 56, Sub-Opcodes: 0 X 00 to 0 X 34

The Opcode number 56 refers to all the cash office functions. It is a general transaction. A Sub Opcode defining the function differentiates each one of the Opcode numbers 56.

### 56 – Cash Office

#### 0 X 56

**Explanation:** The Cash Office Opcode records all safe locking functions the POS generates in connection with the Cash. The safe locking assures that the transaction is a Deposit, or a Receipt. There are also flags defining if the Cashier, POS or Safe is locked, etc., indicating that the Tender that has been counted and declared as being in the safe, is recorded as the starting Tender balance for further trading.

| Bytes | From | To | Data                  | Bits  | Explanation                                               | Remarks                                   |
|-------|------|----|-----------------------|-------|-----------------------------------------------------------|-------------------------------------------|
| 1     | 0    | 1  | Opcode                |       | 56 – Cash Office                                          |                                           |
| 1     | 1    | 2  | Function Safe Locking |       | 00 – Cashier/POS/Safe Locking                             |                                           |
|       |      |    |                       |       | 1 – Deposit                                               |                                           |
|       |      |    |                       |       | 2 – Receipt                                               |                                           |
|       |      |    |                       |       | 3,4 – Tender Exchange (see struct trs_coff_exchange_) ROW |                                           |
|       |      |    |                       |       | 05 – New Safe                                             | For V8                                    |
|       |      |    |                       |       | 30 – Update safe expected amount in SAFE_TRANS            |                                           |
| 4     | 2    | 6  | Amount                |       |                                                           |                                           |
| 2     | 6    | 8  | Count                 |       |                                                           |                                           |
| 1     | 8    | 9  | Tender                |       |                                                           |                                           |
| 1     | 9    | 10 | Flags                 | bit 0 | Lock Cashier                                              |                                           |
|       |      |    |                       | bit 1 | Lock POS                                                  |                                           |
|       |      |    |                       | bit 2 | Lock Safe                                                 |                                           |
|       |      |    |                       | bit 3 | Reprocess                                                 | Process only if in reprocess mode.        |
|       |      |    |                       | bit 4 | Update Safe                                               | Update safe with cashier/pos declaration. |
|       |      |    |                       | bit 5 | Previous Period                                           |                                           |
|       |      |    |                       | bit 6 | Header                                                    |                                           |



| Bytes | From | To | Data            | Bits  | Explanation | Remarks |
|-------|------|----|-----------------|-------|-------------|---------|
|       |      |    |                 | bit 7 | Info        |         |
| 2     | 10   | 12 | Cashier/POS No. |       |             |         |
| 1     | 12   | 13 | PC Number       |       |             |         |
| 2     | 13   | 15 | Bank ID         |       |             |         |
| 16    | 15   | 31 | Reference       |       |             |         |
| 1     | 31   | 32 | Flag            | bit 0 |             |         |
|       |      |    |                 | bit 1 |             |         |
|       |      |    |                 | bit 2 |             |         |
|       |      |    |                 | bit 3 |             |         |
|       |      |    |                 | bit 4 |             |         |
|       |      |    |                 | bit 5 |             |         |
|       |      |    |                 | bit 6 |             |         |
|       |      |    |                 | bit 7 |             |         |
| 8     | 32   | 40 | Amount 2        |       |             |         |
| 4     | 40   | 44 | Not Used        |       |             |         |
| 20    | 44   | 64 | Tail            |       |             |         |
| 64    |      |    | Total           |       |             |         |

## 00 – Cash Office Safe Locking

0 X 00

**Explanation:** Locking the safe transfers the declared Tender balances to the In Safe figures in the safe records.

| Bytes | From | To | Data      | Bits  | Explanation                       | Remarks                                                             |
|-------|------|----|-----------|-------|-----------------------------------|---------------------------------------------------------------------|
| 1     | 0    | 1  | Opcode    |       | 56 – Cash Office                  |                                                                     |
| 1     | 1    | 2  | Function  |       | 00 – Cashier/POS<br>05 – New Safe |                                                                     |
| 4     | 2    | 6  | Amount    |       |                                   |                                                                     |
| 2     | 6    | 8  | Count     |       |                                   |                                                                     |
| 1     | 8    | 9  | Tender    |       |                                   |                                                                     |
| 1     | 9    | 10 | Flags     | Bit 0 | Lock Cashier                      |                                                                     |
|       |      |    |           | Bit 1 | Lock POS                          |                                                                     |
|       |      |    |           | Bit 2 | Lock Safe                         |                                                                     |
|       |      |    |           | Bit 3 | Reprocess                         | Process only if in reprocess mode                                   |
|       |      |    |           | Bit 4 | Update Safe                       | Update safe with Cashier/POS declaration.                           |
|       |      |    |           | Bit 5 | Previous Period                   |                                                                     |
|       |      |    |           | Bit 6 | Header                            |                                                                     |
|       |      |    |           | Bit 7 | Info                              |                                                                     |
| 2     | 10   | 12 | Key       |       | Cashier/POS Number                |                                                                     |
| 1     | 12   | 13 | PC Number |       |                                   |                                                                     |
| 2     | 13   | 15 | Bank ID   |       |                                   |                                                                     |
| 16    | 15   | 31 | Reference |       |                                   |                                                                     |
| 1     | 31   | 32 | Flag      | Bit 0 | Amount                            | If this Bit is set On, then use the Amount2 field from Bytes 32-40. |
|       |      |    |           | Bit 1 | Not Used                          |                                                                     |
|       |      |    |           | Bit 2 | Not Used                          |                                                                     |
|       |      |    |           | Bit 3 | Not Used                          |                                                                     |
|       |      |    |           | Bit 4 | Not Used                          |                                                                     |
|       |      |    |           | Bit 5 | Not Used                          |                                                                     |
|       |      |    |           | Bit 6 | Not Used                          |                                                                     |
|       |      |    |           | Bit 7 | Not Used                          |                                                                     |
| 8     | 32   | 40 | Amount2   |       |                                   |                                                                     |

| Bytes | From | To | Data     | Bits | Explanation | Remarks |
|-------|------|----|----------|------|-------------|---------|
| 4     | 40   | 44 | Not Used |      |             |         |
| 20    | 44   | 64 | Tail     |      |             |         |
| 64    |      |    | Total    |      |             |         |

## 0B/OC – Cash Office Deposit/Receipt

0 X 0B

**Explanation:** When the function ‘OB’ is used, the Deposit function is used. The Deposit function records when a Tender is removed from the Store safe for deposit in the Bank, recording the Tender, User, PC Number, Bank ID, etc. When the function ‘OC’ is used the Receipt function is used. The Receipt function records when a Tender is added from the bank to the Store Safe. Deposits and Receipts affect the In-Safe totals.

| Bytes | From | To | Data        | Bits  | Explanation                  | Remarks                                  |
|-------|------|----|-------------|-------|------------------------------|------------------------------------------|
| 1     | 0    | 1  | Opcode      |       | 56 – Cash Office             |                                          |
| 1     | 1    | 2  | Function    |       | 0B – Deposit<br>0C – Receipt |                                          |
| 8     | 2    | 10 | Amount      |       |                              |                                          |
| 2     | 10   | 12 | Count       |       |                              |                                          |
| 1     | 12   | 13 | Tender      |       |                              |                                          |
| 1     | 13   | 14 | Flags       | Bit 0 | Not Used                     |                                          |
|       |      |    |             | Bit 1 | Not Used                     |                                          |
|       |      |    |             | Bit 2 | Not Used                     |                                          |
|       |      |    |             | Bit 3 | Reprocess                    | Process only if in reprocess mode        |
|       |      |    |             | Bit 4 | Not Used                     | Update safe with Cashier/POS declaration |
|       |      |    |             | Bit 5 | Not Used                     | Update safe with Cashier/POS declaration |
|       |      |    |             | Bit 6 | Header                       |                                          |
|       |      |    |             | Bit 7 | Info                         |                                          |
| 2     | 14   | 16 | User        |       | Cashier/POS Number           |                                          |
| 1     | 16   | 17 | PC Number   |       |                              |                                          |
| 2     | 17   | 19 | Bank ID     |       |                              |                                          |
| 16    | 19   | 35 | Reference   |       |                              |                                          |
| 2     | 35   | 37 | Safe Number |       |                              |                                          |
| 3     | 37   | 40 | Trade Date  |       | Trading date                 |                                          |
| 4     | 40   | 44 | Not Used    |       |                              |                                          |
| 20    | 44   | 64 | Tail        |       |                              |                                          |
| 64    |      |    | Total       |       |                              |                                          |

## OD – Cash Office Declare Safe

0 X 0D

**Explanation:** The Declare Safe function records the process of counting the Tender in the Store Safe. The Amount, Tender, User number, Reference, PC number, and the Safe number with which the declaration is associated are all recorded.

| Bytes | From | To | Data        | Bits  | Explanation       | Remarks                           |
|-------|------|----|-------------|-------|-------------------|-----------------------------------|
| 1     | 0    | 1  | Opcode      |       | 56 – Cash Office  |                                   |
| 1     | 1    | 2  | Function    |       | 0D – Declare Safe |                                   |
| 8     | 2    | 10 | Amount      |       |                   |                                   |
| 2     | 10   | 12 | Count       |       |                   |                                   |
| 1     | 12   | 13 | Tender      |       |                   |                                   |
| 1     | 13   | 14 | Flags       | Bit 0 | Reprocess         | Process only if in reprocess mode |
|       |      |    |             | Bit 1 | Not Used          |                                   |
|       |      |    |             | Bit 2 | Not Used          |                                   |
|       |      |    |             | Bit 3 | Not Used          |                                   |
|       |      |    |             | Bit 4 | Not Used          |                                   |
|       |      |    |             | Bit 5 | Not Used          |                                   |
|       |      |    |             | Bit 6 | Not Used          |                                   |
|       |      |    |             | Bit 7 | Info              | Informative only                  |
| 2     | 14   | 16 | Safe Number |       |                   |                                   |
| 2     | 16   | 18 | User Number |       |                   |                                   |
| 16    | 18   | 34 | Reference   |       |                   |                                   |
| 9     | 34   | 43 | Not Used    |       |                   |                                   |
| 1     | 43   | 44 | PC Number   |       |                   |                                   |
| 20    | 44   | 64 | Tail        |       |                   |                                   |
| 64    |      |    | Total       |       |                   |                                   |

## OE – Cash Office Safe Lock

0 X 0E

**Explanation:** Locking the safe transfers the declared Tender balances to the In Safe figures in the safe records.

| Bytes | From | To | Data        | Bits  | Explanation      | Remarks                           |
|-------|------|----|-------------|-------|------------------|-----------------------------------|
| 1     | 0    | 1  | Opcode      |       | 56 – Cash Office |                                   |
| 1     | 1    | 2  | Function    |       | 0e – Safe Lock   |                                   |
| 8     | 2    | 10 | Amount      |       |                  |                                   |
| 2     | 10   | 12 | Count       |       |                  |                                   |
| 1     | 12   | 13 | Tender      |       |                  |                                   |
| 1     | 13   | 14 | Flags       | Bit 0 | Reprocess        | Process only if in reprocess mode |
|       |      |    |             | Bit 1 | Not Used         |                                   |
|       |      |    |             | Bit 2 | Not Used         |                                   |
|       |      |    |             | Bit 3 | Not Used         |                                   |
|       |      |    |             | Bit 4 | Not Used         |                                   |
|       |      |    |             | Bit 5 | Not Used         |                                   |
|       |      |    |             | Bit 6 | Header           | Header record                     |
|       |      |    |             | Bit 7 | Info             | Informative only                  |
| 2     | 14   | 16 | Safe Number |       |                  |                                   |
| 2     | 16   | 18 | User Number |       |                  |                                   |
| 16    | 18   | 34 | Reference   |       |                  |                                   |
| 9     | 34   | 43 | Not Used    |       |                  |                                   |
| 1     | 43   | 44 | PC Number   |       |                  |                                   |
| 20    | 44   | 64 | Tail        |       |                  |                                   |
| 64    |      |    | Total       |       |                  |                                   |

## 15 – Cash Office Safe Transfer

0 X 15

**Explanation:** The Safe Transfer records when a transaction is made to withdraw a Tender from the cash draw and placed in the safe, after the cashier has accounted for and balanced the Tender in their possession.

| Bytes | From | To | Data             | Bits  | Explanation        | Remarks                                  |
|-------|------|----|------------------|-------|--------------------|------------------------------------------|
| 1     | 0    | 1  | Opcode           |       | 56 – Cash Office   |                                          |
| 1     | 1    | 2  | Function         |       | 15 – Safe Transfer |                                          |
| 8     | 2    | 10 | Amount           |       |                    |                                          |
| 2     | 10   | 12 | Count            |       |                    |                                          |
| 1     | 12   | 13 | Tender           |       |                    |                                          |
| 1     | 13   | 14 | Flags            | Bit 0 | Not Used           |                                          |
|       |      |    |                  | Bit 1 | Not Used           |                                          |
|       |      |    |                  | Bit 2 | Not Used           |                                          |
|       |      |    |                  | Bit 3 | Reprocess          | Process only if in reprocess mode        |
|       |      |    |                  | Bit 4 | Not Used           | Update safe with Cashier/POS declaration |
|       |      |    |                  | Bit 5 | Not Used           | Update safe with Cashier/POS declaration |
|       |      |    |                  | Bit 6 | Header             | Header record                            |
|       |      |    |                  | Bit 7 | Info               | Informative only                         |
| 1     | 14   | 15 | PC Number        |       |                    |                                          |
| 16    | 15   | 31 | Reference        |       |                    |                                          |
| 2     | 31   | 33 | Source Safe      |       |                    |                                          |
| 2     | 33   | 35 | Destination Safe |       |                    |                                          |
| 9     | 35   | 44 | Not Used         |       |                    |                                          |
| 20    | 44   | 64 | Tail             |       |                    |                                          |
| 64    |      |    | Total            |       |                    |                                          |

## 1B – Transaction Deposit Receipt Bank Account

### 0 X 1B (27)

**Explanation:** The Deposit Receipt Bank Account function serves as an enhancement to the existing Bank Account ID. The bank account ID can contain up to 30 characters. When a bank operation is performed, the bank account ID is extracted into the CashOffice log and transaction log files.

| Bytes | From | To | Data         | Bits | Explanation                           | Remarks                     |
|-------|------|----|--------------|------|---------------------------------------|-----------------------------|
| 1     | 0    | 1  | Opcode       |      | 56 – Cash Office                      |                             |
| 1     | 1    | 2  | Function     |      | 1B(27) – Deposit Receipt Bank Account |                             |
| 2     | 2    | 4  | Bank ID      |      |                                       | Current bank ID             |
| 30    | 4    | 34 | Bank Account |      |                                       | Current bank account number |
| 10    | 34   | 44 | Not Used     |      |                                       |                             |
| 20    | 44   | 64 | Tail         |      |                                       |                             |
| 64    |      |    | Total        |      |                                       |                             |



## 1D – Cheque List

0 X 1D

| Bytes | From | To | Data            | Bits  | Explanation                                                                                                                                                                            | Remarks                              |
|-------|------|----|-----------------|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| 1     | 0    | 1  | Opcode          |       | 56 – Cash Office                                                                                                                                                                       |                                      |
| 1     | 1    | 2  | Function        |       | 29 trans coff cheque list                                                                                                                                                              |                                      |
| 2     | 2    | 4  | POS Number      |       |                                                                                                                                                                                        |                                      |
| 10    | 4    | 14 | Sequence Number |       |                                                                                                                                                                                        |                                      |
| 2     | 14   | 16 | Tender Number   |       |                                                                                                                                                                                        |                                      |
| 2     | 16   | 18 | Action Code     |       | Pickup Cheque – 1<br>Tender Correction – 2<br>Pickup and Edit Amount – 3<br>ROA Add Cheque – 4<br>Safe Transfer – 5<br>Bank Deposit – 6<br>Edit ECCA Account – 7<br>Edit Bank Name – 8 |                                      |
| 1     | 18   | 19 | Flag            | Bit 0 | Reprocess                                                                                                                                                                              | 18 Process only if in reprocess mode |
|       |      |    |                 | Bit 1 | Not Used                                                                                                                                                                               | 18 Not used                          |
|       |      |    |                 | Bit 2 | Not Used                                                                                                                                                                               |                                      |
|       |      |    |                 | Bit 3 | Not Used                                                                                                                                                                               |                                      |
|       |      |    |                 | Bit 4 | Not Used                                                                                                                                                                               |                                      |
|       |      |    |                 | Bit 5 | Not Used                                                                                                                                                                               |                                      |
|       |      |    |                 | Bit 6 | Not Used                                                                                                                                                                               |                                      |
|       |      |    |                 | Bit 7 | Not Used                                                                                                                                                                               |                                      |
| 20    | 19   | 39 | Update Data     |       |                                                                                                                                                                                        |                                      |
| 5     | 39   | 44 | Not Used        |       |                                                                                                                                                                                        |                                      |
| 20    | 44   | 64 | Tail            |       |                                                                                                                                                                                        |                                      |
| 64    |      |    | Total           |       |                                                                                                                                                                                        |                                      |

## 19 – Cash Office Over Short Lock

0 X 19

**Explanation:** The Over Short Lock function records when the declared (counted) Tender is less than the system calculated as In Safe Tender (reflected as ‘Short’) and when the declared Tender is greater than the expected Tender, the calculated amount is reflected as ‘Over’. The Amount, Lock Type, Date, Tender number are all recorded. The Lock Type records when the Cashier, POS, or Safe, transfer the declared tender to the In Safe figures in the safe records.

| Bytes | From | To | Data          | Bits | Explanation                        | Remarks |
|-------|------|----|---------------|------|------------------------------------|---------|
| 1     | 0    | 1  | Opcode        |      | 56 – Cash Office                   |         |
| 1     | 1    | 2  | Function      |      | 19 – Over Short Lock               |         |
| 8     | 2    | 10 | Amount        |      |                                    |         |
| 4     | 10   | 14 | User ID       |      |                                    |         |
| 4     | 14   | 18 | Manager ID    |      |                                    |         |
| 1     | 18   | 19 | Lock Type     |      | 1 – Cashier<br>2 – POS<br>3 – Safe |         |
| 3     | 19   | 22 | Start Date    |      | YYMMDD                             |         |
| 3     | 22   | 25 | End Date      |      | YYMMDD                             |         |
| 2     | 25   | 27 | Key           |      | Cashier/POS/Safe Number            |         |
| 2     | 27   | 29 | Tender Number |      |                                    |         |
| 15    | 29   | 44 | Filler        |      |                                    |         |
| 20    | 44   | 64 | Tail          |      |                                    |         |
| 64    |      |    | Total         |      |                                    |         |

## 20 – Cash Office Buy Aid Declaration

0 X 20

**Explanation:** A Buy Aid is a type of voucher, a document/form issued by a Buy Aid company (not ISS45). This function records the amount, company name, member number, voucher number etc., for Buy Aids during the cashier declaration. The Cash Office staff declares the details of each Buy Aid tender. The details can be reviewed in the cashier specific declaration type report.

| Bytes | From | To | Data           | Bits  | Explanation                                                   | Remarks                           |
|-------|------|----|----------------|-------|---------------------------------------------------------------|-----------------------------------|
| 1     | 0    | 1  | Opcode         |       | 56 – Cash Office                                              |                                   |
| 1     | 1    | 2  | Function       |       | 19 – Buy Aid Declr                                            |                                   |
| 8     | 2    | 10 | Amount         |       |                                                               |                                   |
| 2     | 10   | 12 | Count          |       |                                                               |                                   |
| 1     | 12   | 13 | Tender         |       |                                                               |                                   |
| 1     | 13   | 14 | Flag           |       |                                                               |                                   |
|       |      |    |                | Bit 0 | Reprocess                                                     | Process only if in reprocess mode |
|       |      |    |                | Bit 1 | Previous Period                                               |                                   |
|       |      |    |                | Bit 2 | POS Mode                                                      |                                   |
|       |      |    |                | Bit 3 | Not Used                                                      |                                   |
|       |      |    |                | Bit 4 | Not Used                                                      |                                   |
|       |      |    |                | Bit 5 | Not Used                                                      |                                   |
|       |      |    |                | Bit 6 | Not Used                                                      |                                   |
|       |      |    |                | Bit 7 | Not Used                                                      | Informative only                  |
| 2     | 14   | 16 | Safe No.       |       |                                                               |                                   |
| 6     | 16   | 22 | Member Number  |       |                                                               |                                   |
| 9     | 22   | 31 | Voucher Number |       |                                                               |                                   |
| 2     | 31   | 33 | Company Number |       |                                                               |                                   |
| 2     | 33   | 35 | iKey           |       | Cashier or POS Number depending on the POS account in system. |                                   |
| 9     | 35   | 44 | Not Used       |       |                                                               |                                   |
| 20    | 44   | 64 | Tail           |       |                                                               |                                   |
| 64    |      |    | Total          |       |                                                               |                                   |

## 21 – Cash Office Entry Docket Declaration

0 X 21

**Explanation:** A Docket is a type of voucher, a document/form issued by a company (not ISS45). This function records the amount, account number, order number, and docket number, for docket during the cashier declaration. The Cash Office staff declares the details of each entry docket tender. The details can be reviewed in the cashier specific declaration type report.

| Bytes         | From | To | Data           | Bits  | Explanation                                                   | Remarks                           |
|---------------|------|----|----------------|-------|---------------------------------------------------------------|-----------------------------------|
| 1             | 0    | 1  | Opcode         |       | 56 – Cash Office                                              |                                   |
| 1             | 1    | 2  | Function       |       | 20 – Entry Docket Declr                                       |                                   |
| 1             | 2    | 3  | Sub Function   |       | 0 – Main Information<br>1 – Additional Information            |                                   |
| Struct Info 1 |      |    |                |       |                                                               |                                   |
| 8             | 3    | 11 | Amount         |       |                                                               |                                   |
| 2             | 11   | 13 | Count          |       |                                                               |                                   |
| 10            | 13   | 23 | Account Number |       |                                                               |                                   |
| 5             | 23   | 28 | Not Used       |       |                                                               |                                   |
| Struct Info 2 |      |    |                |       |                                                               |                                   |
| 16            | 3    | 19 | Order Number   |       |                                                               |                                   |
| 9             | 19   | 28 | Docket Number  |       |                                                               |                                   |
| 1             | 28   | 29 | Tender         |       |                                                               |                                   |
| 1             | 29   | 30 | Flag           |       |                                                               |                                   |
|               |      |    |                | Bit 0 | Reprocess                                                     | Process only if in reprocess mode |
|               |      |    |                | Bit 1 | Previous Period                                               |                                   |
|               |      |    |                | Bit 2 | POS Mode                                                      |                                   |
|               |      |    |                | Bit 3 | Not Used                                                      |                                   |
|               |      |    |                | Bit 4 | Not Used                                                      |                                   |
|               |      |    |                | Bit 5 | Not Used                                                      |                                   |
|               |      |    |                | Bit 6 | Not Used                                                      |                                   |
|               |      |    |                | Bit 7 | Not Used                                                      |                                   |
| 2             | 30   | 32 | Safe No.       |       |                                                               |                                   |
| 2             | 32   | 34 | iKey           |       | Cashier or POS Number depending on the POS account in system. |                                   |
| 10            | 34   | 44 | Not Used       |       |                                                               |                                   |

| Bytes | From | To | Data  | Bits | Explanation | Remarks |
|-------|------|----|-------|------|-------------|---------|
| 20    | 44   | 64 | Tail  |      |             |         |
| 64    |      |    | Total |      |             |         |

## 30 – Info Media Transfers

0 X 30

**Explanation:** This opcode records tenders that are transferred to the safe.

| Bytes | From | To | Data               | Bits  | Explanation                                           | Remarks |
|-------|------|----|--------------------|-------|-------------------------------------------------------|---------|
| 1     | 0    | 1  | Opcode             |       | 56 – Cash Office                                      |         |
| 2     | 1    | 3  | SubOpcode          |       | 0x30                                                  |         |
| 1     | 3    | 4  | Function           |       | 01 – Transfer Out<br>02 – Transfer In                 |         |
| 1     | 4    | 5  | Flags              |       |                                                       |         |
|       |      |    |                    | Bit 0 | POS Cashier Accountability:<br>0 – cashier<br>1 – POS |         |
|       |      |    |                    | Bit 1 | Not Used                                              |         |
|       |      |    |                    | Bit 2 | Not Used                                              |         |
|       |      |    |                    | Bit 3 | Not Used                                              |         |
|       |      |    |                    | Bit 4 | Not Used                                              |         |
|       |      |    |                    | Bit 5 | Not Used                                              |         |
|       |      |    |                    | Bit 6 | Not Used                                              |         |
|       |      |    |                    | Bit 7 | Not Used                                              |         |
| 4     | 5    | 9  | Amount             |       |                                                       |         |
| 2     | 9    | 11 | Count              |       |                                                       |         |
| 1     | 11   | 12 | Tender             |       |                                                       |         |
| 1     | 12   | 13 | Source POS No.     |       |                                                       |         |
| 2     | 13   | 15 | Source Cashier No. |       |                                                       |         |
| 1     | 15   | 16 | Target POS No.     |       |                                                       |         |
| 2     | 16   | 18 | Target Cashier No. |       |                                                       |         |
| 2     | 18   | 20 | Supervisor No.     |       |                                                       |         |
| 24    | 20   | 44 | Not Used           |       |                                                       |         |
| 20    | 44   | 64 | Tail               |       |                                                       |         |
| 64    |      |    | Total              |       |                                                       |         |

## 33 – Safe Envelope

0 X 33

| Bytes | From | To | Data            | Bits  | Explanation      | Remarks                           |
|-------|------|----|-----------------|-------|------------------|-----------------------------------|
| 1     | 0    | 1  | Opcode          |       | 56 – Cash Office |                                   |
| 1     | 1    | 2  | SubOpcode       |       | 0x33             | TRANS_COFF_SAFE_ENVELOPS_TRANSFER |
| 2     | 2    | 4  | Sequence Number |       |                  |                                   |
| 3     | 4    | 7  | Date            |       |                  |                                   |
| 3     | 7    | 10 | Time            |       |                  |                                   |
| 2     | 10   | 12 | User ID         |       |                  |                                   |
| 2     | 12   | 14 | From Safe       |       |                  |                                   |
| 2     | 14   | 16 | To Safe         |       |                  |                                   |
| 2     | 16   | 18 | Tender ID       |       |                  |                                   |
| 4     | 18   | 22 | Amount          |       |                  |                                   |
| 1     | 22   | 23 | Flag            | Bit 0 | Reprocess        |                                   |
|       |      |    |                 | Bit 1 | Not Used         |                                   |
|       |      |    |                 | Bit 2 | Not Used         |                                   |
|       |      |    |                 | Bit 3 | Not Used         |                                   |
|       |      |    |                 | Bit 4 | Not Used         |                                   |
|       |      |    |                 | Bit 5 | Not Used         |                                   |
|       |      |    |                 | Bit 6 | Not Used         |                                   |
|       |      |    |                 | Bit 7 | Not Used         |                                   |
| 21    | 23   | 44 | Not Used        |       |                  |                                   |
| 20    | 44   | 64 | Tail            |       |                  |                                   |
| 64    |      |    | Total           |       |                  |                                   |

## 34– Safe Envelope Init

0 X 34

| Bytes | From | To | Data            | Bits  | Explanation      | Remarks                       |
|-------|------|----|-----------------|-------|------------------|-------------------------------|
| 1     | 0    | 1  | Opcode          |       | 56 – Cash Office |                               |
| 1     | 1    | 2  | SubOpcode       |       | 0x34             | TRANS_COFF_SAFE_ENVELOPS_INIT |
| 2     | 2    | 4  | Sequence Number |       |                  |                               |
| 3     | 4    | 7  | Date            |       |                  |                               |
| 3     | 7    | 10 | Time            |       |                  |                               |
| 1     | 10   | 11 | Flag            | Bit 0 | Reprocess        |                               |
|       |      |    |                 | Bit 1 | Not Used         |                               |
|       |      |    |                 | Bit 2 | Not Used         |                               |
|       |      |    |                 | Bit 3 | Not Used         |                               |
|       |      |    |                 | Bit 4 | Not Used         |                               |
|       |      |    |                 | Bit 5 | Not Used         |                               |
|       |      |    |                 | Bit 6 | Not Used         |                               |
|       |      |    |                 | Bit 7 | Not Used         |                               |
| 33    | 11   | 44 | Not Used        |       |                  |                               |
| 20    | 44   | 64 | Tail            |       |                  |                               |
| 64    |      |    | Total           |       |                  |                               |



## Opcode 60, Sub-Opcodes: 0 X 01 to 0 X FF

The Opcode number 60 refers to all the events logged by the POS that do not belong to any specific type of transaction registered. It is a general transaction. A Sub Opcode defining the function differentiates each one of the Opcode numbers 60.

### 01 – Item Not found

#### 0 X 01

**Explanation:** This Sub Opcode is recorded every time an item is entered or scanned at the POS terminal, and is not found. The Back Office collects all this data in the Not found QDX file in order to keep a report on items not found on the system.

| Bytes | From | To | Data     | Bits  | Explanation          | Remarks                        |
|-------|------|----|----------|-------|----------------------|--------------------------------|
| 1     | 0    | 1  | Opcode   |       | 60 – Log Information |                                |
| 1     | 1    | 2  | Function |       | 01 – PLU Not Found   |                                |
| 7     | 2    | 9  | Code     |       | Item number          |                                |
| 1     | 9    | 10 | Flag 1   | bit 0 | Scanned Item         | Item was scanned               |
|       |      |    |          | bit 1 | Inquiry              | Item was looked up via inquiry |
|       |      |    |          | bit 2 | Info record          | Informative record             |
|       |      |    |          | bit 3 | Not Used             |                                |
|       |      |    |          | bit 4 | Not Used             |                                |
|       |      |    |          | bit 5 | Not Used             |                                |
|       |      |    |          | bit 6 | Not Used             |                                |
|       |      |    |          | bit 7 | Not Used             |                                |
| 34    | 10   | 44 | Not Used |       |                      |                                |
| 20    | 44   | 64 | Tail     |       |                      |                                |
| 64    |      |    | Total    |       |                      |                                |

## 02 – EFT Comm. Fail

### 0 X 02

**Explanation:** The EFT Comm. Fail records when an external tender communication fails. The function includes many different options for the POS. e.g., information on the End Request, Fail Clear Input, Time Out on Ticket.

| Bytes | From | To | Data                  | Bits     | Explanation                | Remarks |
|-------|------|----|-----------------------|----------|----------------------------|---------|
| 1     | 0    | 1  | Opcode                |          | 60 – Log Information       |         |
| 1     | 1    | 2  | Function              |          | 02 – EFT Comm. Fail        |         |
| 1     | 2    | 3  | Sub Function          |          |                            |         |
| Union |      |    |                       |          |                            |         |
| Eft1  |      |    |                       |          |                            |         |
| 8     | 3    | 11 | Auth number           |          |                            |         |
| 10    | 11   | 21 | Reference number      |          |                            |         |
| 5     | 21   | 26 | Sequence number       |          |                            |         |
| 6     | 26   | 32 | EFT trace number      |          |                            |         |
| 2     | 32   | 34 | Tender number         |          |                            |         |
| 4     | 34   | 38 | Tender amount         |          |                            |         |
| 3     | 38   | 41 | Start time            |          |                            |         |
| 1     | 41   | 42 | Flag                  | Bit 0    | Opt MTX Receipts Retrieved |         |
|       |      |    |                       | Bit 1    | ECC In Sequence            |         |
|       |      |    |                       | Bit 2    | PIN used                   |         |
|       |      |    |                       | Bits 3-7 | Not used                   |         |
| 2     | 42   | 44 | Not Used              |          |                            |         |
| Eft2  |      |    |                       |          |                            |         |
| 11    | 3    | 14 | Masked Account Number |          |                            |         |
| 2     | 14   | 16 | Expiration Date Year  |          |                            |         |
| 18    | 16   | 34 | Payment Description   |          |                            |         |
| 4     | 34   | 38 | Count                 |          |                            |         |
| 6     | 38   | 44 | Not Used              |          |                            |         |
| Eft3  |      |    |                       |          |                            |         |
| 41    | 3    | 44 | EFT Owner Name        |          |                            |         |

| Bytes | From | To | Data  | Bits | Explanation | Remarks |
|-------|------|----|-------|------|-------------|---------|
| 20    | 44   | 64 | Tail  |      |             |         |
| 64    |      |    | Total |      |             |         |

## 03 – Birthday

### 0 X 03

**Explanation:** The Birthday function is recorded when the sale of an item that is controlled with an age restriction is transacted, e.g., Alcohol. The item code triggers the function, prompting for the customers Age, Date, Month, and Year of birth, etc.

| Bytes | From | To | Data     | Bits  | Explanation          | Remarks                        |
|-------|------|----|----------|-------|----------------------|--------------------------------|
| 1     | 0    | 1  | Opcode   |       | 60 – Log Information |                                |
| 1     | 1    | 2  | Function |       | 03 – Birthday        |                                |
| 1     | 2    | 3  | Age      |       |                      |                                |
| 1     | 3    | 4  | Day      |       | Date of Birth: Day   |                                |
| 1     | 4    | 5  | Month    |       | Date of Birth: Month |                                |
| 2     | 5    | 7  | Year     |       | Date of Birth: Year  |                                |
| 1     | 7    | 8  | Flags    |       |                      |                                |
|       |      |    |          | Bit 0 | Bio DOB Flg          | Date of Birth obtained by PBT. |
|       |      |    |          | Bit 1 | Not Used bdate       |                                |
|       |      |    |          | Bit 2 | Not Used bdate       |                                |
|       |      |    |          | Bit 3 | Not Used bdate       |                                |
|       |      |    |          | Bit 4 | Not Used bdate       |                                |
|       |      |    |          | Bit 5 | Not Used bdate       |                                |
|       |      |    |          | Bit 6 | Not Used bdate       |                                |
|       |      |    |          | Bit 7 | Not Used bdate       |                                |
| 36    | 8    | 44 | Not Used |       |                      |                                |
| 20    | 44   | 64 | Tail     |       |                      |                                |
| 64    |      |    | Total    |       |                      |                                |

## 04 – Tax Exempt

### 0 X 04

**Explanation:** The Tax Exempt function records the information registered when tax is exempted from the sale of an item. The POS registers the exemption number and specifies which tax is exemptible, if not all.

| Bytes | From | To | Data          | Bits  | Explanation                           | Remarks     |
|-------|------|----|---------------|-------|---------------------------------------|-------------|
| 1     | 0    | 1  | Opcode        |       | 60 – Log Information                  |             |
| 1     | 1    | 2  | Function      |       | 04 – Tax Exempt                       |             |
| 1     | 2    | 3  | Options       |       | 00 – Stop<br>01 – Start               |             |
| 19    | 3    | 22 | Exempt Number |       |                                       |             |
| 1     | 22   | 23 | All Tax       |       | Tax exempt for all taxes              |             |
| 8     | 23   | 31 | Tax           |       | Allows to specify which tax is exempt |             |
| 1     | 31   | 32 | Flag 1        | bit 0 | WIC Tax Exempt                        | Albertson's |
|       |      |    |               | bit 1 | Not Used                              |             |
|       |      |    |               | bit 2 | Not Used                              |             |
|       |      |    |               | bit 3 | Not Used                              |             |
|       |      |    |               | bit 4 | Not Used                              |             |
|       |      |    |               | bit 5 | Not Used                              |             |
|       |      |    |               | bit 6 | Not Used                              |             |
|       |      |    |               | bit 7 | Not Used                              |             |
| 12    | 32   | 44 | Not Used      |       |                                       |             |
| 20    | 44   | 64 | Tail          |       |                                       |             |
| 64    |      |    | Total         |       |                                       |             |

## 05 – Car

### 0 X 05

**Explanation:** The Car function refers to Fuel Station transactions. It is the information recorded when a car fuels, sending the Registration Number, Mileage, CVD, Range etc.

| Bytes | From | To | Data                | Bits  | Explanation          | Remarks |
|-------|------|----|---------------------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode              |       | 60 – Log Information |         |
| 1     | 1    | 2  | Function            |       | 05 – Car             |         |
| 1     | 2    | 3  | Flag 1              |       |                      |         |
|       |      |    |                     | bit 0 | Registration Number  |         |
|       |      |    |                     | bit 1 | Mileage              |         |
|       |      |    |                     | bit 2 | CVD                  |         |
|       |      |    |                     | bit 3 | Range                |         |
|       |      |    |                     | bit 4 | Not Used             |         |
|       |      |    |                     | bit 5 | Not Used             |         |
|       |      |    |                     | bit 6 | Not Used             |         |
|       |      |    |                     | bit 7 | Not Used             |         |
| 11    | 3    | 14 | Registration Number |       |                      |         |
| 11    | 14   | 25 | Mileage             |       |                      |         |
| 1     | 25   | 26 | CVD                 |       |                      |         |
| 5     | 26   | 31 | Range               |       |                      |         |
| 13    | 31   | 44 | Reserved            |       |                      |         |
| 20    | 44   | 64 | Tail                |       |                      |         |
| 64    |      |    | Total               |       |                      |         |

## 06 – Checksum

0 X 06

**Explanation:** This Checksum function records on each PC: PLU Count and Checksum, Promotion Count and Promotion Checksum.

| Bytes | From | To | Data              | Bits  | Explanation             | Remarks |
|-------|------|----|-------------------|-------|-------------------------|---------|
| 1     | 0    | 1  | Opcode            |       | 60 – Log Information    |         |
| 1     | 1    | 2  | Function          |       | 06 – Checksum           |         |
| 1     | 2    | 3  | Flag 1            |       |                         |         |
|       |      |    |                   | bit 0 | No checksum performed   |         |
|       |      |    |                   | bit 1 | Ignore PLU Maintenance  |         |
|       |      |    |                   | bit 2 | Ignore BROM Maintenance |         |
|       |      |    |                   | bit 3 | PLU checksum failed     |         |
|       |      |    |                   | bit 4 | Brom checksum failed    |         |
|       |      |    |                   | bit 5 | Not Used                |         |
|       |      |    |                   | bit 6 | Not Used                |         |
|       |      |    |                   | bit 7 | Not Used                |         |
| 4     | 3    | 7  | POS PLU Count     |       |                         |         |
| 4     | 7    | 11 | POS PLU Checksum  |       |                         |         |
| 4     | 11   | 15 | POS BROM Count    |       |                         |         |
| 4     | 15   | 19 | POS BROM Checksum |       |                         |         |
| 4     | 19   | 23 | PC PLU Count      |       |                         |         |
| 4     | 23   | 27 | PC PLU Checksum   |       |                         |         |
| 4     | 27   | 31 | PC BROM Count     |       |                         |         |
| 4     | 31   | 35 | PC BROM Checksum  |       |                         |         |
| 9     | 35   | 44 | Reserved          |       |                         |         |
| 20    | 44   | 64 | Tail              |       |                         |         |
| 64    |      |    | Total             |       |                         |         |

## 07 – Background Load

0 X 07

**Explanation:** The Background Load is recorded when the POS loads, updates, or deletes items from the PLU list of items. The load is transferred from the Back Office to the POS.

| Bytes | From | To | Data          | Bits  | Explanation          | Remarks |
|-------|------|----|---------------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode        |       | 60 – Log Information |         |
| 1     | 1    | 2  | Function      |       | 07 – Background load |         |
| 1     | 2    | 3  | Flag 1        |       |                      |         |
|       |      |    |               | bit 0 | Start PLU file load  |         |
|       |      |    |               | bit 1 | Stop PLU file load   |         |
|       |      |    |               | bit 2 | Start BROM file load |         |
|       |      |    |               | bit 3 | Stop BROM file load  |         |
|       |      |    |               | bit 4 | Not Used             |         |
|       |      |    |               | bit 5 | Not Used             |         |
|       |      |    |               | bit 6 | Not Used             |         |
|       |      |    |               | bit 7 | Not Used             |         |
| 2     | 3    | 5  | New Items     |       |                      |         |
| 2     | 5    | 7  | Updated Items |       |                      |         |
| 2     | 7    | 9  | Deleted Items |       |                      |         |
| 2     | 9    | 11 | Errors        |       |                      |         |
| 33    | 11   | 44 | Reserved      |       |                      |         |
| 20    | 44   | 64 | Tail          |       |                      |         |
| 64    |      |    | Total         |       |                      |         |



## 08 – Account

0 X 08

**Explanation:** The Account function records the details of customers store accounts at the end of the transaction, recording the Tender Number, Type, Account Number, Authorization Number, etc.

| Bytes | From | To | Data                               | Bits | Explanation          | Remarks       |
|-------|------|----|------------------------------------|------|----------------------|---------------|
| 1     | 0    | 1  | Opcode                             |      | 60 – Log Information |               |
| 1     | 1    | 2  | Function                           |      | 08 – Account         |               |
| 2     | 2    | 4  | Tender No.                         |      |                      | Tender Number |
| 1     | 4    | 5  | Type                               |      |                      | Tender type   |
| 21    | 5    | 26 | Account                            |      |                      |               |
| 9     | 26   | 35 | Authorization<br>Number            |      |                      |               |
| 9     | 36   | 44 | Printed<br>authorization<br>number |      |                      |               |
| 20    | 44   | 64 | Tail                               |      |                      |               |
| 64    |      |    | Total                              |      |                      |               |

## 09 – Bagger ID

0 X 09

| Bytes | From | To | Data      | Bits | Explanation                    | Remarks |
|-------|------|----|-----------|------|--------------------------------|---------|
| 1     | 0    | 1  | Opcode    |      | 60 – Log Information           |         |
| 1     | 1    | 2  | Function  |      | 09 – Bagger ID                 |         |
| 11    | 2    | 13 | Bagger ID |      | Bagger name as captured at POS |         |
| 31    | 13   | 44 | Reserved  |      |                                |         |
| 20    | 44   | 64 | Tail      |      |                                |         |
| 64    |      |    | Total     |      |                                |         |

## 0A – Charge Posting

0 X 0A

| Bytes | From | To | Data           | Bits | Explanation          | Remarks |
|-------|------|----|----------------|------|----------------------|---------|
| 1     | 0    | 1  | Opcode         |      | 60 – Log Information |         |
| 1     | 1    | 2  | Function       |      | 0A – Charge posting  |         |
| 16    | 2    | 18 | cp_name        |      |                      |         |
| 12    | 18   | 30 | cp_account_num |      |                      |         |
| 1     | 30   | 31 | cp_status      |      |                      |         |
| 4     | 31   | 35 | cp_amount      |      |                      |         |
| 4     | 35   | 39 | cp_balance     |      |                      |         |
| 4     | 39   | 43 | cp_limit       |      |                      |         |
| 1     | 43   | 44 | cp_upcharge    |      |                      |         |
| 20    | 44   | 64 | Tail           |      |                      |         |
| 64    |      |    | Total          |      |                      |         |

## 0B – Expense

### 0 X 0B

**Explanation:** The Expenses function records the information for all expenses, e.g., basic expenses, purchases, etc.

| Bytes  | From | To | Data            | Bits  | Explanation                                                                                                                                                                                                                                                                                                     | Remarks                                                         |
|--------|------|----|-----------------|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| 1      | 0    | 1  | Opcode          |       | 60 – Log Information                                                                                                                                                                                                                                                                                            |                                                                 |
| 1      | 1    | 2  | Function        |       | 0B – Expense                                                                                                                                                                                                                                                                                                    |                                                                 |
| 1      | 2    | 3  | Sub Function    |       | 1 – Basic<br>2,3 – Purchase<br>4 – Debtors<br>5 – Christmas Stamps<br>6,7 – Bad Debts Recovered<br>8 – Basic + VAT<br>9 – Salary<br>11 – Non Bankable<br>12 – Basic + Transaction<br>Description<br>13 – Cost Center<br>14 – Additional Reference +<br>Comments<br>15- Mileage Claim<br>16 – Automatic Machines |                                                                 |
| 1      | 3    | 4  | Flag 1          | bit 0 | Payout                                                                                                                                                                                                                                                                                                          |                                                                 |
|        |      |    |                 | bit 1 | Receipt                                                                                                                                                                                                                                                                                                         |                                                                 |
|        |      |    |                 | bit 2 | Salary                                                                                                                                                                                                                                                                                                          |                                                                 |
|        |      |    |                 | bit 3 | Option reprocess                                                                                                                                                                                                                                                                                                | Process TRS only in<br>reprocess mode                           |
|        |      |    |                 | bit 4 | Last ID                                                                                                                                                                                                                                                                                                         | Use last transaction ID                                         |
|        |      |    |                 | bit 5 | Tender By Unit                                                                                                                                                                                                                                                                                                  | If true, the Amount field<br>will contain the quantity<br>value |
|        |      |    |                 | bit 6 | Is Last Transaction                                                                                                                                                                                                                                                                                             | First transaction in<br>template                                |
|        |      |    |                 | bit 7 | Is First Transaction                                                                                                                                                                                                                                                                                            | Last transaction in<br>template                                 |
| Info 1 |      |    | Expense General |       |                                                                                                                                                                                                                                                                                                                 |                                                                 |
| 40     | 4    | 44 | Data            |       |                                                                                                                                                                                                                                                                                                                 |                                                                 |

| Bytes  | From | To | Data                  | Bits | Explanation | Remarks |
|--------|------|----|-----------------------|------|-------------|---------|
| Info 2 |      |    | Expense Basic         |      |             |         |
| 14     | 4    | 18 | Reference             |      |             |         |
| 4      | 18   | 22 | Branch                |      |             |         |
| 4      | 22   | 26 | Expense Code          |      |             |         |
| 2      | 26   | 28 | Tender Type           |      |             |         |
| 8      | 28   | 36 | Amount                |      |             |         |
| 2      | 36   | 38 | Safe number           |      |             |         |
| 2      | 38   | 40 | User number           |      |             |         |
| 1      | 40   | 41 | Action                |      |             |         |
| 1      | 41   | 42 | PC No.                |      |             |         |
| 1      | 42   | 43 | Template Type         |      |             |         |
| 1      | 43   | 44 | Filler                |      |             |         |
| Info 3 |      |    | Basic Expense 2       |      |             |         |
| 4      | 4    | 8  | Quantity              |      |             |         |
| 3      | 8    | 11 | Date                  |      |             |         |
| 33     | 11   | 44 | Filler                |      |             |         |
| Info 4 |      |    | Expense Basic<br>VAT  |      |             |         |
| 8      | 4    | 12 | VAT Amount            |      |             |         |
| 8      | 12   | 20 | Double VAT Ref        |      |             |         |
| 4      | 20   | 24 | Quantity              |      |             |         |
| 20     | 24   | 44 | Filler                |      |             |         |
| Info 5 |      |    | Expense<br>Purchase 1 |      |             |         |
| 8      | 4    | 12 | VAT Amount            |      |             |         |
| 8      | 12   | 20 | Double VAT<br>Invoice |      |             |         |
| 4      | 20   | 24 | Grv Number            |      |             |         |
| 2      | 24   | 26 | Re Dept               |      |             |         |
| 4      | 26   | 30 | Quantity              |      |             |         |
| 14     | 30   | 44 | Filler                |      |             |         |
| Info 6 |      |    | Expense<br>Purchase 2 |      |             |         |

| Bytes   | From | To | Data                   | Bits | Explanation | Remarks |
|---------|------|----|------------------------|------|-------------|---------|
| 28      | 4    | 32 | Description            |      |             |         |
| 12      | 32   | 44 | Filler                 |      |             |         |
| Info 7  |      |    |                        |      |             |         |
|         |      |    | Expense debtor         |      |             |         |
| 8       | 4    | 12 | VAT Amount             |      |             |         |
| 7       | 12   | 19 | VAT Invoice            |      |             |         |
| 25      | 19   | 44 | Filler                 |      |             |         |
| Info 8  |      |    |                        |      |             |         |
|         |      |    | Expense Crst           |      |             | Xmas    |
| 4       | 4    | 8  | Agent                  |      |             |         |
| 4       | 8    | 12 | Quantity               |      |             |         |
| 32      | 12   | 44 | Filler                 |      |             |         |
| Info 9  |      |    |                        |      |             |         |
|         |      |    | Expense Account        |      |             |         |
| 22      | 4    | 26 | Account number         |      |             |         |
| 4       | 26   | 30 | Quantity               |      |             |         |
| 14      | 30   | 44 | Filler                 |      |             |         |
| Info 10 |      |    |                        |      |             |         |
|         |      |    | Expense Account<br>2   |      |             |         |
| 30      | 4    | 34 | Name                   |      |             |         |
| 10      | 34   | 44 | Initials               |      |             |         |
| Info 11 |      |    |                        |      |             |         |
|         |      |    | Expense Salary         |      |             |         |
| 2       | 4    | 6  | Type                   |      |             |         |
| 4       | 6    | 10 | Quantity               |      |             |         |
| 14      | 10   | 24 | Batch code             |      |             |         |
| 20      | 24   | 44 | Filler                 |      |             |         |
| Info 12 |      |    |                        |      |             |         |
|         |      |    | Non Bankable           |      |             |         |
| 20      | 4    | 24 | Ref Date               |      |             |         |
| 20      | 24   | 44 | Filler                 |      |             |         |
| Info 13 |      |    |                        |      |             |         |
|         |      |    | Expense Cost<br>Center |      |             |         |
| 7       | 4    | 11 | Cost Center            |      |             |         |
| 33      | 11   | 44 | Filler                 |      |             |         |

| Bytes   | From | To | Data                  | Bits | Explanation                                                          | Remarks |
|---------|------|----|-----------------------|------|----------------------------------------------------------------------|---------|
| Info 14 |      |    | Additional References |      |                                                                      |         |
| 1       | 4    | 5  | Type                  |      | 0 – Add Reference<br>1 – Comment 1<br>2 – Comment 2<br>3 – Comment 3 |         |
| 30      | 5    | 35 | Add Reference         |      |                                                                      |         |
| 9       | 35   | 44 | Filler                |      |                                                                      |         |
| Info 15 |      |    | Mileage Claim         |      |                                                                      |         |
| 3       | 4    | 7  | Drive No              |      |                                                                      |         |
| 8       | 7    | 15 | Mileage               |      |                                                                      |         |
| 8       | 15   | 23 | Price Per Mile        |      |                                                                      |         |
| 10      | 23   | 33 | Engine Size           |      |                                                                      |         |
| 11      | 33   | 44 | Filler                |      |                                                                      |         |
| Info 16 |      |    | Expense Auto Machines |      |                                                                      |         |
| 2       | 4    | 6  | Machine ID            |      |                                                                      |         |
| 8       | 6    | 14 | Open Read             |      |                                                                      |         |
| 30      | 14   | 44 | Filler                |      |                                                                      |         |
| 20      | 44   | 64 | Tail                  |      |                                                                      |         |
| 64      |      |    | Total                 |      |                                                                      |         |

## 0C – Cost Percent

### 0 X 0C

**Explanation:** The Cost Percent function records the information on the cost percent of sales, sending the Old Percentages and the New Percentages in the transaction.

| Bytes | From | To | Data        | Bits  | Explanation          | Remarks |
|-------|------|----|-------------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode      |       | 60 – Log Information |         |
| 1     | 1    | 2  | Function    |       | 0C – Cost Percent    |         |
| 1     | 2    | 3  | Flag 1      |       |                      |         |
|       |      |    |             | bit 0 | Start                |         |
|       |      |    |             | bit 1 | Not Used             |         |
|       |      |    |             | bit 2 | Not Used             |         |
|       |      |    |             | bit 3 | Not Used             |         |
|       |      |    |             | bit 4 | Not Used             |         |
|       |      |    |             | bit 5 | Not Used             |         |
|       |      |    |             | bit 6 | Not Used             |         |
|       |      |    |             | bit 7 | Not Used             |         |
| 4     | 3    | 7  | New Percent |       |                      |         |
| 4     | 7    | 11 | Old Percent |       |                      |         |
| 33    | 11   | 44 | Not Used    |       |                      |         |
| 20    | 44   | 64 | Tail        |       |                      |         |
| 64    |      |    | Total       |       |                      |         |



## 0D – Supervisor

### 0 X 0D

**Explanation:** The Supervisor function records information every time the Supervisor Card is needed at the POS, sending the data read from the Supervisor Scan Card.

| Bytes | From | To | Data               | Bits  | Explanation          | Remarks                                                          |
|-------|------|----|--------------------|-------|----------------------|------------------------------------------------------------------|
| 1     | 0    | 1  | Opcode             |       | 60 – Log Information |                                                                  |
| 1     | 1    | 2  | Function           |       | 0D – Supervisor      |                                                                  |
| 1     | 2    | 3  | Flag 1             |       |                      |                                                                  |
|       |      |    |                    | bit 0 | Scan Card            |                                                                  |
|       |      |    |                    | bit 1 | Approved by RPO      | This bit determines if the trs is approved at the POS or by RPO. |
|       |      |    |                    | bit 2 | Not Used             |                                                                  |
|       |      |    |                    | bit 3 | Not Used             |                                                                  |
|       |      |    |                    | bit 4 | Not Used             |                                                                  |
|       |      |    |                    | bit 5 | Not Used             |                                                                  |
|       |      |    |                    | bit 6 | Not Used             |                                                                  |
|       |      |    |                    | bit 7 | Not Used             |                                                                  |
| 4     | 3    | 7  | Supervisor ID      |       |                      |                                                                  |
| 1     | 7    | 8  | Privilege          |       |                      |                                                                  |
| 1     | 8    | 9  | Keylock            |       |                      | Does not exist in Tesco                                          |
| 20    | 9    | 29 | Supervisor Name    |       |                      |                                                                  |
| 1     | 29   | 30 | PLU Action         |       |                      |                                                                  |
| 1     | 30   | 31 | Transaction Action |       |                      |                                                                  |
| 13    | 31   | 44 | Reserved           |       |                      |                                                                  |
| 20    | 44   | 64 | Tail               |       |                      |                                                                  |
| 64    |      |    | Total              |       |                      |                                                                  |

## 0E – Buyaid

### 0 X 0E

**Explanation:** The Buyaid Opcode registers when information on a tender type called Buyaid is sent from the POS. For example, Buyaid Number, Amount, etc.

| Bytes | From | To | Data           | Bits  | Explanation          | Remarks |
|-------|------|----|----------------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode         |       | 60 – Log Information |         |
| 1     | 1    | 2  | Function       |       | 0E – Buyaid          |         |
| 1     | 2    | 3  | Flag 1         |       |                      |         |
|       |      |    |                | bit 0 | Not Used             |         |
|       |      |    |                | bit 1 | Not Used             |         |
|       |      |    |                | bit 2 | Not Used             |         |
|       |      |    |                | bit 3 | Not Used             |         |
|       |      |    |                | bit 4 | Not Used             |         |
|       |      |    |                | bit 5 | Not Used             |         |
|       |      |    |                | bit 6 | Not Used             |         |
|       |      |    |                | bit 7 | Not Used             |         |
| 2     | 3    | 5  | Buyaid Number  |       |                      |         |
| 4     | 5    | 9  | Amount         |       |                      |         |
| 4     | 9    | 13 | Voucher Number |       |                      |         |
| 20    | 13   | 33 | Account        |       |                      |         |
| 11    | 33   | 44 | Reserved       |       |                      |         |
| 20    | 44   | 64 | Tail           |       |                      |         |
| 64    |      |    | Total          |       |                      |         |

## 0F – Staff Discount

0 X 0F

**Explanation:** The Staff Discount function records the information when staff discounts are transacted. The Staff Number, Discount Amount, Number, Percent, Tender Number, etc., are all recorded in the transaction.

| Bytes | From | To | Data             | Bits  | Explanation             | Remarks |
|-------|------|----|------------------|-------|-------------------------|---------|
| 1     | 0    | 1  | Opcode           |       | 60 – Log Information    |         |
| 1     | 1    | 2  | Function         |       | 0F – Staff Discount     |         |
| 1     | 2    | 3  | Flag 1           |       |                         |         |
|       |      |    |                  | bit 0 | Not Used                |         |
|       |      |    |                  | bit 1 | Not Used                |         |
|       |      |    |                  | bit 2 | Not Used                |         |
|       |      |    |                  | bit 3 | Not Used                |         |
|       |      |    |                  | bit 4 | Not Used                |         |
|       |      |    |                  | bit 5 | Not Used                |         |
|       |      |    |                  | bit 6 | Not Used                |         |
|       |      |    |                  | bit 7 | Not Used                |         |
| 11    | 3    | 14 | Staff Number     |       | (ASCII null terminated) |         |
| 4     | 14   | 18 | Discount Amount  |       |                         |         |
| 2     | 18   | 20 | Discount Number  |       |                         |         |
| 4     | 20   | 24 | Discount Percent |       |                         |         |
| 2     | 24   | 26 | Tender Number    |       |                         |         |
| 18    | 26   | 44 | Reserved         |       |                         |         |
| 20    | 44   | 64 | Tail             |       |                         |         |
| 64    |      |    | Total            |       |                         |         |

## 10 – ECCA 1

0 X 10

**Explanation:** The ECCA 1 function records the daily account records. The Name and Account are recorded in the transaction.

| Bytes | From | To | Data         | Bits  | Explanation                                         | Remarks                      |
|-------|------|----|--------------|-------|-----------------------------------------------------|------------------------------|
| 1     | 0    | 1  | Opcode       |       | 60 – Log Information                                |                              |
| 1     | 1    | 2  | Function     |       | 10 – ECCA                                           |                              |
| 1     | 2    | 3  | Sub Function |       | 1 – Name (20)<br>2 – Address (30)<br>3 – Phone (10) |                              |
| 10    | 3    | 13 | Account      |       |                                                     |                              |
| 1     | 13   | 14 | Flag 1       |       |                                                     |                              |
|       |      |    |              | bit 0 | New_ec                                              |                              |
|       |      |    |              | bit 1 | Not Used                                            |                              |
|       |      |    |              | bit 2 | Not Used                                            |                              |
|       |      |    |              | bit 3 | Not Used                                            |                              |
|       |      |    |              | bit 4 | Not Used                                            |                              |
|       |      |    |              | bit 5 | Not Used                                            |                              |
|       |      |    |              | bit 6 | Not Used                                            |                              |
|       |      |    |              | bit 7 | Not Used                                            |                              |
| 20    | 14   | 34 | Name         |       |                                                     |                              |
| 30    | 14   | 44 | Address      |       |                                                     | Union - the highest value 30 |
| 10    | 14   | 24 | Phone        |       |                                                     |                              |
| 9     | 34   | 43 | Bank Number  |       | Name Sub                                            |                              |
|       | 44   | 53 |              |       | Address Sub                                         |                              |
|       | 24   | 33 |              |       | Phone Sub                                           |                              |
| 21    | 43   | 64 | Tail         |       | Name Sub                                            |                              |
| 11    | 53   | 64 |              |       | Address Sub                                         |                              |
| 31    | 33   | 64 |              |       | Phone Sub                                           |                              |
| 64    |      |    | Total        |       |                                                     |                              |

## 10 – ECCA 2

0 X 10

**Explanation:** The ECCA 2 is a continuation of the daily accounts transaction, and the sub function is the Address. The Account and Address fields are recorded in the transaction.

| Bytes | From | To | Data         | Bits  | Explanation          | Remarks |
|-------|------|----|--------------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode       |       | 60 – Log Information |         |
| 1     | 1    | 2  | Function     |       | 10 – ECCA            |         |
| 1     | 2    | 3  | Sub Function |       | 2 – Address (30)     |         |
| 10    | 3    | 13 | Account      |       |                      |         |
| 1     | 13   | 14 | Flag 1       |       |                      |         |
|       |      |    |              | bit 0 | New                  |         |
|       |      |    |              | bit 1 | Not Used             |         |
|       |      |    |              | bit 2 | Not Used             |         |
|       |      |    |              | bit 3 | Not Used             |         |
|       |      |    |              | bit 4 | Not Used             |         |
|       |      |    |              | bit 5 | Not Used             |         |
|       |      |    |              | bit 6 | Not Used             |         |
|       |      |    |              | bit 7 | Not Used             |         |
| 30    | 14   | 44 | Address      |       |                      |         |
| 20    | 44   | 64 | Tail         |       |                      |         |
| 64    |      |    | Total        |       |                      |         |

## 10 – ECCA 3

0 X 10

**Explanation:** The ECCA 3 function is a continuation of the daily file transaction, sending the Account and Telephone number fields in the transaction.

| Bytes | From | To | Data         | Bits  | Explanation          | Remarks |
|-------|------|----|--------------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode       |       | 60 – Log Information |         |
| 1     | 1    | 2  | Function     |       | 10 – ECCA            |         |
| 1     | 2    | 3  | Sub Function |       | 3 – Telephone (10)   |         |
| 10    | 3    | 13 | Account      |       |                      |         |
| 1     | 13   | 14 | Flag 1       |       |                      |         |
|       |      |    |              | bit 0 | New                  |         |
|       |      |    |              | bit 1 | Not Used             |         |
|       |      |    |              | bit 2 | Not Used             |         |
|       |      |    |              | bit 3 | Not Used             |         |
|       |      |    |              | bit 4 | Not Used             |         |
|       |      |    |              | bit 5 | Not Used             |         |
|       |      |    |              | bit 6 | Not Used             |         |
|       |      |    |              | bit 7 | Not Used             |         |
| 10    | 14   | 24 | Telephone    |       |                      |         |
| 20    | 24   | 44 | Not Used     |       |                      |         |
| 20    | 44   | 64 | Tail         |       |                      |         |
| 64    |      |    | Total        |       |                      |         |

## 11 – Customer Information 1

0 X 11

**Explanation:** The Customer Information 1 function records customer information, sending the Customers Name in the transaction.

| Bytes | From | To | Data                 | Bits                                                        | Explanation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Remarks |
|-------|------|----|----------------------|-------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| 1     | 0    | 1  | Opcode               |                                                             | 60 – Log Information                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |
| 1     | 1    | 2  | Function Information |                                                             | 11 – Customer                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |         |
| 1     | 2    | 3  | Sub Function         |                                                             | 0 – Number (20)<br>1 – Name (40)<br>2 – Address (40)<br>3 – Address (40)<br>4 – Address (40)<br>5 – Phone (20)<br>6 – Date (12)<br>7 – Time (10)<br>8 – Customer Message (40)<br>9 – Name and VAT ID (Customer Account)<br>10 – Profession (Customer Account)<br>11 – Fiscal Office (Customer Account)<br>12 – New/Updated address<br>14 – Address 4<br>15 – Address 5<br>19 – Surname<br>28 – Company VAT<br>29 – Company Registration<br>30 – Bank Account number<br>31 – Detailed Tender |         |
| 1     | 3    | 4  | Flag 1               | bit 0<br>bit 1<br>bit 2<br>bit 3<br>bit 4<br>bit 5<br>bit 6 | First<br>Last<br>Customer account<br>Not Used<br>Not Used<br>Not Used<br>Not Used                                                                                                                                                                                                                                                                                                                                                                                                           |         |

| Bytes | From | To | Data  | Bits  | Explanation | Remarks |
|-------|------|----|-------|-------|-------------|---------|
|       |      |    |       | bit 7 | Not Used    |         |
| 40    | 4    | 44 | Data  |       |             |         |
| 20    | 44   | 64 | Tail  |       |             |         |
| 64    |      |    | Total |       |             |         |



## 11 – Customer Information 2

0 X 11

**Explanation:** The Customer Information 2 function records customer information, sending the Customers Address in the transaction.

| Bytes | From | To | Data                 | Bits  | Explanation          | Remarks |
|-------|------|----|----------------------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode               |       | 60 – Log Information |         |
| 1     | 1    | 2  | Function Information |       | 11 – Customer        |         |
| 1     | 2    | 3  | Sub Function         |       | 2 – Address 1 (40)   |         |
| 1     | 3    | 4  | Flag 1               |       |                      |         |
|       |      |    |                      | bit 0 | Not Used             |         |
|       |      |    |                      | bit 1 | Not Used             |         |
|       |      |    |                      | bit 2 | Not Used             |         |
|       |      |    |                      | bit 3 | Not Used             |         |
|       |      |    |                      | bit 4 | Not Used             |         |
|       |      |    |                      | bit 5 | Not Used             |         |
|       |      |    |                      | bit 6 | Not Used             |         |
|       |      |    |                      | bit 7 | Not Used             |         |
| 40    | 4    | 44 | Address 1            |       |                      |         |
| 20    | 44   | 64 | Tail                 |       |                      |         |
| 64    |      |    | Total                |       |                      |         |

## 11 – Customer Information 3

0 X 11

**Explanation:** The Customer Information 3 function records customer information, including a second Address that is recorded in the transaction.

| Bytes | From | To | Data                 | Bits  | Explanation          | Remarks |
|-------|------|----|----------------------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode               |       | 60 – Log Information |         |
| 1     | 1    | 2  | Function Information |       | 11 – Customer        |         |
| 1     | 2    | 3  | Sub Function         |       | 3 – Address 2 (40)   |         |
| 1     | 3    | 4  | Flag 1               |       |                      |         |
|       |      |    |                      | bit 0 | Not Used             |         |
|       |      |    |                      | bit 1 | Not Used             |         |
|       |      |    |                      | bit 2 | Not Used             |         |
|       |      |    |                      | bit 3 | Not Used             |         |
|       |      |    |                      | bit 4 | Not Used             |         |
|       |      |    |                      | bit 5 | Not Used             |         |
|       |      |    |                      | bit 6 | Not Used             |         |
|       |      |    |                      | bit 7 | Not Used             |         |
| 40    | 4    | 44 | Address 2            |       |                      |         |
| 20    | 44   | 64 | Tail                 |       |                      |         |
| 64    |      |    | Total                |       |                      |         |

## 11 – Customer Information 4

0 X 11

**Explanation:** The Customer Information 4 function records more information on customers, including a third Address that is recorded within the sub function of the transaction.

| Bytes | From | To | Data                 | Bits  | Explanation          | Remarks |
|-------|------|----|----------------------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode               |       | 60 – Log Information |         |
| 1     | 1    | 2  | Function Information |       | 11 – Customer        |         |
| 1     | 2    | 3  | Sub Function         |       | 4 – Address 3 (40)   |         |
| 1     | 3    | 4  | Flag 1               |       |                      |         |
|       |      |    |                      | bit 0 | Not Used             |         |
|       |      |    |                      | bit 1 | Not Used             |         |
|       |      |    |                      | bit 2 | Not Used             |         |
|       |      |    |                      | bit 3 | Not Used             |         |
|       |      |    |                      | bit 4 | Not Used             |         |
|       |      |    |                      | bit 5 | Not Used             |         |
|       |      |    |                      | bit 6 | Not Used             |         |
|       |      |    |                      | bit 7 | Not Used             |         |
| 40    | 4    | 44 | Address 3            |       |                      |         |
| 20    | 44   | 64 | Tail                 |       |                      |         |
| 64    |      |    | Total                |       |                      |         |

## 11 – Customer Information 5

0 X 11

**Explanation:** The Customer Information 5 function records more customer information, including the Telephone Number that is recorded in the sub function of the transaction.

| Bytes | From | To | Data                 | Bits  | Explanation          | Remarks |
|-------|------|----|----------------------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode               |       | 60 – Log Information |         |
| 1     | 1    | 2  | Function Information |       | 11 – Customer        |         |
| 1     | 2    | 3  | Sub Function         |       | 5 – Telephone (20)   |         |
| 1     | 3    | 4  | Flag 1               |       |                      |         |
|       |      |    |                      | bit 0 | Not Used             |         |
|       |      |    |                      | bit 1 | Not Used             |         |
|       |      |    |                      | bit 2 | Not Used             |         |
|       |      |    |                      | bit 3 | Not Used             |         |
|       |      |    |                      | bit 4 | Not Used             |         |
|       |      |    |                      | bit 5 | Not Used             |         |
|       |      |    |                      | bit 6 | Not Used             |         |
|       |      |    |                      | bit 7 | Not Used             |         |
| 20    | 4    | 24 | Telephone            |       |                      |         |
| 20    | 24   | 44 | Not Used             |       |                      |         |
| 20    | 44   | 64 | Tail                 |       |                      |         |
| 64    |      |    | Total                |       |                      |         |

## 13 – SKU

0 X 13

**Explanation:** The SKU (Stock Keeping Unit) is the PLU code referred to when creating a batch file or making changes to the PLU file, which are made per item record. The transaction sends the SKU, Old Price, New Price, etc.

| Bytes | From | To | Data      | Bits  | Explanation          | Remarks |
|-------|------|----|-----------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode    |       | 60 – Log Information |         |
| 1     | 1    | 2  | Function  |       | 13 – Customer        |         |
| 1     | 2    | 3  | Flag 1    |       |                      |         |
|       |      |    |           | bit 0 | Not Used             |         |
|       |      |    |           | bit 1 | Not Used             |         |
|       |      |    |           | bit 2 | Not Used             |         |
|       |      |    |           | bit 3 | Not Used             |         |
|       |      |    |           | bit 4 | Not Used             |         |
|       |      |    |           | bit 5 | Not Used             |         |
|       |      |    |           | bit 6 | Not Used             |         |
|       |      |    |           | bit 7 | Not Used             |         |
| 11    | 3    | 14 | SKU       |       |                      |         |
| 11    | 14   | 25 | PLU Code  |       |                      |         |
| 4     | 25   | 29 | Price Old |       |                      |         |
| 4     | 29   | 33 | Price New |       |                      |         |
| 11    | 33   | 44 | Reserved  |       |                      |         |
| 20    | 44   | 64 | Tail      |       |                      |         |
| 64    |      |    | Total     |       |                      |         |

## 14 – Price Override

0 X 14

**Explanation:** The Price Override records information when an item with an embedded value has been marked down or changed, allowing the cashier to manually override the original price.

| Bytes | From | To | Data             | Bits     | Explanation              | Remarks                                              |
|-------|------|----|------------------|----------|--------------------------|------------------------------------------------------|
| 1     | 0    | 1  | Opcode           |          | 60 – Log Information     |                                                      |
| 1     | 1    | 2  | Function         |          | 14 – Customer            |                                                      |
| 1     | 2    | 3  | Flag 1           |          |                          |                                                      |
|       |      |    |                  | bit 0    | Markdown                 | Progressive                                          |
|       |      |    |                  | bit 1    | Electronic Reduced       | Electronic Reduction                                 |
|       |      |    |                  | bit 2    | Force Price              | Indication that the original price is a forced price |
|       |      |    |                  | bit 3    | Opt Subtract             |                                                      |
|       |      |    |                  | bit 4    | Opt Cancel               |                                                      |
|       |      |    |                  | bit 5    | Qty if fuel gallons      |                                                      |
|       |      |    |                  | bit 6    | Qty is weight            |                                                      |
|       |      |    |                  | bit 7    | Qty is decimal qty       |                                                      |
| 4     | 3    | 7  | Original Price   |          |                          |                                                      |
| 4     | 7    | 11 | Reduced Price    |          |                          |                                                      |
| 4     | 11   | 15 | Qty              |          |                          |                                                      |
| 4     | 15   | 19 | Different Amount |          |                          |                                                      |
| 7     | 19   | 26 | Code             |          |                          |                                                      |
| 1     | 26   | 27 | Type             |          |                          |                                                      |
| 1     | 27   | 28 | Reason Number    |          |                          | Progressive                                          |
| 1     | 28   | 29 | Return Type      |          |                          |                                                      |
| 1     | 29   | 30 | Flag             |          |                          |                                                      |
|       |      |    |                  | bit 0    | Opt Return Price Confirm |                                                      |
|       |      |    |                  | bit 1    | Percent Off Override     |                                                      |
|       |      |    |                  | bits 2-7 | Not Used                 |                                                      |
| 1     | 30   | 31 | Original MSU     |          |                          |                                                      |
| 1     | 31   | 32 | New MSU          |          |                          |                                                      |
| 4     | 32   | 36 | Org amount       |          |                          | Progressive                                          |
| 4     | 36   | 40 | Percentage Off   |          |                          |                                                      |
| 8     | 40   | 44 | Reserved         |          |                          |                                                      |

| Bytes | From | To | Data  | Bits | Explanation | Remarks |
|-------|------|----|-------|------|-------------|---------|
| 20    | 44   | 64 | Tail  |      |             |         |
| 64    |      |    | Total |      |             |         |

## 15 – Cheque Guarantee

0 X 15

**Explanation:** The Cheque Guarantee records information when customers are paying by Cheque and the guarantee card is displayed. The Cheque Card information recorded in the transaction includes: Issue Date, Expiry Date, Card Range Number, etc.

| Bytes | From | To | Data                   | Bits  | Explanation          | Remarks |
|-------|------|----|------------------------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode                 |       | 60 – Log Information |         |
| 1     | 1    | 2  | Function               |       | 15 – Cheque          |         |
| 1     | 2    | 3  | Flag 1                 |       |                      |         |
|       |      |    |                        | bit 0 | Issue not used       |         |
|       |      |    |                        | bit 1 | Accept issue date    |         |
|       |      |    |                        | bit 2 | Accept Exp. date     |         |
|       |      |    |                        | bit 3 | MCR used             |         |
|       |      |    |                        | bit 4 | Not Used             |         |
|       |      |    |                        | bit 5 | Not Used             |         |
|       |      |    |                        | bit 6 | Not Used             |         |
|       |      |    |                        | bit 7 | Not Used             |         |
| 10    | 3    | 13 | Cheque Guarantee Card  |       |                      |         |
| 1     | 13   | 14 | Guarantee Card Length  |       |                      |         |
| 2     | 14   | 16 | Issue Date             |       |                      |         |
| 2     | 16   | 18 | Expiry Date            |       |                      |         |
| 1     | 18   | 19 | Card Range Number      |       |                      |         |
| 1     | 19   | 20 | Issue Number           |       |                      |         |
| 1     | 20   | 21 | Auth Card Range Number |       |                      |         |
| 23    | 21   | 44 | Reserved               |       |                      |         |
| 20    | 44   | 64 | Tail                   |       |                      |         |
| 64    |      |    | Total                  |       |                      |         |



## 16 – Drive Off

0 X 16

**Explanation:** The Drive Off function records car details if after fuelling no payment was made. The system then displays the Drive Off alert. The records in the transaction include: Registration Number, Surname, Car Make, Car Year, and Car Color.

| Bytes | From | To | Data                | Bits  | Explanation          | Remarks |
|-------|------|----|---------------------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode              |       | 60 – Log Information |         |
| 1     | 1    | 2  | Function            |       | 16 – Drive off       |         |
| 1     | 2    | 3  | Flag 1              |       |                      |         |
|       |      |    |                     | bit 0 | Ctp                  |         |
|       |      |    |                     | bit 1 | Not Used             |         |
|       |      |    |                     | bit 2 | Not Used             |         |
|       |      |    |                     | bit 3 | Not Used             |         |
|       |      |    |                     | bit 4 | Not Used             |         |
|       |      |    |                     | bit 5 | Not Used             |         |
|       |      |    |                     | bit 6 | Not Used             |         |
|       |      |    |                     | bit 7 | Not Used             |         |
| 11    | 3    | 14 | Registration Number |       |                      |         |
| 20    | 14   | 34 | Surname             |       |                      |         |
| 5     | 34   | 39 | Car Make            |       |                      |         |
| 2     | 39   | 41 | Car Year            |       |                      |         |
| 3     | 41   | 44 | Car Color           |       |                      |         |
| 20    | 44   | 64 | Tail                |       |                      |         |
| 64    |      |    | Total               |       |                      |         |

## 17 – Bad Accounts

0 X 17

**Explanation:** The Bad Accounts function records information when a bad account is found during a transaction. The information includes the type of check, whether it is a Bad Account or Enhanced Bad Account, recording the Account Number and Account Length.

| Bytes | From | To | Data           | Bits | Explanation                                 | Remarks |
|-------|------|----|----------------|------|---------------------------------------------|---------|
| 1     | 0    | 1  | Opcode         |      | 60 – Log Information                        |         |
| 1     | 1    | 2  | Function       |      | 17 – Bad account                            |         |
| 1     | 2    | 3  | Type           |      | 0 – Bad account<br>1 – Enhanced<br>3 – ECCA |         |
| 10    | 3    | 13 | Account Number |      |                                             |         |
| 1     | 13   | 14 | Account Len    |      |                                             |         |
| 30    | 14   | 44 | Reserved       |      |                                             |         |
| 20    | 44   | 64 | Tail           |      |                                             |         |
| 64    |      |    | Total          |      |                                             |         |

## 18 – Reprint Ticket Request

0 X 18

**Explanation:** The Reprint Ticket Request function records information when there is a request to Reprint Tickets/Receipts. The cashier can request a reprint on a ticket. The POS and Receipt Number are recorded.

| Bytes | From | To | Data             | Bits  | Explanation          | Remarks                     |
|-------|------|----|------------------|-------|----------------------|-----------------------------|
| 1     | 0    | 1  | Opcode           |       | 60 – Log Information |                             |
| 1     | 1    | 2  | Function request |       | 18 – Reprint ticket  |                             |
| 1     | 2    | 3  | Flag 1           |       |                      |                             |
|       |      |    |                  | bit 0 | During Ticket        |                             |
|       |      |    |                  | bit 1 | VAT Receipt          |                             |
|       |      |    |                  | bit 2 | Buffer Print         | To indicate buffer printing |
|       |      |    |                  | bit 3 | Not Used             |                             |
|       |      |    |                  | bit 4 | Not Used             |                             |
|       |      |    |                  | bit 5 | Not Used             |                             |
|       |      |    |                  | bit 6 | Not Used             |                             |
|       |      |    |                  | bit 7 | Not Used             |                             |
| 1     | 3    | 4  | POS              |       |                      |                             |
| 2     | 4    | 6  | Receipt Number   |       |                      |                             |
| 38    | 6    | 44 | Reserved         |       |                      |                             |
| 20    | 44   | 64 | Tail             |       |                      |                             |
| 64    |      |    | Total            |       |                      |                             |

## 19 – Assistant

0 X 19

**Explanation:** The Assistant transaction records when the cashier calls the Assistant during a transaction, recording the Assistant Number, BCD, and Assistant Name on completing the transaction.

| Bytes | From | To | Data             | Bits  | Explanation                | Remarks |
|-------|------|----|------------------|-------|----------------------------|---------|
| 1     | 0    | 1  | Opcode           |       | 60 – Log Information       |         |
| 1     | 1    | 2  | Function         |       | 19 – Assistant             |         |
| 1     | 2    | 3  | Flag 1           |       |                            |         |
|       |      |    |                  | bit 0 | Not Used                   |         |
|       |      |    |                  | bit 1 | Not Used                   |         |
|       |      |    |                  | bit 2 | Not Used                   |         |
|       |      |    |                  | bit 3 | Not Used                   |         |
|       |      |    |                  | bit 4 | Not Used                   |         |
|       |      |    |                  | bit 5 | Not Used                   |         |
|       |      |    |                  | bit 6 | Not Used                   |         |
|       |      |    |                  | bit 7 | Not Used                   |         |
| 16    | 3    | 19 | Assistant Number |       | (In ASCII null terminated) |         |
| 6     | 19   | 25 | BCD              |       | (BCD up to 12 digits)      |         |
| 19    | 25   | 44 | Assistant Name   |       |                            |         |
| 20    | 44   | 64 | Tail             |       |                            |         |
| 64    |      |    | Total            |       |                            |         |

## 1A – Promotion Information

### 0 X 1A

**Explanation:** The Promotion Information function records all the information with reference to the promotion during a transaction, including: Promotion Type, Code, Number, Bucket Number, etc.

| Bytes | From | To | Data                               | Bits  | Explanation             | Remarks                                              |
|-------|------|----|------------------------------------|-------|-------------------------|------------------------------------------------------|
| 1     | 0    | 1  | Opcode                             |       | 60 – Log Information    |                                                      |
| 1     | 1    | 2  | Function Information               |       | 1A – Promotion          |                                                      |
| 1     | 2    | 3  | Flag 1                             |       |                         |                                                      |
|       |      |    |                                    | bit 0 | Promotion               | PROM_CHNG                                            |
|       |      |    |                                    | bit 1 | Member card late swipe  |                                                      |
|       |      |    |                                    | bit 2 | Information Transaction | MBA                                                  |
|       |      |    |                                    | bit 3 | Was Canceled            | Void Manual Promotion                                |
|       |      |    |                                    | bit 4 | Reward by Cashier       | Indicates that the reward was entered by the Cashier |
|       |      |    |                                    | bit 5 | Suppress printing       |                                                      |
|       |      |    |                                    | bit 6 | Last in sequence        |                                                      |
|       |      |    |                                    | bit 7 | Selection               |                                                      |
| 1     | 3    | 4  | Promotion Type                     |       |                         |                                                      |
| 1     | 4    | 5  | Extended Promotion Type            |       |                         |                                                      |
| 1     | 5    | 6  | Department Extended Promotion Type |       |                         |                                                      |
| 7     | 6    | 13 | Code                               |       |                         |                                                      |
| 1     | 13   | 14 | Group Type                         |       |                         |                                                      |
| 1     | 14   | 15 | Apportionment Type                 |       |                         |                                                      |
| 1     | 15   | 16 | Bucket Number                      |       |                         |                                                      |
| 2     | 16   | 18 | Extended Promotion Number          |       |                         |                                                      |
| 1     | 18   | 19 | Extended Bucket Number             |       |                         |                                                      |
| 3     | 19   | 22 | Manual Discount Amount             |       |                         |                                                      |

| Bytes | From | To | Data                                   | Bits    | Explanation                          | Remarks                                                                  |
|-------|------|----|----------------------------------------|---------|--------------------------------------|--------------------------------------------------------------------------|
| 1     | 22   | 23 | Reward Type                            |         |                                      |                                                                          |
| 1     | 23   | 24 | Extended Reward Type                   |         |                                      |                                                                          |
| 1     | 24   | 25 | Department Extended Reward Type        |         |                                      |                                                                          |
| 4     | 25   | 29 | Qualify Spent                          |         |                                      | For recovery                                                             |
| 1     | 29   | 30 | Trigger Scheme                         |         |                                      | For recovery                                                             |
| 4     | 30   | 34 | Prom Engine Allocated Promotion Number |         |                                      | For Discounts                                                            |
| 1     | 34   | 35 |                                        | bits0-1 | Promotion Fiscal Reporting Method    | Item= 0<br>Package= 1<br>Total= 2                                        |
|       |      |    |                                        | bit 2   | Collected promotion                  | FSD12648 Indicates that this promotion is part of a promotion collector. |
|       |      |    |                                        | bit 3   | Trig by segments                     | FSD12648 Indicates that this promotion was triggered by segments.        |
|       |      |    |                                        | bit 4   | Staff Discount Promotion             |                                                                          |
|       |      |    |                                        | bit 5   | Refund Discount                      |                                                                          |
|       |      |    |                                        | bit 6   | Client Discount                      | True if use discount instead of promotion                                |
|       |      |    |                                        | Bit 7   | Triggered by Manual Segment Function |                                                                          |
| 4     | 35   | 39 | Promotion Number                       |         |                                      | PROM_CHNG<br>Does not exist in Tesco                                     |
| 4     | 39   | 43 | Points Redeemed                        |         |                                      |                                                                          |
| 1     | 43   | 44 | Customer Specific                      |         |                                      |                                                                          |
| 20    | 44   | 64 | Tail                                   |         |                                      |                                                                          |
| 64    |      |    | Total                                  |         |                                      |                                                                          |

## 1B – ClubCard

### 0 X 1B

**Explanation:** The Clubcard function records when a recognized ClubCard is swiped through at the POS Terminal. The POS Terminal checks the Scheme Number, Card Number, Tender Number, Customer Type, etc.

| Bytes | From | To | Data                      | Bits  | Explanation                    | Remarks                           |
|-------|------|----|---------------------------|-------|--------------------------------|-----------------------------------|
| 1     | 0    | 1  | Opcode                    |       | 60 – Log Information           |                                   |
| 1     | 1    | 2  | Function                  |       | 1B – Club Card                 |                                   |
| 1     | 2    | 3  | Flag 1                    | bit 0 | Card was accepted              |                                   |
|       |      |    |                           | bit 1 | Card was voided                |                                   |
|       |      |    |                           | bit 2 | MCR used                       | Card was swiped or else keyed in  |
|       |      |    |                           | bit 3 | Staff discount card            | Clubcard is a staff discount card |
|       |      |    |                           | bit 4 | Qualify spend information      |                                   |
|       |      |    |                           | bit 5 | Club Card Re-entry             |                                   |
|       |      |    |                           | bit 6 | Frequent Shopper accepted      | Progressive                       |
|       |      |    |                           | bit 7 | Processed Late Swipe           |                                   |
| 1     | 3    | 4  | Scheme No.                |       |                                | 1-9                               |
| 20    | 4    | 24 | Card No.                  |       | In ASCII Null terminated       |                                   |
| 2     | 24   | 26 | Tender No.                |       | Card is credit/debit to tender |                                   |
| 1     | 26   | 27 | Customer Type             |       | Panel flag                     |                                   |
| 4     | 27   | 31 | Customer Points to Date   |       |                                |                                   |
| 4     | 31   | 35 | Customer Redemption Value |       |                                |                                   |
| 3     | 35   | 38 | Customer Update Date      |       |                                |                                   |
| 1     | 38   | 39 | Flag 2                    | Bit 0 | Card does not include CD       |                                   |
|       |      |    |                           | bit 1 | Not Used                       |                                   |
|       |      |    |                           | bit 2 | Not Used                       |                                   |
|       |      |    |                           | bit 3 | Not Used                       |                                   |
|       |      |    |                           | bit 4 | Not Used                       |                                   |
|       |      |    |                           | bit 5 | Not Used                       |                                   |
|       |      |    |                           | bit 6 | Not Used                       |                                   |
|       |      |    |                           | bit 7 | Not Used                       |                                   |

| Bytes | From | To | Data          | Bits | Explanation       | Remarks |
|-------|------|----|---------------|------|-------------------|---------|
| 4     | 39   | 43 | Qualify Spent |      |                   |         |
| 1     | 43   | 44 | CRNG_NO       |      | Card Range Number |         |
| 20    | 44   | 64 | Tail          |      |                   |         |
| 64    |      |    | Total         |      |                   |         |



## 1C – Points

### 0 X 1C

**Explanation:** The Points function records when a Clubcard is used and Points are rewarded. The Scheme Number, Promotion, Qualify Spent, Points Value etc., is recorded with this transaction.

| Bytes | From | To | Data            | Bits  | Explanation                        | Remarks                           |
|-------|------|----|-----------------|-------|------------------------------------|-----------------------------------|
| 1     | 0    | 1  | Opcode          |       | 60 – Log Information               |                                   |
| 1     | 1    | 2  | Function        |       | 1C – Points                        |                                   |
| 1     | 2    | 3  | Flag 1          | bit 0 | Information only                   |                                   |
|       |      |    |                 | bit 1 | CC Re-entry                        |                                   |
|       |      |    |                 | bit 2 | Long Promotion                     | Prom_Chng                         |
|       |      |    |                 | bit 3 | Homestore                          |                                   |
|       |      |    |                 | bit 4 | Account update                     |                                   |
|       |      |    |                 | bit 5 | Points Correction                  |                                   |
|       |      |    |                 | bit 6 | Not Used                           |                                   |
|       |      |    |                 | bit 7 | Not Used                           |                                   |
| 1     | 3    | 4  | Scheme Number   |       |                                    | 1 to 9                            |
| 2     | 4    | 6  | Promotion No.   |       |                                    | 2 Lowest bytes (right)            |
| 20    | 6    | 26 | Card Number     |       |                                    | Card No. in ASCII null terminated |
| 4     | 26   | 30 | Qualify Spent   |       |                                    | 26 QS                             |
| 4     | 30   | 34 | Pointable Value |       | Value for given points             |                                   |
| 4     | 34   | 38 | Points          |       |                                    |                                   |
| 4     | 38   | 42 | Bonus Points    |       |                                    |                                   |
| 2     | 42   | 44 | Promotion No.   |       | PROM_CHNG – 2 highest bytes (left) |                                   |
| 20    | 44   | 64 | Tail            |       |                                    |                                   |
| 64    |      |    | Total           |       |                                    |                                   |

## 1D – Track

### 0 X 1D

**Explanation:** The Track function records the information from the number of digits in the Credit Card script, sending the first and last used Track Numbers and Track data in the transaction.

| Bytes | From | To | Data         | Bits  | Explanation          | Remarks |
|-------|------|----|--------------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode       |       | 60 – Log Information |         |
| 1     | 1    | 2  | Function     |       | 1D – Track           |         |
| 1     | 2    | 3  | Flag 1       |       |                      |         |
|       |      |    |              | bit 0 | First                |         |
|       |      |    |              | bit 1 | Last                 |         |
|       |      |    |              | bit 2 | Gift card            |         |
|       |      |    |              | bit 3 | CC Deposit           |         |
|       |      |    |              | bit 4 | Not Used             |         |
|       |      |    |              | bit 5 | Not Used             |         |
|       |      |    |              | bit 6 | Not Used             |         |
|       |      |    |              | bit 7 | Continuation         |         |
| 1     | 3    | 4  | Track Number |       |                      |         |
| 40    | 4    | 44 | Track Data   |       |                      |         |
| 20    | 44   | 64 | Tail         |       |                      |         |
| 64    |      |    | Total        |       |                      |         |

## 1E – Cash in Drawer

0 X 1E

**Explanation:** The Cash in Drawer function records the cash amounts in the drawer, recording if there is too much cash, or not enough cash in the drawer, etc.

| Bytes | From | To | Data     | Bits  | Explanation          | Remarks    |
|-------|------|----|----------|-------|----------------------|------------|
| 1     | 0    | 1  | Opcode   |       | 60 – Log Information |            |
| 1     | 1    | 2  | Function |       | 1E – Cash in Drawer  |            |
| 1     | 2    | 3  | Flag 1   |       |                      |            |
|       |      |    |          | bit 0 | Too much             | Assistance |
|       |      |    |          | bit 1 | Not enough           | Top up     |
|       |      |    |          | bit 2 | Not Used             |            |
|       |      |    |          | bit 3 | Not Used             |            |
|       |      |    |          | bit 4 | Not Used             |            |
|       |      |    |          | bit 5 | Not Used             |            |
|       |      |    |          | bit 6 | Not Used             |            |
|       |      |    |          | bit 7 | Not Used             |            |
| 41    | 3    | 44 | Data     |       |                      |            |
| 20    | 44   | 64 | Tail     |       |                      |            |
| 64    |      |    | Total    |       |                      |            |

## 1F – Wrong Password

0 X 1F

**Explanation:** The Wrong Password function records when the cashier enters a wrong password at the POS Terminal. The Cashier Mode, Cashier Number, Password, and Data are recorded in the transaction.

| Bytes | From | To | Data           | Bits | Explanation          | Remarks |
|-------|------|----|----------------|------|----------------------|---------|
| 1     | 0    | 1  | Opcode         |      | 60 – Log Information |         |
| 1     | 1    | 2  | Function       |      | 1F – Wrong password  |         |
| 1     | 2    | 3  | Mode           |      |                      |         |
|       |      |    |                |      | 1 – At sign-on       |         |
|       |      |    |                |      | 2 – At sign-off      |         |
| 2     | 3    | 5  | Cashier Number |      |                      |         |
| 2     | 5    | 7  | Password       |      |                      |         |
| 37    | 7    | 44 | Data           |      |                      |         |
| 20    | 44   | 64 | Tail           |      |                      |         |
| 64    |      |    | Total          |      |                      |         |

## 20 – Frequent Shopper

0 X 20

**Explanation:** The Frequent Shopper function records details during a transaction made with a Frequent Shopper card. The records include: Reward Check Used, Old Price, New Price, Qty, Save Amount, etc.

| Bytes | From | To | Data             | Bits  | Explanation          | Remarks |
|-------|------|----|------------------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode           |       | 60 – Log Information |         |
| 1     | 1    | 2  | Function         |       | 20 – Freq. Shopper   |         |
| 7     | 2    | 9  | Code             |       |                      |         |
| 1     | 9    | 10 | Flag 1           |       |                      |         |
|       |      |    |                  | bit 0 | Reward Check Used    |         |
|       |      |    |                  | bit 1 | opt_not_net_fs       |         |
|       |      |    |                  | bit 2 | Not Used             |         |
|       |      |    |                  | bit 3 | Not Used             |         |
|       |      |    |                  | bit 4 | Not Used             |         |
|       |      |    |                  | bit 5 | Not Used             |         |
|       |      |    |                  | bit 6 | Not Used             |         |
|       |      |    |                  | bit 7 | Not Used             |         |
| 4     | 10   | 14 | Old price        |       |                      |         |
| 4     | 14   | 18 | New price        |       |                      |         |
| 4     | 18   | 22 | Qty              |       |                      |         |
| 4     | 22   | 26 | Save Amount      |       |                      |         |
| 2     | 26   | 28 | Short Department |       |                      |         |
| 16    | 28   | 44 | Reserved         |       |                      |         |
| 20    | 44   | 64 | Tail             |       |                      |         |
| 64    |      |    | Total            |       |                      |         |

## 21 – Unlock Update

0 X 21

**Explanation:** The Unlock Update Opcode sends the update redemption value in the customers file. (#file = 77) file.

| Bytes | From | To | Data          | Bits  | Explanation          | Remarks |
|-------|------|----|---------------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode        |       | 60 – Log Information |         |
| 1     | 1    | 2  | Function      |       | 21 – Unlock Update   |         |
| 1     | 2    | 3  | Flag 1        |       |                      |         |
|       |      |    |               | bit 0 | Add value            |         |
|       |      |    |               | bit 1 | Write value          |         |
|       |      |    |               | bit 2 | Unlock               |         |
|       |      |    |               | bit 3 | Not Used             |         |
|       |      |    |               | bit 4 | Not Used             |         |
|       |      |    |               | bit 5 | Not Used             |         |
|       |      |    |               | bit 6 | Not Used             |         |
|       |      |    |               | bit 7 | Continuation         |         |
| 1     | 3    | 4  | QDX file      |       |                      |         |
| 12    | 4    | 16 | Index         |       |                      |         |
| 2     | 16   | 18 | Value Offset  |       |                      |         |
| 4     | 18   | 22 | Value         |       |                      |         |
| 2     | 22   | 24 | Unlock Offset |       |                      |         |
| 20    | 24   | 44 | Reserved      |       |                      |         |
| 20    | 44   | 64 | Tail          |       |                      |         |
| 64    |      |    | Total         |       |                      |         |

## 22 – Redemption

### 0 X 22

**Explanation:** The Redemption function records the point's customers earned and are redeeming during a transaction. Customers earn points during purchases with a Clubcard and there are often promotions which customers can take advantage of with points earned. The Scheme Number, Card Number, Customer Type, Customer Redemption Value, Customer Redemption Used are fields recorded in the transaction.

| Bytes | From | To | Data                      | Bits  | Explanation                          | Remarks  |
|-------|------|----|---------------------------|-------|--------------------------------------|----------|
| 1     | 0    | 1  | Opcode                    |       | 60 – Log Information                 |          |
| 1     | 1    | 2  | Function                  |       | 22 – Redemption                      |          |
| 1     | 2    | 3  | Flag 1                    |       |                                      |          |
|       |      |    |                           | bit 0 | Instant Redemption                   |          |
|       |      |    |                           | bit 1 | Points Updated in Chip Card          |          |
|       |      |    |                           | bit 2 | Promotion Redemption                 |          |
|       |      |    |                           | bit 3 | Member Account Redemption            | FSD11780 |
|       |      |    |                           | bit 4 | Not Used                             |          |
|       |      |    |                           | bit 5 | Not Used                             |          |
|       |      |    |                           | bit 6 | Not Used                             |          |
|       |      |    |                           | bit 7 | Not Used                             |          |
| 1     | 3    | 4  | Scheme Number             |       |                                      | 1 to 9   |
| 20    | 4    | 24 | Card Number               |       | Card Number in ASCII null terminated |          |
| 1     | 24   | 25 | Customer Type             |       | Panel flag                           |          |
| 4     | 25   | 29 | Customer Redemption value |       |                                      |          |
| 4     | 29   | 33 | Customer Redemption Used  |       |                                      |          |
| 4     | 33   | 37 | Member Account ID         |       | Used for Redemption                  |          |
| 17    | 37   | 44 | Reserved                  |       |                                      |          |
| 20    | 44   | 64 | Tail                      |       |                                      |          |
| 64    |      |    | Total                     |       |                                      |          |

## 23 – APAC

0 X 23

| Bytes | From | To | Data                | Bits  | Explanation          | Remarks |
|-------|------|----|---------------------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode              |       | 60 – Log Information |         |
| 1     | 1    | 2  | Function            |       | 23 – APAC            |         |
| 1     | 2    | 3  | Flag 1              |       |                      |         |
|       |      |    |                     | bit 0 | First                |         |
|       |      |    |                     | bit 1 | All Depts.           |         |
|       |      |    |                     | bit 2 | Not Used             |         |
|       |      |    |                     | bit 3 | Not Used             |         |
|       |      |    |                     | bit 4 | Not Used             |         |
|       |      |    |                     | bit 5 | Not Used             |         |
|       |      |    |                     | bit 6 | Not Used             |         |
|       |      |    |                     | bit 7 | Not Used             |         |
| 20    | 3    | 23 | Departments<br>Used |       |                      |         |
| 21    | 23   | 44 | Reserved            |       |                      |         |
| 20    | 44   | 64 | Tail                |       |                      |         |
| 64    |      |    | Total               |       |                      |         |



## 24 – Alerts

0 X 24

**Explanation:** The Alerts function records when a problem is found on the POS Terminal or System. It could be a number of issues or problems that trigger off an alert, which is recorded in the transaction.

| Bytes | From | To | Data             | Bits   | Explanation             | Remarks |
|-------|------|----|------------------|--------|-------------------------|---------|
| 1     | 0    | 1  | Opcode           |        | 60 – Log Information    |         |
| 1     | 1    | 2  | Function         |        | 24 – Alerts             |         |
| 2     | 2    | 4  | Flag 1           |        |                         |         |
|       |      |    |                  | bit 0  | Bad Signature           |         |
|       |      |    |                  | bit 1  | Force Accept            |         |
|       |      |    |                  | bit 2  | POS Line Switch         |         |
|       |      |    |                  | bit 3  | PC Request out of Range |         |
|       |      |    |                  | bit 4  | Retransmit              |         |
|       |      |    |                  | bit 5  | Not Used                |         |
|       |      |    |                  | bit 6  | Not Used                |         |
|       |      |    |                  | bit 7  | Not Used                |         |
|       |      |    |                  | bit 8  | Not Used                |         |
|       |      |    |                  | bit 9  | Not Used                |         |
|       |      |    |                  | bit 10 | Not Used                |         |
|       |      |    |                  | bit 11 | Not Used                |         |
|       |      |    |                  | bit 12 | Not Used                |         |
|       |      |    |                  | bit 13 | Not Used                |         |
|       |      |    |                  | bit 14 | Not Used                |         |
|       |      |    |                  | bit 15 | Not Used                |         |
| 2     | 4    | 6  | POS              |        |                         |         |
| 4     | 6    | 10 | Expected_seq_num |        |                         |         |
| 4     | 10   | 14 | Rcved_seq_num    |        |                         |         |
| 4     | 14   | 18 | Rejected_seq_num |        |                         |         |
| 26    | 18   | 44 | Not Used         |        |                         |         |
| 20    | 44   | 64 | Tail             |        |                         |         |
| 64    |      |    | Total            |        |                         |         |

## 26 – Total key

0 X 26

**Explanation:** The Total Key function records when the cashier presses the Total Key to total a transaction. The records include: Items, Amount, etc.

| Bytes | From | To | Data     | Bits | Explanation          | Remarks |
|-------|------|----|----------|------|----------------------|---------|
| 1     | 0    | 1  | Opcode   |      | 60 – Log Information |         |
| 1     | 1    | 2  | Function |      | 26 – Total Key       |         |
| 2     | 2    | 4  | Items    |      |                      |         |
| 4     | 4    | 8  | Amount   |      |                      |         |
| 36    | 8    | 44 | Reserved |      |                      |         |
| 20    | 44   | 64 | Tail     |      |                      |         |
| 64    |      |    | Total    |      |                      |         |

## 27 – Extra Card Info

0 X 27

**Explanation:** The Extra Card Info function records when the cashier requests for more customer details at the POS Terminal, sending the information in the transaction.

| Bytes | From | To | Data                        | Bits     | Explanation                    | Remarks |
|-------|------|----|-----------------------------|----------|--------------------------------|---------|
| 1     | 0    | 1  | Opcode                      |          | 60 – Log Information           |         |
| 1     | 1    | 2  | Function                    |          | 27 – Extra Card Info           |         |
| 1     | 2    | 3  | Flag 1                      |          |                                |         |
|       |      |    |                             | bit 0    | Funds Guarantee                |         |
|       |      |    |                             | bit 1    | Home Shopping                  |         |
|       |      |    |                             | bit 2    | Credit Card                    |         |
|       |      |    |                             | bit 3    | Debit card                     |         |
|       |      |    |                             | bit 4    | Smart Card                     |         |
|       |      |    |                             | bit 5    | Smart Card Track 2             |         |
|       |      |    |                             | bit 6    | t7_eft                         | EFT     |
|       |      |    |                             | bit 7    | Not Used                       |         |
| 3     | 3    | 6  | Voucher Time                |          |                                |         |
| 1     | 6    | 7  | Tender EFT Group            |          |                                |         |
| 15    | 7    | 22 | Merchant No.                |          |                                |         |
| 1     | 22   | 23 | Sponsor No.                 |          |                                |         |
| 4     | 23   | 27 | Cash Back                   |          |                                |         |
| 6     | 27   | 33 | Branch                      |          | Branch number, null terminated |         |
| 2     | 33   | 35 | Credit Reentry Receipt      |          |                                |         |
| 2     | 35   | 37 | Credit Reentry Sequence No. |          |                                |         |
| 1     | 37   | 38 | Smart Card POS Entry Mode   |          |                                |         |
| 2     | 38   | 40 | Smart Card auth_resp_code   |          |                                |         |
| 1     | 40   | 41 | Flag                        | Bit 0    | Immediate Cashback             |         |
|       |      |    |                             | Bits 1-7 | Not Used                       |         |
| 3     | 41   | 44 | Not Used                    |          |                                |         |
| 20    | 44   | 64 | Tail                        |          |                                |         |

| Bytes | From | To | Data  | Bits | Explanation | Remarks |
|-------|------|----|-------|------|-------------|---------|
| 64    |      |    | Total |      |             |         |

## 28 – OLA Result

0 X 28

**Explanation:** The OLA Results record the information returned after the POS Terminals perform authorization checks. The OLA Results include: Message type, Card Type, Transaction Type etc.

| Bytes | From | To | Data               | Bits  | Explanation                                              | Remark |
|-------|------|----|--------------------|-------|----------------------------------------------------------|--------|
| 1     | 0    | 1  | Opcode             |       | 60 – Log Information                                     |        |
| 1     | 1    | 2  | Function           |       | 28 – OLA Request                                         |        |
| 1     | 2    | 3  | Sub Function       |       | 0 X OLA Results                                          |        |
| 1     | 3    | 4  | Flag 1             |       |                                                          |        |
|       |      |    |                    | bit 0 | Card Accepted                                            |        |
|       |      |    |                    | bit 1 | Hot Card                                                 |        |
|       |      |    |                    | bit 2 | Guaranteed                                               |        |
|       |      |    |                    | bit 3 | Not Guaranteed                                           |        |
|       |      |    |                    | bit 4 | Referral                                                 |        |
|       |      |    |                    | bit 5 | Extra ID                                                 |        |
|       |      |    |                    | bit 6 | Extra Transaction                                        |        |
|       |      |    |                    | bit 7 | Not Used                                                 |        |
| 4     | 4    | 8  | Message Number     |       |                                                          |        |
| 1     | 8    | 9  | Card Type          |       |                                                          |        |
| 1     | 9    | 10 | Transaction Type   |       |                                                          |        |
| 1     | 10   | 11 | Auth Type          |       |                                                          |        |
| 1     | 11   | 12 | Auth Reason        |       |                                                          |        |
| 2     | 12   | 14 | Answer_rtc         |       | 0 – OK<br>1-10 – Host Answer<br>-1 – Bad<br>-6 – Timeout |        |
| 10    | 14   | 24 | Authorization Code |       |                                                          |        |
| 1     | 24   | 25 | Confirm Code       |       |                                                          |        |
| 10    | 25   | 35 | Account            |       | BCD up to 19 digits                                      |        |
| 1     | 35   | 36 | Account Length     |       |                                                          |        |
| 4     | 36   | 40 | Amount             |       |                                                          |        |
| 3     | 40   | 43 | Reserved           |       |                                                          |        |
| 1     | 43   | 44 | Pump               |       |                                                          |        |
| 20    | 44   | 64 | Tail               |       |                                                          |        |
| 64    |      |    | Total              |       |                                                          |        |

## 28 – OLA Airtime EXT0 A0

0 X 28

**Explanation:** The OLA Request A0

| Bytes | From | To | Data                           | Bits | Explanation           | Remarks |
|-------|------|----|--------------------------------|------|-----------------------|---------|
| 1     | 0    | 1  | Opcode                         |      | 60 – Log Information  |         |
| 1     | 1    | 2  | Function                       |      | 28 – OLA Airtime EXT0 |         |
| 1     | 2    | 3  | Sub Function                   |      | 0 X A0                |         |
| 21    | 3    | 24 | PinSerialNumber                |      |                       |         |
| 4     | 24   | 28 | Provider<br>TransSeq<br>Number |      |                       |         |
| 16    | 28   | 44 | Nu0                            |      |                       |         |
| 20    | 44   | 64 | Tail                           |      |                       |         |
| 64    |      |    | Total                          |      |                       |         |

## 28 – OLA Airtime EXT1 A1

0 X 28

**Explanation:** The OLA Request A1

| Bytes | From | To | Data                     | Bits | Explanation           | Remarks |
|-------|------|----|--------------------------|------|-----------------------|---------|
| 1     | 0    | 1  | Opcode                   |      | 60 – Log Information  |         |
| 1     | 1    | 2  | Function                 |      | 28 – OLA Airtime EXT1 |         |
| 1     | 2    | 3  | Sub Function             |      | 0 X A1                |         |
| 21    | 3    | 24 | Provider Order<br>Number |      |                       |         |
| 20    | 24   | 44 | Nu0                      |      |                       |         |
| 20    | 44   | 64 | Tail                     |      |                       |         |
| 64    |      |    | Total                    |      |                       |         |

## 28 – OLA Card Authentication A2

0 X 28

**Explanation:** The OLA Card Authentication

| Bytes | From | To | Data         | Bits | Explanation                                | Remarks |
|-------|------|----|--------------|------|--------------------------------------------|---------|
| 1     | 0    | 1  | Opcode       |      | 60 – Log Information                       |         |
| 1     | 1    | 2  | Function     |      | 28 – OLA Card Authentication               |         |
| 1     | 2    | 3  | Sub Function |      | 0 X A2                                     |         |
| 1     | 3    | 4  | Option       |      | 1 – Record1 (infl1)<br>2 – Record2 (infl2) |         |
| Info1 |      |    |              |      |                                            |         |
| 24    | 4    | 28 | TransID      |      |                                            |         |
| 2     | 28   | 30 | ECI          |      |                                            |         |
| 2     | 30   | 32 | Filler       |      |                                            |         |
| Info2 |      |    |              |      |                                            |         |
| 28    | 4    | 28 | CAVData      |      |                                            |         |
| 12    | 32   | 44 |              |      |                                            |         |
| 20    | 44   | 64 | Tail         |      |                                            |         |
| 64    |      |    | Total        |      |                                            |         |



## 28 – OLA Secure Data A3

0 X 28

**Explanation:** The OLA Secure Data opcode.

| Bytes  | From | To | Data         | Bits | Explanation                           | Remarks |
|--------|------|----|--------------|------|---------------------------------------|---------|
| 1      | 0    | 1  | Opcode       |      | 60 – Log Information                  |         |
| 1      | 1    | 2  | Function     |      | 28 – OLA Card Authentication          |         |
| 1      | 2    | 3  | Sub Function |      | 0 X A3                                |         |
| 1      | 3    | 4  | Option       |      | 1 – Name<br>2 – Sponsor<br>3 - Result |         |
| Info1  |      |    |              |      |                                       |         |
| 25     | 4    | 29 | Name         |      |                                       |         |
| Info 2 |      |    |              |      |                                       |         |
| 25     | 4    | 29 | Sponsor      |      |                                       |         |
| Info 3 |      |    |              |      |                                       |         |
| 25     | 4    | 29 |              |      |                                       |         |
| 15     | 29   | 44 | Not Used     |      |                                       |         |
| 20     | 44   | 64 | Tail         |      |                                       |         |
| 64     |      |    | Total        |      |                                       |         |

## 28 – OLA Certificate Details A4

0 X 28

**Explanation:** The OLA Certificate Details

| Bytes  | From | To | Data         | Bits | Explanation                                      | Remarks |
|--------|------|----|--------------|------|--------------------------------------------------|---------|
| 1      | 0    | 1  | Opcode       |      | 60 – Log Information                             |         |
| 1      | 1    | 2  | Function     |      | 28 – OLA Certificate Details                     |         |
| 1      | 2    | 3  | Sub Function |      | 0 X A4                                           |         |
| 1      | 3    | 4  | Option       |      | 1 – Merchant<br>2 – Cardholder<br>3 – TransStain |         |
| Info1  |      |    |              |      |                                                  |         |
| 24     | 4    | 28 | Merchant     |      |                                                  |         |
| 4      | 28   | 32 | Filler       |      |                                                  |         |
| Info 2 |      |    |              |      |                                                  |         |
| 24     | 4    | 28 | Cardholder   |      |                                                  |         |
| 4      | 28   | 32 |              |      |                                                  |         |
| Info 3 |      |    |              |      |                                                  |         |
| 28     | 4    | 32 |              |      |                                                  |         |
| 12     | 32   | 44 | Not Used     |      |                                                  |         |
| 20     | 44   | 64 | Tail         |      |                                                  |         |
| 64     |      |    | Total        |      |                                                  |         |

## 28 – OLA Request 01

0 X 28

**Explanation:** The OLA Request 01 function records the information required when the POS Terminals perform authorization checks to determine the action the POS Terminal asks the card to perform. The OLA requests Customer details. If off-line, the POS Terminal checks for local customer files on the main Server for authorization.

| Bytes | From | To | Data           | Bits  | Explanation          | Remarks         |
|-------|------|----|----------------|-------|----------------------|-----------------|
| 1     | 0    | 1  | Opcode         |       | 60 – Log Information |                 |
| 1     | 1    | 2  | Function       |       | 28 – OLA Request     |                 |
| 1     | 2    | 3  | Sub Function   |       | 0 X 01               |                 |
| 1     | 3    | 4  | Flag 1         |       |                      |                 |
|       |      |    |                | bit 0 | Open comm failed     |                 |
|       |      |    |                | bit 1 | Tx failed            |                 |
|       |      |    |                | bit 2 | Not Used             |                 |
|       |      |    |                | bit 3 | Not Used             |                 |
|       |      |    |                | bit 4 | Not Used             |                 |
|       |      |    |                | bit 5 | Not Used             |                 |
|       |      |    |                | bit 6 | Not Used             |                 |
|       |      |    |                | bit 7 | Not Used             |                 |
| 4     | 4    | 8  | Message Number |       |                      |                 |
| 24    | 8    | 32 | Card Data      |       |                      | Null terminated |
| 1     | 32   | 33 | Card type      |       |                      |                 |
| 1     | 33   | 34 | Trans Type     |       |                      |                 |
| 1     | 34   | 35 | Auth Type      |       |                      |                 |
| 1     | 35   | 36 | Auth Reason    |       |                      |                 |
| 4     | 36   | 40 | Request Amount |       | Amount + Cash back   |                 |
| 3     | 40   | 43 | Reserved       |       |                      |                 |
| 1     | 43   | 44 | Pump Number    |       |                      |                 |
| 20    | 44   | 64 | Tail           |       |                      |                 |
| 64    |      |    | Total          |       |                      |                 |

## 28 – OLA Ack 02

0 X 28

| Bytes | From | To | Data               | Bits  | Explanation          | Remarks |
|-------|------|----|--------------------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode             |       | 60 – Log Information |         |
| 1     | 1    | 2  | Function           |       | 28 – Transaction OLA |         |
| 1     | 2    | 3  | Sub function       |       | 0 X 02               |         |
| 1     | 3    | 4  | Flag 1             |       |                      |         |
|       |      |    |                    | bit 0 | Timeout              |         |
|       |      |    |                    | bit 1 | Message rejected     |         |
|       |      |    |                    | bit 2 | Ack rejected         |         |
|       |      |    |                    | bit 3 | Not Used             |         |
|       |      |    |                    | bit 4 | Not Used             |         |
|       |      |    |                    | bit 5 | Not Used             |         |
|       |      |    |                    | bit 6 | Not Used             |         |
|       |      |    |                    | bit 7 | Not Used             |         |
| 4     | 4    | 8  | ACK message Number |       |                      |         |
| 4     | 8    | 12 | Timeout Value      |       |                      |         |
| 2     | 12   | 14 | ACK Return Code    |       |                      |         |
| 29    | 14   | 43 | Reserved           |       |                      |         |
| 1     | 43   | 44 | Pump Number        |       |                      |         |
| 20    | 44   | 64 | Tail               |       |                      |         |
| 64    |      |    | Total              |       |                      |         |

## 28 – OLA Answer 03

0 X 28

**Explanation:** The OLA Answer 03 is the function that records the response the POS Terminal receives on performing authorization checks during the OLA transaction. OLA Response Codes are defined.

| Bytes | From | To | Data                  | Bits  | Explanation          | Remarks        |
|-------|------|----|-----------------------|-------|----------------------|----------------|
| 1     | 0    | 1  | Opcode                |       | 60 – Log Information |                |
| 1     | 1    | 2  | Function              |       | 28 – Transaction OLA |                |
| 1     | 2    | 3  | Sub Function          |       | 0 X 03               |                |
| 1     | 3    | 4  | Flag 1                | bit 0 | Timeout              |                |
|       |      |    |                       | bit 1 | Message rejected     |                |
|       |      |    |                       | bit 2 | Not Used             |                |
|       |      |    |                       | bit 3 | Not Used             |                |
|       |      |    |                       | bit 4 | Not Used             |                |
|       |      |    |                       | bit 5 | Not Used             |                |
|       |      |    |                       | bit 6 | Not Used             |                |
|       |      |    |                       | bit 7 | Not Used             |                |
| 4     | 4    | 8  | Answer Message Number |       |                      |                |
| 4     | 8    | 12 | Timeout Value         |       |                      |                |
| 1     | 12   | 13 | Message Type          |       |                      |                |
| 1     | 13   | 14 | Confirm Code          |       |                      |                |
| 2     | 14   | 16 | Answer Return Code    |       |                      |                |
| 10    | 16   | 26 | Auth Code             |       |                      |                |
| 2     | 26   | 28 | Delay                 |       |                      | Project Orange |
| 4     | 28   | 32 | Club Plus Balance     |       |                      |                |
| 6     | 32   | 38 | Club Plus Date        |       |                      |                |
| 5     | 38   | 43 | Reserved              |       |                      |                |
| 1     | 43   | 44 | Pump Number           |       |                      |                |
| 20    | 44   | 64 | Tail                  |       |                      |                |
| 64    |      |    | Total                 |       |                      |                |

## 28 – OLA Free 04

0 X 28

**Explanation:** The OLA Free 04 function records the information during the OLA transaction, once there is confirmation that the card is authorized, including: The Confirm Message Number, Code, Authorization Code, etc.

| Bytes | From | To | Data                   | Bits  | Explanation          | Remarks |
|-------|------|----|------------------------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode                 |       | 60 – Log Information |         |
| 1     | 1    | 2  | Function               |       | 28 – Transaction OLA |         |
| 1     | 2    | 3  | Sub function           |       | 0 X 04               |         |
| 1     | 3    | 4  | Flag 1                 |       |                      |         |
|       |      |    |                        | bit 0 | With Confirm         |         |
|       |      |    |                        | bit 1 | Not Used             |         |
|       |      |    |                        | bit 2 | Not Used             |         |
|       |      |    |                        | bit 3 | Not Used             |         |
|       |      |    |                        | bit 4 | Not Used             |         |
|       |      |    |                        | bit 5 | Not Used             |         |
|       |      |    |                        | bit 6 | Not Used             |         |
|       |      |    |                        | bit 7 | Not Used             |         |
| 4     | 4    | 8  | Confirm Message Number |       |                      |         |
| 1     | 8    | 9  | Confirm Code           |       |                      |         |
| 10    | 9    | 19 | Auth Code              |       |                      |         |
| 24    | 19   | 43 | Reserved               |       |                      |         |
| 1     | 43   | 44 | Pump Number            |       |                      |         |
| 20    | 44   | 64 | Tail                   |       |                      |         |
| 64    |      |    | Total                  |       |                      |         |

## 28 – OLA Results Extra 05

0 X 28

**Explanation:** The OLA Extra Results 05 function records information once the OLA transaction is made. It is the result of the POS Terminal check process. The POS Terminal receives approval including the Result Message, Approval Number, Terminal ID, etc.

| Bytes | From | To | Data                  | Bits | Explanation                | Remarks              |
|-------|------|----|-----------------------|------|----------------------------|----------------------|
| 1     | 0    | 1  | Opcode                |      | 60 – Log Information       |                      |
| 1     | 1    | 2  | Function              |      | 28 – Transaction OLA       |                      |
| 1     | 2    | 3  | Sub Function<br>Extra |      | 0 X 05 – OLA Results extra | OLA Provider Message |
| 20    | 3    | 23 | Result Message        |      | Message from Authorizer    |                      |
| 12    | 23   | 35 | Approval<br>Number    |      |                            |                      |
| 7     | 35   | 42 | Terminal ID           |      |                            |                      |
| 2     | 42   | 44 | Not Used              |      |                            |                      |
| 20    | 44   | 64 | Tail                  |      |                            |                      |
| 64    |      |    | Total                 |      |                            |                      |

## 28 – OLA Printing 06

0 X 28

**Explanation:** The OLA Printing function records information on the fields that are printed on the EFT slip. The card name, masking, and layout are recorded.

| Bytes | From | To | Data          | Bits  | Explanation                         | Remarks                 |
|-------|------|----|---------------|-------|-------------------------------------|-------------------------|
| 1     | 0    | 1  | Opcode        |       | 60 – Log Information                |                         |
| 1     | 1    | 2  | Function      |       | 28 – Transaction OLA                |                         |
| 1     | 2    | 3  | Sub Function  |       | 0 X 06 – Trans Info OLA Printing    |                         |
| 10    | 3    | 13 | Response Code |       |                                     | Message from authorizer |
| 1     | 13   | 14 | Account Type  |       | 0 – Credit, 1- Checking, 2- Savings |                         |
| 1     | 14   | 15 | Flag          |       |                                     |                         |
|       |      |    |               | Bit 0 | Card Swiped                         |                         |
|       |      |    |               | Bit 1 | Not Used                            |                         |
|       |      |    |               | Bit 2 | Not Used                            |                         |
|       |      |    |               | Bit 3 | Not Used                            |                         |
|       |      |    |               | Bit 4 | Not Used                            |                         |
|       |      |    |               | Bit 5 | Not Used                            |                         |
|       |      |    |               | Bit 6 | Not Used                            |                         |
|       |      |    |               | Bit 7 | Not Used                            |                         |
| 29    | 15   | 44 | Not Used      |       |                                     |                         |
| 20    | 44   | 64 | Tail          |       |                                     |                         |
| 64    |      |    | Total         |       |                                     |                         |



## 28 – OLA Referral Save 07

0 X 28

**Explanation:** The OLA Referral Save function records information when parameters need to be referred elsewhere in order to save the EFT transaction. For example, when a transaction is manually authorized, and the card is manually swiped, the OLA is referred before receiving authorization and saving.

| Bytes | From | To | Data                         | Bits  | Explanation                           | Remarks                                                                              |
|-------|------|----|------------------------------|-------|---------------------------------------|--------------------------------------------------------------------------------------|
| 1     | 0    | 1  | Opcode                       |       | 60 – Log Information                  |                                                                                      |
| 1     | 1    | 2  | Function                     |       | 28 – Transaction OLA                  |                                                                                      |
| 1     | 2    | 3  | Sub Function                 |       | 0 X 07 – Trans Info OLA Referral Save |                                                                                      |
| 1     | 3    | 4  | Flags                        |       |                                       |                                                                                      |
|       |      |    |                              | Bit 0 | EFT Save Referral                     |                                                                                      |
|       |      |    |                              | Bit 1 | EFT Void                              | Do Cancel after restore transaction                                                  |
|       |      |    |                              | Bit 2 | EFT Get Authorization                 | After Get Manual Authorization                                                       |
|       |      |    |                              | Bit 3 | Manual Swipe Required                 | Required manual swipe of card                                                        |
|       |      |    |                              | Bit 4 | TRS Processed                         | Indication that transaction was already processed (in case there were several calls) |
|       |      |    |                              | Bit 5 | Not Used                              |                                                                                      |
|       |      |    |                              | Bit 6 | Not Used                              |                                                                                      |
|       |      |    |                              | Bit 7 | Not Used                              |                                                                                      |
| 15    | 4    | 19 | Merchant Telephone           |       |                                       |                                                                                      |
| 2     | 19   | 21 | EFT Tender Number            |       |                                       |                                                                                      |
| 4     | 21   | 25 | Amount                       |       |                                       |                                                                                      |
| 4     | 25   | 29 | Cashback Amount              |       |                                       |                                                                                      |
| 2     | 29   | 31 | Session ID                   |       |                                       |                                                                                      |
| 2     | 31   | 33 | Save POS Number              |       |                                       |                                                                                      |
| 2     | 33   | 35 | Save Ticket Number           |       |                                       |                                                                                      |
| 1     | 35   | 36 | Card Session Original Tender |       |                                       |                                                                                      |

| Bytes | From | To | Data     | Bits | Explanation | Remarks |
|-------|------|----|----------|------|-------------|---------|
| 8     | 36   | 44 | Not Used |      |             |         |
| 20    | 44   | 64 | Tail     |      |             |         |
| 64    |      |    | Total    |      |             |         |

## 28 – OLA Trans Ref8

0 X 28

**Explanation:** The OLA Trans Ref function records information on the parameters used during EFT settlement.

| Bytes | From | To | Data             | Bits | Explanation                 | Remarks |
|-------|------|----|------------------|------|-----------------------------|---------|
| 1     | 0    | 1  | Opcode           |      | 60 – Log Information        |         |
| 1     | 1    | 2  | Function         |      | 28 – Transaction OLA        |         |
| 1     | 2    | 3  | Sub Function     |      | 0 X 08 – Info OLA Trans Ref |         |
| 40    | 3    | 43 | Trans Ref        |      |                             |         |
| 1     | 43   | 44 | Trans Ref Length |      |                             |         |
| 20    | 44   | 64 | Tail             |      |                             |         |
| 64    |      |    | Total            |      |                             |         |

## 28 – OLA Result 00

0 X 28

**Explanation:** The OLA Result 00 function records the result of an OLA transaction. The Message Number, Card Type, Transaction Type, Authorization Type are all recorded on transaction.

| Bytes | From | To | Data                          | Bits  | Explanation          | Remarks  |
|-------|------|----|-------------------------------|-------|----------------------|----------|
| 1     | 0    | 1  | Opcode                        |       | 60 – Log Information |          |
| 1     | 1    | 2  | Function                      |       | 28 – Transaction OLA |          |
| 1     | 2    | 3  | Sub Function                  |       | 0 X 00               |          |
| 1     | 3    | 4  | Flag 1                        | bit 0 | Card accepted        |          |
|       |      |    |                               | bit 1 | Hot card             |          |
|       |      |    |                               | bit 2 | Guaranteed           |          |
|       |      |    |                               | bit 3 | Not guaranteed       |          |
|       |      |    |                               | bit 4 | Referral             |          |
|       |      |    |                               | bit 5 | Extra ID             |          |
|       |      |    |                               | bit 6 | Extra Transaction    | Not used |
|       |      |    |                               | bit 7 | Not Used             |          |
| 4     | 4    | 8  | Message No.                   |       |                      |          |
| 1     | 8    | 9  | Card Type                     |       |                      |          |
| 1     | 9    | 10 | Trans Type                    |       |                      |          |
| 1     | 10   | 11 | Auth Type                     |       |                      |          |
| 1     | 11   | 12 | Auth Reason                   |       |                      |          |
| 2     | 12   | 14 | Return Code                   |       |                      |          |
| 10    | 14   | 24 | Auth Code                     |       |                      |          |
| 1     | 24   | 25 | Confirm Code                  |       |                      |          |
| 10    | 25   | 35 | Account (BCD up to 19 digits) |       |                      |          |
| 1     | 35   | 36 | Account Length                |       |                      |          |
| 4     | 36   | 40 | Amount                        |       |                      |          |
| 3     | 40   | 43 | Not Used                      |       |                      |          |
| 1     | 43   | 44 | Pump Number                   |       |                      |          |
| 20    | 44   | 64 | Tail                          |       |                      |          |
| 64    |      |    | Total                         |       |                      |          |

## 28 – Club Card Request 11

0 X 28

**Explanation:** The Club Card Request 11 function is recorded when a Club Card is swiped through at the POS Terminals. The POS Terminal requests information on the Card Number, Data, Length and Type. This is all for authorization purposes.

| Bytes | From | To | Data                  | Bits  | Explanation          | Remarks |
|-------|------|----|-----------------------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode                |       | 60 – Log Information |         |
| 1     | 1    | 2  | Function Answer Start |       | 28 – Club Card       |         |
| 1     | 2    | 3  | Sub function          |       | 0 X 11               |         |
| 1     | 3    | 4  | Flag 1                |       |                      |         |
|       |      |    |                       | bit 0 | Open comm failed     |         |
|       |      |    |                       | bit 1 | Tx failed            |         |
|       |      |    |                       | bit 2 | Not Used             |         |
|       |      |    |                       | bit 3 | Not Used             |         |
|       |      |    |                       | bit 4 | Not Used             |         |
|       |      |    |                       | bit 5 | Not Used             |         |
|       |      |    |                       | bit 6 | Not Used             |         |
|       |      |    |                       | bit 7 | Not Used             |         |
| 4     | 4    | 8  | Message Number        |       |                      |         |
| 10    | 8    | 18 | Card Data             |       | BCD up to 19 digits  |         |
| 1     | 18   | 19 | Card Data Length      |       |                      |         |
| 1     | 19   | 20 | Transaction Type      |       |                      |         |
| 24    | 20   | 44 | Reserved              |       |                      |         |
| 20    | 44   | 64 | Tail                  |       |                      |         |
| 64    |      |    | Total                 |       |                      |         |

## 28 – Club Card Answer Continued 12

0 X 28

**Explanation:** The Club Card Answer Continued 12 function is the continuation of the Club Card Answer Start 12. The answer to a Club Card request for authorization. The POS Terminal process is completed, and an answer including Promotion Messages, Points, Redemption Threshold, etc. that may be connected to the Club Card are recorded.

| Bytes | From | To | Data                    | Bits  | Explanation                                                                   | Remarks |
|-------|------|----|-------------------------|-------|-------------------------------------------------------------------------------|---------|
| 1     | 0    | 1  | Opcode                  |       | 60 – Log Information                                                          |         |
| 1     | 1    | 2  | Function Answer Start   |       | 28 – Club Card                                                                |         |
| 1     | 2    | 3  | Sub function            |       | 0 X 12                                                                        |         |
| 1     | 3    | 4  | Flag 1                  |       |                                                                               |         |
|       |      |    |                         | bit 0 | Timeout                                                                       |         |
|       |      |    |                         | bit 1 | Message Rejected<br>Message Type Std.<br>Message Typed Ext.<br>EOT_Update_Req |         |
|       |      |    |                         | bit 2 | Er Avail                                                                      |         |
|       |      |    |                         | bit 3 | Not Used                                                                      |         |
|       |      |    |                         | bit 4 | Not Used                                                                      |         |
|       |      |    |                         | bit 5 | Not Used                                                                      |         |
|       |      |    |                         | bit 6 | Not Used                                                                      |         |
|       |      |    |                         | bit 7 | Not Used                                                                      |         |
| 2     | 4    | 6  | Request Message Number  |       |                                                                               |         |
| 2     | 6    | 8  | Answer Message Number   |       |                                                                               |         |
| 20    | 8    | 28 | Family Favorite Choice  |       |                                                                               |         |
| 1     | 28   | 29 | Customer Type           |       |                                                                               |         |
| 4     | 29   | 33 | Accumulated Points      |       |                                                                               |         |
| 4     | 33   | 37 | Redemption Value        |       |                                                                               |         |
| 2     | 37   | 39 | Operator Message Number |       |                                                                               |         |
| 3     | 39   | 42 | Customer Update Date    |       |                                                                               |         |
| 2     | 42   | 44 | Reserved                |       |                                                                               |         |

| Bytes | From | To | Data  | Bits | Explanation | Remarks |
|-------|------|----|-------|------|-------------|---------|
| 20    | 44   | 64 | Tail  |      |             |         |
| 64    |      |    | Total |      |             |         |

## 28 – Club Card Answer Continued 13

0 X 28

**Explanation:** The Club Card Answer Continued 13 function is the continuation of the Club Card Answer Start 12. The answer to a Club Card request for authorization. The POS Terminal process is completed, and an answer including Promotion Messages, Points, Redemption Threshold, etc. that may be connected to the Club Card are recorded.

| Bytes | From | To | Data                   | Bits | Explanation          | Remarks |
|-------|------|----|------------------------|------|----------------------|---------|
| 1     | 0    | 1  | Opcode                 |      | 60 – Log Information |         |
| 1     | 1    | 2  | Function Continued     |      | 28 – CC Answer       |         |
| 1     | 2    | 3  | Sub Function           |      | 0 X 13               |         |
| 5     | 3    | 8  | Promotion Message      |      |                      |         |
| 20    | 8    | 28 | Promotion Points       |      |                      |         |
| 4     | 28   | 32 | Redemption Threshold   |      |                      |         |
| 4     | 32   | 36 | Redemption Step        |      |                      |         |
| 4     | 36   | 40 | Second Current Balance |      |                      |         |
| 4     | 40   | 44 | Reserved               |      |                      |         |
| 20    | 44   | 64 | Tail                   |      |                      |         |
| 64    |      |    | Total                  |      |                      |         |



## 28 – Club Card End Of Ticket 14

0 X 28

**Explanation:** The Club Card End of Ticket function is recorded at the end of the ticket, once the information provided on the card is passed.

| Bytes | From | To | Data           | Bits  | Explanation           | Remarks |
|-------|------|----|----------------|-------|-----------------------|---------|
| 1     | 0    | 1  | Opcode         |       | 60 – Log Information  |         |
| 1     | 1    | 2  | Function       |       | 28 – CC End Of Ticket |         |
| 1     | 2    | 3  | Sub Function   |       | 0 X 14                |         |
| 1     | 3    | 4  | Flag 1         |       |                       |         |
|       |      |    |                | bit 0 | Open Com Failed       |         |
|       |      |    |                | bit 1 | Tx failed             |         |
|       |      |    |                | bit 2 | Not Used              |         |
|       |      |    |                | bit 3 | Not Used              |         |
|       |      |    |                | bit 4 | Not Used              |         |
|       |      |    |                | bit 5 | Not Used              |         |
|       |      |    |                | bit 6 | Not Used              |         |
|       |      |    |                | bit 7 | Not Used              |         |
| 4     | 4    | 8  | Message Number |       |                       |         |
| 36    | 8    | 44 | Reserved       |       |                       |         |
| 20    | 44   | 64 | Tail           |       |                       |         |
| 64    |      |    | Total          |       |                       |         |

## 28 – Hungary OLA Results 30

0 X 28

| Bytes | From | To | Data                 | Bits  | Explanation                                        | Remarks |
|-------|------|----|----------------------|-------|----------------------------------------------------|---------|
| 1     | 0    | 1  | Opcode               |       | 60 – Log Information                               |         |
| 1     | 1    | 2  | Function             |       | 28 – Transaction OLA                               |         |
| 1     | 2    | 3  | Sub Function Results |       | 0 X 30 – Hungary OLA                               |         |
| 1     | 3    | 4  | Flag 1               | bit 0 | Card Accepted                                      |         |
|       |      |    |                      | bit 1 | Not Used                                           |         |
|       |      |    |                      | bit 2 | Not Used                                           |         |
|       |      |    |                      | bit 3 | Not Used                                           |         |
|       |      |    |                      | bit 4 | Not Used                                           |         |
|       |      |    |                      | bit 5 | Not Used                                           |         |
|       |      |    |                      | bit 6 | Not Used                                           |         |
|       |      |    |                      | bit 7 | Not Used                                           |         |
| 4     | 4    | 8  | Message No.          |       |                                                    |         |
| 1     | 8    | 9  | Not Used             |       |                                                    |         |
| 1     | 9    | 10 | Trans. Type          |       | Transaction Type                                   |         |
| 1     | 10   | 11 | Auth Type            |       | Authorization Type                                 |         |
| 1     | 11   | 12 | Not Used2            |       |                                                    |         |
| 2     | 12   | 14 | Answer Return Code   |       | 0 – OK<br>1-10 Host Answer<br>-1 Bad<br>-6 Timeout |         |
| 10    | 14   | 24 | Auth Code            |       | Authorization Code                                 |         |
| 1     | 24   | 25 | Not Used3            |       |                                                    |         |
| 10    | 25   | 35 | Account              |       | BCD up to 19 digits                                |         |
| 1     | 35   | 36 | Account length       |       |                                                    |         |
| 4     | 36   | 40 | Amount               |       |                                                    |         |
| 3     | 40   | 43 | Response Code        |       |                                                    |         |
| 1     | 43   | 44 | Not Used4            |       |                                                    |         |
| 20    | 44   | 64 | Tail                 |       |                                                    |         |
| 64    |      |    | Total                |       |                                                    |         |

## 28 – Hungary OLA Request 31

0 X 28

| Bytes | From | To | Data                 | Bits  | Explanation          | Remarks |
|-------|------|----|----------------------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode               |       | 60 – Log Information |         |
| 1     | 1    | 2  | Function             |       | 28 – Transaction OLA |         |
| 1     | 2    | 3  | Sub function Request |       | 0 X 31 - Hungary OLA |         |
| 1     | 3    | 4  | Flag 1               |       |                      |         |
|       |      |    |                      | bit 0 | Not Used             | 00      |
|       |      |    |                      | bit 1 | Tx failed            |         |
|       |      |    |                      | bit 2 | Not Used             |         |
|       |      |    |                      | bit 3 | Not Used             |         |
|       |      |    |                      | bit 4 | Not Used             |         |
|       |      |    |                      | bit 5 | Not Used             |         |
|       |      |    |                      | bit 6 | Not Used             |         |
|       |      |    |                      | bit 7 | Not Used             |         |
| 4     | 4    | 8  | Message Number       |       |                      |         |
| 24    | 8    | 32 | Card Data            |       | Null terminated      |         |
| 1     | 32   | 33 | Transaction Type     |       |                      |         |
| 1     | 33   | 34 | Authorization Type   |       |                      |         |
| 4     | 34   | 38 | Request Amount       |       | Amount + Cash back   |         |
| 6     | 38   | 44 | Reserved             |       |                      |         |
| 20    | 44   | 64 | Tail                 |       |                      |         |
| 64    |      |    | Total                |       |                      |         |

## 28 – OLA E Pay Result32

0 X 28

| Bytes | From | To | Data                                       | Bits  | Explanation                   | Remarks |
|-------|------|----|--------------------------------------------|-------|-------------------------------|---------|
| 1     | 0    | 1  | Opcode                                     |       | 60 – Log Information          |         |
| 1     | 1    | 2  | Function                                   |       | 28                            |         |
| 1     | 2    | 3  | Sub function                               |       | 0 x32                         |         |
| 2     | 3    | 5  | Session ID                                 |       |                               |         |
| 4     | 5    | 9  | OLA Date                                   |       |                               |         |
| 2     | 9    | 11 | OLA Time                                   |       |                               |         |
| 15    | 11   | 26 | PIN Serial<br>Number                       |       |                               |         |
| 9     | 26   | 35 | Authorization<br>code from OLA<br>Response |       |                               |         |
| 2     | 35   | 37 | Response Code                              |       |                               |         |
| 1     | 37   | 38 | Reversal<br>Authorization                  |       |                               |         |
| 4     | 38   | 42 | Sequence<br>Number                         |       |                               |         |
| 1     | 42   | 43 | Flag                                       |       |                               |         |
|       |      |    |                                            | Bit 0 | Second Extension Trans Exists |         |
|       |      |    |                                            | Bit 1 | Filler                        |         |
|       |      |    |                                            | Bit 2 | Filler                        |         |
|       |      |    |                                            | Bit 3 | Filler                        |         |
|       |      |    |                                            | Bit 4 | Filler                        |         |
|       |      |    |                                            | Bit 5 | Filler                        |         |
|       |      |    |                                            | Bit 6 | Filler                        |         |
|       |      |    |                                            | Bit 7 | Filler                        |         |
| 1     | 43   | 44 | Not Used                                   |       |                               |         |
| 20    | 44   | 64 | Tail                                       |       |                               |         |
| 64    |      |    | Total                                      |       |                               |         |

## 28 – OLA E Pay Result Ext33

0 X 28

**Explanation:** This opcode is recorded when an online item is sold. In case the pin number size (length) that is received from the encryption dll is bigger than 24, we split the pin number (value) into two fields and another transaction is triggered: 0x60/0x28/0x43.

| Bytes | From                        | To | Data               | Bits | Explanation                                                          | Remarks |
|-------|-----------------------------|----|--------------------|------|----------------------------------------------------------------------|---------|
| 1     | 0                           | 1  | Opcode             |      | 60 – Log Information                                                 |         |
| 1     | 1                           | 2  | Function           |      | 28                                                                   |         |
| 1     | 2                           | 3  | Sub function       |      | 0 x33                                                                |         |
| 2     | 3                           | 5  | Session ID         |      |                                                                      |         |
| 1     | 5                           | 6  | Application Option |      | 1 – Card<br>2 – Voucher                                              |         |
| Union | If Card Information<br>Inf1 |    |                    |      |                                                                      |         |
| 15    | 6                           | 21 | Mobile Number      |      |                                                                      |         |
| 12    | 21                          | 33 | Not Used           |      |                                                                      |         |
| OR    |                             |    |                    |      |                                                                      |         |
|       | Voucher Information<br>Inf2 |    |                    |      |                                                                      |         |
| 24    | 6                           | 30 | PIN Number         |      |                                                                      |         |
| 3     | 30                          | 33 | PIN Exp Date       |      |                                                                      |         |
| 8     | 33                          | 41 | Pin Number         |      | If the pin number length is bigger than 24, then get the right size. |         |
| 3     | 41                          | 44 | Identity Number    |      |                                                                      |         |
| 20    | 44                          | 64 | Tail               |      |                                                                      |         |
| 64    |                             |    | Total              |      |                                                                      |         |

## 28 – OLA Gift Card Result 34

0 X 28

| Bytes | From | To | Data                  | Bits  | Explanation                           | Remarks                        |
|-------|------|----|-----------------------|-------|---------------------------------------|--------------------------------|
| 1     | 0    | 1  | Opcode                |       | 60 – Log Information                  |                                |
| 1     | 1    | 2  | Function              |       | 28                                    |                                |
| 1     | 2    | 3  | Sub function          |       | 0 x34                                 |                                |
| 2     | 3    | 5  | Session ID            |       |                                       |                                |
| 2     | 5    | 7  | Expiry Date           |       |                                       | MMYY                           |
| 10    | 7    | 17 | Account Number        |       |                                       | Up to 19 digits                |
| 5     | 17   | 22 | Merchant ID           |       |                                       |                                |
| 4     | 22   | 26 | Old Amount<br>Balance |       |                                       |                                |
| 4     | 26   | 30 | New Amount<br>Balance |       |                                       |                                |
| 2     | 30   | 32 | Response Code         |       |                                       |                                |
| 1     | 32   | 33 | Flag                  |       |                                       |                                |
|       |      |    |                       | Bit 0 | Reversal Authorization                |                                |
|       |      |    |                       | Bit 1 | PAN Masking                           |                                |
|       |      |    |                       | Bit 2 | Was Cancelled                         | PPt gift cards printing        |
|       |      |    |                       | Bit 3 | Executed at no sale mode              | For PPt gift cards<br>printing |
|       |      |    |                       | Bit 4 | Executed from balance transfer        | For ppt gift cards printing    |
|       |      |    |                       | Bit 5 | Executed from refund or<br>redemption | For ppt gift cards printing    |
|       |      |    |                       | Bit 6 | Not Used                              |                                |
|       |      |    |                       | Bit 7 | Not Used                              |                                |
| 4     | 33   | 37 | Sequence<br>Number    |       |                                       |                                |
| 1     | 37   | 38 | Mask Char             |       |                                       |                                |
| 1     | 38   | 39 | Mask End              |       |                                       |                                |
| 1     | 39   | 40 | Mask Start            |       |                                       |                                |
| 3     | 40   | 43 | Pan Layout            |       |                                       |                                |
| 1     | 43   | 44 | Action Type           |       |                                       |                                |
| 20    | 44   | 64 | Tail                  |       |                                       |                                |
| 64    |      |    | Total                 |       |                                       |                                |

## 28 – OLA Bill Payment Result 35

0 X 28

| Bytes | From | To | Data             | Bits  | Explanation                    | Remarks |
|-------|------|----|------------------|-------|--------------------------------|---------|
| 1     | 0    | 1  | Opcode           |       | 60 – Log Information           |         |
| 1     | 1    | 2  | Function         |       | 28                             |         |
| 1     | 2    | 3  | Sub function     |       | 0 x35 OLA bill payment results |         |
| 2     | 3    | 5  | Session ID       |       |                                |         |
| 2     | 5    | 7  | Transaction date |       | BCD format MMY Y               |         |
| 2     | 7    | 9  | Transaction time |       | BCD format MMY Y               |         |
| 15    | 9    | 24 | Merchant ID      |       |                                |         |
| 2     | 24   | 26 | Response Code    |       |                                |         |
| 1     | 26   | 27 | Bill Flag        |       |                                |         |
|       |      |    |                  | Bit 0 | Reversal Authorization         |         |
|       |      |    |                  | Bit 1 | Not Used                       |         |
|       |      |    |                  | Bit 2 | Not Used                       |         |
|       |      |    |                  | Bit 3 | Not Used                       |         |
|       |      |    |                  | Bit 4 | Not Used                       |         |
|       |      |    |                  | Bit 5 | Not Used                       |         |
|       |      |    |                  | Bit 6 | Not Used                       |         |
|       |      |    |                  | Bit 7 | Not Used                       |         |
| 4     | 27   | 31 | Sequence Number  |       |                                |         |
| 10    | 31   | 41 | Bill Number      |       |                                |         |
| 1     | 41   | 42 | Bill type        |       |                                |         |
| 2     | 42   | 44 | Not Used         |       |                                |         |
| 20    | 44   | 64 | Tail             |       |                                |         |
| 64    |      |    | Total            |       |                                |         |

## 28 – OLA Auth Guide 36

0 X 28

**Explanation:** This opcode is recorded when an online item is added to the ticket. A predefined authorization guide tracks this item throughout the sale: Add item, online request session, approval session, void and reversal session.

| Bytes | From | To | Data         | Bits  | Explanation          | Remarks |
|-------|------|----|--------------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode       |       | 60 – Log Information |         |
| 1     | 1    | 2  | Function     |       | 28                   |         |
| 1     | 2    | 3  | Sub function |       | 0 x36                |         |
| 1     | 3    | 4  | Flag         |       |                      |         |
|       |      |    |              | Bit 0 | Request session      |         |
|       |      |    |              | Bit 1 | Authorized session   |         |
|       |      |    |              | Bit 2 | Reversal session     |         |
|       |      |    |              | Bit 3 | Not Used             |         |
|       |      |    |              | Bit 4 | Not Used             |         |
|       |      |    |              | Bit 5 | Not Used             |         |
|       |      |    |              | Bit 6 | Not Used             |         |
|       |      |    |              | Bit 7 | Not Used             |         |
| 8     | 4    | 12 | Not Used     |       |                      |         |
| 32    | 12   | 44 | Guide        |       |                      |         |
| 20    | 44   | 64 | Tail         |       |                      |         |
| 64    |      |    | Total        |       |                      |         |



## 28 – OLA Auth Guide 37

0 X 28

| Bytes | From | To | Data                  | Bits  | Explanation            | Remarks |
|-------|------|----|-----------------------|-------|------------------------|---------|
| 1     | 0    | 1  | Opcode                |       | 60 – Log Information   |         |
| 1     | 1    | 2  | Function              |       | 28                     |         |
| 1     | 2    | 3  | Sub function          |       | 0 x37                  |         |
| 2     | 3    | 5  | Session ID            |       |                        |         |
| 10    | 5    | 15 | Account number        |       |                        |         |
| 1     | 15   | 16 | Flag                  |       |                        |         |
|       |      |    |                       | Bit 0 | Reversal Authorization |         |
|       |      |    |                       | Bit 1 | Was Cancelled          |         |
|       |      |    |                       | Bit 2 | Not Used               |         |
|       |      |    |                       | Bit 3 | Not Used               |         |
|       |      |    |                       | Bit 4 | Not Used               |         |
|       |      |    |                       | Bit 5 | Not Used               |         |
|       |      |    |                       | Bit 6 | Not Used               |         |
|       |      |    |                       | Bit 7 | Not Used               |         |
| 4     | 16   | 20 | Sequence No.          |       |                        |         |
| 4     | 20   | 24 | Balance Amount        |       |                        |         |
| 4     | 24   | 28 | New Amount<br>Balance |       |                        |         |
| 16    | 28   | 44 | Add Info              |       |                        |         |
| 20    | 44   | 64 | Tail                  |       |                        |         |
| 64    |      |    | Total                 |       |                        |         |

## 28 – OLA Serial Number 42

0 X 28

**Explanation:** This opcode is recorded when an online item is sold and the serial number is bigger than 15 numbers.

| Bytes | From | To | Data                         | Bits | Explanation          | Remarks                                                                                     |
|-------|------|----|------------------------------|------|----------------------|---------------------------------------------------------------------------------------------|
| 1     | 0    | 1  | Opcode                       |      | 60 – Log Information |                                                                                             |
| 1     | 1    | 2  | Function                     |      | 28                   |                                                                                             |
| 1     | 2    | 3  | Sub function                 |      | 0 x42                |                                                                                             |
| 15    | 3    | 18 | PinSerialNumber<br>Extension |      |                      |                                                                                             |
| 1     | 18   | 19 | Online Purchase<br>Provider  |      |                      | Provide ID using the<br>transaction as an<br>extension to<br>Info_Online_Purchase_<br>Item. |
| 25    | 19   | 44 | Not Used                     |      |                      |                                                                                             |
| 20    | 44   | 64 | Tail                         |      |                      |                                                                                             |
| 64    |      |    | Total                        |      |                      |                                                                                             |

## 28 – OLA Pin Number Ext2 43

0 X 28

**Explanation:** This opcode is recorded when the pin number (length) received from the encryption dll triggered in opcode 0x60/0x28/0x33 is bigger than 24, it splits the pin number value into 2 fields, and uses this transaction.

| Bytes | From | To | Data               | Bits | Explanation          | Remarks |
|-------|------|----|--------------------|------|----------------------|---------|
| 1     | 0    | 1  | Opcode             |      | 60 – Log Information |         |
| 1     | 1    | 2  | Function           |      | 28                   |         |
| 1     | 2    | 3  | Sub function       |      | 0 x43                |         |
| 28    | 3    | 31 | Ext2_PIN<br>Number |      |                      |         |
| 13    | 31   | 44 | Not Used           |      |                      |         |
| 20    | 44   | 64 | Tail               |      |                      |         |
| 64    |      |    | Total              |      |                      |         |

## 28 – OLA Result EXT2 44

0 X 28

| Bytes | From | To | Data                       | Bits     | Explanation          | Remarks                              |
|-------|------|----|----------------------------|----------|----------------------|--------------------------------------|
| 1     | 0    | 1  | Opcode                     |          | 60 – Log Information |                                      |
| 1     | 1    | 2  | Function                   |          | 28                   |                                      |
| 1     | 2    | 3  | Sub function               |          | 0 x44                |                                      |
| 10    | 3    | 13 | Response Code              |          |                      |                                      |
| 1     | 13   | 14 | Account Type               |          |                      | 0 – Credit; 1-Checking;<br>2-Savings |
| 1     | 14   | 15 | Flags                      | Bit 0    | Card Swiped          |                                      |
|       |      |    |                            | Bits 1-7 | Not Used             |                                      |
| 4     | 15   | 19 | Reward Redeemed            |          |                      |                                      |
| 4     | 19   | 23 | Actual Reward Redeem Value |          |                      |                                      |
| 4     | 23   | 27 | Reward Balance             |          |                      |                                      |
| 4     | 27   | 31 | Extra Reward Earned        |          |                      |                                      |
| 2     | 31   | 33 | Standard Reward Earned     |          |                      |                                      |
| 10    | 33   | 43 | Account Number             |          |                      | BCD                                  |
| 1     | 43   | 44 | Not Used                   |          |                      |                                      |
| 20    | 44   | 64 | Tail                       |          |                      |                                      |
| 64    |      |    | Total                      |          |                      |                                      |

## 28 – OLA Identify Number Extension

0 X 28

| Bytes | From | To | Data                   | Bits  | Explanation                   | Remarks |
|-------|------|----|------------------------|-------|-------------------------------|---------|
| 1     | 0    | 1  | Opcode                 |       | 60 – Log Information          |         |
| 1     | 1    | 2  | Function               |       | 28                            |         |
| 1     | 2    | 3  | Sub function           |       | 0 x45                         |         |
| 7     | 3    | 10 | Identify Number        |       |                               |         |
| 30    | 10   | 40 | Sequence Number        |       |                               |         |
| 1     | 40   | 41 | Sequence Number Length |       |                               |         |
| 1     | 41   | 42 | Flag                   |       |                               |         |
|       |      |    |                        | bit 0 | Confirmation request required |         |
|       |      |    |                        | bit 1 | Received upon confirmation    |         |
|       |      |    |                        | bit 2 | Not Used                      |         |
|       |      |    |                        | bit 3 | Not Used                      |         |
|       |      |    |                        | bit 4 | Not Used                      |         |
|       |      |    |                        | bit 5 | Not Used                      |         |
|       |      |    |                        | bit 6 | Not Used                      |         |
|       |      |    |                        | bit 7 | Not Used                      |         |
| 2     | 42   | 44 | Not Used               |       |                               |         |
| 20    | 44   | 64 | Tail                   |       |                               |         |
| 64    |      |    | Total                  |       |                               |         |

## 28 – OLA Epay Result

0 X 28

| Bytes | From | To | Data                    | Bits | Explanation          | Remarks |
|-------|------|----|-------------------------|------|----------------------|---------|
| 1     | 0    | 1  | Opcode                  |      | 60 – Log Information |         |
| 1     | 1    | 2  | Function                |      | 28                   |         |
| 1     | 2    | 3  | Sub function            |      | 0 x47                |         |
| 28    | 3    | 31 | Pin Serial<br>Number    |      |                      |         |
| 13    | 31   | 44 | Authorization<br>Number |      |                      |         |
| 20    | 44   | 64 | Tail                    |      |                      |         |
| 64    |      |    | Total                   |      |                      |         |

## 28 – OLA Loyalty Update Result

0 X 28

**Explanation:** This opcode is recorded when the loyalty server is updated.

| Bytes | From | To | Data                      | Bits | Explanation          | Remarks |
|-------|------|----|---------------------------|------|----------------------|---------|
| 1     | 0    | 1  | Opcode                    |      | 60 – Log Information |         |
| 1     | 1    | 2  | Function                  |      | 28                   |         |
| 1     | 2    | 3  | Sub function              |      | 0 x46                |         |
| 10    | 3    | 13 | Account Number            |      |                      |         |
| 4     | 13   | 17 | Provider<br>Response Code |      |                      |         |
| 27    | 17   | 44 | Not Used                  |      |                      |         |
| 20    | 44   | 64 | Tail                      |      |                      |         |
| 64    |      |    | Total                     |      |                      |         |

## 28 – OLA Result Ext2

0 X 28

**Explanation:** This opcode is recorded as an extension of the OLA Result opcode.

| Bytes | From | To | Data                       | Bits | Explanation                     | Remarks |
|-------|------|----|----------------------------|------|---------------------------------|---------|
| 1     | 0    | 1  | Opcode                     |      | 60 – Log Information            |         |
| 1     | 1    | 2  | Function                   |      | 28                              |         |
| 1     | 2    | 3  | Sub function               |      | 0 x44                           |         |
| 4     | 3    | 7  | Device Number              |      |                                 |         |
| 4     | 7    | 11 | Amount                     |      | Amount added or deducted        |         |
| 4     | 11   | 15 | Remaining Value            |      |                                 |         |
| 4     | 15   | 19 | Reward Redeemed            |      |                                 |         |
| 4     | 19   | 23 | Actual Reward Redeem Value |      | Actual reward dollar available. |         |
| 4     | 23   | 27 | Reward Balance             |      |                                 |         |
| 4     | 27   | 31 | Extra Reward Earned        |      |                                 |         |
| 2     | 31   | 33 | Standard Reward Earned     |      |                                 |         |
| 10    | 33   | 43 | Account Number             |      | BCD                             |         |
| 1     | 43   | 44 | Filler/ Not Used           |      |                                 |         |
| 20    | 44   | 64 | Tail                       |      |                                 |         |
| 64    |      |    | Total                      |      |                                 |         |



## 28 – OLA Result Ext2 47

0 X 28

**Explanation:** This opcode is recorded as an extension of the OLA Result opcode.

| Bytes | From | To | Data                 | Bits | Explanation          | Remarks |
|-------|------|----|----------------------|------|----------------------|---------|
| 1     | 0    | 1  | Opcode               |      | 60 – Log Information |         |
| 1     | 1    | 2  | Function             |      | 28                   |         |
| 1     | 2    | 3  | Sub function         |      | 0 x47                |         |
| 28    | 3    | 31 | Pin Serial<br>Number |      |                      |         |
| 13    | 31   | 44 | Auth Number          |      |                      |         |
| 20    | 44   | 64 | Tail                 |      |                      |         |
| 64    |      |    | Total                |      |                      |         |

## 28 – OLA Unique ID 48

0 X 28

| Bytes | From | To | Data             | Bits | Explanation          | Remarks          |
|-------|------|----|------------------|------|----------------------|------------------|
| 1     | 0    | 1  | Opcode           |      | 60 – Log Information |                  |
| 1     | 1    | 2  | Function         |      | 0x28                 |                  |
| 1     | 2    | 3  | Sub function     |      | 0x48                 |                  |
| 16    | 3    | 19 | Unique ID        |      |                      |                  |
| 1     | 19   | 20 | Unique ID Length |      |                      |                  |
| 2     | 20   | 22 | Session ID       |      |                      | In Customer Node |
| 22    | 22   | 44 | Not Used Unique  |      |                      |                  |
| 20    | 44   | 64 | Tail             |      |                      |                  |
| 64    |      |    | Total            |      |                      |                  |

## 28 – OLA Payment Card Result 49

0 X 28

| Bytes | From | To | Data                  | Bits | Explanation          | Remarks |
|-------|------|----|-----------------------|------|----------------------|---------|
| 1     | 0    | 1  | Opcode                |      | 60 – Log Information |         |
| 1     | 1    | 2  | Function              |      | 0x28                 |         |
| 1     | 2    | 3  | Sub function          |      | 0x49                 |         |
| 2     | 3    | 5  | Session ID            |      |                      |         |
| 2     | 5    | 7  | Expiry date           |      |                      | MMYY    |
| 20    | 7    | 27 | Account Number        |      |                      |         |
| 4     | 27   | 31 | Old Amount<br>Balance |      |                      |         |
| 4     | 31   | 35 | New Amount<br>Balance |      |                      |         |
| 2     | 35   | 37 | Response Code         |      |                      |         |
| 7     | 37   | 44 | Not Used              |      |                      |         |
| 20    | 44   | 64 | Tail                  |      |                      |         |
| 64    |      |    | Total                 |      |                      |         |

## 28 – OLA Abort 99

0 X 28

| Bytes | From | To | Data           | Bits | Explanation                | Remarks |
|-------|------|----|----------------|------|----------------------------|---------|
| 1     | 0    | 1  | Opcode         |      | 60 – Log Information       |         |
| 1     | 1    | 2  | Function       |      | 28 – OLA Abort 99          |         |
| 1     | 2    | 3  | Sub function   |      | 0 X 99 Aborted by the User |         |
| 4     | 3    | 7  | Message Number |      |                            |         |
| 36    | 7    | 43 | Reserved       |      |                            |         |
| 1     | 43   | 44 | Pump Number    |      |                            |         |
| 20    | 44   | 64 | Tail           |      |                            |         |
| 64    |      |    | Total          |      |                            |         |

## 28 – OLA PCIDSS\_Hashed PAN 4A

0 X 28

**Explanation:** PCIDSS (Payment Card Industry Data Security Standard)

| Bytes | Type | From | To | Data                    | Bits  | Explanation                  | Remarks                           |
|-------|------|------|----|-------------------------|-------|------------------------------|-----------------------------------|
| 1     | Char | 0    | 1  | Opcode                  |       | 60 – Log Information         |                                   |
| 1     | Char | 1    | 2  | Function                |       | 28 – HashedPAN               |                                   |
| 1     | Char | 2    | 3  | Sub function            |       | 0 – Ola results Value 0 X 4A |                                   |
| 1     | Char | 3    | 4  | Sequence Num            |       | Transaction sequence number  |                                   |
| 1     | Char | 4    | 5  | Flag                    |       |                              |                                   |
|       |      |      |    |                         | Bit 0 | Last Sequence Transaction    |                                   |
|       |      |      |    |                         | Bit 1 | Not Used                     |                                   |
|       |      |      |    |                         | Bit 2 | Not Used                     |                                   |
|       |      |      |    |                         | Bit 3 | Not Used                     |                                   |
|       |      |      |    |                         | Bit 4 | Not Used                     |                                   |
|       |      |      |    |                         | Bit 5 | Not Used                     |                                   |
|       |      |      |    |                         | Bit 6 | Not Used                     |                                   |
|       |      |      |    |                         | Bit 7 | Not Used                     |                                   |
| 1     | Char | 5    | 6  | Hashed PAN Value Length |       |                              | The length – text HashedPAN value |
| 32    | Char | 6    | 38 | HashedPAN Value         |       |                              | The Hashed PAN Text               |
| 6     | Char | 38   | 44 | Not Used                |       |                              |                                   |
| 20    |      | 44   | 64 | Tail                    |       |                              |                                   |
| 64    |      |      |    | Total                   |       |                              |                                   |

## 29 – Auth Price Diff

0 X 29

**Explanation:** The Auth Price Diff function is recorded when an item at the POS Terminal is sold at a different price to the marked price. The Authorized Prices, Sold Price, Original Price, Qty, Diff Amount, etc are recorded on transaction by the POS Terminal.

| Bytes | From | To | Data             | Bits  | Explanation          | Remarks |
|-------|------|----|------------------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode           |       | 60 – Log Information |         |
| 1     | 1    | 2  | Function         |       | 29 – Auth price diff |         |
| 7     | 2    | 9  | Code             |       |                      |         |
| 1     | 9    | 10 | Flag 1           |       |                      |         |
|       |      |    |                  | bit 0 | Not Used             |         |
|       |      |    |                  | bit 1 | Not Used             |         |
|       |      |    |                  | bit 2 | Not Used             |         |
|       |      |    |                  | bit 3 | Not Used             |         |
|       |      |    |                  | bit 4 | Not Used             |         |
|       |      |    |                  | bit 5 | Not Used             |         |
|       |      |    |                  | bit 6 | Not Used             |         |
|       |      |    |                  | bit 7 | Not Used             |         |
| 4     | 10   | 14 | Authorized Price |       |                      |         |
| 4     | 14   | 18 | Sold Price       |       |                      |         |
| 4     | 18   | 22 | Qty              |       |                      |         |
| 4     | 22   | 26 | Diff Amount      |       |                      |         |
| 18    | 26   | 44 | Reserved         |       |                      |         |
| 20    | 44   | 64 | Tail             |       |                      |         |
| 64    |      |    | Total            |       |                      |         |

## 2A – Host Batch

0 X 2A

| Bytes | From | To | Data                  | Bits | Explanation                                                        | Remarks |
|-------|------|----|-----------------------|------|--------------------------------------------------------------------|---------|
| 1     | 0    | 1  | Opcode                |      | 60 – Log Information                                               |         |
| 1     | 1    | 2  | Function              |      | 0 X 2A                                                             |         |
| 1     | 2    | 3  | Option                |      | 0 – Start<br>1 – End<br>2 – Start rejected<br>3 – Continues status |         |
| 6     | 3    | 9  | host_batch_<br>number |      |                                                                    |         |
| 4     | 9    | 13 | host_records          |      |                                                                    |         |
| 4     | 13   | 17 | accepted_records      |      |                                                                    |         |
| 1     | 17   | 18 | post_batches          |      |                                                                    |         |
| 6     | 18   | 24 | post_batch1           |      |                                                                    |         |
| 6     | 24   | 30 | post_batch2           |      |                                                                    |         |
| 6     | 30   | 36 | post_batch3           |      |                                                                    |         |
| 3     | 36   | 39 | Date                  |      |                                                                    | BCD     |
| 3     | 39   | 42 | Time                  |      |                                                                    | BCD     |
| 2     | 42   | 44 | Batch Type            |      |                                                                    |         |
| 20    | 44   | 64 | Tail                  |      |                                                                    |         |
| 64    |      |    | Total                 |      |                                                                    |         |

## 2B – Check Fee

0 X 2B

| Bytes | From | To | Data                  | Bits  | Explanation          | Remarks           |
|-------|------|----|-----------------------|-------|----------------------|-------------------|
| 1     | 0    | 1  | Opcode                |       | 60 – Log Information | Not Used by Tesco |
| 1     | 1    | 2  | Function              |       | 2B – Check Fee       |                   |
| 7     | 2    | 9  | Fee Code              |       |                      |                   |
| 1     | 9    | 10 | Flag                  |       |                      |                   |
|       |      |    |                       | bit 0 | Not Used             |                   |
|       |      |    |                       | bit 1 | Not Used             |                   |
|       |      |    |                       | bit 2 | Not Used             |                   |
|       |      |    |                       | bit 3 | Not Used             |                   |
|       |      |    |                       | bit 4 | Not Used             |                   |
|       |      |    |                       | bit 5 | Not Used             |                   |
|       |      |    |                       | bit 6 | Not Used             |                   |
|       |      |    |                       | bit 7 | Not Used             |                   |
| 4     | 10   | 14 | Fee Price             |       |                      |                   |
| 4     | 14   | 18 | Cash Back             |       |                      |                   |
| 1     | 18   | 19 | (Fee) Table<br>Number |       |                      |                   |
| 2     | 19   | 21 | Department<br>Number  |       |                      |                   |
| 2     | 21   | 23 | Tender Number         |       |                      |                   |
| 1     | 23   | 24 | Fee Type              |       |                      |                   |
| 20    | 24   | 44 | Reserved              |       |                      |                   |
| 20    | 44   | 64 | Tail                  |       |                      |                   |
| 64    |      |    | Total                 |       |                      |                   |



## 2C – New ECCA

### 0 X 2C

**Explanation:** The New ECCA Opcode sends information on the tender used at the POS if the Parameter “ECCA” is set to On.

| Bytes | From | To | Data     | Bits  | Explanation           | Remarks |
|-------|------|----|----------|-------|-----------------------|---------|
| 1     | 0    | 1  | Opcode   |       | 60 – Log Information  |         |
| 1     | 1    | 2  | Function |       | 0 X 2C                |         |
| 1     | 2    | 3  | Template |       |                       |         |
| 20    | 3    | 23 | Account  |       | ASCII null terminated |         |
| 1     | 23   | 24 | Flag     |       |                       |         |
|       |      |    |          | bit 0 | Second ECCA           |         |
|       |      |    |          | bit 1 | Not Used              |         |
|       |      |    |          | bit 2 | Not Used              |         |
|       |      |    |          | bit 3 | Not Used              |         |
|       |      |    |          | bit 4 | Not Used              |         |
|       |      |    |          | bit 5 | Not Used              |         |
|       |      |    |          | bit 6 | Not Used              |         |
|       |      |    |          | bit 7 | Not Used              |         |
| 20    | 24   | 44 | Reserved |       |                       |         |
| 20    | 44   | 64 | Tail     |       |                       |         |
| 64    |      |    | Total    |       |                       |         |

## 2D – Embedded Price

### 0 X 2D

**Explanation:** The Embedded Price function is recorded when an item scanned or keyed by the POS Terminal has a fixed price within the barcode. For each Embedded Price Item the function registers, sending the Original Price, Embedded Price, Quantity, etc.

| Bytes | From | To | Data             | Bits  | Explanation          | Remarks |
|-------|------|----|------------------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode           |       | 60 – Log Information |         |
| 1     | 1    | 2  | Function         |       | 0 X 2D               |         |
| 1     | 2    | 3  | Flag 1           |       |                      |         |
|       |      |    |                  | bit 0 | Not Used             |         |
|       |      |    |                  | bit 1 | Not Used             |         |
|       |      |    |                  | bit 2 | Not Used             |         |
|       |      |    |                  | bit 3 | Not Used             |         |
|       |      |    |                  | bit 4 | Not Used             |         |
|       |      |    |                  | bit 5 | Not Used             |         |
|       |      |    |                  | bit 6 | Not Used             |         |
|       |      |    |                  | bit 7 | Not Used             |         |
| 4     | 3    | 7  | Original Price   |       |                      |         |
| 4     | 7    | 11 | Embedded Price   |       |                      |         |
| 4     | 11   | 15 | Quantity         |       |                      |         |
| 4     | 15   | 19 | Different Amount |       |                      |         |
| 7     | 19   | 26 | Code             |       |                      |         |
| 18    | 26   | 44 | Not Used         |       |                      |         |
| 20    | 44   | 64 | Tail             |       |                      |         |
| 64    |      |    | Total            |       |                      |         |

## 2E – EFT Media

### 0 X 2E

**Explanation:** The EFT Media function records the Cashier Number, Media Number and Amount Recorded within the transaction.

| Bytes | From | To | Data         | Bits | Explanation          | Remarks |
|-------|------|----|--------------|------|----------------------|---------|
| 1     | 0    | 1  | Opcode       |      | 60 – Log Information |         |
| 1     | 1    | 2  | Function     |      | 2E – EFT media       |         |
| 2     | 2    | 4  | Cashier      |      |                      |         |
| 2     | 4    | 6  | Media Number |      |                      |         |
| 4     | 6    | 10 | Amount       |      |                      |         |
| 34    | 10   | 44 | Reserved     |      |                      |         |
| 20    | 44   | 64 | Tail         |      |                      |         |
| 64    |      |    | Total        |      |                      |         |

## 2F – EFT Print Reject

0 X 2F

| Bytes | From | To | Data           | Bits | Explanation          | Remarks |
|-------|------|----|----------------|------|----------------------|---------|
| 1     | 0    | 1  | Opcode         |      | 60 – Log Information |         |
| 1     | 1    | 2  | Function       |      | 0 X 2F               |         |
| 2     | 2    | 4  | Tender Number  |      |                      |         |
| 2     | 4    | 6  | Error Code     |      |                      |         |
| 20    | 6    | 26 | Account Number |      |                      |         |
| 4     | 26   | 30 | Balance 1      |      |                      |         |
| 4     | 30   | 34 | Balance 2      |      |                      |         |
| 10    | 34   | 44 | Reserved       |      |                      |         |
| 20    | 44   | 64 | Tail           |      |                      |         |
| 64    |      |    | Total          |      |                      |         |

## 30 – Transaction Index

0 X 30

**Explanation:** The Transaction Index function records an index of all the transactions. The Ticket Totals, Voided Tickets, or Saved Tickets are all fields recorded in the transaction.

| Bytes | From | To | Data         | Bits  | Explanation            | Remarks |
|-------|------|----|--------------|-------|------------------------|---------|
| 1     | 0    | 1  | Opcode       |       | 60 – Log Information   |         |
| 1     | 1    | 2  | Function     |       | 30 – Transaction Index |         |
| 1     | 2    | 3  | Flag 1       | bit 0 | Ticket total           |         |
|       |      |    |              | bit 1 | Void ticket            |         |
|       |      |    |              | bit 2 | Save ticket            |         |
|       |      |    |              | bit 3 | Not Used               |         |
|       |      |    |              | bit 4 | Not Used               |         |
|       |      |    |              | bit 5 | Not Used               |         |
|       |      |    |              | bit 6 | Not Used               |         |
|       |      |    |              | bit 7 | Info                   |         |
| 1     | 3    | 4  | Flag 2       | bit 0 | Not Used               |         |
|       |      |    |              | bit 1 | Not Used               |         |
|       |      |    |              | bit 2 | Not Used               |         |
|       |      |    |              | bit 3 | Not Used               |         |
|       |      |    |              | bit 4 | Not Used               |         |
|       |      |    |              | bit 5 | Not Used               |         |
|       |      |    |              | bit 6 | Not Used               |         |
|       |      |    |              | bit 7 | Not Used               |         |
| 1     | 4    | 5  | Flag 3       | bit 0 | Index Clubcard         |         |
|       |      |    |              | bit 1 | Not Used               |         |
|       |      |    |              | bit 2 | Not Used               |         |
|       |      |    |              | bit 3 | Not Used               |         |
|       |      |    |              | bit 4 | Not Used               |         |
|       |      |    |              | bit 5 | Not Used               |         |
|       |      |    |              | bit 6 | Not Used               |         |
|       |      |    |              | bit 7 | Not Used               |         |
| 1     | 5    | 6  | Index Length |       |                        |         |
| 30    | 6    | 36 | Index        |       |                        |         |
| 8     | 36   | 44 | Reserved     |       |                        |         |

| Bytes | From | To | Data  | Bits | Explanation | Remarks |
|-------|------|----|-------|------|-------------|---------|
| 20    | 44   | 64 | Tail  |      |             |         |
| 64    |      |    | Total |      |             |         |

## 31 – Location (POS Information)

0 X 31

**Explanation:** The Location function records information on the location of the store, sending: the Store ID, POS Terminal Type, Checkout Bank, EFT Location, POS Terminal Number, Profile, etc.

| Bytes | From | To | Data                          | Bits     | Explanation                                                               | Remarks                  |
|-------|------|----|-------------------------------|----------|---------------------------------------------------------------------------|--------------------------|
| 1     | 0    | 1  | Opcode                        |          | 60 – Log Information                                                      |                          |
| 1     | 1    | 2  | Function<br>SubOpcode         |          | 31 – Transaction Index                                                    |                          |
| 1     | 2    | 3  | Flag 1                        |          |                                                                           |                          |
|       |      |    |                               | bit 0    | Tender Correction                                                         |                          |
|       |      |    |                               | bit 1    | Fuel merged recall prepay ticket                                          | Fuel for ALB's           |
|       |      |    |                               | bit 2    | Invoice                                                                   | Use invoice number field |
|       |      |    |                               | bits 3-7 | Not Used                                                                  |                          |
| 6     | 3    | 9  | Store ID                      |          | Store number (Alphanumeric)                                               |                          |
| 1     | 9    | 10 | POS Terminal<br>Type          |          | 'O/I/S'                                                                   |                          |
| 1     | 10   | 11 | Checkout Bank<br>Number       |          | (0-99)                                                                    |                          |
| 5     | 11   | 16 | EFT Location                  |          | Location as defined on POS<br>configuration                               |                          |
| 1     | 16   | 17 | POS Terminal<br>Profile       |          | Till profile as defined on POS<br>configuration                           |                          |
| 1     | 17   | 18 | Doc Type                      |          | El-Salvador Tax Report<br>1 = Ticket<br>2 = Factura<br>3 = Credito fiscal |                          |
| 2     | 18   | 20 | POS Terminal<br>No            |          |                                                                           |                          |
| 2     | 20   | 22 | Cashier No.                   |          |                                                                           |                          |
| 1     | 22   | 23 | Wholesale<br>transaction type |          |                                                                           |                          |
| 8     | 23   | 31 | Invoice Number                |          | Wholesale invoice number                                                  |                          |
| 3     | 31   | 34 | Invoice Date                  |          | Invoice generation date                                                   |                          |
| 3     | 34   | 37 | Invoice Time                  |          | Invoice time                                                              |                          |
| 7     | 37   | 44 | Reserved                      |          |                                                                           | Future use               |
| 20    | 44   | 64 | Tail                          |          |                                                                           |                          |
| 64    |      |    | Total                         |          |                                                                           |                          |

## 32 – Tender Coupon

0 X 32

**Explanation:** The Tender Coupon function records each time a sale is registered and the payments are made with a Coupon. Coupons are not always defined previously on the system. If the Coupon transacted is defined, the On-file flag is set active. The Code, Value, Threshold Qty and Type are fields recorded in the transaction.

| Bytes | From | To | Data               | Bits  | Explanation          | Remarks |
|-------|------|----|--------------------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode             |       | 60 – Log Information |         |
| 1     | 1    | 2  | Function           |       | 32 – Tender coupon   |         |
| 1     | 2    | 3  | Flag 1             |       |                      |         |
|       |      |    |                    | bit 0 | Coupon Ticket        |         |
|       |      |    |                    | bit 1 | Master Coupon Use    |         |
|       |      |    |                    | bit 2 | Cancel Coupon        |         |
|       |      |    |                    | bit 3 | Coupon was Canceled  |         |
|       |      |    |                    | bit 4 | Not Used             |         |
|       |      |    |                    | bit 5 | Not Used             |         |
|       |      |    |                    | bit 6 | Not Used             |         |
|       |      |    |                    | bit 7 | Not Used             |         |
| 7     | 3    | 10 | Code               |       |                      |         |
| 4     | 10   | 14 | Value              |       |                      |         |
| 2     | 14   | 16 | Threshold Qty      |       |                      |         |
| 4     | 16   | 20 | Minimum Purchase   |       |                      |         |
| 1     | 20   | 21 | Type               |       |                      |         |
| 4     | 21   | 25 | Quantity           |       |                      |         |
| 4     | 25   | 29 | Total Value        |       |                      |         |
| 7     | 29   | 36 | Code Master Coupon |       |                      |         |
| 1     | 36   | 37 | Option             |       |                      |         |
| 7     | 37   | 44 | Reserved           |       |                      |         |
| 20    | 44   | 64 | Tail               |       |                      |         |
| 64    |      |    | Total              |       |                      |         |



## 33 – Training Charge Posting Account

0 X 33

| Bytes | From | To | Data              | Bits  | Explanation          | Remarks |
|-------|------|----|-------------------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode            |       | 60 – Log Information |         |
| 1     | 1    | 2  | Function          |       | 33 – Training        |         |
| 2     | 2    | 4  | Media Number      |       |                      |         |
| 1     | 4    | 5  | Flag 1            |       |                      |         |
|       |      |    |                   | bit 0 | Charge payment       |         |
|       |      |    |                   | bit 1 | Charge reverse       |         |
|       |      |    |                   | bit 2 | Not Used             |         |
|       |      |    |                   | bit 3 | Not Used             |         |
|       |      |    |                   | bit 4 | Not Used             |         |
|       |      |    |                   | bit 5 | Not Used             |         |
|       |      |    |                   | bit 6 | Not Used             |         |
|       |      |    |                   | bit 7 | Not Used             |         |
| 12    | 5    | 17 | CP Account number |       |                      |         |
| 1     | 17   | 18 | CP Status         |       |                      |         |
| 4     | 18   | 22 | CP Amount         |       |                      |         |
| 4     | 22   | 26 | CP Balance        |       |                      |         |
| 4     | 26   | 30 | CP Limit          |       |                      |         |
| 14    | 30   | 44 | Reserved          |       |                      |         |
| 20    | 44   | 64 | Tail              |       |                      |         |
| 64    |      |    | Total             |       |                      |         |

## 34 – Ticket Trailer

0 X 34

**Explanation:** The Ticket Trailer function records when a receipt, which includes the Trailer on the bottom of the receipt, is printed, including: Date, Time, Ticket Number, etc.

| Bytes | From | To | Data          | Bits  | Explanation          | Remarks |
|-------|------|----|---------------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode        |       | 60 – Log Information |         |
| 1     | 1    | 2  | Function      |       | 34 – Ticket trailer  |         |
| 1     | 2    | 3  | Flag 1        |       |                      |         |
|       |      |    |               | bit 0 | Not Used             |         |
|       |      |    |               | bit 1 | Not Used             |         |
|       |      |    |               | bit 2 | Not Used             |         |
|       |      |    |               | bit 3 | Not Used             |         |
|       |      |    |               | bit 4 | Not Used             |         |
|       |      |    |               | bit 5 | Not Used             |         |
|       |      |    |               | bit 6 | Not Used             |         |
|       |      |    |               | bit 7 | Not Used             |         |
| 3     | 3    | 6  | Date          |       | BCD yymmdd           |         |
| 3     | 6    | 9  | Time          |       | BCD hhmmss           |         |
| 4     | 9    | 13 | Ticket Number |       |                      |         |
| 31    | 13   | 44 | Reserved      |       |                      |         |
| 20    | 44   | 64 | Tail          |       |                      |         |
| 64    |      |    | Total         |       |                      |         |

## 35 – Finish Media

0 X 35

| Bytes | From | To | Data                       | Bits | Explanation          | Remarks |
|-------|------|----|----------------------------|------|----------------------|---------|
| 1     | 0    | 1  | Opcode                     |      | 60 – Log Information |         |
| 1     | 1    | 2  | Function                   |      | 35 – Finish media    |         |
| 4     | 2    | 6  | Fuel Prepay Sync<br>Number |      | POSPump – Pre-Pay    |         |
| 38    | 6    | 44 | Reserved                   |      |                      |         |
| 20    | 44   | 64 | Tail                       |      |                      |         |
| 64    |      |    | Total                      |      |                      |         |

## 36 – Bad External Device Transaction

0 X 36

**Explanation:** This Opcode registers when it is getting transactions from an external device, recording the External Device Transaction Record Data.

| Bytes | From | To | Data                                    | Bits | Explanation          | Remarks |
|-------|------|----|-----------------------------------------|------|----------------------|---------|
| 1     | 0    | 1  | Opcode                                  |      | 60 – Log Information |         |
| 1     | 1    | 2  | Function Device Transaction             |      | 36 – Bad External    |         |
| 42    | 2    | 44 | External Device Transaction Record Data |      |                      |         |
| 20    | 44   | 64 | Tail                                    |      |                      |         |
| 64    |      |    | Total                                   |      |                      |         |

## 37 – Q-Length

0 X 37

**Explanation:** The Q-Length function reports the number of customers waiting in line at the POS. The Q-Length and Q-Length Count fields are recorded in the transaction.

| Bytes | From | To | Data                 | Bits  | Explanation          | Remarks |
|-------|------|----|----------------------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode               |       | 60 – Log Information |         |
| 1     | 1    | 2  | Function             |       | 37 – Q-Length        |         |
| 1     | 2    | 3  | Flag 1               |       |                      |         |
|       |      |    |                      | bit 0 | Not Used             |         |
|       |      |    |                      | bit 1 | Not Used             |         |
|       |      |    |                      | bit 2 | Not Used             |         |
|       |      |    |                      | bit 3 | Not Used             |         |
|       |      |    |                      | bit 4 | Not Used             |         |
|       |      |    |                      | bit 5 | Not Used             |         |
|       |      |    |                      | bit 6 | Not Used             |         |
|       |      |    |                      | bit 7 | Not Used             |         |
| 2     | 3    | 5  | Q Length             |       |                      |         |
| 2     | 5    | 7  | Q Length alert count |       |                      |         |
| 37    | 7    | 44 | Reserved             |       |                      |         |
| 20    | 44   | 64 | Tail                 |       |                      |         |
| 64    |      |    | Total                |       |                      |         |

## 38 – EFT Print Data

0 X 38

| Bytes | From | To | Data     | Bits  | Explanation          | Remarks |
|-------|------|----|----------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode   |       | 60 – Log Information |         |
| 1     | 1    | 2  | Function |       | 38 – EFT Print data  |         |
| 1     | 2    | 3  | Flag     |       |                      |         |
|       |      |    |          | bit 0 | Line number          |         |
|       |      |    |          | bit 1 | Line number          |         |
|       |      |    |          | bit 2 | Line number          |         |
|       |      |    |          | bit 3 | Line number          |         |
|       |      |    |          | bit 4 | Line number          |         |
|       |      |    |          | bit 5 | Line number          |         |
|       |      |    |          | bit 6 | First line           |         |
|       |      |    |          | bit 7 | Last line            |         |
| 41    | 3    | 44 | Data     |       |                      |         |
| 20    | 44   | 64 | Tail     |       |                      |         |
| 64    |      |    | Total    |       |                      |         |

## 39 – Alcohol Restricted

0 X 39

**Explanation:** The Alcohol Restricted function records all alcohol sales, ensuring the restrictions are taken into account.

| Bytes | From | To | Data                 | Bits  | Explanation          | Remarks |
|-------|------|----|----------------------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode               |       | 60 – Log Information |         |
| 1     | 1    | 2  | Function restriction |       | 39 – Alcohol         |         |
| 1     | 2    | 3  | Flag1                |       |                      |         |
|       |      |    |                      | bit 0 | Restricted           |         |
|       |      |    |                      | bit 1 | Future Restriction   |         |
|       |      |    |                      | bit 2 | Sale Restriction     |         |
|       |      |    |                      | bit 3 | Void Restriction     |         |
|       |      |    |                      | bit 4 | Refund Restriction   |         |
|       |      |    |                      | bit 5 | Not Used             |         |
|       |      |    |                      | bit 6 | Not Used             |         |
|       |      |    |                      | bit 7 | Not Used             |         |
| 7     | 3    | 10 | Code                 |       |                      |         |
| 2     | 10   | 12 | Department           |       |                      |         |
| 2     | 12   | 14 | Hour                 |       |                      |         |
| 2     | 14   | 16 | Minute               |       |                      |         |
| 4     | 16   | 20 | Amount               |       |                      |         |
| 24    | 20   | 44 | Not Used             |       |                      |         |
| 20    | 44   | 64 | Tail                 |       |                      |         |
| 64    |      |    | Total                |       |                      |         |

## 3A – Minimum Age Message

### 0 X 3A

**Explanation:** The Minimum Age Message function records when an item with restrictions is sold at the POS, for example, a message prompts, checking the customer's age when an alcohol sale is transacted.

| Bytes | From | To | Data        | Bits | Explanation          | Remarks |
|-------|------|----|-------------|------|----------------------|---------|
| 1     | 0    | 1  | Opcode      |      | 60 – Log Information |         |
| 1     | 1    | 2  | Function    |      | 0 X 3A               |         |
| 1     | 2    | 3  | Minimum Age |      |                      |         |
| 41    | 3    | 44 | Reserved    |      |                      |         |
| 20    | 44   | 64 | Tail        |      |                      |         |
| 64    |      |    | Total       |      |                      |         |



## 3B – Clubcard Extension

### 0 X 3B

**Explanation:** The Club Card Extension function records information during a transaction when a Club Card is used, to check further details connected to Club Card Members.

| Bytes | From | To | Data              | Bits  | Explanation                 | Remarks |
|-------|------|----|-------------------|-------|-----------------------------|---------|
| 1     | 0    | 1  | Opcode            |       | 60 – Log Information        |         |
| 1     | 1    | 2  | Function          |       | 0 X 3B – Clubcard Extension |         |
| 1     | 2    | 3  | Flag              | bit 0 | Bio FreqShop flag           |         |
|       |      |    |                   | bit 1 | Clubcard ext 2              |         |
|       |      |    |                   | bit 2 | Nu_001                      |         |
|       |      |    |                   | bit 3 | Nu_001                      |         |
|       |      |    |                   | bit 4 | Nu_001                      |         |
|       |      |    |                   | bit 5 | Nu_001                      |         |
|       |      |    |                   | bit 6 | Nu_001                      |         |
|       |      |    |                   | bit 7 | Nu_001                      |         |
| 40    | 3    | 43 | PBT Customer Name |       |                             |         |
| 1     | 43   | 44 | Loyalty State     |       |                             |         |
| 20    | 44   | 64 | Tail              |       |                             |         |
| 64    |      |    | Total             |       |                             |         |

## 3C – Commission

### 0 X 3C

**Explanation:** The Commission function records the tender's service fee. Certain tenders automatically include a service fee charge. The Amount, Tender Amount, Percent, Tender Name are fields recorded once the transaction is completed.

| Bytes | From | To | Data          | Bits  | Explanation          | Remarks |
|-------|------|----|---------------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode        |       | 60 – Log Information |         |
| 1     | 1    | 2  | Function      |       | 0 X 3C – Commission  |         |
| 4     | 2    | 6  | Amount        |       |                      |         |
| 4     | 6    | 10 | Tender Amount |       |                      |         |
| 4     | 10   | 14 | Percent       |       |                      |         |
| 16    | 14   | 30 | Tender Name   |       |                      |         |
| 1     | 30   | 31 | Flag          | bit 0 | Cancel               |         |
|       |      |    |               | bit 1 | Subtract             |         |
|       |      |    |               | bit 2 | Not Used             |         |
|       |      |    |               | bit 3 | Not Used             |         |
|       |      |    |               | bit 4 | Not Used             |         |
|       |      |    |               | bit 5 | Not Used             |         |
|       |      |    |               | bit 6 | Not Used             |         |
|       |      |    |               | bit 7 | Not Used             |         |
| 13    | 31   | 44 | Reserved      |       |                      |         |
| 20    | 44   | 64 | Tail          |       |                      |         |
| 64    |      |    | Total         |       |                      |         |

## 3D – Fly Buys

### 0 X 3D

**Explanation:** The Fly Buys function is used to update Fly Buy Member Companies with the client's points. The transaction sends the Card Number, Amount, etc. (Used in the USA only.)

| Bytes | From | To | Data        | Bits  | Explanation          | Remarks |
|-------|------|----|-------------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode      |       | 60 – Log Information |         |
| 1     | 1    | 2  | Function    |       | 0 X 3D               |         |
| 1     | 2    | 3  | Flag 1      |       |                      |         |
|       |      |    |             | bit 0 | Final                |         |
|       |      |    |             | bit 1 | Voided               |         |
|       |      |    |             | bit 2 | Was canceled         |         |
|       |      |    |             | bit 3 | Not Used             |         |
|       |      |    |             | bit 4 | Not Used             |         |
|       |      |    |             | bit 5 | Not Used             |         |
|       |      |    |             | bit 6 | MCR Used             |         |
|       |      |    |             | bit 7 | Scanned              |         |
| 20    | 3    | 23 | Card Number |       |                      |         |
| 4     | 23   | 27 | Amount      |       |                      |         |
| 17    | 27   | 44 | Reserved    |       |                      |         |
| 20    | 44   | 64 | Tail        |       |                      |         |
| 64    |      |    | Total       |       |                      |         |

## 3E – Charge Reverse Balance

### 0 X 3E

**Explanation:** The Charge Reverse Balance records when a customer pays for purchases with a charge account held in the Store. Recording CP Name, CP Limit, CP Account Number, etc.

| Bytes | From | To | Data                 | Bits  | Explanation          | Remarks |
|-------|------|----|----------------------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode               |       | 60 – Log Information |         |
| 1     | 1    | 2  | Function             |       | 0 X 3E               |         |
| 1     | 2    | 3  | Flag 1               |       |                      |         |
|       |      |    |                      | bit 0 | Payment              |         |
|       |      |    |                      | bit 1 | Purchase             |         |
|       |      |    |                      | bit 2 | Not Used             |         |
|       |      |    |                      | bit 3 | Not Used             |         |
|       |      |    |                      | bit 4 | Not Used             |         |
|       |      |    |                      | bit 5 | Not Used             |         |
|       |      |    |                      | bit 6 | Not Used             |         |
|       |      |    |                      | bit 7 | Not Used             |         |
| 16    | 3    | 19 | CP Name              |       |                      |         |
| 4     | 19   | 23 | CP limit             |       |                      |         |
| 13    | 23   | 36 | CP Account<br>Number |       |                      |         |
| 4     | 36   | 40 | CP Amount            |       |                      |         |
| 4     | 40   | 44 | CP Balance           |       |                      |         |
| 20    | 44   | 64 | Tail                 |       |                      |         |
| 64    |      |    | Total                |       |                      |         |

## 3F – Clubcard Re-entry

### 0 X 3F

**Explanation:** The Clubcard Re-entry function records whenever a Clubcard is swiped or key entered more than once, recording the Card Number, Origin Date, POS Number, Receipt No., etc. There is one byte especially for the Re-entry Reason Code.

| Bytes | From | To | Data                 | Bits  | Explanation           | Remarks |
|-------|------|----|----------------------|-------|-----------------------|---------|
| 1     | 0    | 1  | Opcode               |       | 60 – Log Information  |         |
| 1     | 1    | 2  | Function             |       | 0 X 3F                |         |
| 1     | 2    | 3  | Flag 1               |       |                       |         |
|       |      |    |                      | bit 0 | Not Used              |         |
|       |      |    |                      | bit 1 | Not Used              |         |
|       |      |    |                      | bit 2 | Not Used              |         |
|       |      |    |                      | bit 3 | Not Used              |         |
|       |      |    |                      | bit 4 | Not Used              |         |
|       |      |    |                      | bit 5 | Not Used              |         |
|       |      |    |                      | bit 6 | MCR Used              |         |
|       |      |    |                      | bit 7 | Scanned               |         |
| 20    | 3    | 23 | Card Number          |       | ASCII null terminated |         |
| 3     | 23   | 26 | Origin Date          |       | yymmdd                |         |
| 1     | 26   | 27 | POS Number           |       |                       |         |
| 2     | 27   | 29 | Receipt Number       |       |                       |         |
| 4     | 29   | 33 | Qualify Spent        |       |                       |         |
| 4     | 33   | 37 | Points               |       |                       |         |
| 1     | 37   | 38 | Re-Entry Reason Code |       |                       |         |
| 4     | 38   | 42 | Keys                 |       |                       |         |
| 2     | 42   | 44 | Not Used             |       |                       |         |
| 20    | 44   | 64 | Tail                 |       |                       |         |
| 64    |      |    | Total                |       |                       |         |

## 40 – Promotions/Coupons Cross

0 X 40

**Explanation:** The Promotions/Coupons Cross records information when a coupon is used in combination with a promotion. The transactions sends the Promotion Number, Bucket Number, Promotion Type, Department, Code, Reward Type, etc.

| Bytes | From | To | Data                 | Bits  | Explanation                   | Remarks          |
|-------|------|----|----------------------|-------|-------------------------------|------------------|
| 1     | 0    | 1  | Opcode               |       | 60 – Log Information          |                  |
| 1     | 1    | 2  | Function             |       | 40 – Promotions/coupons cross |                  |
| 1     | 2    | 3  | Flag 1               |       |                               |                  |
|       |      |    |                      | bit 0 | Promotion PLU                 |                  |
|       |      |    |                      | bit 1 | Promotion department          |                  |
|       |      |    |                      | bit 2 | Promotion sub department      |                  |
|       |      |    |                      | bit 3 | Promotion mmg                 |                  |
|       |      |    |                      | bit 4 | Promotion manufacture         |                  |
|       |      |    |                      | bit 5 | Promotion Group               |                  |
|       |      |    |                      | bit 6 | Long Promotion                | Promotion_chng   |
|       |      |    |                      | bit 7 | Promotion Internal ID         |                  |
| 2     | 3    | 5  | Promotion Number     |       |                               |                  |
| 1     | 5    | 6  | Bucket Number        |       |                               |                  |
| 1     | 6    | 7  | Promotion Type       |       |                               |                  |
| 2     | 7    | 9  | Department           |       |                               |                  |
| 7     | 9    | 16 | Code                 |       |                               |                  |
| 1     | 16   | 17 | Reward Type          |       |                               |                  |
| 4     | 17   | 21 | Promotion Number     |       |                               | Promotion Change |
| 4     | 21   | 25 | Apportionment Amount |       |                               |                  |
| 19    | 25   | 44 | Reserved             |       |                               |                  |
| 20    | 44   | 64 | Tail                 |       |                               |                  |
| 64    |      |    | Total                |       |                               |                  |

## 41 – Deposit

0 X 41

**Explanation:** The Deposit function records the cash from each POS deposited. Each POS logs the amount of each tender that is bankable or non-bankable at the end of a shift.

| Bytes | From | To | Data            | Bits  | Explanation          | Remarks |
|-------|------|----|-----------------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode          |       | 60 – Log Information |         |
| 1     | 1    | 2  | Function        |       | 41 – Deposit         |         |
| 1     | 2    | 3  | Flag 1          |       |                      |         |
|       |      |    |                 | bit 0 | Request              |         |
|       |      |    |                 | bit 1 | Ignore Recovery      |         |
|       |      |    |                 | bit 2 | Not Used             |         |
|       |      |    |                 | bit 3 | Not Used             |         |
|       |      |    |                 | bit 4 | Not Used             |         |
|       |      |    |                 | bit 5 | Not Used             |         |
|       |      |    |                 | bit 6 | Not Used             |         |
|       |      |    |                 | bit 7 | Not Used             |         |
| 2     | 3    | 5  | Tender          |       |                      |         |
| 4     | 5    | 9  | Bankable Amount |       |                      |         |
| 35    | 9    | 44 | Reserved        |       |                      |         |
| 20    | 44   | 64 | Tail            |       |                      |         |
| 64    |      |    | Total           |       |                      |         |

## 42 – Trading Stamps

0 X 42

| Bytes | From | To | Data                   | Bits | Explanation          | Remarks |
|-------|------|----|------------------------|------|----------------------|---------|
| 1     | 0    | 1  | Opcode                 |      | 60 – Log Information |         |
| 1     | 1    | 2  | Function               |      | 42 – Trading Stamps  |         |
| 4     | 2    | 6  | Qualify Trading Stamps |      |                      |         |
| 2     | 6    | 8  | Trading Stamps Number  |      |                      |         |
| 36    | 8    | 44 | Reserved               |      |                      |         |
| 20    | 44   | 64 | Tail                   |      |                      |         |
| 64    |      |    | Total                  |      |                      |         |



## 43 – Coupon Information

0 X 43

**Explanation:** The Coupon Information function records when a coupon is used as a tender. The information includes: Type of Coupon, Weight, Price, Amount, etc.

| Bytes | From | To | Data                 | Bits  | Explanation                       | Remarks                      |
|-------|------|----|----------------------|-------|-----------------------------------|------------------------------|
| 1     | 0    | 1  | Opcode               |       | 60 – Log Information              |                              |
| 1     | 1    | 2  | Function Information |       | 43 – Coupon                       |                              |
| 1     | 2    | 3  | Flag 1               |       |                                   |                              |
|       |      |    |                      | bit 0 | Weighted coupon                   |                              |
|       |      |    |                      | bit 1 | Dept Store coupon                 | A's department store coupon  |
|       |      |    |                      | bit 2 | Dept Other Bonus coupon           | A's (other) bonus coupon     |
|       |      |    |                      | bit 3 | Dept Vendor coupon                | A's department vendor        |
|       |      |    |                      | bit 4 | PLU Store coupon                  | A's PLU store coupon         |
|       |      |    |                      | bit 5 | PLU Other Bonus coupon            | A's PLU other bonus coupon   |
|       |      |    |                      | bit 6 | PLU Vendor coupon                 | A's PLU vendor coupon        |
|       |      |    |                      | bit 7 | Frequent Shopper Coupon           |                              |
| 4     | 3    | 7  | Weight               |       |                                   |                              |
| 4     | 7    | 11 | Price                |       |                                   |                              |
| 4     | 11   | 15 | Amount               |       |                                   |                              |
| 1     | 15   | 16 | Return Type          |       |                                   |                              |
| 7     | 16   | 23 | Link Code            |       |                                   |                              |
| 1     | 23   | 24 | Flag                 |       |                                   |                              |
|       |      |    |                      | bit 0 | Triple Coupon                     |                              |
|       |      |    |                      | bit 1 | Smart Card Coupon                 | Electronic smart card coupon |
|       |      |    |                      | bit 2 | Price Embedded Coupon             |                              |
|       |      |    |                      | bit 3 | Vendor Coupon modifier            |                              |
|       |      |    |                      | bit 4 | Tax reversal coupon               |                              |
|       |      |    |                      | bit 5 | Opt RX                            | Prescription                 |
|       |      |    |                      | bit 6 | Opt Non RX                        | Non Prescription             |
|       |      |    |                      | bit 7 | Databar Coupon                    |                              |
| 4     | 24   | 28 | Quantity             |       | For balancing Back Office Reports |                              |
| 7     | 28   | 35 | PLU Code             |       |                                   |                              |
| 4     | 35   | 39 | PLU sequence         |       |                                   |                              |

| Bytes | From | To | Data     | Bits     | Explanation               | Remarks |
|-------|------|----|----------|----------|---------------------------|---------|
| 1     | 39   | 40 | Flag     |          |                           |         |
|       |      |    |          | number   |                           |         |
|       |      |    |          | Bit 0    | Manual Databar Coupon     |         |
|       |      |    |          | Bit 1    | Not Used                  |         |
|       |      |    |          | Bit 2    | Not Used                  |         |
|       |      |    |          | Bit 3    | WIC CVV                   |         |
|       |      |    |          | Bit 4    | Electronic Databar Coupon |         |
| 4     | 40   | 44 | Reserved | Bit 5    | Opt External 2 Coupon     |         |
|       |      |    |          | Bits 6-7 | Reserved                  |         |
|       |      |    |          |          |                           |         |
| 20    | 44   | 64 | Tail     |          |                           |         |
| 64    |      |    | Total    |          |                           |         |

## 44 – Frequent Shopper Member

0 X 44

**Explanation:** The POS sends the Frequent Shopper Member transaction after testing parameters, Frequent Shopper Type/Value and Frequent Shopper Type Item Limit during PLU maintenance.

| Bytes | From | To | Data        | Bits  | Explanation                              | Remarks |
|-------|------|----|-------------|-------|------------------------------------------|---------|
| 1     | 0    | 1  | Opcode      |       | 60 – Log Information                     |         |
| 1     | 1    | 2  | Function    |       | 44 – Frequent Shopper Member Information |         |
| 7     | 2    | 9  | Code        |       | PLU number                               |         |
| 1     | 9    | 10 | Flag        |       |                                          |         |
|       |      |    |             | bit 0 | Not Used                                 |         |
|       |      |    |             | bit 1 | Not Used                                 |         |
|       |      |    |             | bit 2 | Not Used                                 |         |
|       |      |    |             | bit 3 | Not Used                                 |         |
|       |      |    |             | bit 4 | Not Used                                 |         |
|       |      |    |             | bit 5 | Not Used                                 |         |
|       |      |    |             | bit 6 | Not Used                                 |         |
|       |      |    |             | bit 7 | Not Used                                 |         |
| 4     | 10   | 14 | Old Price   |       | PLU Price                                |         |
| 4     | 14   | 18 | New Price   |       | New PLU Price                            |         |
| 4     | 18   | 22 | Quantity    |       |                                          |         |
| 4     | 22   | 26 | Save amount |       | Frequent shop saving                     |         |
| 18    | 26   | 44 | Reserved    |       |                                          |         |
| 20    | 44   | 64 | Tail        |       |                                          |         |
| 64    |      |    | Total       |       |                                          |         |

## 45 – Staff Discount

0 X 45

**Explanation:** The Staff Discount function records when a staff member is entitled to a discount. The Discount Amount, Staff Tender Number, Staff Discount Card are some of the fields recorded.

| Bytes | From | To | Data                  | Bits  | Explanation              | Remarks |
|-------|------|----|-----------------------|-------|--------------------------|---------|
| 1     | 0    | 1  | Opcode                |       | 60 – Log Information     |         |
| 1     | 1    | 2  | Function              |       | 45 – Staff Discount      |         |
| 4     | 2    | 6  | Discount Amount       |       |                          |         |
| 4     | 6    | 10 | Discountable Actual   |       |                          |         |
| 4     | 10   | 14 | Total Discount Amount |       |                          |         |
| 4     | 14   | 18 | Total Discountable    |       |                          |         |
| 1     | 18   | 19 | Staff Tender Number   |       |                          |         |
| 1     | 19   | 20 | Flag                  |       |                          |         |
|       |      |    |                       | bit 0 | Staff Discount Card Only |         |
|       |      |    |                       | bit 1 | Substr Staff             |         |
|       |      |    |                       | bit 2 | Not Used                 |         |
|       |      |    |                       | bit 3 | Not Used                 |         |
|       |      |    |                       | bit 4 | Not Used                 |         |
|       |      |    |                       | bit 5 | Not Used                 |         |
|       |      |    |                       | bit 6 | Not Used                 |         |
|       |      |    |                       | bit 7 | Not Used                 |         |
| 24    | 20   | 44 | Not Used              |       |                          |         |
| 20    | 44   | 64 | Tail                  |       |                          |         |
| 64    |      |    | Total                 |       |                          |         |

## 46 – Recall Transaction

0 X 46

**Explanation:** The Recall Transaction is the function that records when a transaction is recalled to either check for errors, or to make a bad record a proper sale. Records include: the Branch, Checkout Bank, POS Number, Ticket Number, etc.

| Bytes | From | To | Data                 | Bits  | Explanation             | Remarks          |
|-------|------|----|----------------------|-------|-------------------------|------------------|
| 1     | 0    | 1  | Opcode               |       | 60 – Log Information    |                  |
| 1     | 1    | 2  | Function             |       | 46 – Recall transaction |                  |
| 2     | 2    | 4  | Recall Ticket Number |       |                         |                  |
| 1     | 4    | 5  | Recall POS Number    |       |                         |                  |
| 2     | 5    | 7  | Recall Cashier       |       |                         |                  |
| 1     | 7    | 8  | Flags                |       |                         |                  |
|       |      |    |                      | bit 0 | Start                   |                  |
|       |      |    |                      | bit 1 | Offline Mode            | Till offline     |
|       |      |    |                      | bit 2 | Manual Entry Values     |                  |
|       |      |    |                      | bit 3 | Invoice Not Found       |                  |
|       |      |    |                      | bit 4 | Recall saved bakery     |                  |
|       |      |    |                      | bit 5 | Recall drive off        |                  |
|       |      |    |                      | bit 6 | Quick recall flag       |                  |
|       |      |    |                      | bit 7 | Extended recall         | Multiple recalls |
| 2     | 8    | 10 | Branch               |       |                         |                  |
| 2     | 10   | 12 | Checkout Bank        |       |                         |                  |
| 32    | 12   | 44 | Reserved             |       |                         |                  |
| 20    | 44   | 64 | Tail                 |       |                         |                  |
| 64    |      |    | Total                |       |                         |                  |

## 47 – EFT Settlement (Option 1)

0 X 47

**Explanation:** The current ‘EFT Last Settle’ pos function has been modified so that the settlement function is available in a PAP environment.

| Bytes | From | To | Data         | Bits        | Explanation            | Remarks                    |
|-------|------|----|--------------|-------------|------------------------|----------------------------|
| 1     | 0    | 1  | Opcode       |             | 60 – Log Information   | Progressive V7 New Zealand |
| 1     | 1    | 2  | Function     |             | 47 – EFT Settlement    |                            |
| 1     | 2    | 3  | Sub-Function |             | 0 – Header, 1/2 - Data |                            |
| 1     | 3    | 4  | Flag         |             |                        |                            |
|       |      |    |              | bit 0       | Cut over               |                            |
|       |      |    |              | bit 1       | In window              |                            |
|       |      |    |              | bit 2       | Not Used               |                            |
|       |      |    |              | bit 3       | Not Used               |                            |
|       |      |    |              | bit 4       | Not Used               |                            |
|       |      |    |              | bit 5       | Not Used               |                            |
|       |      |    |              | bit 6       | Not Used               |                            |
|       |      |    |              | bit 7       | Failed                 |                            |
| 5x    | 1    | 4  | 5            | Number      |                        | TTL                        |
|       | 2    | 5  | 7            | Count       |                        |                            |
|       | 4    | 7  | 11           | Amount      |                        |                            |
|       | OR   |    |              |             |                        |                            |
|       | 8    | 4  | 12           | Terminal ID |                        | HDR                        |
|       | 15   | 12 | 27           | Merchant ID |                        |                            |
|       | 4    | 27 | 31           | Date ddmm   |                        |                            |
|       | 6    | 31 | 37           | Time hhmmss |                        |                            |
|       | 2    | 37 | 39           | Not Used    |                        |                            |
| 5     | 39   | 44 | Reserved     |             |                        |                            |
| 20    | 44   | 64 | Tail         |             |                        |                            |
| 64    |      |    | Total        |             |                        |                            |

## 47 – EFT Settlement (Option 2)

0 X 47

**Explanation:** The current ‘EFT Last Settle’ pos function will be modified so that the settlement function is available in a PAP environment.

| Bytes | From | To | Data            | Bits  | Explanation          | Remarks             |
|-------|------|----|-----------------|-------|----------------------|---------------------|
| 1     | 0    | 1  | Opcode          |       | 60 – Log Information |                     |
| 1     | 1    | 2  | Function        |       | 47 – EFT Settlement  |                     |
| 1     | 2    | 3  | Sub-Function    |       | Data                 |                     |
| 2     | 3    | 5  | Tender ID       |       |                      |                     |
| 1     | 5    | 6  | Card Type       |       |                      |                     |
| 1     | 6    | 7  | Settlement Type |       |                      |                     |
| 1     | 7    | 8  | Account Type    |       |                      |                     |
| 4     | 8    | 12 | Amount          |       |                      |                     |
| 2     | 12   | 14 | TrxCount        |       |                      |                     |
| 1     | 14   | 15 | Flag            |       |                      |                     |
|       |      |    |                 | Bit 0 | Update previous day  |                     |
|       |      |    |                 | Bit 1 | Update same day      |                     |
|       |      |    |                 | Bit 2 | Not Used             |                     |
|       |      |    |                 | Bit 3 | Not Used             |                     |
|       |      |    |                 | Bit 4 | Not Used             |                     |
|       |      |    |                 | Bit 5 | Not Used             |                     |
|       |      |    |                 | Bit 6 | Not Used             |                     |
|       |      |    |                 | Bit 7 | Not Used             |                     |
| 2     | 15   | 17 | BIN             |       |                      |                     |
| 3     | 17   | 20 | Settlement Date |       | DDMMYY               | PAP Settlement Date |
| 24    | 20   | 44 | Reserved        |       |                      |                     |
| 20    | 44   | 64 | Tail            |       |                      |                     |
| 64    |      |    | Total           |       |                      |                     |

## 48 – EFT WYNID

0 X 48

| Bytes | From | To | Data       | Bits | Explanation             | Remarks |
|-------|------|----|------------|------|-------------------------|---------|
| 1     | 0    | 1  | Opcode     |      | 60 – Log Information    |         |
| 1     | 1    | 2  | Function   |      | 48 – EFT WYNID          |         |
| 1     | 2    | 3  | Type       |      | 7 – Card<br>E – Cheque  |         |
| 1     | 3    | 4  | Option     |      | 1 – Debit<br>2 – Credit |         |
| 1     | 4    | 5  | Status     |      | 0,1,2 – OK              |         |
| 1     | 5    | 6  | Entry Type |      |                         |         |
| 1     | 6    | 7  | Card Type  |      |                         |         |
| 4     | 7    | 11 | Amount     |      |                         |         |
| 18    | 11   | 29 | Account    |      | BCD up to 36 digits     |         |
| 8     | 29   | 37 | Auth       |      |                         |         |
| 1     | 37   | 38 | MPR Count  |      |                         |         |
| 6     | 38   | 44 | Not Used   |      |                         |         |
| 20    | 44   | 64 | Tail       |      |                         |         |
| 64    |      |    | Total      |      |                         |         |



## 49 – Respond Number

0 X 49

**Explanation:** The Respond Number function records the number of the message displayed when a PLU item is registered at the POS, and a message prompt responds to the specific sale. The PLU Code and Message Number are recorded.

| Bytes | From | To | Data           | Bits | Explanation          | Remarks |
|-------|------|----|----------------|------|----------------------|---------|
| 1     | 0    | 1  | Opcode         |      | 60 – Log Information |         |
| 1     | 1    | 2  | Function       |      | 49 – Respond number  |         |
| 7     | 2    | 9  | PLU Code       |      |                      |         |
| 1     | 9    | 10 | Message Number |      |                      |         |
| 34    | 10   | 44 | Not Used       |      |                      |         |
| 20    | 44   | 64 | Tail           |      |                      |         |
| 64    |      |    | Total          |      |                      |         |

## 4A – Cheque Sort Code

0 X 4A

| Bytes | From | To | Data             | Bits | Explanation           | Remarks |
|-------|------|----|------------------|------|-----------------------|---------|
| 1     | 0    | 1  | Opcode           |      | 60 – Log Information  |         |
| 1     | 1    | 2  | Function         |      | 4A – Cheque Sort Code |         |
| 3     | 2    | 5  | Cheque Sort Code |      |                       |         |
| 39    | 5    | 44 | Not Used         |      |                       |         |
| 20    | 44   | 64 | Tail             |      |                       |         |
| 64    |      |    | Total            |      |                       |         |

## 4B – Void Report

### 0 X 4B

**Explanation:** The Void Report function records when the POS Terminal prints a report of all voided transactions and their status. The Type of Authorization, Voided Amounts, Supervisor/Manager Numbers, PLU Codes, Department Numbers, are all recorded.

| Bytes | From | To | Data                    | Bits  | Explanation                      | Remarks |
|-------|------|----|-------------------------|-------|----------------------------------|---------|
| 1     | 0    | 1  | Opcode                  |       | 60 – Log Information             |         |
| 1     | 1    | 2  | Function                |       | 4B – Void report                 |         |
| 1     | 2    | 3  | Type of Negative Action |       |                                  |         |
|       |      |    |                         | bit 0 | Cancel item                      |         |
|       |      |    |                         | bit 1 | Subtract item                    |         |
|       |      |    |                         | bit 2 | Void transaction                 |         |
|       |      |    |                         | bit 3 | Not Used                         |         |
|       |      |    |                         | bit 4 | Not Used                         |         |
|       |      |    |                         | bit 5 | Not Used                         |         |
|       |      |    |                         | bit 6 | Not Used                         |         |
|       |      |    |                         | bit 7 | Not Uses                         |         |
| 1     | 3    | 4  | Type of Limit           |       |                                  |         |
|       |      |    |                         | bit 0 | Item value limit                 |         |
|       |      |    |                         | bit 1 | Total value limit                |         |
|       |      |    |                         | bit 2 | Total count limit                |         |
|       |      |    |                         | bit 3 | Not Used                         |         |
|       |      |    |                         | bit 4 | Not Used                         |         |
|       |      |    |                         | bit 5 | Not Used                         |         |
|       |      |    |                         | bit 6 | Not Used                         |         |
|       |      |    |                         | bit 7 | Not Uses                         |         |
| 1     | 4    | 5  | Type of Authorization   |       |                                  |         |
|       |      |    |                         |       | 0 - No authorization             |         |
|       |      |    |                         |       | 2 - Operator key                 |         |
|       |      |    |                         |       | 3 - Supervisor key               |         |
|       |      |    |                         |       | 4 - Manager key                  |         |
|       |      |    |                         |       | 5 – Technical/Max key            |         |
|       |      |    |                         |       | 9 – Supervisor/Manager privilege |         |

| Bytes | From | To | Data                          | Bits | Explanation | Remarks |
|-------|------|----|-------------------------------|------|-------------|---------|
| 4     | 5    | 9  | Voided Amount                 |      |             |         |
| 4     | 9    | 13 | Supervisor/<br>Manager Number |      |             |         |
| 7     | 13   | 20 | PLU Code                      |      |             |         |
| 2     | 20   | 22 | Dep Number                    |      |             |         |
| 2     | 22   | 24 | Reason Code                   |      |             |         |
| 20    | 22   | 44 | Not Used                      |      |             |         |
| 20    | 44   | 64 | Tail                          |      |             |         |
| 64    |      |    | Total                         |      |             |         |

## 4C – Reorg Print

0 X 4C

**Explanation:** The Reorg Print Opcode records when Buffer Printing is used during the transaction.

| Bytes | From | To | Data     | Bits  | Explanation          | Remarks |
|-------|------|----|----------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode   |       | 60 – Log Information |         |
| 1     | 1    | 2  | Function |       | 4C – Reorg print     |         |
| 1     | 2    | 3  | Flag     |       |                      |         |
|       |      |    |          | bit 0 | Start                |         |
|       |      |    |          | bit 1 | End                  |         |
|       |      |    |          | bit 2 | Not Used             |         |
|       |      |    |          | bit 3 | Not Used             |         |
|       |      |    |          | bit 4 | Not Used             |         |
|       |      |    |          | bit 5 | Not Used             |         |
|       |      |    |          | bit 6 | Not Used             |         |
|       |      |    |          | bit 7 | Not Used             |         |
| 41    | 3    | 44 | Reserved |       |                      |         |
| 20    | 44   | 64 | Tail     |       |                      |         |
| 64    |      |    | Total    |       |                      |         |

## 4D – Family Coupon

### 0 X 4D

**Explanation:** The Family Coupon function records when a Family Coupon is used during a transaction. The transaction records the Coupon Code, Type, etc.

| Bytes | From | To | Data        | Bits  | Explanation          | Remarks |
|-------|------|----|-------------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode      |       | 60 – Log Information |         |
| 1     | 1    | 2  | Function    |       | 4D – Family Coupon   |         |
| 7     | 2    | 9  | Coupon Code |       |                      |         |
| 1     | 9    | 10 | Type        |       |                      |         |
| 1     | 10   | 11 | Flags       |       |                      |         |
|       |      |    |             | bit 0 | Voided               |         |
|       |      |    |             | bit 1 | Was voided           |         |
|       |      |    |             | bit 2 | Not Used             |         |
|       |      |    |             | bit 3 | Not Used             |         |
|       |      |    |             | bit 4 | Not Used             |         |
|       |      |    |             | bit 5 | Not Used             |         |
|       |      |    |             | bit 6 | Not Used             |         |
|       |      |    |             | bit 7 | Not Used             |         |
| 10    | 11   | 21 | Card Number |       |                      |         |
| 23    | 21   | 44 | Not Used    |       |                      |         |
| 20    | 44   | 64 | Tail        |       |                      |         |
| 64    |      |    | Total       |       |                      |         |

## 4E – Customer Select

0 X 4E

| Bytes | From | To | Data               | Bits | Explanation          | Remarks |
|-------|------|----|--------------------|------|----------------------|---------|
| 1     | 0    | 1  | Opcode             |      | 60 – Log Information |         |
| 1     | 1    | 2  | Function           |      | 4E – Customer Select |         |
| 20    | 2    | 22 | Customer Selection |      |                      |         |
| 22    | 22   | 44 | Not Used           |      |                      |         |
| 20    | 44   | 64 | Tail               |      |                      |         |
| 64    |      |    | Total              |      |                      |         |

## 4F – Family Promotion

### 0 X 4F

**Explanation:** The Family Promotion function records when a customer purchases the items specified in the Family Promotion defined, allowing a discount. The Customer must purchase the specified Quantity and Amount from each Bucket Number to qualify for the discount during the transaction.

| Bytes | From | To | Data               | Bits | Explanation           | Remarks |
|-------|------|----|--------------------|------|-----------------------|---------|
| 1     | 0    | 1  | Opcode             |      | 60 – Log Information  |         |
| 1     | 1    | 2  | Function Promotion |      | 4F – Family Promotion |         |
| 2     | 2    | 4  | Bucket Number (1)  |      |                       |         |
| 2     | 4    | 6  | Quantity (1)       |      |                       |         |
| 4     | 6    | 10 | Amount (1)         |      |                       |         |
| 2     | 10   | 12 | Points (1)         |      |                       |         |
| 2     | 12   | 14 | Bucket Number (2)  |      |                       |         |
| 2     | 14   | 16 | Quantity (2)       |      |                       |         |
| 4     | 16   | 20 | Amount (2)         |      |                       |         |
| 2     | 20   | 22 | Points (2)         |      |                       |         |
| 2     | 22   | 24 | Bucket Number (3)  |      |                       |         |
| 2     | 24   | 26 | Quantity (3)       |      |                       |         |
| 4     | 26   | 30 | Amount (3)         |      |                       |         |
| 2     | 30   | 32 | Points (3)         |      |                       |         |
| 2     | 32   | 34 | Bucket Number (4)  |      |                       |         |
| 2     | 34   | 36 | Quantity (4)       |      |                       |         |
| 4     | 36   | 40 | Amount (4)         |      |                       |         |
| 2     | 40   | 42 | Points (4)         |      |                       |         |
| 2     | 42   | 44 | Not Used           |      |                       |         |
| 20    | 44   | 64 | Tail               |      |                       |         |
| 64    |      |    | Total              |      |                       |         |



## 50 – Advanced Frequent Shopper

0 X 50

**Explanation:** The POS sends the Advanced Frequent Shopper Member transaction after testing parameters, Frequent Shopper Type/Value and Frequent Shopper Item Limit during PLU maintenance.

| Bytes | From | To | Data                         | Bits  | Explanation          | Remarks |
|-------|------|----|------------------------------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode                       |       | 60 – Log Information |         |
| 1     | 1    | 2  | Function<br>Frequent Shopper |       | 50 – Advanced        |         |
| 7     | 2    | 9  | Code                         |       |                      |         |
| 1     | 9    | 10 | Flag                         |       |                      |         |
|       |      |    |                              | bit 0 | Exceed Limit         |         |
|       |      |    |                              | bit 1 | opt_not_net_fs       |         |
|       |      |    |                              | bit 2 | Not Used             |         |
|       |      |    |                              | bit 3 | Not Used             |         |
|       |      |    |                              | bit 4 | Not Used             |         |
|       |      |    |                              | bit 5 | Not Used             |         |
|       |      |    |                              | bit 6 | Not Used             |         |
|       |      |    |                              | bit 7 | Not Used             |         |
| 4     | 10   | 14 | Old price                    |       |                      |         |
| 4     | 14   | 18 | New price                    |       |                      |         |
| 4     | 18   | 22 | Quantity                     |       |                      |         |
| 4     | 22   | 26 | Save Amount                  |       |                      |         |
| 18    | 26   | 44 | Reserved                     |       |                      |         |
| 20    | 44   | 64 | Tail                         |       |                      |         |
| 64    |      |    | Total                        |       |                      |         |

## 51 – Frequent Shopper Card

0 X 51

**Explanation:** The Frequent Shopper Card function transacts the code number of the card when a Frequent Shopper Card is used during a transaction, to ensure that the customer who is using the card benefits from the bonuses given to Frequent Shoppers.

| Bytes | From | To | Data                  | Bits | Explanation          | Remarks |
|-------|------|----|-----------------------|------|----------------------|---------|
| 1     | 0    | 1  | Opcode                |      | 60 – Log Information |         |
| 1     | 1    | 2  | Function Shopper Card |      | 51 – Frequent        |         |
| 14    | 2    | 16 | Code                  |      |                      |         |
| 28    | 16   | 44 | Reserved              |      |                      |         |
| 20    | 66   | 64 | Tail                  |      |                      |         |
| 64    |      |    | Total                 |      |                      |         |

## 54 – Retrans

0 X 54

| Bytes | From | To | Data                        | Bits  | Explanation          | Remarks |
|-------|------|----|-----------------------------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode                      |       | 60 – Log Information |         |
| 1     | 1    | 2  | Function                    |       | 54 – Frequent        |         |
| 1     | 2    | 3  | Flag                        | bit 0 | Fail                 |         |
|       |      |    |                             | bit 1 | Ignore               |         |
|       |      |    |                             | bit 2 | Not Used             |         |
|       |      |    |                             | bit 3 | Not Used             |         |
|       |      |    |                             | bit 4 | Not Used             |         |
|       |      |    |                             | bit 5 | Not Used             |         |
|       |      |    |                             | bit 6 | Not Used             |         |
|       |      |    |                             | bit 7 | Not Used             |         |
| 2     | 3    | 5  | Retrans request             |       |                      |         |
| 2     | 5    | 7  | Transaction Fifo size       |       |                      |         |
| 2     | 7    | 9  | Transaction First           |       |                      |         |
| 4     | 9    | 13 | Transaction Pointer         |       |                      |         |
| 2     | 13   | 15 | Transaction Count           |       |                      |         |
| 2     | 15   | 17 | Future Transaction Count    |       |                      |         |
| 2     | 17   | 19 | Transaction Sequence Number |       | Ignore logging       |         |
| 2     | 19   | 21 | Sequence Range Start        |       |                      |         |
| 2     | 21   | 23 | Sequence Range End          |       | Fail logging         |         |
| 2     | 23   | 25 | Read_ptr                    |       |                      |         |
| 2     | 25   | 27 | Alt_read_ptr                |       |                      |         |
| 17    | 27   | 44 | Reserved                    |       |                      |         |
| 20    | 44   | 64 | Tail                        |       |                      |         |
| 64    |      |    | Total                       |       |                      |         |

## 55 – Vouchers

### 0 X 55

**Explanation:** The Vouchers function records when the POS terminal issues a Voucher. The Vouchers include specific records. Some of the fields recorded are the Qualifying Spend, Vouchers Due No., etc.

| Bytes | From | To | Data                  | Bits  | Explanation                   | Remarks     |
|-------|------|----|-----------------------|-------|-------------------------------|-------------|
| 1     | 0    | 1  | Opcode                |       | 60 – Log Information          |             |
| 1     | 1    | 2  | Function              |       | 55 – Vouchers                 |             |
| 4     | 2    | 6  | Qualifying Spend      |       |                               |             |
| 2     | 6    | 8  | Vouchers Due (number) |       |                               |             |
| 1     | 8    | 9  | Flags                 |       |                               |             |
|       |      |    |                       | bit 0 | Vouchers accepted by customer |             |
|       |      |    |                       | bit 1 | Not Used                      | c_key_resp  |
|       |      |    |                       | bit 2 | Not Used                      | yes_no_resp |
|       |      |    |                       | bit 3 | Not Used                      | slct_resp   |
|       |      |    |                       | bit 4 | Not Used                      | op_disp     |
|       |      |    |                       | bit 5 | Not Used                      |             |
|       |      |    |                       | bit 6 | Not Used                      |             |
|       |      |    |                       | bit 7 | Not Used                      |             |
| 1     | 9    | 10 | slct_choice           |       |                               | Check these |
| 1     | 10   | 11 | variant               |       |                               | check       |
| 1     | 11   | 12 | msg_num               |       |                               | Check       |
| 1     | 12   | 13 | prom_bkt_num          |       |                               | Check       |
| 31    | 13   | 44 | Not Used              |       |                               |             |
| 20    | 44   | 64 | Tail                  |       |                               |             |
| 64    |      |    | Total                 |       |                               |             |

## 56 – Info Store count

0 X 56

| Bytes | From | To | Data             | Bits | Explanation           | Remarks |
|-------|------|----|------------------|------|-----------------------|---------|
| 1     | 0    | 1  | Opcode           |      | 60 – Log Information  |         |
| 1     | 1    | 2  | Function         |      | 56 – Info Store count |         |
| 4     | 2    | 6  | Page Store Count |      |                       |         |
| 38    | 6    | 44 | Not Used         |      |                       |         |
| 20    | 44   | 64 | Tail             |      |                       |         |
| 64    |      |    | Total            |      |                       |         |

## 57 – Info Credit/Debit Reentry

0 X 57

**Explanation:** The Info Credit/Debit Reentry is the function that records the data when a credit or debit card is reentered, sending the Transaction Date, POS Terminal Number, and POS Terminal Type.

| Bytes | From | To | Data                   | Bits | Explanation            | Remarks |
|-------|------|----|------------------------|------|------------------------|---------|
| 1     | 0    | 1  | Opcode                 |      | 60 – Log Information   |         |
| 1     | 1    | 2  | Function reentry       |      | 57 – Info credit/debit |         |
| 3     | 2    | 5  | Date_TRS               |      |                        |         |
| 1     | 5    | 6  | POS Terminal<br>Number |      |                        |         |
| 1     | 6    | 7  | POS Terminal<br>Type   |      | Mainstore, PFS, Quick  |         |
| 37    | 7    | 44 | Not Used               |      |                        |         |
| 20    | 44   | 64 | Tail                   |      |                        |         |
| 64    |      |    | Total                  |      |                        |         |

## 58 – Info Saving Total

0 X 58

**Explanation:** The Info Saving Total records the total of savings when a Frequent Shopper Card is used during the transaction, recording the Card Number and Saving Total.

| Bytes | From | To | Data                 | Bits | Explanation                          | Remarks |
|-------|------|----|----------------------|------|--------------------------------------|---------|
| 1     | 0    | 1  | Opcode               |      | 60 – Log Information                 |         |
| 1     | 1    | 2  | Function             |      | 58 – Frequent Shop Saving            |         |
| 20    | 2    | 22 | Card Number          |      | Card Number in ASCII null terminated |         |
| 4     | 22   | 26 | Saving Total Savings |      | Frequent Shopper                     |         |
| 18    | 26   | 44 | Reserved             |      |                                      |         |
| 20    | 44   | 64 | Tail                 |      |                                      |         |
| 64    |      |    | Total                |      |                                      |         |

## 59 – Savings Plus

0 X 59

| Bytes | From | To | Data     | Bits | Explanation          | Remarks |
|-------|------|----|----------|------|----------------------|---------|
| 1     | 0    | 1  | Opcode   |      | 60 – Log Information |         |
| 1     | 1    | 2  | Function |      | 59 – Savings Plus    |         |
| 1     | 2    | 3  | Voided   |      |                      |         |
| 41    | 3    | 44 | Reserved |      |                      |         |
| 20    | 44   | 64 | Tail     |      |                      |         |
| 64    |      |    | Total    |      |                      |         |



## 5A – Info Smart Card 01-ICC

Function: 0 X 5A

| Bytes | From | To | Data                   | Bits  | Explanation              | Remarks                                                                      |
|-------|------|----|------------------------|-------|--------------------------|------------------------------------------------------------------------------|
| 1     | 0    | 1  | Opcode                 |       | 60 – Log Information     |                                                                              |
| 1     | 1    | 2  | Function               |       | 5A – Info Smart Card-ICC |                                                                              |
| 16    | 2    | 18 | AID                    |       |                          |                                                                              |
| 2     | 18   | 20 | AIP                    |       |                          |                                                                              |
| 2     | 20   | 22 | ATC                    |       |                          |                                                                              |
| 2     | 22   | 24 | App usage control      |       |                          |                                                                              |
| 2     | 24   | 26 | App version number     |       |                          |                                                                              |
| 5     | 26   | 31 | Issuer codes – denial  |       |                          |                                                                              |
| 5     | 31   | 36 | Issuer codes – online  |       |                          |                                                                              |
| 5     | 36   | 41 | Issuer codes – default |       |                          |                                                                              |
| 1     | 41   | 42 | Flag                   |       |                          |                                                                              |
|       |      |    |                        | bit 0 | Conf_not_req             |                                                                              |
|       |      |    |                        | bit 1 | Not Used                 |                                                                              |
|       |      |    |                        | bit 2 | Not Used                 |                                                                              |
|       |      |    |                        | bit 3 | Not Used                 |                                                                              |
|       |      |    |                        | bit 4 | Not Used                 |                                                                              |
|       |      |    |                        | bit 5 | Not Used                 |                                                                              |
|       |      |    |                        | bit 6 | Not Used                 |                                                                              |
|       |      |    |                        | bit 7 | Not Used                 |                                                                              |
| 2     | 42   | 44 | POS Entry Mode         |       |                          | Not BCD 2 bytes pan entry mode<br>Byte 1 entry mode 1<br>Byte 2 entry mode 2 |
| 20    | 44   | 64 | Tail                   |       |                          |                                                                              |
| 64    |      |    | Total                  |       |                          |                                                                              |

## 5B – Info Smart Card 02 - POS terminal

0 X 5B

| Bytes | From | To | Data                    | Bits | Explanation                         | Remarks |
|-------|------|----|-------------------------|------|-------------------------------------|---------|
| 1     | 0    | 1  | Opcode                  |      | 60 – Log Information                |         |
| 1     | 1    | 2  | Function                |      | 5B – Info Smart Card – POS terminal |         |
| 1     | 2    | 3  | Cryptogram Type         |      |                                     |         |
| 2     | 3    | 5  | Currency Code           |      |                                     |         |
| 2     | 5    | 7  | Country Code            |      |                                     |         |
| 4     | 7    | 11 | Unpredictable Number    |      |                                     |         |
| 5     | 11   | 16 | TVR                     |      |                                     |         |
| 3     | 16   | 19 | Cardholder Verification |      |                                     |         |
| 2     | 19   | 21 | TSI                     |      |                                     |         |
| 1     | 21   | 22 | EMV Terminal Type       |      |                                     |         |
| 3     | 22   | 25 | Terminal Capabilities   |      |                                     |         |
| 8     | 25   | 33 | Transaction Cryptogram  |      |                                     |         |
| 1     | 33   | 34 | Cryptogram Info Data    |      |                                     |         |
| 2     | 34   | 36 | Reason OLA              |      |                                     |         |
| 3     | 36   | 39 | OLA Date                |      | DDMMYY                              |         |
| 2     | 39   | 41 | OLA Time                |      | HH:MM                               |         |
| 3     | 41   | 44 | Reserved                |      |                                     |         |
| 20    | 44   | 64 | Tail                    |      |                                     |         |
| 64    |      |    | Total                   |      |                                     |         |

## 5C – Info Smart Card 03 - Issuer

0 X 5C

| Bytes | From | To | Data                        | Bits  | Explanation                                                         | Remarks |
|-------|------|----|-----------------------------|-------|---------------------------------------------------------------------|---------|
| 1     | 0    | 1  | Opcode                      |       | 60 – Log Information                                                |         |
| 1     | 1    | 2  | Function                    |       | 5C – Info Smart Card – Issuer                                       |         |
| 32    | 2    | 34 | Issuer App Data             |       |                                                                     |         |
| 1     | 34   | 35 | Issuer App Data Length      |       | The actual length of unpacked issuer application data from 0 to 64. |         |
| 4     | 35   | 39 | Terminal                    |       | Terminal Interface Device Serial Number                             |         |
| 4     | 39   | 43 | Application Sequence Number |       | Application PAN Sequence Number                                     |         |
| 1     | 43   | 44 | Flags                       |       |                                                                     |         |
|       |      |    |                             | Bit 0 | Application Sequence number used                                    |         |
|       |      |    |                             | Bit 1 | Reserved                                                            |         |
|       |      |    |                             | Bit 2 | Reserved                                                            |         |
|       |      |    |                             | Bit 3 | Reserved                                                            |         |
|       |      |    |                             | Bit 4 | Reserved                                                            |         |
|       |      |    |                             | Bit 4 | Reserved                                                            |         |
|       |      |    |                             | Bit 5 | Reserved                                                            |         |
|       |      |    |                             | Bit 6 | Reserved                                                            |         |
|       |      |    |                             | Bit 7 | Reserved                                                            |         |
| 20    | 44   | 64 | Tail                        |       |                                                                     |         |
| 64    |      |    | Total                       |       |                                                                     |         |

## 5D – Info Sales On Account

### 0 X 5D

**Explanation:** The Info Sales On Account records the information on the charge accounts held by customers in the store. The information includes the Name and Account Number of the customer.

| Bytes | From | To | Data                                        | Bits | Explanation                | Remarks           |
|-------|------|----|---------------------------------------------|------|----------------------------|-------------------|
| 1     | 0    | 1  | Opcode                                      |      | 60 – Log Information       | Not used by Tesco |
| 1     | 1    | 2  | Function                                    |      | 5D – Info Sales On Account |                   |
| 16    | 2    | 18 | Charge Posting<br>Name                      |      |                            |                   |
| 12    | 18   | 30 | Charge Posting<br>Account Number            |      |                            |                   |
| 10    | 30   | 40 | Charge Posting<br>Related Account<br>Number |      |                            |                   |
| 4     | 40   | 44 | Reserved                                    |      |                            |                   |
| 20    | 44   | 64 | Tail                                        |      |                            |                   |
| 64    |      |    | Total                                       |      |                            |                   |

## 5E – Info Customer Survey Questions

0 X 5E

**Explanation:** The Info Customer Survey Questions function is recorded when the cashier checks for Customer Information, and the information retrieved is used as a survey to update records.

| Bytes | From | To | Data                     | Bits  | Explanation                  | Remarks           |
|-------|------|----|--------------------------|-------|------------------------------|-------------------|
| 1     | 0    | 1  | Opcode                   |       | 60 – Log Information         | Not used by Tesco |
| 1     | 1    | 2  | Function Survey Question |       | 5E – Info Customer           |                   |
| 2     | 2    | 4  | Cashier Number           |       |                              |                   |
| 1     | 4    | 5  | Checkout Bank            |       | 0-99                         |                   |
| 4     | 5    | 9  | Question Number          |       |                              |                   |
| 1     | 9    | 10 | Flags                    |       |                              |                   |
|       |      |    |                          | bit 0 | End Ticket                   |                   |
|       |      |    |                          | bit 1 | Start Ticket                 |                   |
|       |      |    |                          | bit 2 | Yes/No Type                  |                   |
|       |      |    |                          | bit 3 | Numeric Type                 |                   |
|       |      |    |                          | bit 4 | Yes/No Answer (0=No, 1 =Yes) |                   |
|       |      |    |                          | bit 5 | Zip type                     |                   |
|       |      |    |                          | bit 6 | Phone type                   |                   |
|       |      |    |                          | bit 7 | By Function                  |                   |
| 4     | 10   | 14 | Numeric Answer           |       |                              |                   |
| 5     | 14   | 19 | Zip_Code                 |       |                              |                   |
| 10    | 19   | 29 | Phone Number             |       |                              |                   |
| 15    | 29   | 44 | Reserved                 |       |                              |                   |
| 20    | 44   | 64 | Tail                     |       |                              |                   |
| 64    |      |    | Total                    |       |                              |                   |

## 5F – Voucher (Fuel Reward)

### 0 X 5F

**Explanation:** The Voucher function is used in conjunction with Albertson's who give a fuel reward in the form of a voucher if the customer accumulates the required number of points. The transaction sends the Program Number, Voucher Number, Key Code etc.

| Bytes | From | To | Data           | Bits | Explanation              | Remarks     |
|-------|------|----|----------------|------|--------------------------|-------------|
| 1     | 0    | 1  | Opcode         |      | 60 – Log Information     |             |
| 1     | 1    | 2  | Function       |      | 5F – Fuel Reward Voucher | Albertson's |
| 4     | 2    | 6  | Program Number |      |                          |             |
| 10    | 6    | 16 | Voucher Number |      |                          |             |
| 4     | 16   | 20 | Key Code       |      |                          |             |
| 4     | 20   | 24 | Points         |      |                          |             |
| 2     | 24   | 26 | Template Type  |      |                          |             |
| 18    | 26   | 44 | Reserved       |      |                          |             |
| 20    | 44   | 64 | Tail           |      |                          |             |
| 64    |      |    | Total          |      |                          |             |

## 61 – Info Pre-payment

0 X 61

| Bytes | From | To | Data     | Bits  | Explanation           | Remarks |
|-------|------|----|----------|-------|-----------------------|---------|
| 1     | 0    | 1  | Opcode   |       | 60 – Log Information  |         |
| 1     | 1    | 2  | Function |       | 61 – Info Pre-payment |         |
| 1     | 2    | 3  | Flags    |       |                       |         |
|       |      |    |          | bit 0 | Set/Reset pre-payment |         |
|       |      |    |          | bit 1 | Not Used              |         |
|       |      |    |          | bit 2 | Not Used              |         |
|       |      |    |          | bit 3 | Not Used              |         |
|       |      |    |          | bit 4 | Not Used              |         |
|       |      |    |          | bit 5 | Not Used              |         |
|       |      |    |          | bit 6 | Not Used              |         |
|       |      |    |          | bit 7 | Not Used              |         |
| 41    | 3    | 44 | Not Used |       |                       |         |
| 20    | 44   | 64 | Tail     |       |                       |         |
| 64    |      |    | Total    |       |                       |         |

## 62 – Info Charge FNB

0 X 62

| Bytes | From | To | Data                 | Bits | Explanation          | Remarks |
|-------|------|----|----------------------|------|----------------------|---------|
| 1     | 0    | 1  | Opcode               |      | 60 – Log Information |         |
| 1     | 1    | 2  | Function             |      | 62 – Info Charge FNB |         |
| 12    | 2    | 14 | CP Account<br>Number |      |                      |         |
| 30    | 14   | 44 | Not Used             |      |                      |         |
| 20    | 44   | 64 | Tail                 |      |                      |         |
| 64    |      |    | Total                |      |                      |         |



## 63 – Info Promotion Total Stub

0 X 63

**Explanation:** The Info Promotion Total Stub records the total promotional information transacted during the day from all the promotions defined. The Amounts Sold, Saver Values and Promotion Numbers are all fields recorded in the transaction.

| Bytes | From | To | Data                | Bits | Explanation          | Remarks           |
|-------|------|----|---------------------|------|----------------------|-------------------|
| 1     | 0    | 1  | Opcode              |      | 60 – Log Information | Not used by Tesco |
| 1     | 1    | 2  | Function Total Stub |      | 63 – Info Promotion  |                   |
| 2     | 2    | 4  | Promotion Number    |      |                      |                   |
| 4     | 4    | 8  | Sell Amount         |      |                      |                   |
| 4     | 8    | 12 | Saver Value         |      |                      |                   |
| 32    | 12   | 44 | Not Used            |      |                      |                   |
| 20    | 44   | 64 | Tail                |      |                      |                   |
| 64    |      |    | Total               |      |                      |                   |

## 64 – Info Easy Shop Restricted Item

0 X 64

| Bytes | From | To | Data                   | Bits | Explanation          | Remarks |
|-------|------|----|------------------------|------|----------------------|---------|
| 1     | 0    | 1  | Opcode                 |      | 60 – Log Information |         |
| 1     | 1    | 2  | Function<br>Restricted |      | 64 – Info Easy Shop  |         |
| 42    | 2    | 44 | Not Used               |      |                      |         |
| 20    | 44   | 64 | Tail                   |      |                      |         |
| 64    |      |    | Total                  |      |                      |         |

## 65 – Community Partner

0 X 65

| Bytes | From | To | Data        | Bits  | Explanation            | Remarks |
|-------|------|----|-------------|-------|------------------------|---------|
| 1     | 0    | 1  | Opcode      |       | 60 – Log Information   |         |
| 1     | 1    | 2  | Function    |       | 65 – Community Partner |         |
| 1     | 2    | 3  | Flags       |       |                        |         |
|       |      |    |             | bit 0 | Final                  |         |
|       |      |    |             | bit 1 | Voided                 |         |
|       |      |    |             | bit 2 | Not Used               |         |
|       |      |    |             | bit 3 | Not Used               |         |
|       |      |    |             | bit 4 | Not Used               |         |
|       |      |    |             | bit 5 | Not Used               |         |
|       |      |    |             | bit 6 | MCR Used               |         |
|       |      |    |             | bit 7 | Scanned                |         |
| 20    | 3    | 23 | Card Number |       |                        |         |
| 4     | 23   | 27 | Amount      |       |                        |         |
| 17    | 27   | 44 | Reserved    |       |                        |         |
| 20    | 44   | 64 | Tail        |       |                        |         |
| 64    |      |    | Total       |       |                        |         |

## 66 – Info Automatic Refund

0 X 66

**Explanation:** The Info Automatic Refund records all the information recorded from refunds, including: Customer Number, Transaction Date, POS Terminal Number, Transaction Number, etc.

| Bytes | From | To | Data               | Bits | Explanation          | Remarks |
|-------|------|----|--------------------|------|----------------------|---------|
| 1     | 0    | 1  | Opcode             |      | 60 – Log Information |         |
| 1     | 1    | 2  | Function Refund    |      | 66 – Info Automatic  |         |
| 6     | 2    | 8  | Customer Number    |      |                      |         |
| 3     | 8    | 11 | Transaction Date   |      |                      |         |
| 1     | 11   | 12 | POS Terminal No    |      |                      |         |
| 4     | 12   | 16 | Transaction Number |      |                      |         |
| 28    | 16   | 44 | Not Used           |      |                      |         |
| 20    | 44   | 64 | Tail               |      |                      |         |
| 64    |      |    | Total              |      |                      |         |

## 67 – Info CCMS

0 X 67

| Bytes | From | To | Data                      | Bits | Explanation          | Remarks           |
|-------|------|----|---------------------------|------|----------------------|-------------------|
| 1     | 0    | 1  | Opcode                    |      | 60 – Log Information | Not used by Tesco |
| 1     | 1    | 2  | Function                  |      | 67 – Info CCMS       |                   |
| 1     | 2    | 3  | CCMS Customer<br>Online   |      |                      |                   |
| 1     | 3    | 4  | CCMS Customer<br>Off-Line |      |                      |                   |
| 40    | 4    | 44 | Not Used                  |      |                      |                   |
| 20    | 44   | 64 | Tail                      |      |                      |                   |
| 64    |      |    | Total                     |      |                      |                   |

## 68 – TRS Bonus Buy

0 X 68

| Bytes | From | To | Data        | Bits  | Explanation          | Remarks |
|-------|------|----|-------------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode      |       | 60 – Log Information |         |
| 1     | 1    | 2  | Function    |       | 68 – TRS             |         |
| 1     | 2    | 3  | Flags       |       |                      |         |
|       |      |    |             | bit 0 | Not Used             |         |
|       |      |    |             | bit 1 | Not Used             |         |
|       |      |    |             | bit 2 | Not Used             |         |
|       |      |    |             | bit 3 | Not Used             |         |
|       |      |    |             | bit 4 | Not Used             |         |
|       |      |    |             | bit 5 | Not Used             |         |
|       |      |    |             | bit 6 | Cancel Item          |         |
|       |      |    |             | bit 7 | Subtract Item        |         |
| 7     | 3    | 10 | PLU Code    |       |                      |         |
| 1     | 10   | 11 | Type        |       |                      |         |
| 3     | 11   | 14 | Valid Date  |       |                      |         |
| 4     | 14   | 18 | BB Value    |       |                      |         |
| 4     | 18   | 22 | Sale Value  |       |                      |         |
| 4     | 22   | 26 | Savings     |       |                      |         |
| 4     | 26   | 30 | Sell Amount |       |                      |         |
| 14    | 30   | 44 | Reserved    |       |                      |         |
| 20    | 44   | 64 | Tail        |       |                      |         |
| 64    |      |    | Total       |       |                      |         |

## 69 – Info Bonus Points Saving

0 X 69

| Bytes | From | To | Data         | Bits | Explanation            | Remarks           |
|-------|------|----|--------------|------|------------------------|-------------------|
| 1     | 0    | 1  | Opcode       |      | 60 – Log Information   | Not used by Tesco |
| 1     | 1    | 2  | Function     |      | 69 – Info Bonus Points |                   |
| 7     | 2    | 9  | PLU Code     |      |                        |                   |
| 4     | 9    | 13 | Bonus Points |      |                        |                   |
| 4     | 13   | 17 | Quantity     |      |                        |                   |
| 27    | 17   | 44 | Not Used     |      |                        |                   |
| 20    | 44   | 64 | Tail         |      |                        |                   |
| 64    |      |    | Total        |      |                        |                   |

## 6A – Info Black Box

0 X 6A

| Bytes | From | To | Data              | Bits  | Explanation          | Remarks                          |
|-------|------|----|-------------------|-------|----------------------|----------------------------------|
| 1     | 0    | 1  | Opcode            |       | 60 – Log Information | Not used by Tesco                |
| 1     | 1    | 2  | Function          |       | 6B – Info Black Box  | Information on EFT (Philippines) |
| 1     | 2    | 3  | Flag1             |       |                      |                                  |
|       |      |    |                   | bit 0 | Black Box Start      |                                  |
|       |      |    |                   | bit 1 | Flag OK              |                                  |
|       |      |    |                   | bit 2 | Not Used             |                                  |
|       |      |    |                   | bit 3 | Not Used             |                                  |
|       |      |    |                   | bit 4 | Not Used             |                                  |
|       |      |    |                   | bit 5 | Not Used             |                                  |
|       |      |    |                   | bit 6 | Not Used             |                                  |
|       |      |    |                   | bit 7 | Not Used             |                                  |
| 3     | 3    | 6  | Issuer Code       |       |                      |                                  |
| 3     | 6    | 9  | User Code         |       |                      |                                  |
| 6     | 9    | 15 | Card Number       |       |                      |                                  |
| 4     | 15   | 19 | Remaining Balance |       |                      |                                  |
| 1     | 19   | 20 | Card Type         |       |                      |                                  |
| 4     | 20   | 24 | Purchase Amount   |       |                      |                                  |
| 1     | 24   | 25 | Purpose Code      |       |                      |                                  |
| 4     | 25   | 29 | Until Date        |       |                      |                                  |
| 1     | 29   | 30 | Status Code       |       |                      |                                  |
| 4     | 30   | 34 | Face Value        |       |                      |                                  |
| 10    | 34   | 44 | Not Used          |       |                      |                                  |
| 20    | 44   | 64 | Tail              |       |                      |                                  |
| 64    |      |    | Total             |       |                      |                                  |



## 6B – Balance Inquiry

0 X 6B

| Bytes | From | To | Data                    | Bits     | Explanation                | Remarks           |
|-------|------|----|-------------------------|----------|----------------------------|-------------------|
| 1     | 0    | 1  | Opcode                  |          | 60 – Log Information       | Not used by Tesco |
| 1     | 1    | 2  | Function                |          | 6B – Info Balance Inquiry  | EFT, MTXEPS       |
| 4     | 2    | 6  | EBT Cash Balance        |          |                            |                   |
| 4     | 6    | 10 | EBT Food Stamps Balance |          |                            |                   |
| 4     | 10   | 14 | Gift Card Balance       |          |                            | Gift Card Inquiry |
| 5     | 14   | 19 | Authorization Number    |          |                            |                   |
| 5     | 19   | 24 | EFT Reference Number    |          |                            |                   |
| 2     | 24   | 26 | Year of Expiration Date |          |                            | EBT Inquiry       |
| 1     | 26   | 27 | Flags 1                 |          |                            |                   |
|       |      |    |                         | bit 0    | EBT Cash balance           |                   |
|       |      |    |                         | bit 1    | EBT Food Stamps balance    |                   |
|       |      |    |                         | bit 2    | Enhanced MPR voucher print |                   |
|       |      |    |                         | bit 3    | Accept Expiration Date     | EBT Inquiry       |
|       |      |    |                         | bit 4    | Print Authorization Number | EBT Inquiry       |
|       |      |    |                         | bit 5    | Print Cash Balance         | EBT Inquiry       |
|       |      |    |                         | bit 6    | Print Food Stamp Balance   | EBT Inquiry       |
|       |      |    |                         | bit 7    | Opt MTX Receipts Retrieved | EBT Inquiry       |
| 1     | 27   | 28 | Flags 2                 |          |                            |                   |
|       |      |    |                         | bit 0    | Print Gift Card Balance    | Gift Card Inquiry |
|       |      |    |                         | bit 1    | Print Gift Card Balance    | Gift Card Inquiry |
|       |      |    |                         | bits 2-7 | Not Used                   |                   |
| 10    | 28   | 38 | Account Number          |          |                            | EBT Inquiry       |
| 1     | 38   | 39 | Account Length          |          |                            | EBT Inquiry       |
| 1     | 39   | 40 | Card Range Number       |          |                            | EBT Inquiry       |
| 4     | 40   | 44 | Sequence Number         |          |                            |                   |
| 20    | 44   | 64 | Tail                    |          |                            |                   |
| 64    |      |    | Total                   |          |                            |                   |

## 6C – Black Box Data

0 X 6C

| Bytes | From | To | Data              | Bits  | Explanation          | Remarks                          |
|-------|------|----|-------------------|-------|----------------------|----------------------------------|
| 1     | 0    | 1  | Opcode            |       | 60 – Log Information | Not used by Tesco                |
| 1     | 1    | 2  | Function          |       | 6C – Black Box Data  | Information on EFT (Philippines) |
| 1     | 2    | 3  | Flags             |       |                      |                                  |
|       |      |    |                   | bit 0 | Flag Information     |                                  |
|       |      |    |                   | bit 1 | Not Used             |                                  |
|       |      |    |                   | bit 2 | Not Used             |                                  |
|       |      |    |                   | bit 3 | Not Used             |                                  |
|       |      |    |                   | bit 4 | Not Used             |                                  |
|       |      |    |                   | bit 5 | Not Used             |                                  |
|       |      |    |                   | bit 6 | Not Used             |                                  |
|       |      |    |                   | bit 7 | Not Used             |                                  |
| 3     | 3    | 6  | Issuer Code       |       |                      |                                  |
| 3     | 6    | 9  | User Code         |       |                      |                                  |
| 6     | 9    | 15 | Card Number       |       |                      |                                  |
| 4     | 15   | 19 | Remaining Balance |       |                      |                                  |
| 1     | 19   | 20 | Card Type         |       |                      |                                  |
| 1     | 20   | 21 | Purpose Code      |       |                      |                                  |
| 4     | 21   | 25 | Until Date        |       |                      |                                  |
| 1     | 25   | 26 | Status Code       |       |                      |                                  |
| 4     | 26   | 30 | Face Value        |       |                      |                                  |
| 14    | 30   | 44 | Not Used          |       |                      |                                  |
| 20    | 44   | 64 | Tail              |       |                      |                                  |
| 64    |      |    | Total             |       |                      |                                  |

## 6D – 01 Pay at Pump

### 0 X 6D

**Explanation:** The Pay at Pump records when a customer pays directly at the pump for the fuel. It refers to the Pump Mode. The Transaction Date, Time, Invoice Number etc., are registered at the time of the transaction.

| Bytes | From | To | Data                | Bits | Explanation          | Remarks |
|-------|------|----|---------------------|------|----------------------|---------|
| 1     | 0    | 1  | Opcode              |      | 60 – Log Information |         |
| 1     | 1    | 2  | Function            |      | 6D Pay at Pump       |         |
| 1     | 2    | 3  | Sub function        |      | 01                   |         |
| 3     | 3    | 6  | Transaction Date    |      | BCD YMD              |         |
| 3     | 6    | 9  | Transaction Time    |      | BCD HMS              |         |
| 4     | 9    | 13 | Invoice Number      |      |                      |         |
| 12    | 13   | 25 | Reference<br>Number |      |                      |         |
| 19    | 25   | 44 | Card Name           |      |                      |         |
| 20    | 44   | 64 | Tail                |      |                      |         |
| 64    |      |    | Total               |      |                      |         |

## 6E – Fuel Reward

0 X 6E

**Explanation:** The Fuel Reward function is used to send data, which refers to promotions on items, connected to fuel sales. The transaction sends the Promotion Number, PLU Code, Price, Points, etc.

| Bytes | From | To | Data              | Bits     | Explanation                                  | Remarks     |
|-------|------|----|-------------------|----------|----------------------------------------------|-------------|
| 1     | 0    | 1  | Opcode            |          | 60 – Log Information                         |             |
| 1     | 1    | 2  | Function          |          | 6E – Fuel Reward                             | Albertson's |
| 4     | 2    | 6  | Program Number    |          |                                              |             |
| 4     | 6    | 10 | Promotion Number  |          |                                              |             |
| 7     | 10   | 17 | PLU Code          |          | BCD                                          |             |
| 7     | 17   | 24 | Price             |          |                                              |             |
| 4     | 24   | 28 | Points            |          |                                              |             |
| 2     | 28   | 30 | Count             |          | Counts the total numbers of promotions given |             |
| 2     | 30   | 32 | Department Number |          |                                              |             |
| 1     | 32   | 33 | Flag              | Bit 0    | Member Account                               |             |
|       |      |    |                   | Bit 1    | Info Transaction                             |             |
|       |      |    |                   | Bit 2    | Manually Triggered                           |             |
|       |      |    |                   | Bits 3-7 | Not Used                                     |             |
| 11    | 33   | 44 | Reserved          |          |                                              |             |
| 20    | 44   | 64 | Tail              |          |                                              |             |
| 64    |      |    | Total             |          |                                              |             |

## 6F – Reward Tender

0 X 6F

| Bytes | From | To | Data                  | Bits  | Explanation          | Remarks |
|-------|------|----|-----------------------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode                |       | 60 – Log Information |         |
| 1     | 1    | 2  | Function              |       | 6F – Reward Tender   |         |
| 11    | 2    | 13 | Voucher ID            |       |                      |         |
| 5     | 13   | 18 | Key Code              |       |                      |         |
| 4     | 18   | 22 | Discount Per Quantity |       |                      |         |
| 4     | 22   | 26 | Total Discount        |       |                      |         |
| 4     | 26   | 30 | Total Gallons         |       |                      |         |
| 2     | 30   | 32 | Fuel Grade            |       |                      |         |
| 4     | 32   | 36 | Price Per Grade       |       |                      |         |
| 1     | 36   | 37 | Flag                  |       |                      |         |
|       |      |    |                       | bit 0 | Manual               |         |
|       |      |    |                       | bit 1 | Not Used             |         |
|       |      |    |                       | bit 2 | Not Used             |         |
|       |      |    |                       | bit 3 | Not Used             |         |
|       |      |    |                       | bit 4 | Not Used             |         |
|       |      |    |                       | bit 5 | Not Used             |         |
|       |      |    |                       | bit 6 | Not Used             |         |
|       |      |    |                       | bit 7 | Not Used             |         |
| 8     | 37   | 44 | Not Used              |       |                      |         |
| 20    | 44   | 64 | Tail                  |       |                      |         |
| 64    |      |    | Total                 |       |                      |         |

## 70 – Info EFT Nomad Media

0 X 70

| Bytes | From | To | Data                 | Bits  | Explanation                    | Remarks           |
|-------|------|----|----------------------|-------|--------------------------------|-------------------|
| 1     | 0    | 1  | Opcode               |       | 60 – Log Information           | Not used by Tesco |
| 1     | 1    | 2  | Function Media       |       | 70 – Info EFT Nomad            |                   |
| 2     | 2    | 4  | Card Type            |       |                                |                   |
| 2     | 4    | 6  | Media Number         |       |                                |                   |
| 4     | 6    | 10 | Amount               |       |                                |                   |
| 4     | 10   | 14 | Cash Back            |       |                                |                   |
| 21    | 14   | 35 | EFT Account Number   |       |                                |                   |
| 1     | 35   | 36 | Flags                |       |                                |                   |
|       |      |    |                      | bit 0 | Enter Account                  |                   |
|       |      |    |                      | bit 1 | Enter Account                  |                   |
|       |      |    |                      | bit 2 | Void tender If EFT Not Confirm |                   |
|       |      |    |                      | bit 3 | Not Used                       |                   |
|       |      |    |                      | bit 4 | Not Used                       |                   |
|       |      |    |                      | bit 5 | Not Used                       |                   |
|       |      |    |                      | bit 6 | Not Used                       |                   |
|       |      |    |                      | bit 7 | Not Used                       |                   |
| 1     | 36   | 37 | Manual               |       | Card                           |                   |
|       |      |    |                      |       | 1 – Not MCR Used               |                   |
|       |      |    |                      |       | 2 – MCR Used                   |                   |
| 7     | 37   | 44 | Authorization Number |       | Cheque                         |                   |
|       |      |    |                      |       | 3 – Not Manual                 |                   |
|       |      |    |                      |       | 4 – Manual                     |                   |
| 20    | 44   | 64 | Tail                 |       |                                |                   |
| 64    |      |    | Total                |       |                                |                   |

## 71 – Info EFT Nomad Print Slip

0 X 71

| Bytes | From | To | Data                | Bits | Explanation          | Remarks           |
|-------|------|----|---------------------|------|----------------------|-------------------|
| 1     | 0    | 1  | Opcode              |      | 60 – Log Information | Not used by Tesco |
| 1     | 1    | 2  | Function Print Slip |      | 71 – Info EFT Nomad  |                   |
| 40    | 2    | 42 | Key 1 EFT           |      |                      |                   |
| 2     | 42   | 44 | Reserved            |      |                      |                   |
| 20    | 44   | 64 | Tail                |      |                      |                   |
| 64    |      |    | Total               |      |                      |                   |

## 71 – Info EFT Nomad Print Slip1

0 X 71

| Bytes | From | To | Data                | Bits | Explanation                     | Remarks           |
|-------|------|----|---------------------|------|---------------------------------|-------------------|
| 1     | 0    | 1  | Opcode              |      | 60 – Log Information            | Not used by Tesco |
| 1     | 1    | 2  | Function Print Slip |      | 71 – Info EFT Nomad Print Slip1 |                   |
| 40    | 2    | 42 | KEY1_EFT            |      |                                 |                   |
| 2     | 42   | 44 | Not Used            |      |                                 |                   |
| 20    | 44   | 64 | Tail                |      |                                 |                   |
| 64    |      |    | Total               |      |                                 |                   |



## 72 – Info EFT Nomad Owner Name

0 X 72

| Bytes | From | To | Data                | Bits | Explanation          | Remarks           |
|-------|------|----|---------------------|------|----------------------|-------------------|
| 1     | 0    | 1  | Opcode              |      | 60 – Log Information | Not used by Tesco |
| 1     | 1    | 2  | Function Owner Name |      | 72 – Info EFT Nomad  |                   |
| 42    | 2    | 44 | EFT Owner Name      |      |                      |                   |
| 20    | 44   | 64 | Tail                |      |                      |                   |
| 64    |      |    | Total               |      |                      |                   |

## 73 – Info Redemption Points

0 X 73

| Bytes | From | To | Data                               | Bits | Explanation          | Remarks           |
|-------|------|----|------------------------------------|------|----------------------|-------------------|
| 1     | 0    | 1  | Opcode                             |      | 60 – Log Information | Not used by Tesco |
| 1     | 1    | 2  | Function Points                    |      | 73 – Info Redemption |                   |
| 4     | 2    | 6  | Redemption<br>Points Program 1     |      |                      |                   |
| 4     | 6    | 10 | Redemption<br>Points Program 2     |      |                      |                   |
| 4     | 10   | 14 | Redemption<br>Points Program 3     |      |                      |                   |
| 4     | 14   | 18 | Redemption<br>Points Program 4     |      |                      |                   |
| 4     | 18   | 22 | Redemption<br>Points Program 5     |      |                      |                   |
| 4     | 22   | 26 | Redemption<br>Points Program 6     |      |                      |                   |
| 4     | 26   | 30 | Redemption<br>Points Program 7     |      |                      |                   |
| 4     | 30   | 34 | Redemption<br>Points Program 8     |      |                      |                   |
| 4     | 34   | 38 | Redemption<br>Points Program 9     |      |                      |                   |
| 4     | 38   | 42 | Redemption<br>Points Program<br>10 |      |                      |                   |
| 2     | 42   | 44 | Not Used                           |      |                      |                   |
| 20    | 44   | 64 | Tail                               |      |                      |                   |
| 64    |      |    | Total                              |      |                      |                   |

## 74 – Info EFT Nomad Budget

0 X 74

| Bytes | From | To | Data                           | Bits | Explanation          | Remarks           |
|-------|------|----|--------------------------------|------|----------------------|-------------------|
| 1     | 0    | 1  | Opcode                         |      | 60 – Log Information | Not used by Tesco |
| 1     | 1    | 2  | Function Budget                |      | 74 – Info EFT Nomad  |                   |
| 10    | 2    | 12 | EFT Transaction Number         |      |                      |                   |
| 2     | 12   | 14 | EFT Budget Period              |      |                      |                   |
| 2     | 14   | 16 | EFT Expiry Year                |      |                      |                   |
| 2     | 16   | 18 | EFT Expiry Month               |      |                      |                   |
| 4     | 18   | 22 | EFT Open to buy balance return |      |                      |                   |
| 4     | 22   | 26 | EFT Account Balance return     |      |                      |                   |
| 4     | 26   | 30 | EFT Plan 1                     |      |                      |                   |
| 14    | 30   | 44 | Reserved                       |      |                      |                   |
| 20    | 44   | 64 | Tail                           |      |                      |                   |
| 64    |      |    | Total                          |      |                      |                   |

## 75 – Info EFT Nomad Cheque

0 X 75

| Bytes | From | To | Data                         | Bits | Explanation          | Remarks           |
|-------|------|----|------------------------------|------|----------------------|-------------------|
| 1     | 0    | 1  | Opcode                       |      | 60 – Log Information | Not used by Tesco |
| 1     | 1    | 2  | Function Cheque              |      | 75 – Info EFT Nomad  |                   |
| 4     | 2    | 6  | EFT Cheque<br>Clear Code     |      |                      |                   |
| 16    | 6    | 22 | EFT Cheque<br>Account Number |      |                      |                   |
| 4     | 22   | 26 | EFT Cheque<br>Number         |      |                      |                   |
| 18    | 26   | 44 | Reserved                     |      |                      |                   |
| 20    | 44   | 64 | Tail                         |      |                      |                   |
| 64    |      |    | Total                        |      |                      |                   |

## 76 – Info EFT Nomad TRX Key

0 X 76

**Explanation:** EFT Nomad

| Bytes | From | To | Data        | Bits | Explanation                 | Remarks |
|-------|------|----|-------------|------|-----------------------------|---------|
| 1     | 0    | 1  | Opcode      |      | 60 – Log Information        |         |
| 1     | 1    | 2  | Function    |      | 76 – Info EFT Nomad TRX Key |         |
| 33    | 2    | 35 | EFT TRX Key |      |                             |         |
| 4     | 35   | 39 | Amount      |      |                             |         |
| 5     | 39   | 44 | Reserved    |      |                             |         |
| 20    | 44   | 64 | Tail        |      |                             |         |
| 64    |      |    | Total       |      |                             |         |

## 77 – Scanpoint Save Report

0 X 77

| Bytes | From | To | Data                        | Bits | Explanation          | Remarks           |
|-------|------|----|-----------------------------|------|----------------------|-------------------|
| 1     | 0    | 1  | Opcode                      |      | 60 – Log Information | Not used by Tesco |
| 1     | 1    | 2  | Function Report             |      | 77 – Scanpoint Save  |                   |
| 4     | 2    | 6  | Scanpoint<br>Scanned        |      |                      |                   |
| 4     | 6    | 10 | Rescanned                   |      |                      |                   |
| 4     | 10   | 14 | Scanpoint<br>Scanned Weight |      |                      |                   |
| 4     | 14   | 18 | Rescanned<br>Weight         |      |                      |                   |
| 26    | 18   | 44 | Not Used                    |      |                      |                   |
| 20    | 44   | 64 | Tail                        |      |                      |                   |
| 64    |      |    | Total                       |      |                      |                   |

## 78 – Saved Ticket

0 X 78

**Explanation:** The Saved Ticket Opcode sends information on the transaction, when the cashier uses the function “Save Transaction” at the POS, recording the Ticket Number, Ticket Amount, etc.

| Bytes | From | To | Data                   | Bits  | Explanation             | Remarks                                    |
|-------|------|----|------------------------|-------|-------------------------|--------------------------------------------|
| 1     | 0    | 1  | Opcode                 |       | 60 – Log Information    |                                            |
| 1     | 1    | 2  | Function Report        |       | 78 – Saved Ticket       |                                            |
| 2     | 2    | 4  | Ticket Number          |       |                         |                                            |
| 1     | 4    | 5  | Flag                   |       |                         |                                            |
|       |      |    |                        | bit 0 | Save at Sale Mode       |                                            |
|       |      |    |                        | bit 1 | Save at Tender Mode     |                                            |
|       |      |    |                        | bit 2 | Save at Training Mode   |                                            |
|       |      |    |                        | bit 3 | Saved for Payment       | Invoice is saved for payment               |
|       |      |    |                        | bit 4 | Saved for Split Payment | Split invoice saved for payment            |
|       |      |    |                        | bit 5 | Pack Transaction        | Pack Transaction for bakery tills          |
|       |      |    |                        | bit 6 | Tax Voucher Requested   |                                            |
|       |      |    |                        | bit 7 | Save at Stock Count     |                                            |
| 4     | 5    | 9  | Ticket Amount          |       |                         |                                            |
| 4     | 9    | 13 | Media Total            |       |                         |                                            |
| 2     | 13   | 15 | Ticket Items           |       |                         |                                            |
| 2     | 15   | 17 | Supervisor Number      |       |                         |                                            |
| 8     | 17   | 25 | Invoice Number         |       |                         |                                            |
| 3     | 25   | 28 | Invoice Date           |       |                         |                                            |
| 1     | 28   | 29 | Recalled POS Number    |       |                         | If this ticket number is a recalled ticket |
| 2     | 29   | 31 | Recalled Ticket Number |       |                         | If this ticket is a recalled ticket        |
| 13    | 31   | 44 | Reserved               |       |                         |                                            |
| 20    | 44   | 64 | Tail                   |       |                         |                                            |
| 64    |      |    | Total                  |       |                         |                                            |

## 79 – Electronic Smart Card Coupon

0 X 79

**Explanation:** The Electronic Smart Card Coupon function records coupon information and the information on the PLU attached to the coupon.

| Bytes | From | To | Data            | Bits  | Explanation                                                                              | Remarks           |
|-------|------|----|-----------------|-------|------------------------------------------------------------------------------------------|-------------------|
| 1     | 0    | 1  | Opcode          |       | 60 – Log Information                                                                     | Not used by Tesco |
| 1     | 1    | 2  | Function Coupon |       | 79 – Electronic Smart Card Coupon + PLU attached                                         |                   |
| 7     | 2    | 9  | Coupon Code     |       | Empty (3), Manufacturer Code (6), Family Code (3), Value Code (2)                        |                   |
| 6     | 9    | 15 | Coupon Info     |       | Offer Code (5)<br>Coupon Category Code (2)<br>Medium (1)<br>Vehicle (2)<br>Placement (2) |                   |
| 3     | 15   | 18 | Expiration time |       |                                                                                          |                   |
| 3     | 18   | 21 | Start Time      |       |                                                                                          |                   |
| 3     | 21   | 24 | Capture Time    |       |                                                                                          |                   |
| 1     | 24   | 25 | Re-used counter |       |                                                                                          |                   |
| 1     | 25   | 26 | Flags           |       |                                                                                          |                   |
|       |      |    |                 | bit 0 | Not Used                                                                                 |                   |
|       |      |    |                 | bit 1 | Not Used                                                                                 |                   |
|       |      |    |                 | bit 2 | Display Capable                                                                          |                   |
|       |      |    |                 | bit 3 | DB Unread or Read                                                                        |                   |
|       |      |    |                 | bit 4 | Source                                                                                   |                   |
|       |      |    |                 | bit 5 | Active or Cancel                                                                         |                   |
|       |      |    |                 | bit 6 | Active or Average Status                                                                 |                   |
|       |      |    |                 | bit 7 | Redemption Status                                                                        |                   |
| 1     | 26   | 27 | Flags           |       |                                                                                          |                   |
|       |      |    |                 | bit 0 | Subtract                                                                                 |                   |
|       |      |    |                 | bit 1 | Cancel                                                                                   |                   |
|       |      |    |                 | bit 2 | Ext_smart_cpn_trs                                                                        |                   |
|       |      |    |                 | bit 3 | Not Used                                                                                 |                   |
|       |      |    |                 | bit 4 | Not Used                                                                                 |                   |
|       |      |    |                 | bit 5 | Not Used                                                                                 |                   |



| Bytes | From | To | Data          | Bits  | Explanation | Remarks |
|-------|------|----|---------------|-------|-------------|---------|
|       |      |    |               | bit 6 | Not Used    |         |
|       |      |    |               | bit 7 | Not Used    |         |
| 4     | 27   | 31 | Reward        |       |             |         |
| 7     | 31   | 38 | PLU Code      |       |             |         |
| 2     | 38   | 40 | Family Code 1 |       |             |         |
| 2     | 40   | 42 | Family Code 2 |       |             |         |
| 2     | 42   | 44 | Reserved      |       |             |         |
| 20    | 44   | 64 | Tail          |       |             |         |
| 64    |      |    | Total         |       |             |         |

## 7A – Smart TV Card Information

### 0 X 7A

**Explanation:** The Smart TV Card Information Opcode records when the transaction includes general information about the Card and summary variables.

| Bytes | From | To | Data               | Bits  | Explanation               | Remarks |
|-------|------|----|--------------------|-------|---------------------------|---------|
| 1     | 0    | 1  | Opcode             |       | 60 – Log Information      |         |
| 1     | 1    | 2  | Function Data      |       | 0x7A – Smart TV Card Data |         |
| 4     | 2    | 6  | Wallet ID          |       |                           |         |
| 8     | 6    | 14 | Card Holder ID     |       |                           |         |
| 8     | 14   | 22 | Serial number      |       |                           |         |
| 2     | 22   | 24 | Card Usage Count   |       |                           |         |
| 2     | 24   | 26 | Coupon Redeemed    |       |                           |         |
| 4     | 26   | 30 | Saving Accumulator |       |                           |         |
| 1     | 30   | 31 | Flag 1             |       |                           |         |
|       |      |    |                    | bit 0 | Not Used                  |         |
|       |      |    |                    | bit 1 | Not Used                  |         |
|       |      |    |                    | bit 2 | Not Used                  |         |
|       |      |    |                    | bit 3 | Not Used                  |         |
|       |      |    |                    | bit 4 | Not Used                  |         |
|       |      |    |                    | bit 5 | Not Used                  |         |
|       |      |    |                    | bit 6 | Not Used                  |         |
|       |      |    |                    | bit 7 | Dirty                     |         |
| 1     | 31   | 32 | Flag 1             |       |                           |         |
|       |      |    |                    | bit 0 | Read                      |         |
|       |      |    |                    | bit 1 | Write                     |         |
|       |      |    |                    | bit 2 | Not Used                  |         |
|       |      |    |                    | bit 3 | Not Used                  |         |
|       |      |    |                    | bit 4 | Not Used                  |         |
|       |      |    |                    | bit 5 | Not Used                  |         |
|       |      |    |                    | bit 6 | Not Used                  |         |
|       |      |    |                    | bit 7 | Not Used                  |         |
| 12    | 32   | 44 | Reserved           |       |                           |         |
| 20    | 44   | 64 | Tail               |       |                           |         |

| Bytes | From | To | Data  | Bits | Explanation | Remarks |
|-------|------|----|-------|------|-------------|---------|
| 64    |      |    | Total |      |             |         |

## 7B – Gift Card Transaction

### 0 X 7B

**Explanation:** The Gift Card Transaction function is used by Albertson's when a Gift Card is activated, or recharged (re-activation).

| Bytes | From | To | Data                 | Bits  | Explanation                  | Remarks                  |
|-------|------|----|----------------------|-------|------------------------------|--------------------------|
| 1     | 0    | 1  | Opcode               |       | 60 – Log Information         |                          |
| 1     | 1    | 2  | Function             |       | 0x7B – Gift Card Transaction | For Albertsons           |
| 1     | 2    | 3  | Action Type          |       |                              |                          |
| 11    | 3    | 14 | Card Number          |       |                              |                          |
| 9     | 14   | 23 | Authorization Number |       |                              |                          |
| 10    | 23   | 33 | Reference Number     |       |                              |                          |
| 4     | 33   | 37 | Beginning Balance    |       |                              |                          |
| 4     | 37   | 41 | Transaction Amount   |       |                              |                          |
| 1     | 41   | 42 | Flag                 | bit 0 | Activation                   | Gift card activation     |
|       |      |    |                      | bit 1 | Recharge gift card           |                          |
|       |      |    |                      | bit 2 | Opt MTX Receipts Retrieved   |                          |
|       |      |    |                      | bit 3 | Manually Swiped              | Card was manually swiped |
|       |      |    |                      | bit 4 | Opt External Data            |                          |
|       |      |    |                      | bit 5 | Allow Deactivation           |                          |
|       |      |    |                      | bit 6 | Pre-activated Flag           |                          |
|       |      |    |                      | bit 7 | Activation After Tender      |                          |
| 2     | 42   | 44 | Tender Number        |       |                              |                          |
| 20    | 44   | 64 | Tail                 |       |                              |                          |
| 64    |      |    | Total                |       |                              |                          |

## 7C – Smart Card Coupon Information Transaction

### 0 X 7C

**Explanation:** The Smart Card Coupon function records when a transaction includes the information related to PLUs attached to the coupon.

| Bytes | From | To | Data            | Bits | Explanation                        | Remarks     |
|-------|------|----|-----------------|------|------------------------------------|-------------|
| 1     | 0    | 1  | Opcode          |      | 60 – Log Information               | Correct fix |
| 1     | 1    | 2  | Function Report |      | 0x7C – Smart Card Coupon Extension |             |
| 7     | 2    | 9  | PLU Code        |      |                                    |             |
| 2     | 9    | 11 | Family Code 1   |      |                                    |             |
| 2     | 11   | 13 | Family Code 2   |      |                                    |             |
| 7     | 13   | 20 | PLU Code        |      |                                    |             |
| 2     | 20   | 22 | Family Code 1   |      |                                    |             |
| 2     | 22   | 24 | Family Code 2   |      |                                    |             |
| 7     | 24   | 31 | PLU Code        |      |                                    |             |
| 2     | 31   | 33 | Family Code 1   |      |                                    |             |
| 2     | 33   | 35 | Family Code 2   |      |                                    |             |
| 9     | 35   | 44 | Reserved        |      |                                    |             |
| 20    | 44   | 64 | Tail            |      |                                    |             |
| 64    |      |    | Total           |      |                                    |             |

## 7D – Return Voucher Issued

0 X 7D

**Explanation:** The Return Voucher Issued

| Bytes | From | To | Data                        | Bits | Explanation                                | Remarks |
|-------|------|----|-----------------------------|------|--------------------------------------------|---------|
| 1     | 0    | 1  | Opcode                      |      | 60 – Log Information                       |         |
| 1     | 1    | 2  | Function                    |      | 0x7D – Return Voucher Issue                | ROW     |
| 1     | 2    | 3  | Sub Function                |      | 0 – Issue<br>1 – Redemption<br>2 – Payment |         |
| 10    | 3    | 13 | VCR Number                  |      | Voucher number in BCD                      |         |
| 4     | 13   | 17 | Voucher Amount              |      |                                            |         |
| 2     | 17   | 19 | Redemption<br>Tender Number |      |                                            |         |
| 10    | 19   | 29 | Customer<br>Number          |      |                                            |         |
| 15    | 29   | 44 | Filler                      |      | Future Use                                 |         |
| 20    | 44   | 64 | Tail                        |      |                                            |         |
| 64    |      |    | Total                       |      |                                            |         |

## 7E – Information Transaction for Recalled Invoice

### 0 X 7E

**Explanation:** The Information Transaction for Recalled Invoice function records when an invoice is recalled. Information registered includes: Invoice Number, Cashier, POS, Ticket Number, Payment Type, etc.

| Bytes | From | To | Data           | Bits | Explanation                                                                                                                                                    | Remarks        |
|-------|------|----|----------------|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| 1     | 0    | 1  | Opcode         |      | 60 – Log Information                                                                                                                                           |                |
| 1     | 1    | 2  | Function       |      | 0 X 7E Info transaction for recalled invoice                                                                                                                   |                |
| 8     | 2    | 10 | Invoice number |      | Cashier, Till, Ticket Number                                                                                                                                   | (CCCCTTTNNNNN) |
| 1     | 10   | 11 | Payment type   |      | 0 – Normal payment<br>1 – Paid through an account payment offline.<br>2 – Split TRS paid offline<br>3 – Split TRS paid online<br>See also Invoice_Payment_Type |                |
| 3     | 11   | 14 | inv_issue_dt   |      | Invoice issue date                                                                                                                                             |                |
| 3     | 14   | 17 | inv_issue_tm   |      | Invoice issue date                                                                                                                                             |                |
| 27    | 17   | 44 | Filler         |      | For Future Use                                                                                                                                                 |                |
| 20    | 44   | 64 | Tail           |      |                                                                                                                                                                |                |
| 64    |      |    | Total          |      |                                                                                                                                                                |                |

## 7F – Information on Charge Payments

### 0 X 7F

**Explanation:** The Information on Charge Payments records the Tender Numbers and Customer Numbers of customer purchases that are charged to a store account.

| Bytes | From | To | Data                   | Bits | Explanation                  | Remarks                                          |
|-------|------|----|------------------------|------|------------------------------|--------------------------------------------------|
| 1     | 0    | 1  | Opcode                 |      | 60 – Log Information         |                                                  |
| 1     | 1    | 2  | Function               |      | 0x7F –Payment by all Tenders | ROW: METRO;<br>Sale_Proc:<br>ACC_PAYM_ALL_TENDER |
| 1     | 2    | 3  | Type of Payment<br>EOT |      |                              |                                                  |
| 4     | 3    | 7  | Tender Amount          |      |                              |                                                  |
| 4     | 7    | 11 | Amount Total           |      |                              |                                                  |
| 2     | 11   | 13 | Tender Number          |      |                              |                                                  |
| 20    | 13   | 33 | Customer<br>Number     |      |                              |                                                  |
| 11    | 33   | 44 | Not Used               |      |                              |                                                  |
| 20    | 44   | 64 | Tail                   |      |                              |                                                  |
| 64    |      |    | Total                  |      |                              |                                                  |



## 80 – EFT Finland (Request 1)

0 X 80

| Bytes | From | To | Data               | Bits | Explanation                                             | Remarks           |
|-------|------|----|--------------------|------|---------------------------------------------------------|-------------------|
| 1     | 0    | 1  | Opcode             |      | 60 – Log Information                                    | Not used by Tesco |
| 1     | 1    | 2  | Function           |      | 80 – EFT Finland                                        |                   |
| 12    | 2    | 14 | Amount             |      | Amount: '1000....' = 10.00                              |                   |
| 4     | 14   | 18 | Transaction Type   |      | Type of transaction (00) + type of tender (05) = "0005" |                   |
| 19    | 18   | 37 | Account            |      | Account:<br>'4920567890123455....'                      |                   |
| 6     | 37   | 43 | Authorization Code |      |                                                         |                   |
| 1     | 43   | 44 | Reserved           |      |                                                         |                   |
| 20    | 44   | 64 | Tail               |      |                                                         |                   |
| 64    |      |    | Total              |      |                                                         |                   |

## 81 – EFT Finland (Request 2)

0 X 81

| Bytes | From | To | Data                   | Bits  | Explanation                                                                                                                               | Remarks                |
|-------|------|----|------------------------|-------|-------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| 1     | 0    | 1  | Opcode                 |       | 60 – Log Information                                                                                                                      | Not used by Tesco      |
| 1     | 1    | 2  | Function               |       | 81 – EFT Finland                                                                                                                          |                        |
| 4     | 2    | 6  | Expiry Date            |       |                                                                                                                                           |                        |
| 4     | 6    | 10 | Message Type           |       | 0100 = Authorization request<br>0101 = Repetition of request<br>0400 = Cancellation of Authorization<br>0401 = Repetition of Cancellation |                        |
| 2     | 10   | 12 | Original Response Code |       | Used in Cancellations                                                                                                                     |                        |
| 1     | 12   | 13 | Flags                  |       |                                                                                                                                           |                        |
|       |      |    |                        | bit 0 | Request Failed                                                                                                                            | Request Failed/Not     |
|       |      |    |                        | bit 1 | Cancel Subtract Flag                                                                                                                      | Cancel/Subtract = True |
|       |      |    |                        | bit 2 | Not Used                                                                                                                                  |                        |
|       |      |    |                        | bit 3 | Not Used                                                                                                                                  |                        |
|       |      |    |                        | bit 4 | Not Used                                                                                                                                  |                        |
|       |      |    |                        | bit 5 | Not Used                                                                                                                                  |                        |
|       |      |    |                        | bit 6 | Not Used                                                                                                                                  |                        |
|       |      |    |                        | bit 7 | Not Used                                                                                                                                  |                        |
| 31    | 13   | 44 | Reserved               |       |                                                                                                                                           |                        |
| 20    | 44   | 64 | Tail                   |       |                                                                                                                                           |                        |
| 64    |      |    | Total                  |       |                                                                                                                                           |                        |

## 82 – EFT Finland (Response 1)

0 X 82

| Bytes | From | To | Data               | Bits | Explanation                                   | Remarks           |
|-------|------|----|--------------------|------|-----------------------------------------------|-------------------|
| 1     | 0    | 1  | Opcode             |      | 60 – Log Information                          | Not used by Tesco |
| 1     | 1    | 2  | Function           |      | 82 – EFT Finland                              |                   |
| 12    | 2    | 14 | Amount             |      | Amount: '000000001000' = 10.00                |                   |
| 4     | 14   | 18 | Transaction Type   |      | Type of transaction + type of tender = "0005" |                   |
| 19    | 18   | 37 | Account            |      | Account: '4920567890123455...'                |                   |
| 6     | 37   | 43 | Authorization Code |      |                                               |                   |
| 1     | 43   | 44 | Reserved           |      |                                               |                   |
| 20    | 44   | 64 | Tail               |      |                                               |                   |
| 64    |      |    | Total              |      |                                               |                   |

## 83 – EFT Finland (Response 3)

0 X 83

| Bytes | From | To | Data                        | Bits  | Explanation                                                         | Remarks                |
|-------|------|----|-----------------------------|-------|---------------------------------------------------------------------|------------------------|
| 1     | 0    | 1  | Opcode                      |       | 60 – Log Information                                                | Not used by Tesco      |
| 1     | 1    | 2  | Function                    |       | 83 – EFT Finland                                                    |                        |
| 4     | 2    | 6  | Message Type                |       | 0110 = Response to Authorization<br>0410 = Response to Cancellation |                        |
| 2     | 6    | 8  | Response Code               |       |                                                                     |                        |
| 6     | 8    | 14 | Message ID from SOK         |       | Message ID from SOK                                                 |                        |
| 10    | 14   | 24 | Time Stamp Response         |       | MMDDhhmmss                                                          |                        |
| 6     | 24   | 30 | Authorization Code Response |       | Authorization code                                                  |                        |
| 1     | 30   | 31 | Flags                       |       |                                                                     |                        |
|       |      |    |                             | bit 0 | Request Failed                                                      | Request failed/not     |
|       |      |    |                             | bit 1 | Cancel Subtract Flag                                                | Cancel/subtract = True |
|       |      |    |                             | bit 2 | Not Used                                                            |                        |
|       |      |    |                             | bit 3 | Not Used                                                            |                        |
|       |      |    |                             | bit 4 | Not Used                                                            |                        |
|       |      |    |                             | bit 5 | Not Used                                                            |                        |
|       |      |    |                             | bit 6 | Not Used                                                            |                        |
|       |      |    |                             | bit 7 | Not Used                                                            |                        |
| 2     | 31   | 33 | Tender Number               |       | EFT_FIN_1                                                           |                        |
| 11    | 33   | 44 | Reserved                    |       |                                                                     |                        |
| 20    | 44   | 64 | Tail                        |       |                                                                     |                        |
| 64    |      |    | Total                       |       |                                                                     |                        |

## 84 – Matthew Clubcard Trigger

0 X 84

| Bytes | From | To | Data                         | Bits | Explanation          | Remarks |
|-------|------|----|------------------------------|------|----------------------|---------|
| 1     | 0    | 1  | Opcode                       |      | 60 – Log Information |         |
| 1     | 1    | 2  | Function<br>Clubcard Trigger |      | 84 – Matthew         |         |
| 1     | 2    | 3  | Trigger Number               |      |                      |         |
| 1     | 3    | 4  | Currency Type                |      |                      |         |
| 4     | 4    | 8  | Qualify Spend                |      |                      |         |
| 4     | 8    | 12 | Award Points                 |      |                      |         |
| 4     | 12   | 16 | Award Keys                   |      |                      |         |
| 28    | 16   | 44 | Not Used                     |      |                      |         |
| 20    | 44   | 64 | Tail                         |      |                      |         |
| 64    |      |    | Total                        |      |                      |         |

## 85 – CC OLA Message

0 X 85

| Bytes | From | To | Data     | Bits  | Explanation          | Remarks |
|-------|------|----|----------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode   |       | 60 – Log Information |         |
| 1     | 1    | 2  | Function |       | 85 – CC OLA Message  |         |
| 1     | 2    | 3  | Flags    |       |                      |         |
|       |      |    |          | bit 0 | Op Message           |         |
|       |      |    |          | bit 1 | Elong                |         |
|       |      |    |          | bit 2 | Type 1               |         |
|       |      |    |          | bit 3 | Type 2               |         |
|       |      |    |          | bit 4 | Type 3               |         |
|       |      |    |          | bit 5 | Not Used             |         |
|       |      |    |          | bit 6 | Not Used             |         |
|       |      |    |          | bit 7 | Not Used             |         |
| 41    | 4    | 44 | Data     |       |                      |         |
| 20    | 44   | 64 | Tail     |       |                      |         |
| 64    |      |    | Total    |       |                      |         |

## 86 – Department Additional Data

0 X 86

**Explanation:** The Department Additional Data function records additional information on departments, including: Return Types per Department, Quantities, Amounts, etc.

| Bytes | From | To | Data                                      | Bits  | Explanation          | Remarks |
|-------|------|----|-------------------------------------------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode                                    |       | 60 – Log Information |         |
| 1     | 1    | 2  | Function<br>Additional Data               |       | 86 – Department      |         |
| 1     | 2    | 3  | Flags                                     |       |                      |         |
|       |      |    |                                           | bit 0 | Opt Subtract         |         |
|       |      |    |                                           | bit 1 | Opt Cancel           |         |
|       |      |    |                                           | bit 2 | Not Used             |         |
|       |      |    |                                           | bit 3 | Not Used             |         |
|       |      |    |                                           | bit 4 | Not Used             |         |
|       |      |    |                                           | bit 5 | Not Used             |         |
|       |      |    |                                           | bit 6 | Not Used             |         |
|       |      |    |                                           | bit 7 | Not Used             |         |
| 1     | 3    | 4  | Return Type                               |       |                      |         |
| 4     | 4    | 8  | Qty                                       |       |                      |         |
| 4     | 8    | 12 | Amount                                    |       |                      |         |
| 7     | 12   | 19 | Item for<br>Department<br>Additional Data |       |                      |         |
| 25    | 19   | 44 | Not Used                                  |       |                      |         |
| 20    | 44   | 64 | Tail                                      |       |                      |         |
| 64    |      |    | Total                                     |       |                      |         |

## 87 – Promotion Coupon Required

0 X 87

| Bytes | From | To | Data                     | Bits  | Explanation             | Remarks                                  |
|-------|------|----|--------------------------|-------|-------------------------|------------------------------------------|
| 1     | 0    | 1  | Opcode                   |       | 60 – Log Information    | Not used by Tesco                        |
| 1     | 1    | 2  | Function Coupon Required |       | 87 – Promotion          |                                          |
| 5     | 2    | 7  | Promotion Number         |       | BCD//PROM_CHNG (Was 2)  |                                          |
| 7     | 7    | 14 | No Coupon Required       |       |                         |                                          |
| 1     | 14   | 15 | Flags                    |       |                         |                                          |
|       |      |    |                          | bit 0 | Delayed Promotion       |                                          |
|       |      |    |                          | bit 1 | Coupon Required Return  | PROM_CPN_REQ1                            |
|       |      |    |                          | bit 2 | Coupon Physical Scan    | Coupon was physically scanned by cashier |
|       |      |    |                          | bit 3 | Ext Transaction         |                                          |
|       |      |    |                          | bit 4 | External Validation LPE |                                          |
|       |      |    |                          | bit 5 | Was Cancelled           |                                          |
|       |      |    |                          | bit 6 | Cancel                  |                                          |
|       |      |    |                          | bit 7 | Master Coupon           |                                          |
| 7     | 15   | 22 | Attached PLU             |       | For coins PLU attached  |                                          |
| 2     | 22   | 24 | Count                    |       |                         |                                          |
| 7     | 24   | 31 | Coupon code              |       |                         |                                          |
| 1     | 31   | 32 | Coupon Code Length       |       |                         |                                          |
| 8     | 32   | 40 | Supplemental Data        |       |                         | Supplement data to the promotion coupon  |
| 4     | 40   | 44 | Not Used                 |       |                         |                                          |
| 20    | 44   | 64 | Tail                     |       |                         |                                          |
| 64    |      |    | Total                    |       |                         |                                          |



## 88 – OLA Day Totals

0 X 88

**Explanation:** The OLA Day Totals records the authorized credit totals and counts, debit totals and counts at the end of the day, when cashing up.

| Bytes | From | To | Data         | Bits | Explanation          | Remarks           |
|-------|------|----|--------------|------|----------------------|-------------------|
| 1     | 0    | 1  | Opcode       |      | 60 – Log Information | Not used by Tesco |
| 1     | 1    | 2  | Function     |      | 83 – EFT Finland     |                   |
| 4     | 2    | 6  | Credit Total |      | 1 – Write            |                   |
| 2     | 6    | 8  | Credit Count |      |                      |                   |
| 4     | 8    | 12 | Debit Total  |      |                      |                   |
| 2     | 12   | 14 | Debit Count  |      |                      |                   |
| 30    | 14   | 44 | Not Used     |      |                      |                   |
| 20    | 44   | 64 | Tail         |      |                      |                   |
| 64    |      |    | Total        |      |                      |                   |

## 89 – Pump Totals

0 X 89

**Explanation:** The Pump Totals records all the information from each pump at the end of a shift, including: the Grade, the Nozzle used, the Shift Number, etc.

| Bytes | From | To | Data                  | Bits | Explanation          | Remarks           |
|-------|------|----|-----------------------|------|----------------------|-------------------|
| 1     | 0    | 1  | Opcode                |      | 60 – Log Information | Not used by Tesco |
| 1     | 1    | 2  | Function              |      | 89 – Pump Totals     |                   |
| 2     | 2    | 4  | Nozzle                |      | 1 – Write            |                   |
| 2     | 4    | 6  | Grade                 |      |                      |                   |
| 4     | 6    | 10 | Index Number          |      |                      |                   |
| 4     | 10   | 14 | Pump                  |      |                      |                   |
| 4     | 14   | 18 | Active Read<br>Number |      |                      |                   |
| 4     | 18   | 22 | Shift Number          |      |                      |                   |
| 4     | 22   | 26 | Volume                |      |                      |                   |
| 4     | 26   | 30 | Value A               |      |                      |                   |
| 4     | 30   | 34 | Value B               |      |                      |                   |
| 4     | 34   | 38 | Date Time             |      |                      |                   |
| 6     | 38   | 44 | Not Used              |      |                      |                   |
| 20    | 44   | 64 | Tail                  |      |                      |                   |
| 64    |      |    | Total                 |      |                      |                   |

## 8A – Message 5 PLU

0 X 8A

**Explanation:** The Message 5 PLU records the links to the PLU Code, and the description message connected to the PLU.

| Bytes | From | To | Data                    | Bits  | Explanation             | Remarks           |
|-------|------|----|-------------------------|-------|-------------------------|-------------------|
| 1     | 0    | 1  | Opcode                  |       | 60 – Log Information    | Not used by Tesco |
| 1     | 1    | 2  | Function                |       | 8A – Message 5 PLU      |                   |
| 1     | 2    | 3  | Flag 1                  |       |                         |                   |
|       |      |    |                         | bit 0 | Subtract                |                   |
|       |      |    |                         | bit 1 | Canceled                |                   |
|       |      |    |                         | bit 2 | Department Sale         |                   |
|       |      |    |                         | bit 3 | Item Sold               |                   |
|       |      |    |                         | bit 4 | Recall Report           |                   |
|       |      |    |                         | bit 5 | Refund                  |                   |
|       |      |    |                         | bit 6 | Post Void               |                   |
|       |      |    |                         | bit 7 | Recall Sale Not Allowed |                   |
| 20    | 3    | 23 | Describe<br>Message PLU |       |                         |                   |
| 7     | 23   | 30 | Link PLU Code           |       |                         |                   |
| 2     | 30   | 32 | Department<br>Number    |       |                         |                   |
| 12    | 32   | 44 | Reserved                |       |                         |                   |
| 20    | 44   | 64 | Tail                    |       |                         |                   |
| 64    |      |    | Total                   |       |                         |                   |

## 8C – Cash Withdrawal EFT

0 X 8C

| Bytes | From | To | Data     | Bits  | Explanation              | Remarks           |
|-------|------|----|----------|-------|--------------------------|-------------------|
| 1     | 0    | 1  | Opcode   |       | 60 – Log Information     | Not used by Tesco |
| 1     | 1    | 2  | Function |       | 8C – Cash Withdrawal EFT |                   |
| 1     | 2    | 3  | Flag 1   |       |                          |                   |
|       |      |    |          | bit 0 | Cash Withdrawal EFT      |                   |
|       |      |    |          | bit 1 | Not Used                 |                   |
|       |      |    |          | bit 2 | Not Used                 |                   |
|       |      |    |          | bit 3 | Not Used                 |                   |
|       |      |    |          | bit 4 | Not Used                 |                   |
|       |      |    |          | bit 5 | Not Used                 |                   |
|       |      |    |          | bit 6 | Not Used                 |                   |
|       |      |    |          | bit 7 | Not Used                 |                   |
| 41    | 3    | 44 | Reserved |       |                          |                   |
| 20    | 44   | 64 | Tail     |       |                          |                   |
| 64    |      |    | Total    |       |                          |                   |

## 8D – Information on Delivery Charges

### 0 X 8D

**Explanation:** The Information on Delivery Charges function records all the information on deliveries received by the store. The information recorded includes: Tax Rates, Tax Numbers, Delivery Amounts, Tax on Delivery Amounts, etc.

| Bytes | From | To | Data                   | Bits | Explanation                     | Remarks |
|-------|------|----|------------------------|------|---------------------------------|---------|
| 1     | 0    | 1  | Opcode                 |      | 60 – Log Information            |         |
| 1     | 1    | 2  | Function               |      | 8D                              |         |
| 4     | 2    | 6  | Tax Rate               |      |                                 |         |
| 2     | 6    | 8  | Tax Number             |      |                                 |         |
| 4     | 8    | 12 | Delivery Amount        |      |                                 |         |
| 4     | 12   | 16 | Tax on Delivery Amount |      | Tax amount into delivery amount |         |
| 28    | 16   | 44 | Not Used               |      |                                 |         |
| 20    | 44   | 64 | Tail                   |      |                                 |         |
| 64    |      |    | Total                  |      |                                 |         |

## 8E – Information Segment

0 X 8E

| Bytes | From | To | Data        | Bits  | Explanation                  | Remarks                   |
|-------|------|----|-------------|-------|------------------------------|---------------------------|
| 1     | 0    | 1  | Opcode      |       | 60 – Log Information         |                           |
| 1     | 1    | 2  | Function    |       | 8E                           |                           |
| 10    | 2    | 12 | Card Number |       | Card number in BCD           |                           |
| 1     | 12   | 13 | Flags 1     | bit 0 | Segment Insert 1             | Delete segment value      |
|       |      |    |             | bit 1 | Segment Insert 2             | Insert value into segment |
|       |      |    |             | bit 2 | Segment Insert 3             |                           |
|       |      |    |             | bit 3 | Segment Insert 4             |                           |
|       |      |    |             | bit 4 | Segment Insert 5             |                           |
|       |      |    |             | bit 5 | Segment Insert 6             |                           |
|       |      |    |             | bit 6 | Segment Insert 7             |                           |
|       |      |    |             | bit 7 | Segment Insert 8             |                           |
| 1     | 13   | 14 | Flags 2     | bit 0 | Segment Insert 9             |                           |
|       |      |    |             | bit 1 | Segment Insert 10            |                           |
|       |      |    |             | bit 2 | Segment Updated In Chip Card |                           |
|       |      |    |             | bit 3 | Not Used                     |                           |
|       |      |    |             | bit 4 | Not Used                     |                           |
|       |      |    |             | bit 5 | Not Used                     |                           |
|       |      |    |             | bit 6 | Not Used                     |                           |
|       |      |    |             | bit 7 | Not Used                     |                           |
| 2     | 14   | 16 | Segment 1   |       |                              |                           |
| 2     | 16   | 18 | Segment 2   |       |                              |                           |
| 2     | 18   | 20 | Segment 3   |       |                              |                           |
| 2     | 20   | 22 | Segment 4   |       |                              |                           |
| 2     | 22   | 24 | Segment 5   |       |                              |                           |
| 2     | 24   | 26 | Segment 6   |       |                              |                           |
| 2     | 26   | 28 | Segment 7   |       |                              |                           |
| 2     | 28   | 30 | Segment 8   |       |                              |                           |
| 2     | 30   | 32 | Segment 9   |       |                              |                           |
| 2     | 32   | 34 | Segment 10  |       |                              |                           |
| 10    | 34   | 44 | Reserved    |       |                              |                           |
| 20    | 44   | 64 | Tail        |       |                              |                           |
| 64    |      |    | Total       |       |                              |                           |

## 8F – Chip Card Information

0 X 8F

**Explanation:** The Chip Card Information records the information read from the chip that reads the credit card status, sending the Card Number, Data, Card Type, Status, etc.

| Bytes | From | To | Data        | Bits | Explanation               | Remarks |
|-------|------|----|-------------|------|---------------------------|---------|
| 1     | 0    | 1  | Opcode      |      | 60 – Log Information      |         |
| 1     | 1    | 2  | Function    |      | 8F –Chip Card Information |         |
| 10    | 1    | 12 | Card Number |      | Chip Card Number in BCD   |         |
| 24    | 12   | 36 | Data        |      |                           |         |
| 1     | 36   | 37 | Card Type   |      |                           |         |
| 2     | 37   | 39 | Status      |      |                           |         |
| 4     | 39   | 43 | Amount      |      |                           |         |
| 1     | 43   | 44 | Not Used    |      |                           |         |
| 20    | 44   | 64 | Tail        |      |                           |         |
| 64    |      |    | Total       |      |                           |         |

## 91 – PLU Stock Count – 7.3.4

0 X 91

**Explanation:** This Opcode registers information on items during the transaction, for PLU Stock Counting.

| Bytes | From | To | Data   | Bits  | Explanation                  | Remarks |
|-------|------|----|--------|-------|------------------------------|---------|
| 1     | 0    | 1  | Opcode |       | 91 – PLU Stock Count         |         |
| 7     | 1    | 8  | Code   |       |                              |         |
| 1     | 8    | 9  | Flags  |       |                              |         |
|       |      |    |        | bit 0 | Ext record                   |         |
|       |      |    |        | bit 1 | Subtract                     |         |
|       |      |    |        | bit 2 | Cancel                       |         |
|       |      |    |        | bit 3 | Negative                     |         |
|       |      |    |        | bit 4 | Was Canceled                 |         |
|       |      |    |        | bit 5 | Supplier promotion           |         |
|       |      |    |        | bit 6 | Staff discountable           |         |
|       |      |    |        | bit 7 | Accept price override        |         |
| 1     | 9    | 10 | Flags  |       |                              |         |
|       |      |    |        | bit 0 | Item on Sale                 |         |
|       |      |    |        | bit 1 | Price Override               |         |
|       |      |    |        | bit 2 | Manual price                 |         |
|       |      |    |        | bit 3 | Manual price allowed         |         |
|       |      |    |        | bit 4 | Weight from scale            |         |
|       |      |    |        | bit 5 | Quantity is weight           |         |
|       |      |    |        | bit 6 | Quantity is decimal quantity |         |
|       |      |    |        | bit 7 | Quantity is liter            |         |
| 1     | 10   | 11 | Flags  |       |                              |         |
|       |      |    |        | bit 0 | Chained from previous item   |         |
|       |      |    |        | bit 1 | Promotion                    |         |
|       |      |    |        | bit 2 | Reduction                    |         |
|       |      |    |        | bit 3 | Offer                        |         |
|       |      |    |        | bit 4 | Non-merchandise              |         |
|       |      |    |        | bit 5 | Store coupon                 |         |
|       |      |    |        | bit 6 | Vendor coupon                |         |



| Bytes | From | To | Data                     | Bits  | Explanation               | Remarks |
|-------|------|----|--------------------------|-------|---------------------------|---------|
|       |      |    |                          | bit 7 | Item discount flag        |         |
| 1     | 11   | 12 | Flags                    | bit 0 | Scanned item              |         |
|       |      |    |                          | bit 1 | Read from PC              |         |
|       |      |    |                          | bit 2 | Next info                 |         |
|       |      |    |                          | bit 3 | Saver                     |         |
|       |      |    |                          | bit 4 | Extended Promotion        |         |
|       |      |    |                          | bit 5 | Price embedded            |         |
|       |      |    |                          | bit 6 | FF drags modifier         |         |
|       |      |    |                          | bit 7 | FF modifier               |         |
| 1     | 12   | 13 | Flags                    | bit 0 | Offer discount            |         |
|       |      |    |                          | bit 1 | Offer continue            |         |
|       |      |    |                          | bit 2 | Offer first               |         |
|       |      |    |                          | bit 3 | Counter department        |         |
|       |      |    |                          | bit 4 | Return to stock           |         |
|       |      |    |                          | bit 5 | Cost Plus                 |         |
|       |      |    |                          | bit 6 | Frequent Shopper discount |         |
|       |      |    |                          | bit 7 | Food Stamps payment       |         |
| 2     | 13   | 15 | Department               |       |                           |         |
| 1     | 15   | 16 | Multi sell unit          |       |                           |         |
| 1     | 16   | 17 | Return type              |       |                           |         |
| 1     | 17   | 18 | Tax pointer              |       |                           |         |
| 4     | 18   | 22 | Quantity                 |       |                           |         |
| 4     | 22   | 26 | Price                    |       |                           |         |
| 4     | 26   | 30 | Amount                   |       |                           |         |
| 4     | 30   | 34 | No-tax price             |       |                           |         |
| 4     | 34   | 38 | No-tax amount            |       |                           |         |
| 4     | 38   | 42 | Return surcharge percent |       |                           |         |
| 1     | 42   | 43 | Product code             |       |                           |         |
| 1     | 43   | 44 | Flags                    | bit 0 | FF modifier price         |         |

| Bytes | From | To | Data  | Bits  | Explanation     | Remarks |
|-------|------|----|-------|-------|-----------------|---------|
|       |      |    |       | bit 1 | Markdown        |         |
|       |      |    |       | bit 2 | Member discount |         |
|       |      |    |       | bit 3 | Not Used        |         |
|       |      |    |       | bit 4 | Not Used        |         |
|       |      |    |       | bit 5 | Not Used        |         |
|       |      |    |       | bit 6 | Not Used        |         |
|       |      |    |       | bit 7 | Not Used        |         |
| 20    | 44   | 64 | Tail  |       |                 |         |
| 64    |      |    | Total |       |                 |         |

## 92 – Card Deposit

0 X 92

| Bytes | From | To | Data                             | Bits  | Explanation            | Remarks |
|-------|------|----|----------------------------------|-------|------------------------|---------|
| 1     | 0    | 1  | Opcode                           |       | 60 – Log Information   |         |
| 1     | 1    | 2  | Function                         |       | 92 – Card Deposit      |         |
| 21    | 2    | 23 | Account                          |       |                        |         |
| 9     | 23   | 32 | Print<br>Authorization<br>number |       |                        |         |
| 1     | 32   | 33 | Issue No                         |       |                        |         |
| 2     | 33   | 35 | Issue Date Year                  |       |                        |         |
| 2     | 35   | 37 | Issue Date Month                 |       |                        |         |
| 2     | 37   | 39 | Expiry Date Year                 |       |                        |         |
| 2     | 39   | 41 | Expiry Date<br>Month             |       |                        |         |
| 1     | 41   | 42 | Flags                            |       | bit 0 – Issue Not Used |         |
|       |      |    |                                  | bit 1 | MCR Used               |         |
|       |      |    |                                  | bit 2 | Smart Card Used        |         |
|       |      |    |                                  | bit 3 | Accept Expiry Date     |         |
|       |      |    |                                  | bit 4 | Accept Issue Date      |         |
|       |      |    |                                  | bit 5 | Not Used               |         |
|       |      |    |                                  | bit 6 | Not Used               |         |
|       |      |    |                                  | bit 7 | Not Used               |         |
| 2     | 42   | 44 | Not Used                         |       |                        |         |
| 20    | 44   | 64 | Tail                             |       |                        |         |
| 64    |      |    | Total                            |       |                        |         |

## 93 – Ticket Times

0 X 93

| Bytes | From | To | Data                 | Bits  | Explanation           | Remarks |
|-------|------|----|----------------------|-------|-----------------------|---------|
| 1     | 0    | 1  | Opcode               |       | 60 – Log Information  |         |
| 1     | 1    | 2  | Function             |       | 93 – Ticket Times     |         |
| 1     | 2    | 3  | Flags                |       |                       |         |
|       |      |    |                      | bit 0 | Ticket with exception |         |
|       |      |    |                      | bit 1 | Not Used              |         |
|       |      |    |                      | bit 2 | Not Used              |         |
|       |      |    |                      | bit 3 | Not Used              |         |
|       |      |    |                      | bit 4 | Not Used              |         |
|       |      |    |                      | bit 5 | Not Used              |         |
|       |      |    |                      | bit 6 | Not Used              |         |
|       |      |    |                      | bit 7 | Not Used              |         |
| 4     | 3    | 7  | Time For All Ticket  |       |                       |         |
| 4     | 7    | 11 | Time Accept Cards    |       |                       |         |
| 4     | 11   | 15 | Time Scan Items      |       |                       |         |
| 4     | 15   | 19 | Time Finish Ticket   |       |                       |         |
| 4     | 19   | 23 | Time Supervisor      |       |                       |         |
| 4     | 23   | 27 | Time Call Assistant  |       |                       |         |
| 4     | 27   | 31 | Time Supervisor Menu |       |                       |         |
| 13    | 31   | 44 | Not Used             |       |                       |         |
| 20    | 44   | 64 | Tail                 |       |                       |         |
| 64    |      |    | Total                |       |                       |         |

## 94 – Ticket Exceptions

0 X 94

| Bytes | From | To | Data                                | Bits  | Explanation            | Remarks |
|-------|------|----|-------------------------------------|-------|------------------------|---------|
| 1     | 0    | 1  | Opcode                              |       | 60 – Log Information   |         |
| 1     | 1    | 2  | Function                            |       | 94 – Ticket Exceptions |         |
| 1     | 2    | 3  | Flag1                               |       |                        |         |
|       |      |    |                                     | bit 0 | Ticket with exception  |         |
|       |      |    |                                     | bit 1 | Not Used               |         |
|       |      |    |                                     | bit 2 | Not Used               |         |
|       |      |    |                                     | bit 3 | Not Used               |         |
|       |      |    |                                     | bit 4 | Not Used               |         |
|       |      |    |                                     | bit 5 | Not Used               |         |
|       |      |    |                                     | bit 6 | Not Used               |         |
|       |      |    |                                     | bit 7 | Not Used               |         |
| 2     | 3    | 5  | All Items                           |       |                        |         |
| 2     | 5    | 7  | Items With Exceptions               |       |                        |         |
| 2     | 7    | 9  | Cancel Exception                    |       |                        |         |
| 2     | 9    | 11 | Items With Manual Exception         |       |                        |         |
| 2     | 11   | 13 | Items With Not On File Exception    |       |                        |         |
| 2     | 13   | 15 | Items With Not For Sale Exception   |       |                        |         |
| 2     | 15   | 17 | Items With Manual Price Exception   |       |                        |         |
| 2     | 17   | 19 | Items With Price Verify Exception   |       |                        |         |
| 2     | 19   | 21 | Items With Age Restricted Exception |       |                        |         |
| 2     | 21   | 23 | Items With Video Sale Exception     |       |                        |         |
| 2     | 23   | 25 | Items With Time Restrict Exception  |       |                        |         |

| Bytes | From | To | Data                    | Bits | Explanation | Remarks |
|-------|------|----|-------------------------|------|-------------|---------|
| 2     | 25   | 27 | Maximum<br>Customer Age |      |             |         |
| 17    | 27   | 44 | Not Used                |      |             |         |
| 20    | 44   | 64 | Tail                    |      |             |         |
| 64    |      |    | Total                   |      |             |         |

## 95 – Info EFT Nomad Print Slip2

0 X 95

| Bytes | From | To | Data                | Bits | Explanation                     | Remarks           |
|-------|------|----|---------------------|------|---------------------------------|-------------------|
| 1     | 0    | 1  | Opcode              |      | 60 – Log Information            | Not used by Tesco |
| 1     | 1    | 2  | Function Print Slip |      | 95 – Info EFT Nomad Print Slip2 |                   |
| 40    | 2    | 42 | KEY2_EFT            |      |                                 |                   |
| 2     | 42   | 44 | Not Used            |      |                                 |                   |
| 20    | 44   | 64 | Tail                |      |                                 |                   |
| 64    |      |    | Total               |      |                                 |                   |

## 96 – Info EFT Nomad Print Slip3

0 X 96

| Bytes | From | To | Data                | Bits | Explanation                     | Remarks           |
|-------|------|----|---------------------|------|---------------------------------|-------------------|
| 1     | 0    | 1  | Opcode              |      | 60 – Log Information            | Not used by Tesco |
| 1     | 1    | 2  | Function Print Slip |      | 96 – Info EFT Nomad Print Slip3 |                   |
| 40    | 2    | 42 | KEY3_EFT            |      |                                 |                   |
| 2     | 42   | 44 | Not Used            |      |                                 |                   |
| 20    | 44   | 64 | Tail                |      |                                 |                   |
| 64    |      |    | Total               |      |                                 |                   |



## 97 – Pump Post Dec

0 X 97

| Bytes | From | To | Data         | Bits | Explanation          | Remarks |
|-------|------|----|--------------|------|----------------------|---------|
| 1     | 0    | 1  | Opcode       |      | 60 – Log Information |         |
| 1     | 1    | 2  | Function     |      | 97 – Pump Post Dec   |         |
| 10    | 2    | 12 | Account      |      |                      |         |
| 2     | 12   | 14 | Media Number |      |                      |         |
| 4     | 14   | 18 | Amount       |      |                      |         |
| 4     | 18   | 22 | Volume       |      |                      |         |
| 2     | 22   | 24 | Decline Code |      |                      |         |
| 1     | 24   | 25 | Pump Number  |      |                      |         |
| 3     | 25   | 28 | Date         |      |                      |         |
| 3     | 28   | 31 | Time         |      |                      |         |
| 13    | 31   | 44 | Reserved     |      |                      |         |
| 20    | 44   | 64 | Tail         |      |                      |         |
| 64    |      |    | Total        |      |                      |         |

## 98 – Pump Grade Price ID

0 X 98

**Explanation:** The Pump Grade Price ID records the information from the Pump when recognizing that the Price ID and Grade ID correlate with the price of the fuel.

| Bytes | From | To | Data     | Bits | Explanation              | Remarks |
|-------|------|----|----------|------|--------------------------|---------|
| 1     | 0    | 1  | Opcode   |      | 60 – Log Information     |         |
| 1     | 1    | 2  | Function |      | 98 – Pump Grade Price ID |         |
| 2     | 2    | 4  | Price ID |      |                          |         |
| 1     | 4    | 5  | Grade ID |      |                          |         |
| 4     | 5    | 9  | Price    |      |                          |         |
| 35    | 9    | 44 | Reserved |      |                          |         |
| 20    | 44   | 64 | Tail     |      |                          |         |
| 64    |      |    | Total    |      |                          |         |

## 99 – Chipcard Handle Message

0 X 99

| Bytes | From | To | Data           | Bits | Explanation               | Remarks |
|-------|------|----|----------------|------|---------------------------|---------|
| 1     | 0    | 1  | Opcode         |      | 60 – Log Information      |         |
| 1     | 1    | 2  | Function       |      | 0x99                      |         |
| 10    | 2    | 12 | Card Number    |      | 2 Chip Card Number in BCD |         |
| 1     | 12   | 13 | Message Level  |      |                           |         |
| 2     | 13   | 15 | Message Number |      |                           |         |
| 2     | 15   | 17 | Update Status  |      |                           |         |
| 27    | 17   | 44 | Not Used       |      |                           |         |
| 20    | 44   | 64 | Tail           |      |                           |         |
| 64    |      |    | Total          |      |                           |         |

## 9F – Invoice Reprint

0 X 9F

**Explanation:** The Invoice Reprint records the information on invoices that are reprinted. The transaction sends Invoice Number, Invoice Issue Date, etc.

| Bytes | From | To | Data               | Bits | Explanation          | Remarks        |
|-------|------|----|--------------------|------|----------------------|----------------|
| 1     | 0    | 1  | Opcode             |      | 60 – Log Information |                |
| 1     | 1    | 2  | Function           |      | 9F – Invoice Reprint |                |
| 8     | 2    | 10 | Invoice Number     |      |                      |                |
| 3     | 10   | 13 | Invoice Issue Date |      |                      |                |
| 4     | 13   | 17 | Amount             |      |                      | Invoice Value  |
| 4     | 17   | 21 | Supervisor         |      |                      |                |
| 23    | 21   | 44 | Filler             |      |                      | For Future Use |
| 20    | 44   | 64 | Tail               |      |                      |                |
| 64    |      |    | Total              |      |                      |                |

## A0 – EJ Info Bad Account

### 0 X A0

**Explanation:** The EJ Info Bad Account records all the information on bad accounts in the Electronic Journal, sending the Account Number, Account Length, Card Range Number, etc.

| Bytes | From | To | Data                 | Bits  | Explanation                                            | Remarks                       |
|-------|------|----|----------------------|-------|--------------------------------------------------------|-------------------------------|
| 1     | 0    | 1  | Opcode               |       | 60 – Log Information                                   |                               |
| 1     | 1    | 2  | Function             |       | A0 – Electronic Journal<br>Information on Bad Accounts |                               |
| 10    | 2    | 12 | Account Number       |       | (BCD 19)                                               |                               |
| 1     | 12   | 13 | Account Length       |       |                                                        |                               |
| 1     | 13   | 14 | Card Range<br>Number |       |                                                        |                               |
| 1     | 14   | 15 | Flags                |       |                                                        |                               |
|       |      |    |                      | bit 0 | MCR Used                                               | Magnetic Card Reader<br>used. |
|       |      |    |                      | bit 1 | Not Used                                               |                               |
|       |      |    |                      | bit 2 | Not Used                                               |                               |
|       |      |    |                      | bit 3 | Not Used                                               |                               |
|       |      |    |                      | bit 4 | Not Used                                               |                               |
|       |      |    |                      | bit 5 | Not Used                                               |                               |
|       |      |    |                      | bit 6 | Not Used                                               |                               |
|       |      |    |                      | bit 7 | Not Used                                               |                               |
| 9     | 15   | 24 | Bank Number          |       |                                                        |                               |
| 20    | 24   | 44 | Reserved             |       |                                                        |                               |
| 20    | 44   | 64 | Tail                 |       |                                                        |                               |
| 64    |      |    | Total                |       |                                                        |                               |

## A1 – EJ Info Price Inquiry

### 0 X A1

**Explanation:** The EJ Info Price Inquiry records all price inquiries recorded in the Electronic Journal, sending the PLU Code, Inquire Amount, Promotion Amount, etc.

| Bytes | From | To | Data                | Bits  | Explanation                                             | Remarks |
|-------|------|----|---------------------|-------|---------------------------------------------------------|---------|
| 1     | 0    | 1  | Opcode              |       | 60 – Log Information                                    |         |
| 1     | 1    | 2  | Function            |       | A1 – Electronic Journal<br>Information on Price Inquiry |         |
| 7     | 2    | 9  | PLU Code            |       |                                                         |         |
| 4     | 9    | 13 | Inquiry Amount      |       | Total Inquiry                                           |         |
| 4     | 13   | 17 | Promotion<br>Amount |       | Total Promotion                                         |         |
| 4     | 17   | 21 | Discount Amount     |       | Total Discount                                          |         |
| 4     | 21   | 25 | PLU Price           |       |                                                         |         |
| 4     | 25   | 29 | Original Price      |       |                                                         |         |
| 4     | 29   | 33 | Count               |       |                                                         |         |
| 4     | 33   | 37 | Decimal Count       |       |                                                         |         |
| 1     | 37   | 38 | Mult Sell Unit      |       |                                                         |         |
| 4     | 38   | 42 | Weight              |       |                                                         |         |
| 1     | 42   | 43 | Flags               |       |                                                         |         |
|       |      |    |                     | bit 0 | Execute Inquiry                                         |         |
|       |      |    |                     | bit 1 | Store Coupon                                            |         |
|       |      |    |                     | bit 2 | Vendor Coupon                                           |         |
|       |      |    |                     | bit 3 | Other Coupon                                            |         |
|       |      |    |                     | bit 4 | WIC Item                                                |         |
|       |      |    |                     | bit 5 | Not Used                                                |         |
|       |      |    |                     | bit 6 | Not Used                                                |         |
|       |      |    |                     | bit 7 | Not Used                                                |         |
| 1     | 43   | 44 | Reserved            |       |                                                         |         |
| 20    | 44   | 64 | Tail                |       |                                                         |         |
| 64    |      |    | Total               |       |                                                         |         |

## A2 – EJ Info Control Check

### 0 X A2

**Explanation:** During a transaction where a control check is used, the data is transferred to the EJ (Electronic Journal). The EJ Info Control Check transaction records the control check Numbers and the status of the control check.

| Bytes | From | To | Data                 | Bits  | Explanation           | Remarks           |
|-------|------|----|----------------------|-------|-----------------------|-------------------|
| 1     | 0    | 1  | Opcode               |       | 60 – Log Information  | Not Used by Tesco |
| 1     | 1    | 2  | Function Check       |       | A2 – EJ Info control  |                   |
| 2     | 2    | 4  | Control Check Number |       |                       |                   |
| 1     | 4    | 5  | Flag 1               |       |                       |                   |
|       |      |    |                      | bit 0 | Accepted              |                   |
|       |      |    |                      | bit 1 | Not Used              |                   |
|       |      |    |                      | bit 2 | Not Used              |                   |
|       |      |    |                      | bit 3 | Not Used              |                   |
|       |      |    |                      | bit 4 | Not Used              |                   |
|       |      |    |                      | bit 5 | Not Used              |                   |
|       |      |    |                      | bit 6 | Not Used              |                   |
|       |      |    |                      | bit 7 | Not Used              |                   |
| 1     | 5    | 6  | Flag 2               |       |                       |                   |
|       |      |    |                      | bit 0 | Ask Yes No            |                   |
|       |      |    |                      | bit 1 | Manager Key           |                   |
|       |      |    |                      | bit 2 | Stop Activity         |                   |
|       |      |    |                      | bit 3 | Supervisor Key        |                   |
|       |      |    |                      | bit 4 | Warning Only          |                   |
|       |      |    |                      | bit 5 | Valid Record          |                   |
|       |      |    |                      | bit 6 | Delayed Authorization |                   |
|       |      |    |                      | bit 7 | Value at Text         |                   |
| 1     | 6    | 7  | Privilege            |       |                       |                   |
| 2     | 7    | 9  | Cashier Number       |       |                       |                   |
| 2     | 9    | 11 | Template Number      |       |                       |                   |
| 1     | 11   | 12 | POS Status           |       |                       |                   |
| 1     | 12   | 13 | TLOG reporting level |       | Reporting Level       |                   |
| 31    | 13   | 44 | Reserved             |       |                       |                   |

| Bytes | From | To | Data  | Bits | Explanation | Remarks |
|-------|------|----|-------|------|-------------|---------|
| 20    | 44   | 64 | Tail  |      |             |         |
| 64    |      |    | Total |      |             |         |



## A3 – EJ Info Age ID

### 0 X A3

**Explanation:** The EJ Info Age ID records the data that prompts an Age ID check. The data is recorded in the Electronic Journal.

| Bytes | From | To | Data          | Bits  | Explanation              | Remarks           |
|-------|------|----|---------------|-------|--------------------------|-------------------|
| 1     | 0    | 1  | Opcode        |       | 60 – Log Information     | Not Used by Tesco |
| 1     | 1    | 2  | Function      |       | A3 – EJ Info Age ID      |                   |
| 1     | 2    | 3  | Current Age   |       |                          |                   |
| 3     | 3    | 6  | Birthday Date |       |                          |                   |
| 1     | 6    | 7  | Flag 1        |       |                          |                   |
|       |      |    |               | bit 0 | Bypass Age               |                   |
|       |      |    |               | bit 1 | Check Age                |                   |
|       |      |    |               | bit 2 | Bypass or Check Accepted |                   |
|       |      |    |               |       | 0 – Not                  |                   |
|       |      |    |               |       | 1 – Yes                  |                   |
|       |      |    |               | bit 3 | Not Used                 |                   |
|       |      |    |               | bit 4 | Not Used                 |                   |
|       |      |    |               | bit 5 | Not Used                 |                   |
|       |      |    |               | bit 6 | Not Used                 |                   |
|       |      |    |               | bit 7 | Not Used                 |                   |
| 37    | 7    | 44 | Reserved      |       |                          |                   |
| 20    | 44   | 64 | Tail          |       |                          |                   |
| 64    |      |    | Total         |       |                          |                   |

## A4 – Add Loss Report (Item On Sale)

### 0 X A4

**Explanation:** This Opcode registers any added information on the different items on sale, at the end of the transaction, recording Code Number, Original Price, Quantity Price, etc.

| Bytes | From | To | Data           | Bits  | Explanation          | Remarks                                   |
|-------|------|----|----------------|-------|----------------------|-------------------------------------------|
| 1     | 0    | 1  | Opcode         |       | 60 – Log Information | Not Used by Tesco                         |
| 1     | 1    | 2  | Function       |       | A4 – Item on sale    |                                           |
| 7     | 2    | 9  | Code           |       |                      |                                           |
| 1     | 9    | 10 | Flag 1         |       |                      |                                           |
|       |      |    |                | bit 0 | Qty is Weight        |                                           |
|       |      |    |                | bit 1 | Qty is Decimal Qty   |                                           |
|       |      |    |                | bit 2 | Qty is Fuel Gallons  | POSPump. TESCO field name is Qty is Liter |
|       |      |    |                | bit 3 | Not Used             |                                           |
|       |      |    |                | bit 4 | Not Used             |                                           |
|       |      |    |                | bit 5 | Not Used             |                                           |
|       |      |    |                | bit 6 | Not Used             |                                           |
|       |      |    |                | bit 7 | Not Used             |                                           |
| 4     | 10   | 14 | Original Price |       |                      |                                           |
| 1     | 14   | 15 | Original Qty   |       |                      |                                           |
| 4     | 15   | 19 | On Sale Price  |       |                      |                                           |
| 1     | 19   | 20 | On Sale Qty    |       |                      |                                           |
| 4     | 20   | 24 | Amount         |       |                      |                                           |
| 4     | 24   | 28 | Quantity       |       |                      |                                           |
| 16    | 28   | 44 | Reserved       |       |                      |                                           |
| 20    | 44   | 64 | Tail           |       |                      |                                           |
| 64    |      |    | Total          |       |                      |                                           |

## A5 – Tank Reading Header

0 X A5

| Bytes | From | To | Data     | Bits   | Explanation              | Remarks |
|-------|------|----|----------|--------|--------------------------|---------|
| 1     | 0    | 1  | Opcode   |        | 60 – Log Information     |         |
| 1     | 1    | 2  | Function |        | A5 – Tank Reading Header |         |
| 1     | 2    | 3  | Flag 1   |        |                          |         |
|       |      |    |          | bit 0  | End Of Day Read          |         |
|       |      |    |          | bit 1  | Force Read               |         |
|       |      |    |          | bits 2 | Not Used                 |         |
|       |      |    |          | bit 3  | Not Used                 |         |
|       |      |    |          | bit 4  | Not Used                 |         |
|       |      |    |          | bit 5  | Not Used                 |         |
|       |      |    |          | bit 6  | Not Used                 |         |
|       |      |    |          | bit 7  | Not Used                 |         |
| 1     | 3    | 4  | Reserved |        |                          |         |
| 20    | 44   | 64 | Tail     |        |                          |         |
| 64    |      |    | Total    |        |                          |         |

## A6 – Tank Reading Detail

0 X A6

| Bytes | From | To | Data            | Bits | Explanation              | Remarks |
|-------|------|----|-----------------|------|--------------------------|---------|
| 1     | 0    | 1  | Opcode          |      | 60 – Log Information     |         |
| 1     | 1    | 2  | Function        |      | A6 – Tank Reading Detail |         |
| 1     | 2    | 3  | Tank Number     |      |                          |         |
| 1     | 3    | 4  | Status 1        |      |                          |         |
| 1     | 4    | 5  | DataMap         |      |                          |         |
| 4     | 5    | 9  | Fuel Level      |      |                          |         |
| 4     | 9    | 13 | Water Level     |      |                          |         |
| 2     | 13   | 15 | Temperature     |      |                          |         |
| 1     | 15   | 16 | Status 2        |      |                          |         |
| 4     | 16   | 20 | Volume          |      |                          |         |
| 4     | 20   | 24 | Value           |      |                          |         |
| 4     | 24   | 28 | Price Per Liter |      |                          |         |
| 16    | 28   | 44 | Reserved        |      |                          |         |
| 20    | 44   | 64 | Tail            |      |                          |         |
| 64    |      |    | Total           |      |                          |         |

## A7 – Pump Reading Header

0 X A7

| Bytes | From | To | Data                | Bits  | Explanation              | Remarks           |
|-------|------|----|---------------------|-------|--------------------------|-------------------|
| 1     | 0    | 1  | Opcode              |       | 60 – Log Information     | Not Used by Tesco |
| 1     | 1    | 2  | Function            |       | A7 – Pump Reading Header |                   |
| 1     | 2    | 3  | Flag 1              |       |                          |                   |
|       |      |    |                     | bit 0 | End Of Day Read          |                   |
|       |      |    |                     | bit 1 | Force Read               |                   |
|       |      |    |                     | bit 2 | Not Used                 |                   |
|       |      |    |                     | bit 3 | Not Used                 |                   |
|       |      |    |                     | bit 4 | Not Used                 |                   |
|       |      |    |                     | bit 5 | Not Used                 |                   |
|       |      |    |                     | bit 6 | Not Used                 |                   |
|       |      |    |                     | bit 7 | Not Used                 |                   |
| 1     | 3    | 4  | Number of Pump Recs |       |                          |                   |
| 40    | 4    | 44 | Reserved            |       |                          |                   |
| 20    | 44   | 64 | Tail                |       |                          |                   |
| 64    |      |    | Total               |       |                          |                   |

## A8 – Pump Reading Detail

0 X A8

| Bytes | From | To | Data            | Bits | Explanation              | Remarks |
|-------|------|----|-----------------|------|--------------------------|---------|
| 1     | 0    | 1  | Opcode          |      | 60 – Log Information     |         |
| 1     | 1    | 2  | Function        |      | A8 – Pump Reading Detail |         |
| 1     | 2    | 3  | Pump Number     |      |                          |         |
| 1     | 3    | 4  | Status          |      |                          |         |
| 1     | 4    | 5  | Status Nozzle 1 |      |                          |         |
| 4     | 5    | 9  | Volume 1        |      |                          |         |
| 1     | 9    | 10 | Status Nozzle 2 |      |                          |         |
| 4     | 10   | 14 | Volume 2        |      |                          |         |
| 1     | 14   | 15 | Status Nozzle 3 |      |                          |         |
| 4     | 15   | 19 | Volume 3        |      |                          |         |
| 1     | 19   | 20 | Status Nozzle 4 |      |                          |         |
| 4     | 20   | 24 | Volume 4        |      |                          |         |
| 20    | 24   | 44 | Reserved        |      |                          |         |
| 20    | 44   | 64 | Tail            |      |                          |         |
| 64    |      |    | Total           |      |                          |         |

## A9 – Delivery Reading Header

0 X A9

| Bytes | From | To | Data                       | Bits  | Explanation                  | Remarks |
|-------|------|----|----------------------------|-------|------------------------------|---------|
| 1     | 0    | 1  | Opcode                     |       | 60 – Log Information         |         |
| 1     | 1    | 2  | Function                   |       | A9 – Delivery Reading Header |         |
| 1     | 2    | 3  | Flag 1                     |       |                              |         |
|       |      |    |                            | bit 0 | End Of Day Read              |         |
|       |      |    |                            | bit 1 | Not Used                     |         |
|       |      |    |                            | bit 2 | Not Used                     |         |
|       |      |    |                            | bit 3 | Not Used                     |         |
|       |      |    |                            | bit 4 | Not Used                     |         |
|       |      |    |                            | bit 5 | Not Used                     |         |
|       |      |    |                            | bit 6 | Not Used                     |         |
|       |      |    |                            | bit 7 | Not Used                     |         |
| 1     | 3    | 4  | Number Of<br>Delivery Recs |       |                              |         |
| 40    | 4    | 44 | Reserved                   |       |                              |         |
| 20    | 44   | 64 | Tail                       |       |                              |         |
| 64    |      |    | Total                      |       |                              |         |

## AA – Delivery Reading Detail

0 X AA

| Bytes | From | To | Data                        | Bits | Explanation                  | Remarks |
|-------|------|----|-----------------------------|------|------------------------------|---------|
| 1     | 0    | 1  | Opcode                      |      | 60 – Log Information         |         |
| 1     | 1    | 2  | Function                    |      | AA – Delivery Reading Detail |         |
| 1     | 2    | 3  | Tank Number                 |      |                              |         |
| 5     | 3    | 8  | Start Date Time             |      |                              |         |
| 5     | 8    | 13 | End Date Time               |      |                              |         |
| 4     | 13   | 17 | Start Volume                |      |                              |         |
| 4     | 17   | 21 | End Volume                  |      |                              |         |
| 4     | 21   | 25 | Adjusted<br>Delivery Volume |      |                              |         |
| 4     | 25   | 29 | Adjusted<br>Temperature     |      |                              |         |
| 15    | 29   | 44 | Reserved                    |      |                              |         |
| 20    | 44   | 64 | Tail                        |      |                              |         |
| 64    |      |    | Total                       |      |                              |         |



## AB – Alarm Reading Header

0 X AB

| Bytes | From | To | Data                 | Bits  | Explanation               | Remarks |
|-------|------|----|----------------------|-------|---------------------------|---------|
| 1     | 0    | 1  | Opcode               |       | 60 – Log Information      |         |
| 1     | 1    | 2  | Function             |       | AB – Alarm Reading Header |         |
| 1     | 2    | 3  | Flag 1               |       |                           |         |
|       |      |    |                      | bit 0 | End Of Day Read           |         |
|       |      |    |                      | bit 1 | Force Read                |         |
|       |      |    |                      | bit 2 | Not Used                  |         |
|       |      |    |                      | bit 3 | Not Used                  |         |
|       |      |    |                      | bit 4 | Not Used                  |         |
|       |      |    |                      | bit 5 | Not Used                  |         |
|       |      |    |                      | bit 6 | Not Used                  |         |
|       |      |    |                      | bit 7 | Not Used                  |         |
| 1     | 3    | 4  | Number Of Alarm Recs |       |                           |         |
| 40    | 4    | 44 | Reserved             |       |                           |         |
| 20    | 44   | 64 | Tail                 |       |                           |         |
| 64    |      |    | Total                |       |                           |         |

## AC – Alarm Reading Detail

0 X AC

| Bytes | From | To | Data            | Bits | Explanation              | Remarks |
|-------|------|----|-----------------|------|--------------------------|---------|
| 1     | 0    | 1  | Opcode          |      | 60 – Log Information     |         |
| 1     | 1    | 2  | Function        |      | AC –Alarm Reading Detail |         |
| 2     | 2    | 4  | Category        |      |                          |         |
| 2     | 4    | 6  | Code            |      |                          |         |
| 5     | 6    | 11 | Start Date Time |      |                          |         |
| 5     | 11   | 16 | End Date Time   |      |                          |         |
| 28    | 16   | 44 | Reserved        |      |                          |         |
| 20    | 44   | 64 | Tail            |      |                          |         |
| 64    |      |    | Total           |      |                          |         |

## AD – Tank Config Reading Header

0 X AD

| Bytes | From | To | Data                       | Bits  | Explanation              | Remarks |
|-------|------|----|----------------------------|-------|--------------------------|---------|
| 1     | 0    | 1  | Opcode                     |       | 60 – Log Information     |         |
| 1     | 1    | 2  | Function                   |       | AD – Tank Reading Header |         |
| 1     | 2    | 3  | Flag 1                     |       |                          |         |
|       |      |    |                            | bit 0 | End Of Day Read          |         |
|       |      |    |                            | bit 1 | Force Read               |         |
|       |      |    |                            | bit 2 | Not Used                 |         |
|       |      |    |                            | bit 3 | Not Used                 |         |
|       |      |    |                            | bit 4 | Not Used                 |         |
|       |      |    |                            | bit 5 | Not Used                 |         |
|       |      |    |                            | bit 6 | Not Used                 |         |
|       |      |    |                            | bit 7 | Not Used                 |         |
| 1     | 3    | 4  | Tank Gauge Fit             |       |                          |         |
| 1     | 4    | 5  | Reconciliation Needed      |       |                          |         |
| 1     | 5    | 6  | Card Number                |       |                          |         |
| 1     | 6    | 7  | Gauge Type                 |       |                          |         |
| 2     | 7    | 9  | Fuel Reconciliation Period |       |                          |         |
| 1     | 9    | 10 | Interlock Modes            |       |                          |         |
| 1     | 10   | 11 | End Of Day Report Required |       |                          |         |
| 1     | 11   | 12 | Number Of Tanks            |       |                          |         |
| 32    | 12   | 44 | Reserved                   |       |                          |         |
| 20    | 44   | 64 | Tail                       |       |                          |         |
| 64    |      |    | Total                      |       |                          |         |

## AE – Tank Config Reading Detail

0 X AE

| Bytes | From | To | Data                  | Bits | Explanation                        | Remarks |
|-------|------|----|-----------------------|------|------------------------------------|---------|
| 1     | 0    | 1  | Opcode                |      | 60 – Log Information               |         |
| 1     | 1    | 2  | Function              |      | AE – Tank Config Reading<br>Detail |         |
| 1     | 2    | 3  | Tank Number           |      |                                    |         |
| 1     | 3    | 4  | Grade In Tank         |      |                                    |         |
| 1     | 4    | 5  | Mapped Tank<br>Number |      |                                    |         |
| 1     | 5    | 6  | Tank Gauge Line       |      |                                    |         |
| 38    | 6    | 44 | Reserved              |      |                                    |         |
| 20    | 44   | 64 | Tail                  |      |                                    |         |
| 64    |      |    | Total                 |      |                                    |         |

## AF – Pump Config Reading Header

0 X AF

| Bytes | From | To | Data               | Bits  | Explanation                    | Remarks |
|-------|------|----|--------------------|-------|--------------------------------|---------|
| 1     | 0    | 1  | Opcode             |       | 60 – Log Information           |         |
| 1     | 1    | 2  | Function           |       | AF– Pump Config Reading Header |         |
| 1     | 2    | 3  | Flag 1             |       |                                |         |
|       |      |    |                    | bit 0 | End Of Day Read                |         |
|       |      |    |                    | bit 1 | Force Read                     |         |
|       |      |    |                    | bit 2 | Not Used                       |         |
|       |      |    |                    | bit 3 | Not Used                       |         |
|       |      |    |                    | bit 4 | Not Used                       |         |
|       |      |    |                    | bit 5 | Not Used                       |         |
|       |      |    |                    | bit 6 | Not Used                       |         |
|       |      |    |                    | bit 7 | Not Used                       |         |
| 4     | 3    | 7  | Site Volume Limits |       |                                |         |
| 4     | 7    | 11 | Site Value Limits  |       |                                |         |
| 1     | 11   | 12 | Number Of Pumps    |       |                                |         |
| 32    | 12   | 44 | Reserved           |       |                                |         |
| 20    | 44   | 64 | Tail               |       |                                |         |
| 64    |      |    | Total              |       |                                |         |

## B0 – Pump Config Reading Detail

0 X B0

| Bytes | From | To | Data                | Bits | Explanation                     | Remarks           |
|-------|------|----|---------------------|------|---------------------------------|-------------------|
| 1     | 0    | 1  | Opcode              |      | 60 – Log Information            | Not Used by Tesco |
| 1     | 1    | 2  | Function            |      | B0 – Pump Config Reading Detail |                   |
| 1     | 2    | 3  | Pump Number         |      |                                 |                   |
| 1     | 3    | 4  | Card Number         |      |                                 |                   |
| 1     | 4    | 5  | Card Channel Number |      |                                 |                   |
| 1     | 5    | 6  | Type                |      |                                 |                   |
| 1     | 6    | 7  | Nozzle 1 Grade      |      |                                 |                   |
| 1     | 7    | 8  | Nozzle 1 Tank       |      |                                 |                   |
| 1     | 8    | 9  | Nozzle 2 Grade      |      |                                 |                   |
| 1     | 9    | 10 | Nozzle 2 Tank       |      |                                 |                   |
| 1     | 10   | 11 | Nozzle 3 Grade      |      |                                 |                   |
| 1     | 11   | 12 | Nozzle 3 Tank       |      |                                 |                   |
| 1     | 12   | 13 | Nozzle 4 Grade      |      |                                 |                   |
| 1     | 13   | 14 | Nozzle 4 Tank       |      |                                 |                   |
| 30    | 14   | 44 | Reserved            |      |                                 |                   |
| 20    | 44   | 64 | Tail                |      |                                 |                   |
| 64    |      |    | Total               |      |                                 |                   |

## B1 – Information Sundry Product

### 0 X B1

**Explanation:** The Information Sundry Product function is recorded when a sundry item transaction is transacted. Item Prices and Descriptions are captured at the POS.

| Bytes | From | To | Data            | Bits  | Explanation              | Remarks               |
|-------|------|----|-----------------|-------|--------------------------|-----------------------|
| 1     | 0    | 1  | Opcode          |       | 60 – Log Information     |                       |
| 1     | 1    | 2  | Function        |       | B1 – Info Sundry Product |                       |
| 7     | 2    | 9  | PLU Code        |       | Item number (BCD)        |                       |
| 20    | 9    | 29 | PLU Description |       | Item description         |                       |
| 1     | 29   | 30 | Flags           |       |                          |                       |
|       |      |    |                 | bit 0 | Liquor Item              |                       |
|       |      |    |                 | bit 1 | Tobacco Item             |                       |
|       |      |    |                 | bit 2 | Standard Item            | Not liquor or tobacco |
|       |      |    |                 | bit 3 | Not Used                 |                       |
|       |      |    |                 | bit 4 | Not Used                 |                       |
|       |      |    |                 | bit 5 | Not Used                 |                       |
|       |      |    |                 | bit 6 | Not Used                 |                       |
|       |      |    |                 | bit 7 | Not Used                 |                       |
| 2     | 30   | 32 | Liquor Capacity |       | Liters in item unit      |                       |
| 4     | 32   | 36 | Tax Amount      |       |                          |                       |
| 4     | 36   | 40 | PLU Price       |       | Item price               |                       |
| 4     | 40   | 44 | Quantity        |       | Quantity sold            |                       |
| 20    | 44   | 64 | Tail            |       |                          |                       |
| 64    |      |    | Total           |       |                          |                       |

## B2 – Information Grid Calculation

### 0 X B2

**Explanation:** The Information Grid Calculation Opcode sends information on Item Prices from the Price Grid Table if the parameter “Price\_Grid” is set to On. The transaction describes the process of ‘Search Minimum Item Price’.

| Bytes | From | To | Data               | Bits  | Explanation                | Remarks |
|-------|------|----|--------------------|-------|----------------------------|---------|
| 1     | 0    | 1  | Opcode             |       | 60 – Log Information       |         |
| 1     | 1    | 2  | Function           |       | B2 – Info Grid Calculation |         |
| 7     | 2    | 9  | PLU Code           |       |                            |         |
| 1     | 9    | 10 | Comparative Number |       |                            |         |
| 1     | 10   | 11 | Flag 1             |       |                            |         |
|       |      |    |                    | bit 0 | Comparative flag           |         |
|       |      |    |                    | bit 1 | Special Price              |         |
|       |      |    |                    | bit 2 | Not Used                   |         |
|       |      |    |                    | bit 3 | Not Used                   |         |
|       |      |    |                    | bit 4 | Not Used                   |         |
|       |      |    |                    | bit 5 | Not Used                   |         |
|       |      |    |                    | bit 6 | Not Used                   |         |
|       |      |    |                    | bit 7 | Not Used                   |         |
| 2     | 11   | 13 | Price Code         |       |                            |         |
| 4     | 13   | 17 | Tax on Extra Fee 1 |       |                            |         |
| 4     | 17   | 21 | Service Fee        |       |                            |         |
| 4     | 21   | 25 | Finance Fee        |       |                            |         |
| 4     | 25   | 29 | Extra Fee1         |       |                            |         |
| 4     | 29   | 33 | Broken Pack        |       |                            |         |
| 4     | 33   | 37 | Extra Fee 2        |       |                            |         |
| 4     | 37   | 41 | Promotion Number   |       |                            |         |
| 1     | 41   | 42 | cp_prc_indicator   |       |                            |         |
| 2     | 42   | 44 | Not Used           |       |                            |         |
| 20    | 44   | 64 | Tail               |       |                            |         |
| 64    |      |    | Total              |       |                            |         |



## B3 – Information Price Calculation

### 0 X B3

**Explanation:** This Opcode is a continuation of the previous Opcode B2 – Information Grid Calculation. The transaction describes the pricing calculation process for price getting from the Price Grid Table.

| Bytes | From | To | Data                       | Bits  | Explanation                                    | Remarks                                       |
|-------|------|----|----------------------------|-------|------------------------------------------------|-----------------------------------------------|
| 1     | 0    | 1  | Opcode                     |       | 60 – Log Information                           |                                               |
| 1     | 1    | 2  | Function                   |       | B3 – SubOpcode – Price calculations            | ROW – wholesale price calculation information |
| 7     | 2    | 9  | PLU Code                   |       | Item number                                    |                                               |
| 2     | 9    | 11 | Department Number          |       |                                                |                                               |
| 1     | 11   | 12 | Flag 1                     | bit 0 | Staff discount given                           |                                               |
|       |      |    |                            | bit 1 | Customer discount given                        |                                               |
|       |      |    |                            | bit 2 | Manager discount given                         |                                               |
|       |      |    |                            | bit 3 | Not Used                                       |                                               |
|       |      |    |                            | bit 4 | Not Used                                       |                                               |
|       |      |    |                            | bit 5 | Not Used                                       |                                               |
|       |      |    |                            | bit 6 | Not Used                                       |                                               |
|       |      |    |                            | bit 7 | Not Used                                       |                                               |
| 4     | 12   | 16 | Long Milk levy             |       | Levy on this item                              |                                               |
| 4     | 16   | 20 | Wet tax amount             |       |                                                |                                               |
| 4     | 20   | 24 | Liquor Subsidy Amount      |       |                                                |                                               |
| 4     | 24   | 28 | Discount Amount            |       | Discount amount for staff, customers, managers |                                               |
| 4     | 28   | 32 | Tax on this Item           |       |                                                |                                               |
| 4     | 32   | 36 | Case Discount Amount       |       |                                                |                                               |
| 4     | 36   | 40 | Surcharge Rate In Percents |       |                                                |                                               |
| 4     | 40   | 44 | Not Used                   |       |                                                |                                               |
| 20    | 44   | 64 | Tail                       |       |                                                |                                               |
| 64    |      |    | Total                      |       |                                                |                                               |

## B5 – Priceline Abn

0 X B5

| Bytes | From | To | Data     | Bits | Explanation          | Remarks                               |
|-------|------|----|----------|------|----------------------|---------------------------------------|
| 1     | 0    | 1  | Opcode   |      | 60 – Log Information |                                       |
| 1     | 1    | 2  | Function |      | B5 – Price line ABN  | The Number ABN on ticket (Priceline). |
| 15    | 2    | 17 | abn_nu   |      |                      |                                       |
| 27    | 17   | 44 | Not Used |      |                      |                                       |
| 20    | 44   | 64 | Tail     |      |                      |                                       |
| 64    |      |    | Total    |      |                      |                                       |

## B6 – Staff Card

### 0 X B6

**Explanation:** The Staff Card records the card information when a staff card is used, granting staff benefits if relevant. The data recorded includes: Scheme Number, Card Number, Tender Number, etc.

| Bytes | From | To | Data          | Bits  | Explanation                           | Remarks               |
|-------|------|----|---------------|-------|---------------------------------------|-----------------------|
| 1     | 0    | 1  | Opcode        |       | 60 – Log Information                  |                       |
| 1     | 1    | 2  | Function      |       | B6 – Staff Card                       |                       |
| 1     | 2    | 3  | Flag 1        |       |                                       |                       |
|       |      |    |               | bit 0 | MCR used                              | Card was Swiped/Keyed |
|       |      |    |               | bit 1 | Not Used                              |                       |
|       |      |    |               | bit 2 | Not Used                              |                       |
|       |      |    |               | bit 3 | Not Used                              |                       |
|       |      |    |               | bit 4 | Not Used                              |                       |
|       |      |    |               | bit 5 | Not Used                              |                       |
|       |      |    |               | bit 6 | Not Used                              |                       |
|       |      |    |               | bit 7 | Not Used                              |                       |
| 1     | 3    | 4  | Scheme Number |       |                                       | 1 to 9                |
| 20    | 4    | 24 | Card Number   |       | Card No. in ASCII null terminated     |                       |
| 2     | 24   | 26 | Tender Number |       | Card is credit/debit to Tender Number |                       |
| 1     | 26   | 27 | CRNG_NO       |       | Card Range Number                     |                       |
| 17    | 27   | 44 | Not Used      |       |                                       |                       |
| 20    | 44   | 64 | Tail          |       |                                       |                       |
| 64    |      |    | Total         |       |                                       |                       |

## B7 – Info TPF Recall

0 X B7

**Explanation:** This transaction records the data for self scan save and recall transactions.

| Bytes        | From | To | Data          | Bits  | Explanation               | Remarks                                           |
|--------------|------|----|---------------|-------|---------------------------|---------------------------------------------------|
| 1            | 0    | 1  | Opcode        |       | 60 – Log Information      |                                                   |
| 1            | 1    | 2  | Function      |       | B7 – Item Data for recall |                                                   |
| 7            | 2    | 9  | PLU Code      |       | PLU Number                |                                                   |
| <b>Union</b> |      |    |               |       |                           |                                                   |
| First data   |      |    |               |       |                           |                                                   |
| 1            | 9    | 10 | Type          |       | Struct takes up 10 bytes  |                                                   |
|              |      |    |               |       | 2 – Date                  |                                                   |
|              |      |    |               |       | 3 – Integer               |                                                   |
|              |      |    |               |       | 4 – Decimal               |                                                   |
|              |      |    |               |       | 5 – Alpha requests        |                                                   |
| 1            | 10   | 11 | Number        |       |                           |                                                   |
| Second data  |      |    |               |       |                           |                                                   |
| 1            | 11   | 12 | Date          |       |                           |                                                   |
|              | 12   | 13 | Number        |       |                           |                                                   |
| Third data   |      |    |               |       |                           |                                                   |
|              | 13   | 14 | Integer       |       |                           |                                                   |
|              | 14   | 15 | Number        |       |                           |                                                   |
| Fourth data  |      |    |               |       |                           |                                                   |
|              | 15   | 16 | Decimal       |       |                           |                                                   |
|              | 16   | 17 | Number        |       |                           |                                                   |
| Fifth data   |      |    |               |       |                           |                                                   |
|              | 17   | 18 | Alpha Request |       |                           |                                                   |
|              | 18   | 19 | Number        |       |                           |                                                   |
| 10           | 19   | 29 | Field         |       |                           |                                                   |
| 1            | 29   | 30 | Flag 1        |       |                           | Message number that was used from e-topup variant |
|              |      |    |               | bit 0 | Refund TPF Item           |                                                   |
|              |      |    |               | bit 1 | Price currency            | 0 – default<br>1 – Euro                           |

| Bytes | From | To | Data     | Bits  | Explanation | Remarks                   |
|-------|------|----|----------|-------|-------------|---------------------------|
|       |      |    |          | bit 2 | RTC         | 0 – Norma<br>1 – RTC item |
|       |      |    |          | bit 3 | Void Item   | 0 – scanned<br>1 – voided |
|       |      |    |          | bit 4 | Not Used    |                           |
|       |      |    |          | bit 5 | Not Used    |                           |
|       |      |    |          | bit 6 | Not Used    |                           |
|       |      |    |          | bit 7 | Not Used    |                           |
| 6     | 30   | 36 | Quantity |       |             |                           |
| 5     | 36   | 41 | Amount   |       |             |                           |
| 3     | 41   | 44 | Reserved |       |             |                           |
| 20    | 44   | 64 | Tail     |       |             |                           |
| 64    |      |    | Total    |       |             |                           |

## B9 – Information OEM Points

0 X B9

| Bytes | From | To | Data                     | Bits | Explanation                | Remarks |
|-------|------|----|--------------------------|------|----------------------------|---------|
| 1     | 0    | 1  | Opcode                   |      | 60 – Log Information       |         |
| 1     | 1    | 2  | Function                 |      | B9 –OEM Points Transaction |         |
| 20    | 2    | 22 | Member Card<br>Number    |      |                            |         |
| 4     | 22   | 26 | Current Points<br>Earned |      |                            |         |
| 4     | 26   | 30 | Points<br>Accumulated    |      |                            |         |
| 14    | 30   | 44 | Not Used                 |      |                            |         |
| 20    | 44   | 64 | Tail                     |      |                            |         |
| 64    |      |    | Total                    |      |                            |         |

## BB – Information Repeat Code

### 0 X BB

**Explanation:** The Information Repeat Code function is a Representative Code Transaction. The transaction gives information on representative codes against which sales can be recorded, for reporting and commission purposes.

| Bytes | From | To | Data        | Bits  | Explanation               | Remarks |
|-------|------|----|-------------|-------|---------------------------|---------|
| 1     | 0    | 1  | Opcode      |       | 60 – Log Information      |         |
| 1     | 1    | 2  | Function    |       | BB – Rep Code Transaction |         |
| 1     | 2    | 3  | Sub Opcode  |       | 1 – Trans<br>2 – Item     |         |
| 7     | 3    | 10 | PLU Code    |       |                           |         |
| 4     | 10   | 14 | Quantity    |       |                           |         |
| 1     | 14   | 15 | Flag1       |       |                           |         |
|       |      |    |             | Bit 0 | Automatic Repeat Code     |         |
|       |      |    |             | Bit 1 | Force Entry               |         |
|       |      |    |             | Bit 2 | Cancel Item               |         |
|       |      |    |             | Bit 3 | Subtract Item             |         |
|       |      |    |             | Bit 4 | Void Repeat Code          |         |
|       |      |    |             | Bit 5 | Manual Entry              |         |
|       |      |    |             | Bit 6 | Not Used                  |         |
|       |      |    |             | Bit 7 | Not Used                  |         |
| 2     | 15   | 17 | Repeat Code |       |                           |         |
| 27    | 17   | 44 | Not Used    |       |                           |         |
| 20    | 44   | 64 | Tail        |       |                           |         |
| 64    |      |    | Total       |       |                           |         |

## BC – Customer at SOT

### 0 X BC

**Explanation:** The Customer at SOT (Start of Ticket) is the transaction that records the information at the beginning of the ticket. Sending information on the status of the Payment Type, Customer Category, Cheque Limits, Credit Limits, etc.

| Bytes | From | To | Data                    | Bits  | Explanation                                  | Remarks                                        |
|-------|------|----|-------------------------|-------|----------------------------------------------|------------------------------------------------|
| 1     | 0    | 1  | Opcode                  |       | 60 – Log Information                         |                                                |
| 1     | 1    | 2  | Function                |       | BC –Customer at SOT                          |                                                |
| 1     | 2    | 3  | Sub Function            |       | 1 – Inf1<br>2 – Inf2<br>3 – Inf3<br>4 – Inf4 |                                                |
| 41    | 3    | 44 | Data                    |       |                                              |                                                |
|       |      |    | <b>Inf1</b>             |       |                                              |                                                |
| 1     | 3    | 4  | Payment Type            |       |                                              |                                                |
| 2     | 4    | 6  | Customer Category       |       |                                              |                                                |
| 4     | 6    | 10 | Rep Code                |       |                                              |                                                |
| 2     | 10   | 12 | Liquor Type             |       |                                              |                                                |
| 3     | 12   | 15 | Liquor Type Expiry Date |       |                                              |                                                |
| 1     | 15   | 16 | Flags                   |       |                                              |                                                |
|       |      |    |                         | bit 0 | Rounding                                     |                                                |
|       |      |    |                         | bit 1 | Case Discount                                |                                                |
|       |      |    |                         | bit 2 | First Recall Invoice                         |                                                |
|       |      |    |                         | bit 3 | Wet Tax                                      |                                                |
|       |      |    |                         | bit 4 | Not Used2                                    |                                                |
|       |      |    |                         | bit 5 | Foreign                                      |                                                |
|       |      |    |                         | bit 6 | Not Used                                     |                                                |
|       |      |    |                         | bit 7 | Not Used                                     |                                                |
| 1     | 16   | 17 | Flags                   |       |                                              |                                                |
|       |      |    |                         | bit 0 | Vat Exempt                                   | Inv_RRP<br>Invoice Markdown<br>Invoice Barcode |
|       |      |    |                         | bit 1 | Credit Card fee                              |                                                |
|       |      |    |                         | bit 2 | Delivery Charge                              |                                                |
|       |      |    |                         | bit 3 | Not Used                                     |                                                |



| Bytes       | From | To | Data                      | Bits  | Explanation             | Remarks   |
|-------------|------|----|---------------------------|-------|-------------------------|-----------|
|             |      |    |                           | bit 4 | Not Used                |           |
|             |      |    |                           | bit 5 | Invoice Not Used        |           |
|             |      |    |                           | bit 6 | Invoice Not Used        |           |
|             |      |    |                           | bit 7 | Invoice Not Used        |           |
| 2           | 17   | 19 | Home State                |       |                         |           |
| 1           | 19   | 20 | Customer Status           |       |                         |           |
| 4           | 20   | 24 | Cheque Limit              |       |                         |           |
| 4           | 24   | 28 | Credit Limit              |       |                         |           |
| 2           | 28   | 30 | Block Code                |       |                         |           |
| 1           | 30   | 31 | Discount CD               |       |                         |           |
| 4           | 31   | 35 | Surcharge<br>Percent      |       |                         |           |
| 2           | 35   | 37 | Customer at SOT<br>MCR    |       |                         |           |
| 1           | 37   | 38 | Flags                     |       |                         |           |
|             |      |    |                           | bit 0 | Customer Charge Posting |           |
|             |      |    |                           | bit 1 | Customer Offline        |           |
|             |      |    |                           | bit 2 | Customer Not Found      |           |
|             |      |    |                           | bit 3 | Customer Tax Exempt     |           |
|             |      |    |                           | bit 4 | Customer Branch         | Sale Proc |
|             |      |    |                           | bit 5 | Customer Reserve        |           |
|             |      |    |                           | bit 6 | Customer Reserve        |           |
|             |      |    |                           | bit 7 | Customer Reserve        |           |
| 1           | 38   | 39 | Staff Type                |       |                         |           |
| 1           | 39   | 40 | Price Exception           |       |                         |           |
| 1           | 40   | 41 | Price Type                |       |                         |           |
| 1           | 41   | 42 | Type of Payment<br>at SOT |       |                         | Sale Proc |
| 1           | 42   | 43 | Type Return               |       | Start up menu return    |           |
| 1           | 43   | 44 | Reserved                  |       |                         |           |
| <b>Inf2</b> |      |    |                           |       |                         |           |
| 12          | 3    | 15 | Liquor License            |       |                         |           |
| 10          | 15   | 25 | Tax ID                    |       |                         |           |
| 4           | 25   | 29 | Postal Code               |       |                         |           |
| 4           | 29   | 33 | Cheque Amount             |       |                         |           |
| 4           | 33   | 37 | Credit Amount             |       |                         |           |
| 7           | 37   | 44 | Reserved                  |       |                         |           |

| Bytes | From | To | Data  | Bits | Explanation | Remarks |
|-------|------|----|-------|------|-------------|---------|
| 20    | 44   | 64 | Tail  |      |             |         |
| 64    |      |    | Total |      |             |         |

## BD – Gift Basket

0 X BD

**Explanation:** Gift Basket

| Bytes | From | To | Data        | Bits  | Explanation          | Remarks |
|-------|------|----|-------------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode      |       | 60 – Log Information |         |
| 1     | 1    | 2  | Function    |       | BD – Gift Basket     |         |
| 2     | 2    | 4  | Gift Number |       |                      |         |
| 1     | 4    | 5  | Flags       |       |                      |         |
|       |      |    |             | bit 0 | Start                |         |
|       |      |    |             | bit 1 | End                  |         |
|       |      |    |             | bit 2 | Void Gift            |         |
|       |      |    |             | bit 3 | Not Used             |         |
|       |      |    |             | bit 4 | Not Used             |         |
|       |      |    |             | bit 5 | Not Used             |         |
|       |      |    |             | bit 6 | Not Used             |         |
|       |      |    |             | bit 7 | Not Used             |         |
| 39    | 5    | 44 | Reserved    |       |                      |         |
| 20    | 44   | 64 | Tail        |       |                      |         |
| 64    |      |    | Total       |       |                      |         |

## BE – EFT Handle Transaction

0 X BE

| Bytes | From | To | Data                    | Bits  | Explanation                 | Remarks                                                      |
|-------|------|----|-------------------------|-------|-----------------------------|--------------------------------------------------------------|
| 1     | 0    | 1  | Opcode                  |       | 60 – Log Information        |                                                              |
| 1     | 1    | 2  | Function –Sub<br>Opcode |       | BE – EFT Handle Transaction | EFT_NMD_CLICKS                                               |
| 4     | 2    | 6  | Handle Number           |       |                             |                                                              |
| 1     | 6    | 7  | Flags                   |       |                             |                                                              |
|       |      |    |                         | bit 0 | Invoice                     | (Ticket) handle                                              |
|       |      |    |                         | bit 1 | Item                        | (Elec. Voucher) handle                                       |
|       |      |    |                         | bit 2 | Media                       | EFT Handle, not really<br>used: handle send in<br>media_ext2 |
|       |      |    |                         | bit 3 | Cancel                      | Cancel Handle                                                |
|       |      |    |                         | bit 4 | Not Used                    | Future Use                                                   |
|       |      |    |                         | bit 5 | Not Used                    |                                                              |
|       |      |    |                         | bit 6 | Not Used                    |                                                              |
|       |      |    |                         | bit 7 | Not Used                    |                                                              |
| 37    | 7    | 44 | Reserved                |       | Not Used                    |                                                              |
| 20    | 44   | 64 | Tail                    |       |                             |                                                              |
| 64    |      |    | Total                   |       |                             |                                                              |

## BF – PRN\_NMD

0 X BF

| Bytes | From | To | Data         | Bits | Explanation          | Remarks        |
|-------|------|----|--------------|------|----------------------|----------------|
| 1     | 0    | 1  | Opcode       |      | 60 – Log Information |                |
| 1     | 1    | 2  | Function     |      | BF – PRN_NMD         | EFT_NMD_CLICKS |
| 1     | 2    | 3  | Sub Function |      | Number of string     |                |
| 41    | 3    | 44 | Data         |      |                      |                |
| 20    | 44   | 64 | Tail         |      |                      |                |
| 64    |      |    | Total        |      |                      |                |

## C0 – Loyalty Message

0 X C0

**Explanation:** The Loyalty Message

| Bytes | From | To | Data        | Bits  | Explanation                                                                   | Remarks |
|-------|------|----|-------------|-------|-------------------------------------------------------------------------------|---------|
| 1     | 0    | 1  | Opcode      |       | 60 – Log Information                                                          |         |
| 1     | 1    | 2  | Function    |       | C0 – Information Loyalty Messages                                             |         |
| 1     | 2    | 3  | Not Used    |       |                                                                               |         |
| 1     | 3    | 4  | Language ID |       |                                                                               |         |
| 2     | 4    | 6  | SMS Number  |       | BCD – Message ID                                                              |         |
| 20    | 6    | 26 | Card Number |       | 0 – Customer Specific Message<br>1 – All Loyalty<br>2 – Non-Loyalty Customers |         |
| 1     | 26   | 27 | Destination |       |                                                                               |         |
| 1     | 24   | 25 | Flag 1      |       |                                                                               |         |
|       |      |    |             | bit 0 | Remove Specific Link                                                          |         |
|       |      |    |             | bit 1 | Message Expired                                                               |         |
|       |      |    |             | bit 2 | Not Used                                                                      |         |
|       |      |    |             | bit 3 | Not Used                                                                      |         |
|       |      |    |             | bit 4 | Not Used                                                                      |         |
|       |      |    |             | bit 5 | Not Used                                                                      |         |
|       |      |    |             | bit 6 | Not Used                                                                      |         |
|       |      |    |             | bit 7 | Not Used                                                                      |         |
| 16    | 25   | 44 | Data        |       |                                                                               |         |
| 20    | 44   | 64 | Tail        |       |                                                                               |         |
| 64    |      |    | Total       |       |                                                                               |         |

## C0 – Foreign Currency/DCC Transaction Detail (TESCO)

### 0 X C0

**Explanation:** The Foreign Currency/DCC Transaction records all DCC (Dual Currency Conversion) and all foreign currency transactions when a foreign credit card is tendered. The customer is charged in the home currency according to the current conversion rate.

| Bytes | From | To | Data              | Bits | Explanation                               | Remarks    |
|-------|------|----|-------------------|------|-------------------------------------------|------------|
| 1     | 0    | 1  | Opcode            |      | 60 – Log Information                      | TESCO ONLY |
| 1     | 1    | 2  | Function          |      | C0 – Item Data Capture                    |            |
| 3     | 2    | 5  | Currency code     |      | Currency code                             |            |
| 3     | 5    | 8  | Currency Mnemonic |      | Currency Mnemonic                         |            |
| 13    | 8    | 21 | Currency Rate     |      | Currency Conversion rate used             |            |
| 6     | 21   | 27 | Currency Date     |      | Applicable date for the conversion rate   |            |
| 4     | 27   | 31 | Home value        |      | Tender value charged in the home currency |            |
| 13    | 31   | 44 | Not Used          |      |                                           |            |
| 20    | 44   | 64 | Tail              |      |                                           |            |
| 64    |      |    | Total             |      |                                           |            |

## C1 – Loyalty Customer

### 0 X C1

**Explanation:** The Loyalty Customer function records the information on Customer Points earned from using a Loyalty Card.

| Bytes | From | To | Data                  | Bits  | Explanation                                     | Remarks                          |
|-------|------|----|-----------------------|-------|-------------------------------------------------|----------------------------------|
| 1     | 0    | 1  | Opcode                |       | 60 – Log Information                            |                                  |
| 1     | 1    | 2  | Function              |       | C1 – Information Loyalty Customer               |                                  |
| 10    | 2    | 12 | Card Number           |       | Loyalty Card Number in BCD                      |                                  |
| 4     | 12   | 16 | Customer Points       |       | Points up to date                               |                                  |
| 4     | 16   | 20 | Today Earned Points   |       | Points earned during the day – From the Server  |                                  |
| 4     | 20   | 24 | Today Redeemed Points |       | Points redeemed during the day from the Server. |                                  |
| 1     | 24   | 25 | Flag 1                |       |                                                 |                                  |
|       |      |    |                       | bit 0 | Record In Server                                | Customer in server cust.qdx file |
|       |      |    |                       | bit 1 | Not Used                                        |                                  |
|       |      |    |                       | bit 2 | Not Used                                        |                                  |
|       |      |    |                       | bit 3 | Not Used                                        |                                  |
|       |      |    |                       | bit 4 | Not Used                                        |                                  |
|       |      |    |                       | bit 5 | Not Used                                        |                                  |
|       |      |    |                       | bit 6 | Not Used                                        |                                  |
|       |      |    |                       | bit 7 | Not Used                                        |                                  |
| 19    | 25   | 44 | Not Used19            |       |                                                 |                                  |
| 20    | 44   | 64 | Tail                  |       |                                                 |                                  |
| 64    |      |    | Total                 |       |                                                 |                                  |



## C2 – EFT Information Data

0 X C2

| Bytes | From | To | Data               | Bits  | Explanation                                                                                                                                                                   | Remarks              |
|-------|------|----|--------------------|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| 1     | 0    | 1  | Opcode             |       | 60 – Log Information                                                                                                                                                          |                      |
| 1     | 1    | 2  | Function           |       | 0 X C2 Trans Info EFT Data                                                                                                                                                    |                      |
| 2     | 2    | 4  | Session ID         |       |                                                                                                                                                                               |                      |
| 1     | 4    | 5  | Customer Wait Time |       |                                                                                                                                                                               |                      |
| 1     | 5    | 6  | Total Network Time |       |                                                                                                                                                                               |                      |
| 1     | 6    | 7  | Flag               |       |                                                                                                                                                                               |                      |
|       |      |    |                    | bit 0 | Communication timeout                                                                                                                                                         |                      |
|       |      |    |                    | bit 1 | Offline Authorization                                                                                                                                                         |                      |
|       |      |    |                    | bit 2 | Not Used                                                                                                                                                                      |                      |
|       |      |    |                    | bit 3 | Not Used                                                                                                                                                                      |                      |
|       |      |    |                    | bit 4 | Not Used                                                                                                                                                                      |                      |
|       |      |    |                    | bit 5 | Not Used                                                                                                                                                                      |                      |
|       |      |    |                    | bit 6 | Not Used                                                                                                                                                                      |                      |
|       |      |    |                    | bit 7 | Not Used                                                                                                                                                                      |                      |
| 1     | 7    | 8  | Card Type          |       | 0 – Cheque card<br>1 – Debit card<br>2 – Credit card<br>3 – Charge card<br>4 – Fuel card<br>6 – Security card<br>7 – Loyalty card<br>8 – Staff discount<br>9 – Consumer panel | Includes check cards |
| 2     | 8    | 10 | Card Range Number  |       |                                                                                                                                                                               |                      |
| 9     | 10   | 19 | XAuthCode          |       | BASE24 “0000” if online authorization source<br>BASE24 “IHCF” if only checked in bad account list                                                                             |                      |

| Bytes | From | To | Data             | Bits | Explanation   | Remarks |
|-------|------|----|------------------|------|---------------|---------|
| 1     | 19   | 20 | Separator Place  |      |               |         |
| 1     | 20   | 21 | Length           |      |               |         |
| 20    | 21   | 41 | Data             |      |               |         |
| 1     | 41   | 42 | Authorize Source |      | Same as Below |         |
| 2     | 42   | 44 | Not Used         |      |               |         |
| 20    | 44   | 64 | Tail             |      |               |         |
| 64    |      |    | Total            |      |               |         |

## C3 – Information Additional Credit Limit

### 0 X C3

**Explanation:** This Opcode is used to send information on the Customers and their Credit Card Limits, during the transaction. It is used for the “METRO” project.

| Bytes | From | To | Data            | Bits | Explanation                                           | Remarks    |
|-------|------|----|-----------------|------|-------------------------------------------------------|------------|
| 1     | 0    | 1  | Opcode          |      | 60 – Log Information                                  |            |
| 1     | 1    | 2  | Function        |      | C3 – Transaction: Allow additional credit/check limit | ROW: METRO |
| 1     | 2    | 3  | Type Limit      |      | 1 – Credit Limit<br>2 – Check Limit                   |            |
| 4     | 3    | 7  | Amount          |      |                                                       |            |
| 20    | 7    | 27 | Customer Number |      |                                                       |            |
| 17    | 27   | 44 | Not Used        |      |                                                       |            |
| 20    | 44   | 64 | Tail            |      |                                                       |            |
| 64    |      |    | Total           |      |                                                       |            |

## C4 – Clubcard Information

### 0 X C4

**Explanation:** The Clubcard Information function records the information read from a Clubcard during the transaction, recording the Card Number, Expiry Year, Expiry Month, etc.

| Bytes | From | To | Data                     | Bits  | Explanation                     | Remarks |
|-------|------|----|--------------------------|-------|---------------------------------|---------|
| 1     | 0    | 1  | Opcode                   |       | 60 – Log Information            |         |
| 1     | 1    | 2  | Function                 |       | C4                              |         |
| 10    | 2    | 12 | SCard No                 |       | Card number in BCD              |         |
| 2     | 12   | 14 | shExpYear                |       |                                 |         |
| 1     | 14   | 15 | chExpMonth               |       |                                 |         |
| 1     | 15   | 16 | chIssue Number           |       |                                 |         |
| 1     | 16   | 17 | Flags                    | Bit 0 | Secondary ID                    |         |
|       |      |    |                          | Bit 1 | Chip Card Used                  |         |
|       |      |    |                          | Bit 2 | Octopus Loyalty Card            |         |
|       |      |    |                          | Bit 3 | Loyalty Issue Only              |         |
|       |      |    |                          | Bit 4 | Rocks Loyalty Card              |         |
|       |      |    |                          | Bit 5 | Master Card From Barcode        |         |
|       |      |    |                          | Bit 6 | Void Barcode When Scheme Voided |         |
|       |      |    |                          | Bit 7 | Not Used                        |         |
| 10    | 17   | 27 | Master Account Number    |       |                                 |         |
| 2     | 27   | 29 | CardStoreNum             |       | Member Card Store Number        |         |
| 1     | 29   | 30 | Loyalty Type             |       |                                 |         |
| 2     | 30   | 32 | Tender Number            |       |                                 |         |
| 4     | 32   | 36 | lACIOrderDiscountPercent |       | ACI Order Discount Percent      |         |
| 1     | 36   | 37 | Flags                    | Bit 0 | CCMS Customer                   |         |
|       |      |    |                          | Bit 1 | CCMS Customer Offline           |         |
|       |      |    |                          | Bit 2 | Not Used                        |         |
|       |      |    |                          | Bit 3 | Not Used                        |         |
|       |      |    |                          | Bit 4 | Not Used                        |         |
|       |      |    |                          | Bit 5 | Not Used                        |         |
|       |      |    |                          | Bit 6 | Not Used                        |         |
|       |      |    |                          | Bit 7 | Not Used                        |         |
| 7     | 37   | 44 | Reserved                 |       |                                 |         |

| Bytes | From | To | Data  | Bits | Explanation | Remarks |
|-------|------|----|-------|------|-------------|---------|
| 20    | 44   | 64 | Tail  |      |             |         |
| 64    |      |    | Total |      |             |         |

## C5 – External Charge Payment

0 X C5

| Bytes | From | To | Data     | Bits  | Explanation                                             | Remarks                       |
|-------|------|----|----------|-------|---------------------------------------------------------|-------------------------------|
| 1     | 0    | 1  | Opcode   |       | 60 – Log Information                                    |                               |
| 1     | 1    | 2  | Function |       | C5 – Transaction External Charge Payment                |                               |
| 10    | 2    | 12 | Account  |       | BCD of account, without check digit, with leading zeros |                               |
| 1     | 12   | 13 | Flag     | bit 0 | is_reversal_charge_payment                              | Is it reversal charge payment |
|       |      |    |          | bit 1 | Not Used                                                |                               |
|       |      |    |          | bit 2 | Not Used                                                |                               |
|       |      |    |          | bit 3 | Not Used                                                |                               |
|       |      |    |          | bit 4 | Not Used                                                |                               |
|       |      |    |          | bit 5 | Not Used                                                |                               |
|       |      |    |          | bit 6 | Not Used                                                |                               |
|       |      |    |          | bit 7 | Not Used                                                |                               |
| 4     | 13   | 17 | Amount   |       | Always positive                                         |                               |
| 27    | 17   | 44 | Reserved |       |                                                         |                               |
| 20    | 44   | 64 | Tail     |       |                                                         |                               |
| 64    |      |    | Total    |       |                                                         |                               |

## C6 – Self-Scanning Recovery

0 X C6

| Bytes | From | To | Data             | Bits  | Explanation                                            | Remarks                       |
|-------|------|----|------------------|-------|--------------------------------------------------------|-------------------------------|
| 1     | 0    | 1  | Opcode           |       | 60 – Log Information                                   |                               |
| 1     | 1    | 2  | Function         |       | C6 – Self-Scanning Recovery<br>Information Transaction |                               |
| 1     | 2    | 3  | Flags            |       |                                                        |                               |
|       |      |    |                  | bit 0 | Additional Item Selling                                |                               |
|       |      |    |                  | bit 1 | Self-scanning Ticket Execution                         |                               |
|       |      |    |                  | bit 2 | Self-scanning Ticket Parsed                            |                               |
|       |      |    |                  | bit 3 | Self-scanning Rescan Execution                         |                               |
|       |      |    |                  | bit 4 | Self-scanning Return Ticket                            |                               |
|       |      |    |                  | bit 5 | Ticket Finished                                        | Ticket Parsed<br>Successfully |
|       |      |    |                  | bit 6 | Order Number as Trans Number                           |                               |
|       |      |    |                  | bit 7 | Not Used                                               |                               |
| 1     | 3    | 4  | Self System Type |       | 1 – Fast_Track<br>2 – Home_Shopping                    |                               |
| 8     | 4    | 12 | Order Number     |       |                                                        |                               |
| 32    | 12   | 44 | Not Used         |       |                                                        |                               |
| 20    | 44   | 64 | Tail             |       |                                                        |                               |
| 64    |      |    | Total            |       |                                                        |                               |

## C7 – Information on Invoice Recall

### 0 X C7

**Explanation:** The Information on Invoice Recall Opcode sends on-line information to indicate to the Back Office that the invoice was recalled, and eliminates the chances of the POS trying to simultaneously recall the invoice.

| Bytes | From | To | Data                | Bits  | Explanation                        | Remarks |
|-------|------|----|---------------------|-------|------------------------------------|---------|
| 1     | 0    | 1  | Opcode              |       | 60 – Log Information               | (METRO) |
| 1     | 1    | 2  | Function            |       | C7 – Information on Invoice Recall |         |
| 8     | 2    | 10 | Invoice Number      |       |                                    |         |
| 3     | 10   | 13 | Invoice Date        |       |                                    |         |
| 1     | 13   | 14 | Flags               |       |                                    |         |
|       |      |    |                     | bit 0 | Use Original POS Number            |         |
|       |      |    |                     | bit 1 | Void Recalled Invoice              |         |
|       |      |    |                     | bit 2 | Not Used                           |         |
|       |      |    |                     | bit 3 | Not Used                           |         |
|       |      |    |                     | bit 4 | Not Used                           |         |
|       |      |    |                     | bit 5 | Not Used                           |         |
|       |      |    |                     | bit 6 | Not Used                           |         |
|       |      |    |                     | bit 7 | Not Used                           |         |
| 1     | 14   | 15 | Original POS Number |       |                                    |         |
| 29    | 15   | 44 | Not Used            |       |                                    |         |
| 20    | 44   | 64 | Tail                |       |                                    |         |
| 64    |      |    | Total               |       |                                    |         |



## C9 – Customer Language

0 X C9

**Explanation:** Multi-Language.

| Bytes | From | To | Data              | Bits  | Explanation            | Remarks |
|-------|------|----|-------------------|-------|------------------------|---------|
| 1     | 0    | 1  | Opcode            |       | 60 – Log Information   |         |
| 1     | 1    | 2  | Function          |       | C9                     |         |
| 2     | 2    | 4  | Customer Language |       |                        |         |
| 1     | 4    | 5  | Flags             |       |                        |         |
|       |      |    |                   | bit 0 | Manual Language Change |         |
|       |      |    |                   | bit 1 | Not Used               |         |
|       |      |    |                   | bit 2 | Not Used               |         |
|       |      |    |                   | bit 3 | Not Used               |         |
|       |      |    |                   | bit 4 | Not Used               |         |
|       |      |    |                   | bit 5 | Not Used               |         |
|       |      |    |                   | bit 6 | Not Used               |         |
|       |      |    |                   | bit 7 | Not Used               |         |
| 39    | 5    | 44 | Not Used          |       |                        |         |
| 20    | 44   | 64 | Tail              |       |                        |         |
| 64    |      |    | Total             |       |                        |         |

## CB – Information on Non-Merchandise

### 0 X CB

**Explanation:** The Information on Non-Merchandise function records Information on Non-Merchandise item sales. **Note:** This is relevant to ISS45, however, in ROW it refers to wholesale item sales.

| Bytes | From | To | Data              | Bits                  | Explanation               | Remarks              |
|-------|------|----|-------------------|-----------------------|---------------------------|----------------------|
| 1     | 0    | 1  | Opcode            |                       | 60 – Log Information      |                      |
| 1     | 1    | 2  | Function          |                       | CB – Info_non_merchandise |                      |
| 7     | 2    | 9  | PLU Code          |                       | Item number               |                      |
| 2     | 9    | 11 | Department Number |                       |                           |                      |
| 1     | 11   | 12 | Flags             |                       |                           |                      |
|       |      |    |                   | bit 0                 | Non-merchandise Item      |                      |
|       |      |    |                   | bit 1                 | Tax Exclusive             | Tax is GST exclusive |
|       |      |    |                   | bit 2                 | Not Used                  | For Future Use       |
|       |      |    |                   | bit 3                 | Not Used                  |                      |
|       |      |    |                   | bit 4                 | Not Used                  |                      |
|       |      |    |                   | bit 5                 | Not Used                  |                      |
|       |      |    |                   | bit 6                 | Not Used                  |                      |
|       |      |    |                   | bit 7                 | Not Used                  |                      |
| 4     | 12   | 16 | Tax Amount        |                       | Tax on this item          |                      |
| 28    | 16   | 44 | Reserved          |                       |                           |                      |
|       |      |    |                   | Frequent Shopper Type |                           |                      |
| 20    | 44   | 64 | Tail              |                       |                           |                      |
| 64    |      |    | Total             |                       |                           |                      |

## CC – Loyalty Mail Information

0 X CC

**Explanation:** The Loyalty Mail Information records the customers mailing details. The transaction sends the Card Number and Mail Delivery Status.

| Bytes | From | To | Data                 | Bits | Explanation                   | Remarks |
|-------|------|----|----------------------|------|-------------------------------|---------|
| 1     | 0    | 1  | Opcode               |      | 60 – Log Information          |         |
| 1     | 1    | 2  | Function             |      | CC – Loyalty Mail Information |         |
| 10    | 2    | 12 | Card Number          |      | Card Number in BCD            |         |
| 1     | 12   | 13 | Mail Delivery Status |      |                               |         |
| 31    | 13   | 44 | Not Used             |      |                               |         |
| 20    | 44   | 64 | Tail                 |      |                               |         |
| 64    |      |    | Total                |      |                               |         |

## CD – Information Exclusive Calculation

0 X CD

**Explanation:** Wholesale GST calculation information.

| Bytes | From | To | Data                           | Bits | Explanation          | Remarks |
|-------|------|----|--------------------------------|------|----------------------|---------|
| 1     | 0    | 1  | Opcode                         |      | 60 – Log Information |         |
| 1     | 1    | 2  | Function                       |      | CD – SubOpcode       |         |
| 7     | 2    | 9  | PLU Code                       |      | Item number          |         |
| 2     | 9    | 11 | Department<br>Number           |      |                      |         |
| 4     | 11   | 15 | Tax on Customer<br>Discount    |      |                      |         |
| 4     | 15   | 19 | Tax on Staff<br>Discount       |      |                      |         |
| 4     | 19   | 23 | Tax on Case<br>Discount Amount |      |                      |         |
| 4     | 23   | 27 | Tax on Surcharge<br>Amount     |      |                      |         |
| 4     | 27   | 31 | Tax on Broken<br>Pack          |      |                      |         |
| 4     | 31   | 35 | Tax on Service<br>Fee          |      |                      |         |
| 4     | 35   | 39 | Tax on Extra Fee<br>1          |      |                      |         |
| 4     | 39   | 43 | Tax on Extra Fee<br>2          |      |                      |         |
| 1     | 43   | 44 | Not Used                       |      |                      |         |
| 20    | 44   | 64 | Tail                           |      |                      |         |
| 64    |      |    | Total                          |      |                      |         |

## CE – Information Supplementary Data

0 X CE

| Bytes | From | To | Data          | Bits | Explanation                            | Remarks |
|-------|------|----|---------------|------|----------------------------------------|---------|
| 1     | 0    | 1  | Opcode        |      | 60 – Log Information                   |         |
| 1     | 1    | 2  | Function      |      | CE – Information<br>Supplementary Data |         |
| 2     | 2    | 4  | Tender Number |      |                                        |         |
| 1     | 4    | 5  | Type          |      |                                        |         |
| 8     | 5    | 13 | Data          |      |                                        |         |
| 31    | 13   | 44 | Reserved      |      |                                        |         |
| 20    | 44   | 64 | Tail          |      |                                        |         |
| 64    |      |    | Total         |      |                                        |         |

## CF – Information on Barcode Program

0 X CF

| Bytes | From | To | Data         | Bits | Explanation                         | Remarks |
|-------|------|----|--------------|------|-------------------------------------|---------|
| 1     | 0    | 1  | Opcode       |      | 60 – Log Information                |         |
| 1     | 1    | 2  | Function     |      | CF – Information on Barcode Program |         |
| 2     | 2    | 4  | Barcode Type |      |                                     |         |
| 2     | 4    | 6  | Segments     |      |                                     |         |
| 4     | 6    | 10 | Points       |      |                                     |         |
| 34    | 10   | 44 | Reserved     |      |                                     |         |
| 20    | 44   | 64 | Tail         |      |                                     |         |
| 64    |      |    | Total        |      |                                     |         |

## D0 – Information Invoice Request

### 0 X D0

**Explanation:** The Information Invoice Request is recorded when there is an invoice request from the Front Office.

| Bytes | From | To | Data           | Bits  | Explanation                                            | Remarks |
|-------|------|----|----------------|-------|--------------------------------------------------------|---------|
| 1     | 0    | 1  | Opcode         |       | 60 – Log Information                                   |         |
| 1     | 1    | 2  | Function       |       | D0 – Invoice Request                                   |         |
| 1     | 2    | 3  | Flag 1         |       |                                                        |         |
|       |      |    |                | bit 0 | 1 - Immediate<br>0 - Delayed                           |         |
|       |      |    |                | bit 1 | Not Used                                               |         |
|       |      |    |                | bit 2 | Not Used                                               |         |
|       |      |    |                | bit 3 | Not Used                                               |         |
|       |      |    |                | bit 4 | Not Used                                               |         |
|       |      |    |                | bit 5 | Not Used                                               |         |
|       |      |    |                | bit 6 | Not Used                                               |         |
|       |      |    |                | bit 7 | Not Used                                               |         |
| 1     | 3    | 4  | Invoice Type   |       | 1 – Belgium VAT<br>2 – Phone number<br>3 – Foreign VAT |         |
| 10    | 4    | 14 | Invoice Number |       | Belgium VAT/Phone<br>number/Foreign VAT                |         |
| 2     | 14   | 16 | Ticket Number  |       |                                                        |         |
| 1     | 16   | 17 | POS_No         |       |                                                        |         |
| 27    | 17   | 44 | Filler         |       | For Future Use                                         |         |
| 20    | 44   | 64 | Tail           |       |                                                        |         |
| 64    |      |    | Total          |       |                                                        |         |

## D1 – Information Transaction

### 0 X D1

**Explanation:** The Information Transaction function indicates that a secondary ID has been added to the member card (OEM – USA). Information recorded includes: Member Card No., Alternative ID, Previous Alternative ID, etc.

| Bytes | From | To | Data                       | Bits | Explanation           | Remarks                 |
|-------|------|----|----------------------------|------|-----------------------|-------------------------|
| 1     | 0    | 1  | Opcode                     |      | 60 – Log Information  |                         |
| 1     | 1    | 2  | Function                   |      | D1 – Info transaction |                         |
| 15    | 2    | 17 | Member card No.            |      |                       |                         |
| 10    | 17   | 27 | Alternative ID             |      |                       |                         |
| 10    | 27   | 37 | Previous<br>Alternative ID |      |                       |                         |
| 2     | 37   | 39 | Rc                         |      |                       |                         |
| 2     | 39   | 41 | Club Comb to<br>Join       |      |                       | Holds the clubs as bits |
| 2     | 41   | 43 | Club Comb to<br>Quit       |      |                       | Hold the clubs as bits  |
| 1     | 43   | 44 | Reserved                   |      |                       |                         |
| 20    | 44   | 64 | Tail                       |      |                       |                         |
| 64    |      |    | Total                      |      |                       |                         |



## D2 – Create Clubcard

0 X D2

| Bytes | From | To | Data           | Bits | Explanation          | Remarks |
|-------|------|----|----------------|------|----------------------|---------|
| 1     | 0    | 1  | Opcode         |      | 60 – Log Information |         |
| 1     | 1    | 2  | Function       |      | D2 – Create Clubcard |         |
| 10    | 2    | 12 | Card Number    |      | Card Number in BCD   |         |
| 1     | 12   | 13 | General Status |      |                      |         |
| 31    | 13   | 44 | Not Used       |      |                      |         |
| 20    | 44   | 64 | Tail           |      |                      |         |
| 64    |      |    | Total          |      |                      |         |

## D3 – Information Coupon Redemption

0 X D3

| Bytes | From | To | Data          | Bits | Explanation                      | Remarks                           |
|-------|------|----|---------------|------|----------------------------------|-----------------------------------|
| 1     | 0    | 1  | Opcode        |      | 60 – Log Information             |                                   |
| 1     | 1    | 2  | Function      |      | 0 X D3 Information OEM Club Data |                                   |
| 20    | 2    | 22 | Card Number   |      |                                  | Card no. in ASCII null terminated |
| 20    | 22   | 42 | Coupon Number |      |                                  |                                   |
| 2     | 42   | 44 | Message Id    |      |                                  |                                   |
| 20    | 44   | 64 | Tail          |      |                                  |                                   |
| 64    |      |    | Total         |      |                                  |                                   |

## D4 – Bookkeeping PLU Sale

0 X D4

| Bytes | From | To | Data     | Bits  | Explanation                     | Remarks                       |
|-------|------|----|----------|-------|---------------------------------|-------------------------------|
| 1     | 0    | 1  | Opcode   |       | 60 – Log Information            |                               |
| 1     | 1    | 2  | Function |       | D4 – Info Book keeping PLU Sale |                               |
| 7     | 2    | 9  | PLU code |       | BCD                             |                               |
| 1     | 9    | 10 | Flag 1   |       |                                 |                               |
|       |      |    |          | Bit 0 | Extended Record                 | Trans 0x11 will follow        |
|       |      |    |          | Bit 1 | Subtract Item                   |                               |
|       |      |    |          | Bit 2 | Cancel Item                     |                               |
|       |      |    |          | Bit 3 | Negative Item                   |                               |
|       |      |    |          | Bit 4 | Was Canceled Item               |                               |
|       |      |    |          | Bit 5 | Supplier Promotion              |                               |
|       |      |    |          | Bit 6 | Staff Discountable              |                               |
|       |      |    |          | Bit 7 | Accept Price Override           |                               |
| 1     | 10   | 11 | Flag 2   |       |                                 |                               |
|       |      |    |          | Bit 0 | Item on sale                    |                               |
|       |      |    |          | Bit 1 | Price Override                  |                               |
|       |      |    |          | Bit 2 | Manual Price                    | Price was keyed               |
|       |      |    |          | Bit 3 | Manual Price Allowed            | Manual Price allowed for item |
|       |      |    |          | Bit 4 | Weight From Scale               | No manual weight entry        |
|       |      |    |          | Bit 5 | Quantity is Weight              | Weighted item sold            |
|       |      |    |          | Bit 6 | Quantity is Decimal Quantity    |                               |
|       |      |    |          | Bit 7 | Quantity is Fuel Gallons        | PosPump                       |
| 1     | 11   | 12 | Flag 3   |       |                                 |                               |
|       |      |    |          | Bit 0 | Chained Previous Item           |                               |
|       |      |    |          | Bit 1 | Promotion                       | Item Promotion Flag           |
|       |      |    |          | Bit 2 | Reduction                       |                               |
|       |      |    |          | Bit 3 | Offer                           |                               |
|       |      |    |          | Bit 4 | Non Merchandise                 |                               |
|       |      |    |          | Bit 5 | Store Coupon                    |                               |
|       |      |    |          | Bit 6 | Vendor Coupon                   |                               |
|       |      |    |          | Bit 7 | Item Discount Flag              |                               |
| 1     | 12   | 13 | Flag 4   |       |                                 |                               |
|       |      |    |          | Bit 0 | Scanned Item                    |                               |

| Bytes | From | To | Data                     | Bits  | Explanation               | Remarks                                           |
|-------|------|----|--------------------------|-------|---------------------------|---------------------------------------------------|
| 1     | 13   | 14 | Flag 5                   | Bit 1 | Read from PC              |                                                   |
|       |      |    |                          | Bit 2 | Next Info                 |                                                   |
|       |      |    |                          | Bit 3 | Non RX                    |                                                   |
|       |      |    |                          | Bit 4 | Extended Promotion        |                                                   |
|       |      |    |                          | Bit 5 | Price Embedded            |                                                   |
|       |      |    |                          | Bit 6 | FF drags Modifier         | Coffee shop great 8 item                          |
|       |      |    |                          | Bit 7 | WIC CVV                   |                                                   |
|       |      |    |                          |       |                           |                                                   |
|       |      |    |                          | Bit 0 | Offer Discount            | 03 will follow                                    |
|       |      |    |                          | Bit 1 | Offer Continue            | Continuation offer                                |
|       |      |    |                          | Bit 2 | Offer First               | 01 & 03 will follow                               |
|       |      |    |                          | Bit 3 | Counter Dept              | Taken from dep struct                             |
|       |      |    |                          | Bit 4 | Return to Stock           | Taken from return struct                          |
|       |      |    |                          | Bit 5 | Cost Plus                 |                                                   |
|       |      |    |                          | Bit 6 | Frequent Shopper Discount |                                                   |
|       |      |    |                          | Bit 7 | Food Stamp payment        |                                                   |
| 2     | 14   | 16 | Dept                     |       |                           |                                                   |
| 1     | 16   | 17 | Multiple Sell Unit       |       |                           |                                                   |
| 1     | 17   | 18 | Return Type              |       |                           |                                                   |
| 1     | 18   | 19 | Tax Ptr                  |       |                           |                                                   |
| 4     | 19   | 23 | Quantity                 |       |                           |                                                   |
| 4     | 23   | 27 | Price                    |       |                           |                                                   |
| 4     | 27   | 31 | Amount                   |       |                           |                                                   |
| 4     | 31   | 35 | Non Tax Price            |       |                           |                                                   |
| 4     | 35   | 39 | Non Tax Amount           |       |                           |                                                   |
| 4     | 39   | 43 | Return Surcharge Percent |       |                           |                                                   |
| 1     | 43   | 44 | Flag 6                   |       |                           |                                                   |
|       |      |    |                          | Bit 0 | FF modifier price         | Coffee great 8 modifier + price                   |
|       |      |    |                          | Bit 1 | Markdown                  | progressive                                       |
|       |      |    |                          | Bit 2 | Member discount           | progressive                                       |
|       |      |    |                          | Bit 3 | Bottle deposit            |                                                   |
|       |      |    |                          | Bit 4 | Bottle refund             |                                                   |
|       |      |    |                          | Bit 5 | Opt RX                    | FSA Legal requirements for USA, prescription item |

| Bytes | From | To | Data  | Bits  | Explanation              | Remarks               |
|-------|------|----|-------|-------|--------------------------|-----------------------|
|       |      |    |       | Bit 6 | Limit quantity promotion |                       |
|       |      |    |       | Bit 7 | Reward check             | ROW (Case item Sales) |
| 20    | 44   | 64 | Tail  |       |                          |                       |
| 64    |      |    | Total |       |                          |                       |

## D5 – Online Information Script Sales

### 0 X D5

**Explanation:** The Online Information Script Sales function sends on-line information during the transaction that a prescription was selected during the sale/return. The transaction indicates that the script was prescribed, and the POS terminal locks the option of it being accepted again on another POS terminal. The Opcode records the Status of the Prescription, Surname, Patient Number, Script Number, etc.

| Bytes | From | To | Data                | Bits  | Explanation                                                | Remarks            |
|-------|------|----|---------------------|-------|------------------------------------------------------------|--------------------|
| 1     | 0    | 1  | Opcode              |       | 60 – Log Information                                       |                    |
| 1     | 1    | 2  | Function            |       | D5                                                         | Pharmacy Project   |
| 1     | 2    | 3  | Status              |       | Status of Prescription<br>0 – Uncommitted<br>1 – Committed |                    |
| 18    | 3    | 21 | Surname             |       | Patients Surname                                           |                    |
| 3     | 21   | 24 | Patient Number      |       | BCD – Patients Number                                      |                    |
| 3     | 24   | 27 | Script Number       |       | BCD                                                        |                    |
| 1     | 27   | 28 | Flag                |       |                                                            |                    |
|       |      |    |                     | bit 0 | Original POS Number                                        |                    |
|       |      |    |                     | bit 1 | Void Script                                                | Script is voided   |
|       |      |    |                     | bit 2 | Return Script                                              | Script is returned |
|       |      |    |                     | bit 3 | Not Used                                                   |                    |
|       |      |    |                     | bit 4 | Not Used                                                   |                    |
|       |      |    |                     | bit 5 | Not Used                                                   |                    |
|       |      |    |                     | bit 6 | Not Used                                                   |                    |
|       |      |    |                     | bit 7 | Not Used                                                   |                    |
| 1     | 28   | 29 | Original POS Number |       |                                                            |                    |
| 15    | 29   | 44 | Not Used            |       |                                                            |                    |
| 20    | 44   | 64 | Tail                |       |                                                            |                    |
| 64    |      |    | Total               |       |                                                            |                    |

## D6 – Payment Information Transaction For Script

### 0 X D6

**Explanation:** The Payment Information Transaction for Script function sends on-line information during a transaction that a pharmaceutical script was selected, recording information about the patient, prescription, and drug that was selected.

| Bytes | From | To | Data             | Bits  | Explanation                                                | Remarks            |
|-------|------|----|------------------|-------|------------------------------------------------------------|--------------------|
| 1     | 0    | 1  | Opcode           |       | 60 – Log Information                                       |                    |
| 1     | 1    | 2  | Function         |       | D6                                                         | Pharmacy Project   |
| 1     | 2    | 3  | Sub Function     |       | 1 – Inf 1<br>2 – Inf 2                                     |                    |
|       |      |    | Inf 1            |       |                                                            |                    |
| 1     | 3    | 4  | Status           |       | Status of Prescription<br>0 – Uncommitted<br>1 – Committed |                    |
| 18    | 4    | 22 | Surname          |       | Patients Surname                                           |                    |
| 3     | 22   | 25 | Patient Number   |       | BCD – Patients Number                                      |                    |
| 3     | 25   | 28 | Script Number    |       | BCD                                                        |                    |
| 1     | 28   | 29 | Flag             |       |                                                            |                    |
|       |      |    |                  | bit 0 | Void Script                                                | Script is voided   |
|       |      |    |                  | bit 1 | Return Script                                              | Script is returned |
|       |      |    |                  | bit 2 | Not Used                                                   |                    |
|       |      |    |                  | bit 3 | Not Used                                                   |                    |
|       |      |    |                  | bit 4 | Not Used                                                   |                    |
|       |      |    |                  | bit 5 | Not Used                                                   |                    |
|       |      |    |                  | bit 6 | Not Used                                                   |                    |
|       |      |    |                  | bit 7 | Not Used                                                   |                    |
| 15    | 29   | 44 | Not Used         |       |                                                            |                    |
|       |      |    | Inf 2            |       |                                                            |                    |
| 14    | 3    | 17 | Drug Description |       |                                                            |                    |
| 10    | 17   | 27 | Strength of Drug |       |                                                            |                    |
| 4     | 27   | 31 | Price of Drug    |       |                                                            |                    |
| 1     | 31   | 32 | Tax Code         |       |                                                            |                    |
| 12    | 32   | 44 | Not Used         |       |                                                            |                    |
| 20    | 44   | 64 | Tail             |       |                                                            |                    |
| 64    |      |    | Total            |       |                                                            |                    |





## D7 – Transaction Information Points

### 0 X D7

**Explanation:** The Transaction Information Points Opcode records the Message ID sent, reporting how many points a customer earned during a transaction.

| Bytes | From | To | Data            | Bits  | Explanation          | Remarks |
|-------|------|----|-----------------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode          |       | 60 – Log Information |         |
| 1     | 1    | 2  | Function Report |       | D7                   |         |
| 2     | 2    | 4  | Message ID      |       |                      |         |
| 4     | 4    | 8  | Points          |       |                      |         |
| 7     | 8    | 15 | PLU/Dep code    |       |                      | BCD     |
| 1     | 15   | 16 | Flag            | Bit 0 | Item is Department   |         |
|       |      |    |                 | Bit 1 | Adjust is Credit     |         |
|       |      |    |                 | Bit 2 | Barcode Points       |         |
|       |      |    |                 | Bit 3 | Original Points      |         |
|       |      |    |                 | Bit 4 | Option was cancelled |         |
|       |      |    |                 | Bit 5 | Not Used             |         |
|       |      |    |                 | Bit 6 | Not Used             |         |
|       |      |    |                 | Bit 7 | Not Used             |         |
| 28    | 16   | 44 | Reserved        |       |                      |         |
| 20    | 44   | 64 | Tail            |       |                      |         |
| 64    |      |    | Total           |       |                      |         |

## D8 – Phone Card Action

### 0 X D8

**Explanation:** The Phone Card Action is the information recorded when the customer is adding Air-Time to a Phone Card. The Cashiers Action, Card Number, and Authorization Number are recorded during the transaction.

| Bytes | From | To | Data                 | Bits  | Explanation            | Remarks                  |
|-------|------|----|----------------------|-------|------------------------|--------------------------|
| 1     | 0    | 1  | Opcode               |       | 60 – Log Information   |                          |
| 1     | 1    | 2  | Function             |       | D8                     |                          |
| 1     | 2    | 3  | Action Type          |       |                        |                          |
| 22    | 3    | 25 | Card Number          |       |                        |                          |
| 9     | 25   | 34 | Authorization Number |       |                        |                          |
| 1     | 34   | 35 | Flag                 |       |                        |                          |
|       |      |    |                      | Bit 0 | Manually Swiped        | Card was swiped manually |
|       |      |    |                      | Bit 1 | Phone card return      |                          |
|       |      |    |                      | Bit 2 | Phone card void        |                          |
|       |      |    |                      | Bit 3 | Deactivation allowed   |                          |
|       |      |    |                      | Bit 4 | MTX Receipts Retrieved |                          |
|       |      |    |                      | Bit 5 | Not Used               |                          |
|       |      |    |                      | Bit 6 | Not Used               |                          |
|       |      |    |                      | Bit 7 | Not Used               |                          |
| 1     | 35   | 36 | Activation type      |       |                        |                          |
| 5     | 36   | 41 | Sequence Number      |       |                        |                          |
| 3     | 41   | 44 | Not Used             |       |                        |                          |
| 20    | 44   | 64 | Tail                 |       |                        |                          |
| 64    |      |    | Total                |       |                        |                          |

## D9 – Barcode Programming Information

### 0 X D9

**Explanation:** The Barcode Programming Information function is sent each time a barcode is scanned or keyed, and then found in the barcode programming maintenance.

| Bytes | From | To | Data                  | Bits  | Explanation                          | Remarks                       |
|-------|------|----|-----------------------|-------|--------------------------------------|-------------------------------|
| 1     | 0    | 1  | Opcode                |       | 60 – Log Information                 |                               |
| 1     | 1    | 2  | Function              |       | D9 – Barcode Programming Information |                               |
| 1     | 2    | 3  | Type                  |       | Barcode Type                         |                               |
|       |      |    |                       |       | 0 – PLU                              |                               |
|       |      |    |                       |       | 1 – Tender                           |                               |
|       |      |    |                       |       | 2 – Department                       |                               |
|       |      |    |                       |       | 3 – Promotion                        |                               |
|       |      |    |                       |       | 4 – Loyalty                          |                               |
|       |      |    |                       |       | 5 – Points                           |                               |
|       |      |    |                       |       | 6 – Segment                          |                               |
|       |      |    |                       |       | 7 - Save\Recall                      |                               |
|       |      |    |                       |       | 8 – Utility                          |                               |
| 1     | 3    | 4  | Barcode Length        |       |                                      |                               |
| 4     | 4    | 5  | Flags                 | bit 0 | Opt_scan                             |                               |
|       |      |    |                       | bit 1 | Opt_key_entered                      |                               |
|       |      |    |                       | bit 2 | Opt_ignore                           |                               |
|       |      |    |                       | bit 3 | Produced                             |                               |
|       |      |    |                       | bit 4 | Validated                            |                               |
|       |      |    |                       | bit 5 | Catalina Coupon                      |                               |
|       |      |    |                       | bit 6 | Coupon Rejected                      |                               |
|       |      |    |                       | bit 7 | Cancel                               |                               |
| 30    | 5    | 35 | BCD – Barcode Buffer  |       |                                      | Right justify, leading zeroes |
| 1     | 35   | 36 | Unique Key Identifier |       |                                      |                               |
| 4     | 36   | 40 | Barcode Value         |       |                                      |                               |
| 1     | 40   | 41 | Ext Validation        |       |                                      |                               |
| 3     | 41   | 44 | Not Used              |       |                                      |                               |
| 20    | 44   | 64 | Tail                  |       |                                      |                               |
| 64    |      |    | Total                 |       |                                      |                               |

## DA – Information Ticket Points

0 X DA

| Bytes | From | To | Data           | Bits | Explanation                    | Remarks |
|-------|------|----|----------------|------|--------------------------------|---------|
| 1     | 0    | 1  | Opcode         |      | 60 – Log Information           |         |
| 1     | 1    | 2  | Function       |      | DA – Information Ticket Points |         |
| 4     | 2    | 6  | Promotion No.  |      |                                |         |
| 4     | 6    | 10 | Points         |      |                                |         |
| 1     | 10   | 11 | Redeeming flag |      |                                |         |
| 33    | 11   | 44 | Reserved       |      |                                |         |
| 20    | 44   | 64 | Tail           |      |                                |         |
| 64    |      |    | Total          |      |                                |         |

## DB – Information Service Desk Voucher

0 X DB

| Bytes | From | To | Data               | Bits  | Explanation                                               | Remarks           |
|-------|------|----|--------------------|-------|-----------------------------------------------------------|-------------------|
| 1     | 0    | 1  | Opcode             |       | 60 – Log Information                                      |                   |
| 1     | 1    | 2  | Function           |       | DB – Information Service Desk Voucher                     |                   |
| 7     | 2    | 9  | PLU Code           |       |                                                           |                   |
| 2     | 9    | 11 | Department         |       | Department number                                         |                   |
| 4     | 11   | 15 | Points             |       | Points accumulated on Voucher                             | (Apology Voucher) |
| 4     | 15   | 19 | Tender amount      |       | Amount accumulated to tender voucher                      |                   |
| 1     | 19   | 20 | Point Return Type  |       | Return type of points voucher                             | (Apology Voucher) |
| 1     | 20   | 21 | Tender Return Type |       | Return type of tender voucher                             |                   |
| 1     | 21   | 22 | Reason Code        |       | Reason code of point voucher                              | (Apology Voucher) |
| 1     | 22   | 23 | Transaction type   |       | The type of transaction – Tender/Points/Tender and Points |                   |
| 1     | 23   | 24 | Flag               | Bit 0 | Option to cancel                                          |                   |
|       |      |    |                    | Bit 1 | Option was cancelled                                      |                   |
|       |      |    |                    | Bit 2 | Not Used                                                  |                   |
|       |      |    |                    | Bit 3 | Not Used                                                  |                   |
|       |      |    |                    | Bit 4 | Not Used                                                  |                   |
|       |      |    |                    | Bit 5 | Not Used                                                  |                   |
|       |      |    |                    | Bit 6 | Not Used                                                  |                   |
|       |      |    |                    | Bit 7 | Not Used                                                  |                   |
| 20    | 24   | 44 | Reserved           |       |                                                           | To be filled      |
| 20    | 44   | 64 | Tail               |       |                                                           |                   |
| 64    |      |    | Total              |       |                                                           |                   |

## DC – Signature Capture HDR

0 X DC

**Explanation:** Header Record

| Bytes | From | To | Data                        | Bits | Explanation                          | Remarks |
|-------|------|----|-----------------------------|------|--------------------------------------|---------|
| 1     | 0    | 1  | Opcode                      |      | 60 – Log Information                 |         |
| 1     | 1    | 2  | Function                    |      | DC – Signature Capture               |         |
| 1     | 2    | 3  | Sub Function                |      | 0x01 Header Record                   |         |
| 2     | 3    | 5  | Buffer type                 |      | 1 = MTX<br>2 = INGENICO (2 byte BIN) |         |
| 2     | 5    | 7  | Unzipped buffer size        |      |                                      |         |
| 2     | 7    | 9  | Number of Signature Capture |      |                                      |         |
| 35    | 9    | 44 | Not Used                    |      |                                      |         |
| 20    | 44   | 64 | Tail                        |      |                                      |         |
| 64    |      |    | Total                       |      |                                      |         |

## DC – Signature Capture Data

0 X DC

**Explanation:** Data Record

| Bytes | From | To | Data            | Bits | Explanation            | Remarks |
|-------|------|----|-----------------|------|------------------------|---------|
| 1     | 0    | 1  | Opcode          |      | 60 – Log Information   |         |
| 1     | 1    | 2  | Function        |      | DC – Signature Capture |         |
| 1     | 2    | 3  | Sub Function    |      | 0x02 Data Record       |         |
| 1     | 3    | 4  | Sequence number |      | 0x00 to 0x99           |         |
| 40    | 4    | 44 | Data            |      |                        |         |
| 20    | 44   | 64 | Tail            |      |                        |         |
| 64    |      |    | Total           |      |                        |         |

## DD – Information Order Number

0 X DD

| Bytes | From | To | Data         | Bits  | Explanation                            | Remarks                                                                      |
|-------|------|----|--------------|-------|----------------------------------------|------------------------------------------------------------------------------|
| 1     | 0    | 1  | Opcode       |       | 60 – Log Information                   |                                                                              |
| 1     | 1    | 2  | Function     |       | DD – Information Order Number          |                                                                              |
| 6     | 2    | 8  | Order Number |       |                                        |                                                                              |
| 10    | 8    | 18 | Extended ID  |       | Order ID                               |                                                                              |
| 1     | 18   | 19 | Sequence     |       | Sequence of the transaction (1,2,3.)   | Required due to the fact that several order numbers will be sent in a ticket |
| 23    | 19   | 42 | Not Used     |       |                                        |                                                                              |
| 1     | 42   | 43 | Flags        | Bit 0 | Ignore                                 | Ignore flag (for cancel home delivery/parcel pickup)                         |
|       |      |    |              | Bit 1 | Not Used                               |                                                                              |
|       |      |    |              | Bit 2 | Not Used                               |                                                                              |
|       |      |    |              | Bit 3 | Not Used                               |                                                                              |
|       |      |    |              | Bit 4 | Not Used                               |                                                                              |
|       |      |    |              | Bit 5 | Not Used                               |                                                                              |
|       |      |    |              | Bit 6 | Not Used                               |                                                                              |
|       |      |    |              | Bit 7 | Not Used                               |                                                                              |
| 1     | 43   | 44 | Order Type   |       | 1 – Home Delivery<br>2 – Parcel Pickup |                                                                              |
| 20    | 44   | 64 | Tail         |       |                                        |                                                                              |
| 64    |      |    | Total        |       |                                        |                                                                              |



## DE – Information Price List ID

0 X DE

| Bytes | From | To | Data          | Bits | Explanation                                    | Remarks |
|-------|------|----|---------------|------|------------------------------------------------|---------|
| 1     | 0    | 1  | Opcode        |      | 60 – Log Information                           |         |
| 1     | 1    | 2  | Function      |      | DE – Information Price List ID                 |         |
| 2     | 2    | 4  | Price List ID |      |                                                |         |
| 1     | 4    | 5  | Source        |      | 1 from checkout bank<br>2 from customer scheme |         |
| 39    | 3    | 44 | Not Used      |      |                                                |         |
| 20    | 44   | 64 | Tail          |      |                                                |         |
| 64    |      |    | Total         |      |                                                |         |

## DF – Information Customer Account ID

### 0 X DF

**Explanation:** The Information Customer Account ID supports the customer center functionality, and when this function is triggered during the POS process of customer identification, the POS can verify if a customer center Id is detected. If the customer is identified as an account owner, the Account Number, Account Limit, Account Payment Type, etc. are all recorded. This enables the user to maintain one customer with various selected types of registrations such as, Loyalty, Credit, and ECCA Accounts.

| Bytes | From | To | Data                            | Bits  | Explanation                          | Remarks                                                                                     |
|-------|------|----|---------------------------------|-------|--------------------------------------|---------------------------------------------------------------------------------------------|
| 1     | 0    | 1  | Opcode                          |       | 60 – Log Information                 |                                                                                             |
| 1     | 1    | 2  | Function                        |       | DF – Information Customer Account ID |                                                                                             |
| 10    | 2    | 12 | Account Number                  |       |                                      |                                                                                             |
| 4     | 12   | 16 | Account Limit                   |       |                                      |                                                                                             |
| 1     | 16   | 17 | Account Payment Type            |       |                                      |                                                                                             |
| 1     | 17   | 18 | Flags                           | Bit 0 | Loyalty related                      |                                                                                             |
|       |      |    |                                 | Bit 1 | Offline                              |                                                                                             |
|       |      |    |                                 | Bit 2 | Force Account                        |                                                                                             |
|       |      |    |                                 | Bit 3 | Charge control per item              |                                                                                             |
|       |      |    |                                 | Bit 4 | Offline account as cash only         |                                                                                             |
|       |      |    |                                 | Bit 5 | Void Customer Account                |                                                                                             |
|       |      |    |                                 | Bit 6 | Next Appearance Notice Displayed     |                                                                                             |
|       |      |    |                                 | Bit 7 | Not Used                             |                                                                                             |
| 4     | 18   | 22 | Previous Balance                |       |                                      |                                                                                             |
| 2     | 22   | 24 | Postponed pay period            |       |                                      |                                                                                             |
| 1     | 24   | 25 | Surcharge Type                  |       |                                      |                                                                                             |
| 4     | 25   | 29 | Surcharge Rate                  |       |                                      |                                                                                             |
| 1     | 29   | 30 | Customer Type                   |       |                                      |                                                                                             |
| 1     | 30   | 31 | Scheme no.                      |       |                                      | Member Scheme number from barcode definition                                                |
| 4     | 31   | 35 | Customer Account surcharge rate |       |                                      | Percentage from reward enter by cashier promotion (Extra reward from customer account type) |

| Bytes | From | To | Data                   | Bits | Explanation | Remarks |
|-------|------|----|------------------------|------|-------------|---------|
| 4     | 35   | 39 | Discount<br>Percentage |      |             |         |
| 5     | 39   | 44 | Reserved               |      |             |         |
| 20    | 44   | 64 | Tail                   |      |             |         |
| 64    |      |    | Total                  |      |             |         |

## E0 –Information Order Status

### 0 X E0

**Explanation:** The Information Order Header function sends information on orders, retrieved from tickets that are received from the electronic sales file. It is part of the Electronic Sales Project.

| Bytes                   | From | To | Data                      | Bits  | Explanation                                               | Remarks                  |
|-------------------------|------|----|---------------------------|-------|-----------------------------------------------------------|--------------------------|
| 1                       | 0    | 1  | Opcode                    |       | 60 – Log Information                                      |                          |
| 1                       | 1    | 2  | Function                  |       | E0 – Transaction Information/Customer order status record | Electronic Sales Project |
| 1                       | 2    | 3  | Sub Function              |       | 1 – Order Header Status<br>2 – Item Line Status           |                          |
| 5                       | 3    | 8  | Order Number              |       |                                                           |                          |
| 5                       | 8    | 13 | Customer Reference Number |       |                                                           |                          |
| 3                       | 13   | 16 | Order Date                |       |                                                           |                          |
| 1                       | 16   | 17 | Error Code                |       | Error Table (Errors 1-255)                                |                          |
| IF Order Header Status: |      |    |                           |       |                                                           |                          |
| 10                      | 17   | 27 | Customer number           |       |                                                           |                          |
| 7                       | 27   | 34 | Error Data                |       |                                                           |                          |
| 8                       | 34   | 42 | Invoice Number            |       |                                                           |                          |
| 1                       | 42   | 43 | Order Status              |       | 0 – Successful<br>1 – Errors during process               |                          |
| Inf1                    |      |    |                           |       |                                                           |                          |
| IF Item Line Status     |      |    |                           |       |                                                           |                          |
| 7                       | 17   | 24 | Item code                 |       |                                                           |                          |
| 19                      | 24   | 43 | Not Used                  |       |                                                           |                          |
| Inf2                    |      |    |                           |       |                                                           |                          |
| 1                       | 43   | 44 | Flags                     |       |                                                           |                          |
|                         |      |    |                           | Bit 0 | Customer Order on Till                                    |                          |
|                         |      |    |                           | Bit 1 | Not Used                                                  |                          |
|                         |      |    |                           | Bit 2 | Not Used                                                  |                          |
|                         |      |    |                           | Bit 3 | Not Used                                                  |                          |

| Bytes | From | To | Data  | Bits  | Explanation | Remarks |
|-------|------|----|-------|-------|-------------|---------|
|       |      |    |       | Bit 4 | Not Used    |         |
|       |      |    |       | Bit 5 | Not Used    |         |
|       |      |    |       | Bit 6 | Not Used    |         |
|       |      |    |       | Bit 7 | Not Used    |         |
| 20    | 44   | 64 | Tail  |       |             |         |
| 64    |      |    | Total |       |             |         |

## E1 –Information Fuel Discount Coupon

### 0 X E1

**Explanation:** The Information Fuel Discount Coupon Opcode is recorded when the Rebate Coupon is printed once the transaction is completed. Supermarkets are introducing fuel as an initiative to increase sales by offering cents per liter discounts on fuel, based on purchase where the value is above a given qualifying threshold. The POS sends the Rebate Number for Barcode, Rebate Expiry Date, Rebate Qualifier Amount, Rebate Discount, Transaction total, and Qualifier ID. The BO uses Rebate File ID and ID reference numbers.

| Bytes | From | To | Data                    | Bits | Explanation                      | Remarks |
|-------|------|----|-------------------------|------|----------------------------------|---------|
| 1     | 0    | 1  | Opcode                  |      | 60 – Log Information             |         |
| 1     | 1    | 2  | Function                |      | E1 – New Information Transaction |         |
| 2     | 2    | 4  | Rebate File ID          |      |                                  |         |
| 4     | 4    | 8  | ID Reference            |      |                                  |         |
| 1     | 8    | 9  | Qualifier ID            |      |                                  |         |
| 3     | 9    | 12 | Rebate Number           |      | BCD; Pak/unpak                   |         |
| 3     | 12   | 15 | Rebate Expiry Date      |      | BCD; Pak/unpak                   |         |
| 4     | 15   | 19 | Rebate Qualifier amount |      |                                  |         |
| 2     | 19   | 21 | Rebate Discount         |      |                                  |         |
| 4     | 21   | 25 | Transaction Total       |      |                                  |         |
| 2     | 25   | 27 | Error code              |      | 1 – Error code<br>0 – OK         |         |
| 17    | 27   | 44 | Not Used                |      |                                  |         |
| 20    | 44   | 64 | Tail                    |      |                                  |         |
| 64    |      |    | Total                   |      |                                  |         |

## E2 – Car Wash

0 X E2

**Explanation:** The Information Car Wash function.

| Bytes | From | To | Data                    | Bits  | Explanation          | Remarks |
|-------|------|----|-------------------------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode                  |       | 60 – Log Information |         |
| 1     | 1    | 2  | Function                |       | E2 – Car Wash        |         |
| 7     | 2    | 9  | PLU                     |       |                      |         |
| 10    | 9    | 19 | Car Wash Code           |       |                      |         |
| 8     | 19   | 27 | Exp Date                |       |                      |         |
| 1     | 27   | 28 | Car Wash Type           |       |                      |         |
| 1     | 28   | 29 | Flags                   |       |                      |         |
|       |      |    |                         | Bit 0 | Voided               |         |
|       |      |    |                         | Bit 1 | Returned             |         |
|       |      |    |                         | Bit 2 | Opt info ext         |         |
|       |      |    |                         | Bit 3 | Car wash only        |         |
|       |      |    |                         | Bit 4 | Not Used             |         |
|       |      |    |                         | Bit 5 | Not Used             |         |
|       |      |    |                         | Bit 6 | Not Used             |         |
|       |      |    |                         | Bit 7 | Not Used             |         |
| 5     | 29   | 34 | Device Number           |       |                      |         |
| 4     | 34   | 38 | Pump transaction number |       |                      |         |
| 6     | 38   | 44 | Data                    |       |                      |         |
| 20    | 44   | 64 | Tail                    |       |                      |         |
| 64    |      |    | Total                   |       |                      |         |

## E3 – Tax Discount

0 X E3

Explanation: USA

| Bytes | From | To | Data     | Bits  | Explanation          | Remarks |
|-------|------|----|----------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode   |       | 60 – Log Information |         |
| 1     | 1    | 2  | Function |       | E3 – Tax Discount    |         |
| 1     | 2    | 3  | Flags    |       |                      |         |
|       |      |    |          | Bit 0 | Tax Discount         |         |
|       |      |    |          | Bit 1 | Not Used             |         |
|       |      |    |          | Bit 2 | Not Used             |         |
|       |      |    |          | Bit 3 | Not Used             |         |
|       |      |    |          | Bit 4 | Not Used             |         |
|       |      |    |          | Bit 5 | Not Used             |         |
|       |      |    |          | Bit 6 | Not Used             |         |
|       |      |    |          | Bit 7 | Not Used             |         |
| 41    | 3    | 44 | Not Used |       |                      |         |
| 20    | 44   | 64 | Tail     |       |                      |         |
| 64    |      |    | Total    |       |                      |         |



## E6 – Information Barcode Coupon

0 X E6

| Bytes | From | To | Data                | Bits     | Explanation                  | Remarks |
|-------|------|----|---------------------|----------|------------------------------|---------|
| 1     | 0    | 1  | Opcode              |          | 60 – Log Information         |         |
| 1     | 1    | 2  | Function            |          | E6 – Transaction Information |         |
| 7     | 2    | 9  | Code                |          |                              |         |
| 7     | 9    | 16 | Original Code       |          |                              |         |
| 4     | 16   | 20 | Count               |          |                              |         |
| 4     | 20   | 24 | Promotion<br>Number |          |                              |         |
| 2     | 24   | 26 | Reward              |          |                              |         |
| 1     | 26   | 27 | Flags               |          |                              |         |
|       |      |    |                     | Bit 0    | Rx award bonus               |         |
|       |      |    |                     | Bits 1-7 | Not Used                     |         |
| 17    | 27   | 44 | Reserved            |          |                              |         |
| 20    | 44   | 64 | Tail                |          |                              |         |
| 64    |      |    | Total               |          |                              |         |

## E7 – Information Offline EFT

### 0 X E7

**Explanation:** The Information Offline EFT Opcode records the customer's account details, card expiry date, the tender amount, the authorization number, etc. for the transaction when the EFT server is offline. This information is relevant to the Offline Tender Report.

| Bytes | From | To | Data                 | Bits  | Explanation                  | Remarks |
|-------|------|----|----------------------|-------|------------------------------|---------|
| 1     | 0    | 1  | Opcode               |       | 60 – Log Information         |         |
| 1     | 1    | 2  | Function             |       | E7 – Transaction Information |         |
| 2     | 2    | 4  | Number               |       | Tender number                |         |
| 1     | 4    | 5  | Flags                | Bit 0 | Offline credit               |         |
|       |      |    |                      | Bit 1 | Offline EBT                  |         |
|       |      |    |                      | Bit 2 | Not Used                     |         |
|       |      |    |                      | Bit 3 | Not Used                     |         |
|       |      |    |                      | Bit 4 | Not Used                     |         |
|       |      |    |                      | Bit 5 | Not Used                     |         |
|       |      |    |                      | Bit 6 | Not Used                     |         |
|       |      |    |                      | Bit 7 | Not Used                     |         |
| 10    | 5    | 15 | Account number       |       |                              |         |
| 2     | 15   | 17 | Expiry Date          |       |                              |         |
| 4     | 17   | 21 | Amount               |       | Tender amount or Cashback    |         |
| 4     | 21   | 25 | Authorization number |       |                              |         |
| 11    | 25   | 36 | EBT Voucher No.      |       |                              |         |
| 1     | 36   | 37 | Account length       |       |                              |         |
| 1     | 37   | 38 | Flag                 | Bit 0 | Authorization Number Length  |         |
|       |      |    |                      | Bit 1 | Authorization Number Length  |         |
|       |      |    |                      | Bit 2 | Authorization Number Length  |         |
|       |      |    |                      | Bit 3 | Authorization Number Length  |         |
|       |      |    |                      | Bit 4 | Not Used                     |         |
|       |      |    |                      | Bit 5 | Not Used                     |         |
|       |      |    |                      | Bit 6 | Not Used                     |         |
|       |      |    |                      | Bit 7 | Not Used                     |         |
| 6     | 38   | 44 | Not Used             |       |                              |         |
| 20    | 44   | 64 | Tail                 |       |                              |         |
| 64    |      |    | Total                |       |                              |         |



## EF – Information Confirmed Promotion

### 0 X EF

**Explanation:** The Information Confirmed Promotion transaction for redeemable promotions is used specifically for recovery. It is a customer specific enhancement that is available for general use.

| Bytes | From | To | Data         | Bits | Explanation                                  | Remarks |
|-------|------|----|--------------|------|----------------------------------------------|---------|
| 1     | 0    | 1  | Opcode       |      | 60 – Log Information                         |         |
| 1     | 1    | 2  | Function     |      | 0 x EF –Information Confirmed Promotion      |         |
| 7     | 2    | 9  | PLU Code     |      |                                              |         |
| 5     | 9    | 14 | Promotion    |      | Promotion number                             |         |
| 7     | 14   | 21 | Price        |      | Item Price (ASCII)                           |         |
| 2     | 21   | 23 | Count        |      | Number of promotions given (+) or taken (-). |         |
| 21    | 23   | 44 |              |      |                                              |         |
| 20    | 44   | 64 | Tail         |      |                                              |         |
| 64    |      |    | <b>Total</b> |      |                                              |         |

## F2 – Information Net Gross Price – PRJ USA ONLY

0 X F2

| Bytes | From | To | Data                     | Bits     | Explanation                     | Remarks                                    |
|-------|------|----|--------------------------|----------|---------------------------------|--------------------------------------------|
| 1     | 0    | 1  | Opcode                   |          | 60 – Log Information            |                                            |
| 1     | 1    | 2  | Function                 |          | F2 –Information Net Gross Price |                                            |
| 1     | 2    | 3  | Flag                     |          |                                 |                                            |
|       |      |    |                          | Bit 0    | Simple Type                     | Transaction contains simple promotion data |
|       |      |    |                          | Bit 1    | Member Type                     | Transaction contains member promotion data |
|       |      |    |                          | Bits 2-6 | Reserved                        |                                            |
|       |      |    |                          | Bit 7    | Promo Exist                     | Does the promo exist?                      |
| 10    | 3    | 13 | Promotion Number         |          |                                 | ASCII                                      |
| 10    | 13   | 23 | Promotion Price          |          |                                 | ASCII                                      |
| 10    | 23   | 33 | Adjusted PLU Price       |          |                                 | ASCII                                      |
| 7     | 33   | 40 | Reserved                 |          |                                 |                                            |
| 2     | 40   | 42 | Attached Sequence Number |          |                                 | Sequence number of attached transaction    |
| 2     | 42   | 44 | This Sequence Number     |          |                                 | Sequence number of this transaction        |
| 20    | 44   | 64 | Tail                     |          |                                 |                                            |
| 64    |      |    | Total                    |          |                                 |                                            |

## F6 – Information Order Promotion Apportionment

0 X F6

**Explanation:** The Information Order Promotion Apportionment opcode is used to record....

| Bytes  | From | To | Data                 | Bits  | Explanation          | Remarks |
|--------|------|----|----------------------|-------|----------------------|---------|
| 1      | 0    | 1  | Opcode               |       | 60 – Log Information |         |
| 1      | 1    | 2  | Function             |       | F6                   |         |
| 1      | 2    | 3  | Flags                | Bit 0 | First                |         |
|        |      |    |                      | Bit 1 | Last                 |         |
|        |      |    |                      | Bit 2 | Not Used             |         |
|        |      |    |                      | Bit 3 | Not Used             |         |
|        |      |    |                      | Bit 4 | Not Used             |         |
|        |      |    |                      | Bit 5 | Not Used             |         |
|        |      |    |                      | Bit 6 | Not Used             |         |
|        |      |    |                      | Bit 7 | Not Used             |         |
| 4      | 3    | 7  | Promotion number     |       |                      |         |
| Struct |      |    | Item                 |       |                      |         |
| 1      | 7    | 8  | Flags                | Bit 0 | Department           |         |
|        |      |    |                      | Bit 1 | Not Used 9           |         |
|        |      |    |                      | Bit 2 | Not Used 10          |         |
|        |      |    |                      | Bit 3 | Not Used 11          |         |
|        |      |    |                      | Bit 4 | Not Used 12          |         |
|        |      |    |                      | Bit 5 | Not Used 13          |         |
|        |      |    |                      | Bit 6 | Not Used 14          |         |
|        |      |    |                      | Bit 7 | Not Used 15          |         |
| 7      | 8    | 15 | Code                 |       |                      |         |
| 4      | 15   | 19 | Apportionment amount |       |                      |         |
| 1      | 43   | 44 | Reserved             |       |                      |         |
| 20     | 44   | 64 | Tail                 |       |                      |         |
| 64     |      |    | Total                |       |                      |         |

X3

## F7 – StoreNext

0 X F7

| Bytes | From | To | Data                  | Bits  | Explanation                                                     | Remarks |
|-------|------|----|-----------------------|-------|-----------------------------------------------------------------|---------|
| 1     | 0    | 1  | Opcode                |       | 60 – Log Information                                            |         |
| 1     | 1    | 2  | Function              |       | F7                                                              |         |
| 1     | 2    | 3  | Template Printed flag | bit 0 | Will be set if custom template printed at end of every X ticket |         |
|       |      |    |                       | bit 1 | Not Used                                                        |         |
|       |      |    |                       | bit 2 | Not Used                                                        |         |
|       |      |    |                       | bit 3 | Not Used                                                        |         |
|       |      |    |                       | bit 4 | Not Used                                                        |         |
|       |      |    |                       | bit 5 | Not Used                                                        |         |
|       |      |    |                       | bit 6 | Not Used                                                        |         |
|       |      |    |                       | bit 7 | Not Used`                                                       |         |
| 41    | 3    | 44 | Reserved              |       |                                                                 |         |
| 20    | 44   | 64 | Tail                  |       |                                                                 |         |
| 64    |      |    | Total                 |       |                                                                 |         |

## F9 – Information Tare

0 X F9

| Bytes | From | To | Data         | Bits     | Explanation              | Remarks               |
|-------|------|----|--------------|----------|--------------------------|-----------------------|
| 1     | 0    | 1  | Opcode       |          | 60 – Log Information     |                       |
| 1     | 1    | 2  | Function     |          | F9                       |                       |
| 1     | 2    | 3  | Sub info     |          | 0x01                     |                       |
| 1     | 3    | 4  | Tare         |          | Entry in tare table      |                       |
| 4     | 4    | 8  | Tare weight  |          | Weight of the tare       |                       |
| 4     | 8    | 12 | Item weight  |          |                          |                       |
| 1     | 12   | 13 | Flags        |          |                          |                       |
|       |      |    |              | Bit 0    | Manual tare              | Manually entered tare |
|       |      |    |              | Bits 1-7 | Not used                 |                       |
| 4     | 13   | 17 | Tare pointer |          | Tare number in Gen table |                       |
| 27    | 17   | 44 | Not used     |          |                          |                       |
| 20    | 44   | 64 | Tail         |          |                          |                       |
| 64    |      |    | Total        |          |                          |                       |



## FA – Scanned Image Information

0 X FA

| Bytes | From | To | Data             | Bits | Explanation          | Remarks |
|-------|------|----|------------------|------|----------------------|---------|
| 1     | 0    | 1  | Opcode           |      | 60 – Log Information |         |
| 1     | 1    | 2  | Function         |      | FA                   |         |
| 2     | 2    | 4  | POS Number       |      |                      |         |
| 2     | 4    | 7  | Ticket Number    |      |                      |         |
| 3     | 7    | 10 | Transaction Date |      |                      |         |
| 3     | 10   | 13 | Transaction Time |      |                      |         |
| 10    | 13   | 23 | Account Number   |      |                      |         |
| 4     | 23   | 27 | Image Width      |      |                      |         |
| 4     | 27   | 31 | Image Height     |      |                      |         |
| 2     | 31   | 33 | Account Length   |      |                      |         |
| 11    | 33   | 44 | Reserved         |      |                      |         |
| 20    | 44   | 64 | Tail             |      |                      |         |
| 64    |      |    | Total            |      |                      |         |

## FD – Extended Gift Card Data

0 X FD

| Bytes | From | To | Data                | Bits     | Explanation               | Remarks |
|-------|------|----|---------------------|----------|---------------------------|---------|
| 1     | 0    | 1  | Opcode              |          | 60 – Log Information      |         |
| 1     | 1    | 2  | Function            |          | FD – Gift Card Act Ext.   |         |
| 10    | 2    | 12 | Template            |          |                           |         |
| 1     | 12   | 13 | Activation Type     |          |                           |         |
| 20    | 13   | 33 | Barcode Description |          |                           |         |
| 5     | 33   | 38 | Sequence Number     |          |                           |         |
| 4     | 38   | 42 | index               |          |                           |         |
| 1     | 42   | 43 | Flag                | Bit 0    | Delayed Card activated    |         |
|       |      |    |                     | Bit 1    | Account Length 16         |         |
|       |      |    |                     | Bit 2    | Account Length 19         |         |
|       |      |    |                     | Bit 3    | Print Balance Flag        |         |
|       |      |    |                     | Bit 4    | Print Template in Receipt |         |
|       |      |    |                     | Bit 5    | Opt External Data         |         |
|       |      |    |                     | Bits 6-7 | Not Used                  |         |
| 1     | 43   | 44 | SuspendTranCC       |          |                           |         |
| 20    | 44   | 64 | Tail                |          |                           |         |
| 64    |      |    | Total               |          |                           |         |

## FE – Info EFT Decline

0 X FE

**Explanation:** Opcode used when Log declines to T-log.

| Bytes | From | To | Data            | Bits | Explanation          | Remarks |
|-------|------|----|-----------------|------|----------------------|---------|
| 1     | 0    | 1  | Opcode          |      | 60 – Log Information |         |
| 1     | 1    | 2  | Function        |      | FE                   |         |
| 3     | 2    | 5  | Response code   |      |                      |         |
| 2     | 5    | 7  | Tender number   |      |                      |         |
| 4     | 7    | 11 | Declined amount |      |                      |         |
| 33    | 11   | 44 | Not Used        |      |                      |         |
| 20    | 44   | 64 | Tail            |      |                      |         |
| 64    |      |    | Total           |      |                      |         |

## FF – Information Denomination

### 0 X FF

**Explanation:** The Information Denomination opcode is used when tenders are declared, added to the float, removed from the POS terminal, paid out, or received when performing cash office functions on the Front Office. The denomination, tender type, amount, and quantity are each recorded. (When a declaration is performed at the POS, without denominations, the transaction 0x70 0x52 is used.)

| Bytes | From | To | Data                  | Bits                                                                 | Explanation                                                                                                | Remarks                                                                    |
|-------|------|----|-----------------------|----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|
| 1     | 0    | 1  | Opcode                |                                                                      | 60 – Log Information                                                                                       |                                                                            |
| 1     | 1    | 2  | Function              |                                                                      | FF –Information Denomination                                                                               |                                                                            |
| 2     | 2    | 4  | Denomination ID       |                                                                      |                                                                                                            |                                                                            |
| 2     | 4    | 6  | Tender ID             |                                                                      |                                                                                                            |                                                                            |
| 4     | 6    | 10 | Amount                |                                                                      |                                                                                                            |                                                                            |
| 4     | 10   | 14 | Count                 |                                                                      |                                                                                                            |                                                                            |
| 1     | 14   | 15 | Cash Office Type      |                                                                      | 1 Declare<br>2 Float<br>3 Cash lift<br>4 Paid Out<br>5 Receipt                                             |                                                                            |
| 1     | 15   | 16 | Flags                 | Bit 0<br>Bit 1<br>Bit 2<br>Bit 3<br>Bit 4<br>Bit 5<br>Bit 6<br>Bit 7 | Informative Pickup<br>First Tender<br>Void<br>Opt Info<br>Change Order<br>Not Used<br>Not Used<br>Not Used | Spot check, informative only, ignore this record.<br>Flag for change order |
| 2     | 16   | 18 | Ticket No             |                                                                      |                                                                                                            |                                                                            |
| 1     | 18   | 19 | Denomination count    |                                                                      |                                                                                                            |                                                                            |
| 2     | 19   | 21 | Denomination Entry ID |                                                                      |                                                                                                            |                                                                            |
| 23    | 21   | 44 | Reserved              |                                                                      |                                                                                                            |                                                                            |
| 20    | 44   | 64 | Tail                  |                                                                      |                                                                                                            |                                                                            |
| 64    |      |    | Total                 |                                                                      |                                                                                                            |                                                                            |

## Opcode 63 Alerts

Below is the general structure for alerts. Where alerts have different structures, they are individually described. Alerts are logged to inform of problems on the system. Warning messages are sent from the POS Terminals to the Back Office servers. These messages are parameter driven, triggered by specific events on the POS Terminals, for example, when a POS terminal cash drawer is too full, the appropriate message is sent to the Back Office server.

| Alert Type            | Range            |
|-----------------------|------------------|
| POS generated         | 1 – 199          |
| Back Office generated | 200 – 500        |
| User-defined          | 1000 and greater |

| Bytes | From | To | Data         | Bits | Explanation                       | Remarks |
|-------|------|----|--------------|------|-----------------------------------|---------|
| 1     | 0    | 1  | Opcode       |      | 63 – Alerts                       |         |
| 2     | 1    | 3  | Alert number |      |                                   |         |
|       |      |    |              |      | POS-generated alerts (10 - 199)   |         |
|       |      |    |              |      | 10 – Printer error                |         |
|       |      |    |              |      | 11 – Drawer error                 |         |
|       |      |    |              |      | 12 – Scanner error                |         |
|       |      |    |              |      | 13 – Customer display error       |         |
|       |      |    |              |      | 14 – Swipe keyboard error         |         |
|       |      |    |              |      | 20 – Till Sent All Trs Before EOD |         |
|       |      |    |              |      | 21 – POS start EOD                |         |
|       |      |    |              |      | 22 – POS EOD in trans             |         |
|       |      |    |              |      | 30 – Power up reboot              |         |
|       |      |    |              |      | 31 – Store Open                   |         |
|       |      |    |              |      | 32 – POS off-line                 |         |
|       |      |    |              |      | 33/1 – Load PLU start, foreground |         |
|       |      |    |              |      | 34/1 – Load PLU start, background |         |
|       |      |    |              |      | 34/2 – Load PLU end, background   |         |
|       |      |    |              |      | 35 – Cold start                   |         |

| Bytes | From | To | Data | Bits | Explanation                                    | Remarks                                          |
|-------|------|----|------|------|------------------------------------------------|--------------------------------------------------|
|       |      |    |      |      | 39 – Flashing Dollar                           |                                                  |
|       |      |    |      |      | 40 – Drawer full (assistance)                  |                                                  |
|       |      |    |      |      | 41 – Topup (not enough cash change)            |                                                  |
|       |      |    |      |      | 42 – Q length                                  |                                                  |
|       |      |    |      |      | 45 – Password violation                        |                                                  |
|       |      |    |      |      | 50 – OLA off-line                              |                                                  |
|       |      |    |      |      | 80 – POS software version                      |                                                  |
|       |      |    |      |      | 81 – Release Version No Match                  |                                                  |
|       |      |    |      |      | 88 – File Load                                 | Tesco                                            |
|       |      |    |      |      | 89 – File refresh                              |                                                  |
|       |      |    |      |      | 90/1 – Start RS batch                          |                                                  |
|       |      |    |      |      | 90/2 - End RS batch                            |                                                  |
|       |      |    |      |      | 91 – Program corrupt                           |                                                  |
|       |      |    |      |      | 92 – Quick Terminal Call                       |                                                  |
|       |      |    |      |      | 93 – Quick Battery Low                         |                                                  |
|       |      |    |      |      | 94 – Quick Abandon                             |                                                  |
|       |      |    |      |      | 95 – Quick Fail Position                       |                                                  |
|       |      |    |      |      | 96 – Quick Charge Timeout                      |                                                  |
|       |      |    |      |      | 97 – Dock Paper Low                            | Docking                                          |
|       |      |    |      |      | 98- Dock Printer Offline                       | Docking                                          |
|       |      |    |      |      | 99 – CCMS Offline                              | COREMA                                           |
|       |      |    |      |      | 100 – TOSCA Bad Com                            | Tesco                                            |
|       |      |    |      |      | 102 – Fiscal Error                             | Tesco                                            |
|       |      |    |      |      | 103 – Start Fiscal EOD                         | Tesco                                            |
|       |      |    |      |      | 104 – Baud Rate                                | Tesco                                            |
|       |      |    |      |      | 106 – Fiscal EOD OK                            | Tesco                                            |
|       |      |    |      |      | 110 – Message received                         |                                                  |
|       |      |    |      |      | 111 – Load Hybrid Reader                       | Smartcard                                        |
|       |      |    |      |      | 112 – CCMS QDX full                            | Corema                                           |
|       |      |    |      |      | 113 – Post Mail                                |                                                  |
|       |      |    |      |      | 114 – POS Not Sign As Active                   | Pos not sign as Active during POS configuration. |
|       |      |    |      |      | 115 – POS Disk Limit                           | Disk Size Limit                                  |
|       |      |    |      |      | 116- Transaction QDX Problem                   | Transaction QDX problem                          |
|       |      |    |      |      | 120 – Switch OLA Main Provider to Sub Provider |                                                  |

| Bytes | From | To | Data | Bits | Explanation                                          | Remarks                              |
|-------|------|----|------|------|------------------------------------------------------|--------------------------------------|
|       |      |    |      |      | 121 – Switch OLA Sub Provider to Main Provider       |                                      |
|       |      |    |      |      | 122 – Switch OLA Sub Provider1 to Sub Provider2      |                                      |
|       |      |    |      |      | 123 – Switch OLA Main Provider to offline            |                                      |
|       |      |    |      |      | 124 – Switch OLA Sub Provider to offline             |                                      |
|       |      |    |      |      | 125 – Switch OLA Offline to Main Provider            |                                      |
|       |      |    |      |      | 126 – Switch OLA Offline to Sub Provider             |                                      |
|       |      |    |      |      | 130 – Grade Price Change Failed                      |                                      |
|       |      |    |      |      | 140 – Printer Okay                                   |                                      |
|       |      |    |      |      | 141 – Drawer Okay                                    |                                      |
|       |      |    |      |      | 142 – Scanner Okay                                   |                                      |
|       |      |    |      |      | 143 – Scale Okay                                     |                                      |
|       |      |    |      |      | 144 – Payment Term Okay                              |                                      |
|       |      |    |      |      | 145 – TV number Okay                                 |                                      |
|       |      |    |      |      | 146 – Wrong DLL Version                              | New alert for wrong pos dll version. |
|       |      |    |      |      | 147 – Check Scanner Error                            |                                      |
|       |      |    |      |      | 148 – New Mensys Loaded                              |                                      |
|       |      |    |      |      | 191 – Promotion Engine Communication Failed          |                                      |
|       |      |    |      |      | BACK OFFICE-generated alerts (200-1000)              |                                      |
|       |      |    |      |      | 201 – EOD start                                      |                                      |
|       |      |    |      |      | 202 – EOD finish                                     |                                      |
|       |      |    |      |      | 203 – EOD POPS off-line                              |                                      |
|       |      |    |      |      | 206 – Not all transactions sent by POS before EOD    |                                      |
|       |      |    |      |      | 207 – Not all maintenance received by POS before EOD |                                      |
|       |      |    |      |      | 222 – Package                                        |                                      |
|       |      |    |      |      | 230 – Program version                                |                                      |
|       |      |    |      |      | 232 – No communication to POS                        |                                      |
|       |      |    |      |      | 233 – Secure password violation                      |                                      |
|       |      |    |      |      | 236 – Error While executing PLU Batch                |                                      |

| Bytes | From | To | Data                | Bits  | Explanation                                         | Remarks |
|-------|------|----|---------------------|-------|-----------------------------------------------------|---------|
|       |      |    |                     |       | 239 – MFS2 did not receive QDX files (PLUTODAY.ZIP) |         |
|       |      |    |                     |       | 300 – General Text transaction                      |         |
|       |      |    |                     |       | 301 – CRC error. Difference between QDX and SQL.    |         |
|       |      |    |                     |       | 302 – SQL Administrator password has been changed.  |         |
|       |      |    |                     |       | 303 – Wrong SQL Administrator Password              |         |
|       |      |    |                     |       | 601 – Disk Space below limit                        |         |
|       |      |    |                     |       | 602 – CDM                                           |         |
|       |      |    |                     |       | 1000 – Grade Price changes pending.                 |         |
|       |      |    |                     |       | 17001 – Printer unable to scan the check.           |         |
|       |      |    |                     |       | 17008 – Invalid Dept or PLU for Uncollected Change  |         |
|       |      |    |                     |       | 17009 – EBT WIC Error File Found                    |         |
|       |      |    |                     |       | 18103 – Extract Engine Info                         |         |
|       |      |    |                     |       | 18104 – NCR Copient Offline                         |         |
|       |      |    |                     |       | 20001 – Need Help                                   |         |
| 1     | 3    | 4  | Function            |       |                                                     |         |
| 1     | 4    | 5  | Flag 1              |       |                                                     |         |
|       |      |    |                     | bit 0 | Display message on PCs                              |         |
|       |      |    |                     | bit 1 | Popup alert message from background                 |         |
|       |      |    |                     | bit 2 | Move alert to saved file (ignore)                   |         |
|       |      |    |                     | bit 3 | Use original POS number (for on-line alerts, FC47)  |         |
|       |      |    |                     | bit 4 | Get text message                                    |         |
|       |      |    |                     | bit 5 | Not Used                                            |         |
|       |      |    |                     | bit 6 | Not Used                                            |         |
|       |      |    |                     | bit 7 | Not Used                                            |         |
| 37    | 5    | 42 | Alert data          |       |                                                     |         |
| 1     | 42   | 43 | Original POS number |       |                                                     |         |
| 1     | 43   | 44 | Original PC number  |       |                                                     |         |
| 20    | 44   | 64 | Tail                |       |                                                     |         |
| 64    |      |    | Total               |       |                                                     |         |



## Transaction Alert (general)

| Bytes | From | To | Data                | Bits  | Explanation             | Remarks |
|-------|------|----|---------------------|-------|-------------------------|---------|
| 1     | 0    | 1  | Opcode              |       | 63 – Alerts             |         |
| 2     | 2    | 3  | Sub Opcode          |       |                         |         |
| 1     | 3    | 4  | Function            |       |                         |         |
| 1     | 4    | 5  | Flag 1              |       |                         |         |
|       |      |    |                     | bit 0 | Not Used                |         |
|       |      |    |                     | bit 1 | Not Used                |         |
|       |      |    |                     | bit 2 | Not Used                |         |
|       |      |    |                     | bit 3 | Use Original POS Number |         |
|       |      |    |                     | bit 4 | Not Used                |         |
|       |      |    |                     | bit 5 | Not Used                |         |
|       |      |    |                     | bit 6 | Not Used                |         |
|       |      |    |                     | bit 7 | Not Used                |         |
| 37    | 5    | 42 | Data                |       |                         |         |
| 1     | 42   | 43 | Original POS number |       |                         |         |
| 1     | 43   | 44 | Original PC number  |       |                         |         |
| 20    | 44   | 64 | Tail                |       |                         |         |
| 64    |      |    | Total               |       |                         |         |

## Alert INDYME

| Bytes | From | To | Data                | Bits  | Explanation             | Remarks |
|-------|------|----|---------------------|-------|-------------------------|---------|
| 1     | 0    | 1  | Opcode              |       | 63 – Alerts             |         |
| 2     | 2    | 3  | Sub Opcode          |       |                         |         |
| 1     | 3    | 4  | Function            |       | INDYME                  |         |
| 1     | 4    | 5  | Flag 1              |       |                         |         |
|       |      |    |                     | bit 0 | Not Used                |         |
|       |      |    |                     | bit 1 | Not Used                |         |
|       |      |    |                     | bit 2 | Not Used                |         |
|       |      |    |                     | bit 3 | Use Original POS Number |         |
|       |      |    |                     | bit 4 | Not Used                |         |
|       |      |    |                     | bit 5 | Not Used                |         |
|       |      |    |                     | bit 6 | Not Used                |         |
|       |      |    |                     | bit 7 | Not Used                |         |
| 4     | 5    | 9  | Virtual Key         |       |                         |         |
| 2     | 9    | 11 | INDYME_RTC          |       |                         |         |
| 31    | 11   | 42 | Data                |       |                         |         |
| 1     | 42   | 43 | Original POS Number |       |                         |         |
| 1     | 43   | 44 | Original PC Number  |       |                         |         |
| 20    | 44   | 64 | Tail                |       |                         |         |
| 64    |      |    | Total               |       |                         |         |

## Unbalanced POS

**Explanation:** This alert notifies when the cash at a specific POS is unbalanced, indicating there are differences in the totals found.

| Bytes | From | To | Data                      | Bits  | Explanation          | Remarks |
|-------|------|----|---------------------------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode                    |       | 63 – Alerts          |         |
| 2     | 1    | 3  | Sub function              |       | 205 – Unbalanced POS |         |
| 1     | 3    | 4  | Function                  |       |                      |         |
| 1     | 4    | 5  | Flag 1                    |       |                      |         |
|       |      |    |                           | bit 0 | Display message      |         |
|       |      |    |                           | bit 1 | DRV file popup       |         |
|       |      |    |                           | bit 2 | Ignore alert         |         |
|       |      |    |                           | bit 3 | Use POS number       |         |
|       |      |    |                           | bit 4 | Not Used             |         |
|       |      |    |                           | bit 5 | Not Used             |         |
|       |      |    |                           | bit 6 | Not Used             |         |
|       |      |    |                           | bit 7 | Not Used             |         |
| 1     | 5    | 6  | POS-no                    |       |                      |         |
| 1     | 6    | 7  | PC_no                     |       |                      |         |
| 8     | 7    | 15 | yesterday_<br>grand_total |       |                      |         |
| 8     | 15   | 23 | today_grand_<br>total     |       |                      |         |
| 8     | 23   | 31 | diff_grand_ total         |       |                      |         |
| 4     | 31   | 35 | gross_sales               |       |                      |         |
| 4     | 35   | 39 | diff_sales                |       |                      |         |
| 5     | 39   | 44 | Not Used                  |       |                      |         |
| 20    | 44   | 64 | Tail                      |       |                      |         |
| 64    |      |    | Total                     |       |                      |         |

## Program Version

**Explanation:** This alert notifies the system that the Program Versions on the POS are not compatible.

| Bytes | From | To | Data         | Bits  | Explanation           | Remarks |
|-------|------|----|--------------|-------|-----------------------|---------|
| 1     | 0    | 1  | Opcode       |       | 63 – Alerts           |         |
| 2     | 1    | 3  | Sub function |       | 230 – Program Version |         |
| 1     | 3    | 4  | Function     |       |                       |         |
| 1     | 4    | 5  | Flag 1       |       |                       |         |
|       |      |    |              | bit 0 | Display message       |         |
|       |      |    |              | bit 1 | DRV file popup        |         |
|       |      |    |              | bit 2 | Ignore alert          |         |
|       |      |    |              | bit 3 | Use POS number        |         |
|       |      |    |              | bit 4 | Not Used              |         |
|       |      |    |              | bit 5 | Not Used              |         |
|       |      |    |              | bit 6 | Not Used              |         |
|       |      |    |              | bit 7 | Not Used              |         |
| 12    | 5    | 17 | prog_name    |       |                       |         |
| 3     | 17   | 20 | compile_date |       |                       |         |
| 3     | 20   | 23 | compile_time |       |                       |         |
| 8     | 23   | 31 | Version      |       |                       |         |
| 1     | 31   | 32 | POS_no       |       |                       |         |
| 1     | 32   | 33 | PC_no        |       |                       |         |
| 11    | 33   | 44 | Not Used     |       |                       |         |
| 20    | 44   | 64 | Tail         |       |                       |         |
| 64    |      |    | Total        |       |                       |         |

## POST Version Alert

**Explanation:** This Alert provides information on the Pos.exe/PosW32.exe.

| Bytes | From | To | Data                | Bits  | Explanation             | Remarks |
|-------|------|----|---------------------|-------|-------------------------|---------|
| 1     | 0    | 1  | Opcode              |       | 63 – Alerts             |         |
| 2     | 1    | 3  | SubOpcode           |       | 80 – Post Version       |         |
| 1     | 3    | 4  | Function            |       |                         |         |
| 1     | 4    | 5  | Flag 1              |       |                         |         |
|       |      |    |                     | bit 0 | Not Used                |         |
|       |      |    |                     | bit 1 | Not Used                |         |
|       |      |    |                     | bit 2 | Not Used                |         |
|       |      |    |                     | bit 3 | Use Original POS number |         |
|       |      |    |                     | bit 4 | Not Used                |         |
|       |      |    |                     | bit 5 | Not Used                |         |
|       |      |    |                     | bit 6 | Not Used                |         |
|       |      |    |                     | bit 7 | Not Used                |         |
| 12    | 5    | 17 | Program Name        |       |                         |         |
| 3     | 17   | 20 | Compile Date        |       |                         |         |
| 3     | 20   | 23 | Compile Time        |       |                         |         |
| 8     | 23   | 31 | Version             |       |                         |         |
| 11    | 31   | 42 | Data                |       |                         |         |
| 1     | 42   | 43 | Original POS Number |       |                         |         |
| 1     | 43   | 44 | Original PC Number  |       |                         |         |
| 20    | 44   | 64 | Tail                |       |                         |         |
| 64    |      |    | Total               |       |                         |         |

## File Refresh

**Explanation:** This alert notifies the system that a specific POS needs file refreshing.

| Bytes | From | To | Data                | Bits  | Explanation                                                                                                                                                                                                                                                       | Remarks |
|-------|------|----|---------------------|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| 1     | 0    | 1  | Opcode              |       | 63 – Alerts                                                                                                                                                                                                                                                       |         |
| 2     | 1    | 3  | Sub_opcode          |       | 89 – File Refresh                                                                                                                                                                                                                                                 |         |
| 1     | 3    | 4  | Function            |       |                                                                                                                                                                                                                                                                   |         |
| 1     | 4    | 5  | Flag 1              | bit 0 | Not used                                                                                                                                                                                                                                                          |         |
|       |      |    |                     | bit 1 | Not used                                                                                                                                                                                                                                                          |         |
|       |      |    |                     | bit 2 | Not used t                                                                                                                                                                                                                                                        |         |
|       |      |    |                     | bit 3 | Use original POS number                                                                                                                                                                                                                                           |         |
|       |      |    |                     | bit 4 | Not used                                                                                                                                                                                                                                                          |         |
|       |      |    |                     | bit 5 | Not used                                                                                                                                                                                                                                                          |         |
|       |      |    |                     | bit 6 | Not used                                                                                                                                                                                                                                                          |         |
|       |      |    |                     | bit 7 | Not used                                                                                                                                                                                                                                                          |         |
| 1     | 5    | 6  | QDX File            |       | File Number. 0 represents all files                                                                                                                                                                                                                               |         |
| 1     | 6    | 7  | Status              |       | 1 – Start refresh checksum fails<br>2 – Start refresh TV problem<br>3 – Suspend load user abort<br>4 – Resume load<br>5 – Start refresh force request<br>6 – Start refresh CFM request<br>7 – File refreshing completed<br>8 – POS menu QDX file refreshing fails |         |
| 35    | 7    | 42 | Data                |       |                                                                                                                                                                                                                                                                   |         |
| 1     | 42   | 43 | Original POS Number |       |                                                                                                                                                                                                                                                                   |         |
| 1     | 43   | 44 | Original PC No.     |       |                                                                                                                                                                                                                                                                   |         |
| 20    | 44   | 64 | Tail                |       |                                                                                                                                                                                                                                                                   |         |
| 64    |      |    | Total               |       |                                                                                                                                                                                                                                                                   |         |

## Alert Batch

| Bytes | From | To | Data                  | Bits  | Explanation             | Remarks |
|-------|------|----|-----------------------|-------|-------------------------|---------|
| 1     | 0    | 1  | Opcode                |       | 63 – Alerts             |         |
| 2     | 1    | 3  | Sub function          |       | 90 – Alert Batch        |         |
| 1     | 3    | 4  | Function              |       |                         |         |
| 1     | 4    | 5  | Flag 1                |       |                         |         |
|       |      |    |                       | bit 0 | Not Used                |         |
|       |      |    |                       | bit 1 | Not Used                |         |
|       |      |    |                       | bit 2 | Not Used                |         |
|       |      |    |                       | bit 3 | Use Original POS Number |         |
|       |      |    |                       | bit 4 | Not Used                |         |
|       |      |    |                       | bit 5 | Not Used                |         |
|       |      |    |                       | bit 6 | Not Used                |         |
|       |      |    |                       | bit 7 | Not Used                |         |
| 6     | 5    | 11 | host_batch_<br>number |       |                         |         |
| 4     | 11   | 15 | host_records          |       |                         |         |
| 4     | 15   | 19 | accepted_ records     |       |                         |         |
| 3     | 19   | 22 | Date                  |       |                         | BCD     |
| 3     | 22   | 25 | Time                  |       |                         | BCD     |
| 2     | 25   | 27 | Batch Type            |       |                         |         |
| 15    | 27   | 42 | Data                  |       |                         |         |
| 1     | 42   | 43 | org_pos_no            |       |                         |         |
| 1     | 43   | 44 | org_pc_no             |       |                         |         |
| 20    | 44   | 64 | Tail                  |       |                         |         |
| 64    |      |    | Total                 |       |                         |         |

## Wrong Version Alert

**Explanation:** Versions Control On POS

| Bytes | From | To | Data             | Bits | Explanation               | Remarks |
|-------|------|----|------------------|------|---------------------------|---------|
| 1     | 0    | 1  | Opcode           |      | 63 – Alerts               |         |
| 2     | 1    | 3  | Sub Opcode       |      | 165 – Wrong Version Alert |         |
| 1     | 3    | 4  | Function         |      |                           |         |
| 22    | 4    | 26 | Component Name   |      |                           |         |
| 8     | 26   | 34 | Expected Version |      |                           |         |
| 8     | 34   | 42 | Actual Version   |      |                           |         |
| 1     | 42   | 43 | POS Number       |      |                           |         |
| 1     | 43   | 44 | PC Number        |      |                           |         |
| 20    | 44   | 64 | Tail             |      |                           |         |
| 64    |      |    | Total            |      |                           |         |



## Alert Trans Send

| Bytes | From | To | Data             | Bits  | Explanation                        | Remarks |
|-------|------|----|------------------|-------|------------------------------------|---------|
| 1     | 0    | 1  | Opcode           |       | 63 – Alerts                        |         |
| 2     | 1    | 3  | Sub Opcode       |       | 166 – Alert Trans Manager<br>Stuck |         |
| 1     | 3    | 4  | Function         |       |                                    |         |
| 1     | 4    | 5  | Flag 1           |       |                                    |         |
|       |      |    |                  | bit 0 | Not Used                           |         |
|       |      |    |                  | bit 1 | Not Used                           |         |
|       |      |    |                  | bit 2 | Not Used                           |         |
|       |      |    |                  | bit 3 | Use Original POS Number            |         |
|       |      |    |                  | bit 4 | Not Used                           |         |
|       |      |    |                  | bit 5 | Not Used                           |         |
|       |      |    |                  | bit 6 | Not Used                           |         |
|       |      |    |                  | bit 7 | Not Used                           |         |
| 4     | 5    | 9  | Send Pointer     |       |                                    |         |
| 4     | 9    | 13 | Write Pointer    |       |                                    |         |
| 29    | 13   | 42 | Data             |       |                                    |         |
| 1     | 42   | 43 | Original POS No. |       |                                    |         |
| 1     | 43   | 44 | Original PC No.  |       |                                    |         |
| 20    | 44   | 64 | Tail             |       |                                    |         |
| 64    |      |    | Total            |       |                                    |         |

## Package DE

**Explanation:** This alert notifies the system of a new code deploy package to be installed.

| Bytes | From | To | Data           | Bits  | Explanation      | Remarks |
|-------|------|----|----------------|-------|------------------|---------|
| 1     | 0    | 1  | Opcode         |       | 63 – Alerts      |         |
| 2     | 1    | 3  | Sub function   |       |                  |         |
| 1     | 3    | 4  | Function       |       |                  |         |
| 1     | 4    | 5  | Flag 1         |       |                  |         |
|       |      |    |                | bit 0 | Display message  |         |
|       |      |    |                | bit 1 | DRV file popup   |         |
|       |      |    |                | bit 2 | Ignore alert     |         |
|       |      |    |                | bit 3 | Use POS number   |         |
|       |      |    |                | bit 4 | Get text message |         |
|       |      |    |                | bit 5 | Manual package   |         |
|       |      |    |                | bit 6 | Not Used         |         |
|       |      |    |                | bit 7 | Not Used         |         |
| 12    | 5    | 17 | Package number |       |                  |         |
| 14    | 17   | 31 | Data           |       |                  |         |
| 1     | 31   | 32 | Opener result  |       |                  |         |
| 2     | 32   | 34 | Previous rel a |       |                  |         |
| 1     | 34   | 36 | Previous rel b |       |                  |         |
| 1     | 36   | 38 | Previous rel c |       |                  |         |
| 1     | 38   | 40 | Previous rel d |       |                  |         |
| 2     | 40   | 42 | Error          |       |                  |         |
| 1     | 42   | 43 | POS number     |       |                  |         |
| 1     | 43   | 44 | PC number      |       |                  |         |
| 20    | 44   | 64 | Tail           |       |                  |         |
| 64    |      |    | Total          |       |                  |         |

## Check Card 51

| Bytes | From | To | Data                 | Bits  | Explanation                         | Remarks |
|-------|------|----|----------------------|-------|-------------------------------------|---------|
| 1     | 0    | 1  | Opcode               |       | 63 – Alerts                         |         |
| 2     | 1    | 3  | Sub opcode           |       |                                     |         |
| 1     | 3    | 4  | Function             |       |                                     |         |
| 1     | 4    | 5  | Flag 1               |       |                                     |         |
|       |      |    |                      | bit 0 | Display message                     |         |
|       |      |    |                      | bit 1 | DRV file popup                      |         |
|       |      |    |                      | bit 2 | Ignore alert                        |         |
|       |      |    |                      | bit 3 | Use original POS number             |         |
|       |      |    |                      | bit 4 | Get text message                    |         |
|       |      |    |                      | bit 5 | Not Used                            |         |
|       |      |    |                      | bit 6 | Not Used                            |         |
|       |      |    |                      | bit 7 | Not Used                            |         |
| 1     | 5    | 6  | New OLA<br>Provider1 |       | 0 = mean offline<br>1-10 MFS1-MFS10 |         |
| 1     | 6    | 7  | Old OLA<br>Provider1 |       | 0 = Mean offline<br>1-10MFS1-MFS10  |         |
| 35    | 7    | 42 | Data                 |       |                                     |         |
| 1     | 42   | 43 | POS number           |       |                                     |         |
| 1     | 43   | 44 | PC number            |       |                                     |         |
| 20    | 44   | 64 | Tail                 |       |                                     |         |
| 64    |      |    | Total                |       |                                     |         |

## Alert Host Lookup

| Bytes | From | To | Data                | Bits  | Explanation                                                         | Remarks |
|-------|------|----|---------------------|-------|---------------------------------------------------------------------|---------|
| 1     | 0    | 1  | Opcode              |       | 63 – Alerts                                                         |         |
| 2     | 1    | 3  | Sub Opcode          |       | 165 (xA5)                                                           |         |
| 1     | 3    | 4  | Function            |       |                                                                     |         |
| 1     | 4    | 5  | Flag 1              |       |                                                                     |         |
|       |      |    |                     | bit 0 | Display message                                                     |         |
|       |      |    |                     | bit 1 | Drvfile popup                                                       |         |
|       |      |    |                     | bit 2 | Ignore alert                                                        |         |
|       |      |    |                     | bit 3 | Original POS Number                                                 |         |
|       |      |    |                     | bit 4 | Get Text Message                                                    |         |
|       |      |    |                     | bit 5 | Not Used                                                            |         |
|       |      |    |                     | bit 6 | Not Used                                                            |         |
|       |      |    |                     | bit 7 | Not Used17                                                          |         |
| 1     | 5    | 6  | Reason              |       | 0 - Host Unavailable<br>1 – Unknown to host<br>2 – Action Cancelled |         |
| 7     | 6    | 13 | BCD Unknown Item    |       |                                                                     |         |
| 29    | 13   | 42 | Data                |       |                                                                     |         |
| 1     | 42   | 43 | Original POS number |       |                                                                     |         |
| 1     | 43   | 44 | Original PC number  |       |                                                                     |         |
| 20    | 44   | 64 | Tail                |       |                                                                     |         |
| 64    |      |    | Total               |       |                                                                     |         |

## Alert CFM

| Bytes | From | To | Data         | Bits  | Explanation                                                                                                                                     | Remarks |
|-------|------|----|--------------|-------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| 1     | 0    | 1  | Opcode       |       | 0 X 63 – Alerts CFM                                                                                                                             |         |
| 2     | 1    | 3  | Sub function |       | 237 – Alerts CFM                                                                                                                                |         |
| 1     | 3    | 4  | Function     |       | 0 – Alert CFM<br>1 – Alert CFM Update<br>2 – Alert CFM Recovery<br>3 – Alert CFM File<br>4 – Alert CFM End<br>5 – Alert Emergency CFM Fail Sync |         |
| 1     | 4    | 5  | Flag 1       | bit 0 | Display message                                                                                                                                 |         |
|       |      |    |              | bit 1 | DRV file popup                                                                                                                                  |         |
|       |      |    |              | bit 2 | Ignore alert                                                                                                                                    |         |
|       |      |    |              | bit 3 | Use POS number                                                                                                                                  |         |
|       |      |    |              | bit 4 | Get text message                                                                                                                                |         |
|       |      |    |              | bit 5 | Not Used                                                                                                                                        |         |
|       |      |    |              | bit 6 | Not Used                                                                                                                                        |         |
|       |      |    |              | bit 7 | Not Used                                                                                                                                        |         |
| 1     | 5    | 6  | QDX File     |       |                                                                                                                                                 |         |
| 1     | 6    | 7  | No Files     |       |                                                                                                                                                 |         |
| 35    | 7    | 42 | Data         |       |                                                                                                                                                 |         |
| 1     | 42   | 43 | POS number   |       |                                                                                                                                                 |         |
| 1     | 43   | 44 | PC number    |       |                                                                                                                                                 |         |
| 20    | 44   | 64 | Tail         |       |                                                                                                                                                 |         |
| 64    |      |    | Total        |       |                                                                                                                                                 |         |

## Disk Space Info

**Explanation:** This alert notifies the system when there is not enough free space left on the disk. The POS Number, PC Number, etc. are specified.

| Bytes | From | To | Data                        | Bits  | Explanation           | Remarks |
|-------|------|----|-----------------------------|-------|-----------------------|---------|
| 1     | 0    | 1  | Opcode                      |       | 63 – Alerts package   |         |
| 2     | 1    | 3  | Sub function                |       | 238 – Disk Space Info |         |
| 1     | 3    | 4  | Function                    |       |                       |         |
| 1     | 4    | 5  | Flag 1                      |       |                       |         |
|       |      |    |                             | bit 0 | Display message       |         |
|       |      |    |                             | bit 1 | DRV file popup        |         |
|       |      |    |                             | bit 2 | Ignore alert          |         |
|       |      |    |                             | bit 3 | Use POS number        |         |
|       |      |    |                             | bit 4 | Get text message      |         |
|       |      |    |                             | bit 5 | Not Used              |         |
|       |      |    |                             | bit 6 | Not Used              |         |
|       |      |    |                             | bit 7 | Not Used              |         |
| 4     | 5    | 9  | Free Space in Disk          |       |                       |         |
| 4     | 9    | 13 | Free Space Minimum (needed) |       |                       |         |
| 29    | 13   | 42 | Data                        |       |                       |         |
| 1     | 42   | 43 | POS Number                  |       |                       |         |
| 1     | 43   | 44 | PC Number                   |       |                       |         |
| 20    | 44   | 64 | Tail                        |       |                       |         |
| 64    |      |    | Total                       |       |                       |         |

## Storeboard Message

| Bytes | From | To | Data                | Bits  | Explanation                   | Remarks |
|-------|------|----|---------------------|-------|-------------------------------|---------|
| 1     | 0    | 1  | Opcode              |       | 63 – Alert Storeboard Message |         |
| 2     | 1    | 3  | SubOpcode           |       | 110                           |         |
| 1     | 3    | 4  | Function            |       |                               |         |
| 1     | 4    | 5  | Flag 1              |       |                               |         |
|       |      |    |                     | bit 0 | Not Used                      |         |
|       |      |    |                     | bit 1 | Not Used                      |         |
|       |      |    |                     | bit 2 | Not Used                      |         |
|       |      |    |                     | bit 3 | Use Original POS Number       |         |
|       |      |    |                     | bit 4 | Not Used                      |         |
|       |      |    |                     | bit 5 | Not Used                      |         |
|       |      |    |                     | bit 6 | Not Used                      |         |
|       |      |    |                     | bit 7 | Not Used                      |         |
| 1     | 5    | 6  | Message Number      |       |                               |         |
| 1     | 6    | 7  | Cashier Answer      |       | 1 – No, 2 – Yes               |         |
| 35    | 7    | 42 | Message Text        |       | First 35 bytes of text        |         |
| 1     | 42   | 43 | Original POS Number |       |                               |         |
| 1     | 43   | 44 | Original PC Number  |       |                               |         |
| 20    | 44   | 64 | Tail                |       |                               |         |
| 64    |      |    | Total               |       |                               |         |

## Post Mail

| Bytes | From | To | Data                | Bits | Explanation    | Remarks |
|-------|------|----|---------------------|------|----------------|---------|
| 1     | 0    | 1  | Opcode              |      | 63 – Post Mail |         |
| 2     | 1    | 3  | SubOpcode           |      | 113            |         |
| 1     | 3    | 4  | Function            |      |                |         |
| 2     | 4    | 6  | From Address        |      |                |         |
| 4     | 6    | 10 | Mail Message Number |      |                |         |
| 1     | 10   | 11 | Send To All         |      |                |         |
| 31    | 11   | 42 | Data                |      |                |         |
| 1     | 42   | 43 | Original POS Number |      |                |         |
| 1     | 43   | 44 | Original PC Number  |      |                |         |
| 20    | 44   | 64 | Tail                |      |                |         |
| 64    |      |    | Total               |      |                |         |



## Transaction Error

**Explanation:** Transaction Error alerts the system when a QDX problem occurs within a transaction, recording FIFO size, Pointer, Count, Sequence Number, etc.

| Bytes | From | To | Data                     | Bits  | Explanation                        | Remarks |
|-------|------|----|--------------------------|-------|------------------------------------|---------|
| 1     | 0    | 1  | Opcode                   |       | 63 – Alert Transaction QDX Problem |         |
| 2     | 1    | 3  | SubOpcode                |       | 116                                |         |
| 1     | 3    | 4  | Function                 |       |                                    |         |
| 1     | 4    | 5  | Flags                    | bit 0 | Not Used                           |         |
|       |      |    |                          | bit 1 | Not Used                           |         |
|       |      |    |                          | bit 2 | Not Used                           |         |
|       |      |    |                          | bit 3 | Use Original POS Number            |         |
|       |      |    |                          | bit 4 | Not Used                           |         |
|       |      |    |                          | bit 5 | Not Used                           |         |
|       |      |    |                          | bit 6 | Not Used                           |         |
|       |      |    |                          | bit 7 | Not Used                           |         |
| 2     | 5    | 7  | Transaction FIFO Size    |       |                                    |         |
| 2     | 7    | 9  | Transaction First        |       |                                    |         |
| 4     | 9    | 13 | Transaction Pointer      |       |                                    |         |
| 2     | 13   | 15 | Transaction Count        |       |                                    |         |
| 2     | 15   | 17 | Future Transaction Count |       |                                    |         |
| 2     | 17   | 19 | Transaction Sequence No. |       |                                    |         |
| 23    | 19   | 42 | Data                     |       |                                    |         |
| 1     | 42   | 43 | Original POS No.         |       |                                    |         |
| 1     | 43   | 44 | Original PC No.          |       |                                    |         |
| 20    | 44   | 64 | Tail                     |       |                                    |         |
| 64    |      |    | Total                    |       |                                    |         |

## Code Distribution

**Explanation:** The Code Distribution alerts the system that a new package will be received, recording the Package Name, Data, Opener Results, etc.

| Bytes | From | To | Data          | Bits  | Explanation                            | Remarks |
|-------|------|----|---------------|-------|----------------------------------------|---------|
| 1     | 0    | 1  | Opcode        |       | 63 – Alert Package – Code Distribution |         |
| 2     | 1    | 3  | SubOpcode     |       | 0xDE                                   |         |
| 1     | 3    | 4  | Function      |       |                                        |         |
| 1     | 4    | 5  | Flag 1        |       |                                        |         |
|       |      |    |               | bit 0 | Display Message                        |         |
|       |      |    |               | bit 1 | Drive File Pop Up                      |         |
|       |      |    |               | bit 2 | Ignore alert                           |         |
|       |      |    |               | bit 3 | Use Original POS Number                |         |
|       |      |    |               | bit 4 | Get Text Message                       |         |
|       |      |    |               | bit 5 | Manual Package                         |         |
|       |      |    |               | bit 6 | Not Used                               |         |
|       |      |    |               | bit 7 | Not Used                               |         |
| 12    | 5    | 17 | Package Name  |       |                                        |         |
| 14    | 17   | 31 | Data          |       |                                        |         |
| 1     | 31   | 32 | Opener Result |       |                                        |         |
| 2     | 32   | 34 | Prev_Rel_a    |       |                                        |         |
| 2     | 34   | 36 | Prev_Rel_b    |       |                                        |         |
| 2     | 36   | 38 | Prev_Rel_c    |       |                                        |         |
| 2     | 38   | 40 | Prev_Rel_d    |       |                                        |         |
| 2     | 40   | 42 | Error         |       |                                        |         |
| 1     | 42   | 43 | POS Number    |       |                                        |         |
| 1     | 43   | 44 | PC Number     |       |                                        |         |
| 20    | 44   | 64 | Tail          |       |                                        |         |
| 64    |      |    | Total         |       |                                        |         |

## OLA

| Bytes | From | To | Data                | Bits  | Explanation                                | Remarks |
|-------|------|----|---------------------|-------|--------------------------------------------|---------|
| 1     | 0    | 1  | Opcode              |       | 63 – OLA Alert                             |         |
| 2     | 1    | 3  | SubOpcode           |       |                                            |         |
| 1     | 3    | 4  | Function            |       |                                            |         |
| 1     | 4    | 5  | Flag 1              |       |                                            |         |
|       |      |    |                     | bit 0 | Not Used                                   |         |
|       |      |    |                     | bit 1 | Not Used                                   |         |
|       |      |    |                     | bit 2 | Not Used                                   |         |
|       |      |    |                     | bit 3 | Use Original POS Number                    |         |
|       |      |    |                     | bit 4 | Not Used                                   |         |
|       |      |    |                     | bit 5 | Not Used                                   |         |
|       |      |    |                     | bit 6 | Not Used                                   |         |
|       |      |    |                     | bit 7 | Not Used                                   |         |
| 1     | 5    | 6  | New OLA Provider    |       | 0 – Means Offline<br>1 – 10 - MFS1 – LFS10 |         |
| 1     | 6    | 7  | Old OLA Provider    |       | 0 – Means Offline<br>1 – 10 MFS1 – LFS10   |         |
| 35    | 7    | 42 | Data                |       |                                            |         |
| 1     | 42   | 43 | Original POS Number |       |                                            |         |
| 1     | 43   | 44 | Original PC Number  |       |                                            |         |
| 20    | 44   | 64 | Tail                |       |                                            |         |
| 64    |      |    | Total               |       |                                            |         |

## QDX Problem

| Bytes | From | To | Data                        | Bits  | Explanation                   | Remarks |
|-------|------|----|-----------------------------|-------|-------------------------------|---------|
| 1     | 0    | 1  | Opcode                      |       | 63 – OLA Alert                |         |
| 2     | 1    | 3  | SubOpcode                   |       | Alert Transaction QDX Problem |         |
| 1     | 3    | 4  | Function                    |       |                               |         |
| 1     | 4    | 5  | Flag 1                      |       |                               |         |
|       |      |    |                             | bit 0 | Not Used                      |         |
|       |      |    |                             | bit 1 | Not Used                      |         |
|       |      |    |                             | bit 2 | Not Used                      |         |
|       |      |    |                             | bit 3 | Use Original POS Number       |         |
|       |      |    |                             | bit 4 | Not Used                      |         |
|       |      |    |                             | bit 5 | Not Used                      |         |
|       |      |    |                             | bit 6 | Not Used                      |         |
|       |      |    |                             | bit 7 | Not Used                      |         |
| 2     | 5    | 7  | Transaction Fifo size       |       |                               |         |
| 2     | 7    | 9  | Transaction First           |       |                               |         |
| 4     | 9    | 13 | Transaction Pointer         |       |                               |         |
| 2     | 13   | 15 | Transaction Count           |       |                               |         |
| 2     | 15   | 17 | Future Transaction Count    |       |                               |         |
| 2     | 17   | 19 | Transaction Sequence Number |       |                               |         |
| 23    | 19   | 42 | Data                        |       |                               |         |
| 1     | 42   | 43 | Original POS Number         |       |                               |         |
| 1     | 43   | 44 | Original PC Number          |       |                               |         |
| 20    | 44   | 64 | Tail                        |       |                               |         |
| 64    |      |    | Total                       |       |                               |         |

## Gift Card Enquiry

**Explanation:** This alert is triggered during gift card enquiry failures. It holds the details of the gift card enquire failure.

| Bytes | From | To | Data                               | Bits  | Explanation                         | Remarks |
|-------|------|----|------------------------------------|-------|-------------------------------------|---------|
| 1     | 0    | 1  | Opcode                             |       | 63 – Alert                          |         |
| 2     | 1    | 3  | SubOpcode                          |       | Alert Transaction Gift Card Enquire |         |
| 1     | 3    | 4  | Function                           |       |                                     |         |
| 1     | 4    | 5  | Flag 1                             |       |                                     |         |
|       |      |    |                                    | bit 0 | Display Message                     |         |
|       |      |    |                                    | bit 1 | Drvfile popup                       |         |
|       |      |    |                                    | bit 2 | Ignore alert                        |         |
|       |      |    |                                    | bit 3 | Use POS No                          |         |
|       |      |    |                                    | bit 4 | Get Text Message                    |         |
|       |      |    |                                    | bit 5 | Not Used                            |         |
|       |      |    |                                    | bit 6 | Not Used                            |         |
|       |      |    |                                    | bit 7 | Not Used                            |         |
| 5     | 5    | 10 | Gift Card Batch Number             |       |                                     |         |
| 11    | 10   | 21 | Gift Card Batch Card Number        |       |                                     |         |
| 4     | 21   | 25 | Gift Card Batch Card Amount        |       |                                     |         |
| 2     | 25   | 27 | Gift Card Batch Card Number Length |       |                                     |         |
| 17    | 27   | 44 | Original POS Number                |       |                                     |         |
| 20    | 44   | 64 | Tail                               |       |                                     |         |
| 64    |      |    | Total                              |       |                                     |         |

## Alert File Distribution

| Bytes | From | To | Data                | Bits | Explanation             | Remarks |
|-------|------|----|---------------------|------|-------------------------|---------|
| 1     | 0    | 1  | Opcode              |      | 63 – Alert              |         |
| 2     | 1    | 3  | SubOpcode           |      | Alert File Distribution |         |
| 1     | 3    | 4  | Function            |      |                         |         |
| 1     | 4    | 5  | File ID             |      |                         |         |
| 1     | 5    | 6  | File Operation Type |      |                         |         |
| 36    | 6    | 42 | Data                |      |                         |         |
| 1     | 42   | 43 | Original POS No     |      |                         |         |
| 1     | 43   | 44 | Original PC No.     |      |                         |         |
| 20    | 44   | 64 | Tail                |      |                         |         |
| 64    |      |    | Total               |      |                         |         |

## AlarmSrv

**Explanation:** AlarmSrv alerts txn, written only from ExtTrs32 and not from the POS.

| Bytes | From | To | Data         | Bits | Explanation          | Remarks |
|-------|------|----|--------------|------|----------------------|---------|
| 1     | 0    | 1  | Opcode       |      | 63 – Alert           |         |
| 2     | 1    | 3  | SubOpcode    |      | AlarmSrv 800 (0x320) |         |
| 1     | 3    | 4  | Function     |      |                      |         |
| 2     | 4    | 6  | Category     |      |                      |         |
| 2     | 6    | 8  | Sub Category |      |                      |         |
| 2     | 8    | 10 | AlarmID      |      |                      |         |
| 2     | 10   | 12 | Device No.   |      |                      |         |
| 32    | 12   | 44 | Not Used     |      |                      |         |
| 20    | 44   | 64 | Tail         |      |                      |         |
| 64    |      |    | Total        |      |                      |         |

## Auto Fuel Management 176

| Bytes | From | To | Data              | Bits  | Explanation              | Remarks |
|-------|------|----|-------------------|-------|--------------------------|---------|
| 1     | 0    | 1  | Opcode            |       | 63 – Alert               |         |
| 2     | 1    | 3  | SubOpcode         |       | Auto Fuel Management 176 |         |
| 1     | 3    | 4  | Function          |       | Alert number             |         |
| 1     | 4    | 5  | Flag              |       |                          |         |
|       |      |    |                   | Bit 0 | Display message          |         |
|       |      |    |                   | Bit 1 | Drv file popup           |         |
|       |      |    |                   | Bit 2 | Ignore alert             |         |
|       |      |    |                   | Bit 3 | UseOriginalPOS No.       |         |
|       |      |    |                   | Bit 4 | Get Text Message         |         |
|       |      |    |                   | Bit 5 | Not Used                 |         |
|       |      |    |                   | Bit 6 | Not Used                 |         |
|       |      |    |                   | Bit 7 | Not Used                 |         |
| 4     | 5    | 9  | Batch Number      |       |                          |         |
| 4     | 9    | 13 | Store ID          |       |                          |         |
| 1     | 13   | 14 | Price change type |       |                          |         |
| 28    | 14   | 42 | Data              |       |                          |         |
| 1     | 42   | 43 | Original POS No.  |       |                          |         |
| 1     | 43   | 44 | Original PC No.   |       |                          |         |
| 20    | 44   | 64 | Tail              |       |                          |         |
| 64    |      |    | Total             |       |                          |         |



## Combined User Security

**Explanation:** This alert is triggered for alerting password violation and unknown user ID.

| Bytes | From | To | Data        | Bits  | Explanation                               | Remarks |
|-------|------|----|-------------|-------|-------------------------------------------|---------|
| 1     | 0    | 1  | Opcode      |       | 63 – Alert                                |         |
| 2     | 1    | 3  | SubOpcode   |       | 45 (wrong password)<br>119 (Unknown User) |         |
| 1     | 3    | 4  | Function    |       |                                           |         |
| 1     | 4    | 5  | Flag        | Bit 0 | Opt Not Used                              |         |
|       |      |    |             | Bit 1 | Opt Not Used                              |         |
|       |      |    |             | Bit 2 | Opt Not Used                              |         |
|       |      |    |             | Bit 3 | Opt Not Used                              |         |
|       |      |    |             | Bit 4 | Opt Not Used                              |         |
|       |      |    |             | Bit 5 | Opt Not Used                              |         |
|       |      |    |             | Bit 6 | Opt Not Used                              |         |
|       |      |    |             | Bit 7 | Opt Not Used                              |         |
| 2     | 5    | 7  | Cashier No. |       |                                           |         |
| 2     | 7    | 9  | POS No.     |       |                                           |         |
| 35    | 9    | 44 | Not Used    |       |                                           |         |
| 20    | 44   | 64 | Tail        |       |                                           |         |
| 64    |      |    | Total       |       |                                           |         |

## Uncollected Change

**Explanation:** This alert is triggered for alerting change not collected from fuel prepays

| Bytes | From | To | Data             | Bits  | Explanation                                             | Remarks |
|-------|------|----|------------------|-------|---------------------------------------------------------|---------|
| 1     | 0    | 1  | Opcode           |       | 63 – Alert                                              |         |
| 2     | 1    | 3  | SubOpcode        |       | 17008 -Alert invalid dep or PLU for uncollected change) |         |
| 1     | 3    | 4  | Function         |       |                                                         |         |
| 1     | 4    | 5  | Flag             | Bit 0 | Opt Not Used                                            |         |
|       |      |    |                  | Bit 1 | Opt Not Used                                            |         |
|       |      |    |                  | Bit 2 | Opt Not Used                                            |         |
|       |      |    |                  | Bit 3 | Opt Org Pos Number                                      |         |
|       |      |    |                  | Bit 4 | Get Text Message                                        |         |
|       |      |    |                  | Bit 5 | Opt Not Used                                            |         |
|       |      |    |                  | Bit 6 | Opt Not Used                                            |         |
|       |      |    |                  | Bit 7 | Opt Not Used                                            |         |
| 37    | 5    | 42 | Data             |       |                                                         |         |
| 1     | 42   | 43 | Original POS No. |       |                                                         |         |
| 1     | 43   | 44 | Original PC No.  |       |                                                         |         |
| 20    | 44   | 64 | Tail             |       |                                                         |         |
| 64    |      |    | Total            |       |                                                         |         |

## Opcode 64 Printout

### Transaction Printout

**Explanation:** This is the Opcode used when all the transactions are printed to the Electronic Journal. The transaction information is picked up daily from the transaction file.

| Bytes | From | To | Data     | Bits     | Explanation                      | Remarks            |
|-------|------|----|----------|----------|----------------------------------|--------------------|
| 1     | 0    | 1  | Opcode   |          | 64 – Transaction printout        | Not compressed     |
| 1     | 1    | 2  | Flag 1   |          |                                  |                    |
|       |      |    |          | bit 0    | End                              | End of ticket text |
|       |      |    |          | bit 1    | Start                            | Start of ticket    |
|       |      |    |          | bit 2, 3 | Pre blank lines (up to three)    | Inset              |
|       |      |    |          | bit 4    | Print only to Electronic Journal | Not on receipt     |
|       |      |    |          | bit 5    | Cut paper                        |                    |
|       |      |    |          | bit 6    | Print Emphasized                 |                    |
|       |      |    |          | bit 7    | Print Enlarged                   |                    |
| 40    | 2    | 42 | Text     |          |                                  |                    |
| 2     | 42   | 44 | Not Used |          |                                  |                    |
| 20    | 44   | 64 | Tail     |          |                                  |                    |
| 64    |      |    | Total    |          |                                  |                    |

## Opcode 65 Fuel System

### Debug Transaction

**Explanation:** In a situation where incorrect data is received on the RS232 line, or a problem is detected in Pump Logic, the PFS will log a debug transaction in order to analyze it afterwards.

| Bytes | Description                  | Contents   |
|-------|------------------------------|------------|
|       | SYS_DEBUG_LARGE_SALE         | 0x65, 0x01 |
|       | SYS_DEBUG_COMPLETE_NO_INFO   | 0x65, 0x02 |
|       | SYS_DEBUG_WRONG_PUMP_STAT    | 0x65, 0x03 |
|       | SYS_DEBUG_WRONG_TRANSAC_STAT | 0x65, 0x04 |
|       | SYS_DEBUG_WRONG_PUMP_MODE    | 0x65, 0x05 |
|       | SYS_DEBUG_WRONG_PUMP_NUMBER  | 0x65, 0x06 |

**Note:** We recommend that you make a daily or weekly batch to search for these transactions, to find problems as well as prevent future problems.

## Opcode 66 Fuel Reconciliation

### Site Controller Raw Data

| Bytes | From | To | Data                   | Bits | Explanation                                               | Remarks |
|-------|------|----|------------------------|------|-----------------------------------------------------------|---------|
| 1     | 0    | 1  | Opcode                 |      | 66 – Site controller raw data message                     |         |
| 1     | 1    | 2  | Flags                  |      | Not used                                                  |         |
| 2     | 2    | 4  | Command comm*          |      | Original message code, taken from the message header      |         |
| 2     | 4    | 6  | Parameter              |      | Source message parameter, taken from comm* message header |         |
| 2     | 6    | 8  | Number comm*           |      | Source message number, taken from the message header      |         |
| 1     | 8    | 9  | Current block number   |      |                                                           |         |
| 1     | 9    | 10 | Total number of blocks |      |                                                           |         |
| 1     | 10   | 11 | Block length           |      | Length of the block data                                  |         |
| 32    | 11   | 43 | Block data             |      |                                                           |         |
| 1     | 43   | 44 | Not used               |      |                                                           |         |
| 20    | 44   | 64 | Tail                   |      |                                                           |         |
| 64    |      |    | Total                  |      |                                                           |         |

#### Notes:

1. The fields “Command”, “Parameter” and “Number” are the most important fields in the message header received from the site controller. The “Number” has no use in the current implementation but might have in the future.
2. The “Command” field contains the original message code.  
In fuel reconciliation it should be one of the following:  
FUEL\_DATA\_1\_CMD 0 X 7031  
FUEL\_DATA\_2\_CMD 0 X 7032
3. The “Parameter” field contains the original message parameter.  
In fuel reconciliation this field is used as a sequence number. (For more information, refer to “MPS – NEXT GEN FUEL RECONCILIATION INTERFACE SPEC” section 3).

4. Using the “Current block number”, and “Total number of blocks”, the UNIX software can identify start and end of each message.

In the first block: Current block number = 1

In the last block: Current block number = Total number of blocks

\* Refers to comms with Site Controller via RS-232 line.

## 68 – Zip Printout

0 X 68

| Bytes | From | To | Data   | Bits | Explanation         | Remarks |
|-------|------|----|--------|------|---------------------|---------|
| 1     | 0    | 1  | Opcode |      | 0x68 – Zip Printout |         |
| 1     | 1    | 2  | Bytes  |      |                     |         |
| 42    | 2    | 44 | Data   |      |                     |         |
| 20    | 44   | 64 | Tail   |      |                     |         |
| 64    |      |    | Total  |      |                     |         |

## 69 – Zip Printout Wide

0 X 69

**Explanation:** The Wide Printout Zip is used for invoices by Australia.

| Bytes | From | To | Data   | Bits | Explanation         | Remarks |
|-------|------|----|--------|------|---------------------|---------|
| 1     | 0    | 1  | Opcode |      | 0x69 – Zip Printout |         |
| 1     | 1    | 2  | Bytes  |      |                     |         |
| 42    | 2    | 44 | Data   |      |                     |         |
| 20    | 44   | 64 | Tail   |      |                     |         |
| 64    |      |    | Total  |      |                     |         |



## Opcode 70, Sub-Opcodes: 0 X 01 to 0 X FB

The Opcode number 70 is a continuation of the Opcode 60. It also refers to all the events logged by the POS that do not belong to any specific type of transaction registered. It is a general transaction. A Sub Opcode defining the function differentiates each one of the Opcode numbers 70.

### 01 – Manual Settlement

#### 0 X 01

**Explanation:** This opcode is recorded when an EFT transaction is performed and waiting to go to the bank, before the OLA is verified. The transaction is settled manually, recording the Account type, Transaction type, Purchase amount, Total amount, Tender type in which the transaction was finalized and the POS number on which the transaction was performed.

| Bytes | From | To | Data               | Bits | Explanation                                                      | Remarks |
|-------|------|----|--------------------|------|------------------------------------------------------------------|---------|
| 1     | 0    | 1  | Opcode             |      | 70 – Log Information                                             |         |
| 1     | 1    | 2  | Function           |      | 0 x 01                                                           |         |
| 1     | 2    | 3  | EFT Payment Status |      |                                                                  |         |
| 2     | 3    | 5  | Transaction Number |      |                                                                  |         |
| 2     | 5    | 7  | Session ID         |      |                                                                  |         |
| 3     | 7    | 10 | Trs Date           |      | YMD                                                              |         |
| 3     | 10   | 13 | Trs Time           |      | HMS                                                              |         |
| 10    | 13   | 23 | Card No.           |      | In BCD                                                           |         |
| 2     | 23   | 25 | Expiry Date        |      |                                                                  |         |
| 4     | 25   | 29 | Auth Number        |      | Authorization number in BCD.                                     |         |
| 1     | 29   | 30 | Issue Number       |      |                                                                  |         |
| 1     | 30   | 31 | Account Type       |      |                                                                  |         |
| 1     | 31   | 32 | Transaction Type   |      |                                                                  |         |
| 4     | 32   | 36 | Purchase Amount    |      |                                                                  |         |
| 4     | 36   | 40 | Total Amount       |      |                                                                  |         |
| 1     | 40   | 41 | Tender             |      | The Tender in which the transaction was finalized with (manual). |         |
| 1     | 41   | 42 | POS Number         |      |                                                                  |         |
| 2     | 42   | 44 | Error Code         |      |                                                                  |         |
| 20    | 44   | 64 | Tail               |      |                                                                  |         |

| Bytes | From | To | Data  | Bits | Explanation | Remarks |
|-------|------|----|-------|------|-------------|---------|
| 64    |      |    | Total |      |             |         |

## 02 – Info Sequence

0 x 02

| Bytes | From | To | Data              | Bits  | Explanation          | Remarks |
|-------|------|----|-------------------|-------|----------------------|---------|
| 1     | 0    | 1  | Opcode            |       | 70 – Log Information |         |
| 1     | 1    | 2  | Function          |       | 0 x 02               |         |
| 1     | 2    | 3  | Entity            |       |                      |         |
| 1     | 3    | 4  | Sequence Type     |       |                      |         |
| 4     | 4    | 8  | Sequence          |       |                      |         |
| 1     | 8    | 9  | Flags             |       |                      |         |
|       |      |    |                   | Bit 0 | New                  |         |
|       |      |    |                   | Bit 1 | Not Used             |         |
|       |      |    |                   | Bit 2 | Not Used             |         |
|       |      |    |                   | Bit 3 | Not Used             |         |
|       |      |    |                   | Bit 4 | Not Used             |         |
|       |      |    |                   | Bit 5 | Not Used             |         |
|       |      |    |                   | Bit 6 | Not Used             |         |
|       |      |    |                   | Bit 7 | Not Used             |         |
| 1     | 9    | 10 | Sequence Sub Type |       |                      |         |
| 34    | 10   | 44 | Not Used          |       |                      |         |
| 20    | 44   | 64 | Tail              |       |                      |         |
| 64    |      |    | Total             |       |                      |         |

## 03 – Unknown Item

### 0 X 03

**Explanation:** This Sub Opcode is based on the sub opcode 60 0x01. The structure is the same, however, it points to a different function.

| Bytes | From | To | Data       | Bits  | Explanation          | Remarks                                     |
|-------|------|----|------------|-------|----------------------|---------------------------------------------|
| 1     | 0    | 1  | Opcode     |       | 70 – Log Information |                                             |
| 1     | 1    | 2  | Function   |       | 03 – Unknown Item    |                                             |
| 7     | 2    | 9  | Code       |       | Item number          |                                             |
| 1     | 9    | 10 | Flag 1     | bit 0 | Scanned Item         | Item was scanned                            |
|       |      |    |            | bit 1 | Inquiry              | Item was looked up via inquiry              |
|       |      |    |            | bit 2 | Info record          | Informative record                          |
|       |      |    |            | bit 3 | Dep Sale Unknown     |                                             |
|       |      |    |            | bit 4 | Extra Code           |                                             |
|       |      |    |            | bit 5 | Not Used             |                                             |
|       |      |    |            | bit 6 | Not Used             |                                             |
|       |      |    |            | bit 7 | Not Used             |                                             |
| 1     | 10   | 11 | Flag 2     | bit 0 | POS Offline          | Indicates POS offline                       |
|       |      |    |            | bit 1 | Unknown item logic   | If using the unknown item logic.            |
|       |      |    |            | bit 2 | Unitmsrv_alive       | If POS got ACK for the unknown item request |
|       |      |    |            | bit 3 | Received PLU info    | If POS got ANS for the unknown item request |
|       |      |    |            | bit 4 | Invalid PLU details  | Answer not valid                            |
|       |      |    |            | bit 5 | External _srv_alive  | Cyber not alive                             |
|       |      |    |            | bit 6 | Not Used             |                                             |
|       |      |    |            | bit 7 | Not Used             |                                             |
| 20    | 11   | 31 | Extra Code |       |                      |                                             |
| 13    | 31   | 44 | Not Used   |       |                      |                                             |
| 20    | 44   | 64 | Tail       |       |                      |                                             |
| 64    |      |    | Total      |       |                      |                                             |

## 04 – PLU Sale Ext 3

0 X 04

**Explanation:** The PLU Sale Ext 3 opcode is generated when extra PLU data in the transaction is declared.

| Bytes | From | To | Data                              | Bits  | Explanation                           | Remarks                                                                                               |
|-------|------|----|-----------------------------------|-------|---------------------------------------|-------------------------------------------------------------------------------------------------------|
| 1     | 0    | 1  | Opcode                            |       | 70 – Log Information                  |                                                                                                       |
| 1     | 1    | 2  | Function                          |       | 0 x 04 Trans Info Extra PLU Data      |                                                                                                       |
| 6     | 2    | 8  | Sub Department                    |       | Sub Department number in BCD.         |                                                                                                       |
| 4     | 8    | 12 | Cost Price                        |       | Cost Price                            |                                                                                                       |
| 4     | 12   | 16 | Comparison Price                  |       | Comparison Price                      |                                                                                                       |
| 2     | 16   | 18 | Promotion Number                  |       |                                       |                                                                                                       |
| 7     | 18   | 25 | PLU Code                          |       |                                       |                                                                                                       |
| 7     | 25   | 32 | Internal Code                     |       |                                       |                                                                                                       |
| 1     | 32   | 33 | Flag                              |       |                                       |                                                                                                       |
|       |      |    |                                   | Bit 0 | Prohibited Sale Item                  | Indicates if a prohibited item was sold by the approval of a control check                            |
|       |      |    |                                   | Bit 1 | Rtc Embedded Barcode                  | Indicates if a barcode is an RTC embedded barcode.                                                    |
|       |      |    |                                   | Bit 2 | Follows linked item child             |                                                                                                       |
|       |      |    |                                   | Bit 3 | Exclude Price Modified form Promotion |                                                                                                       |
|       |      |    |                                   | Bit 4 | Not Used                              |                                                                                                       |
|       |      |    |                                   | Bit 5 | Not Used                              |                                                                                                       |
|       |      |    |                                   | Bit 6 | Not Used                              |                                                                                                       |
|       |      |    |                                   | Bit 7 | Not Used                              |                                                                                                       |
| 7     | 33   | 40 | Unknown item Replacement PLU Code |       |                                       |                                                                                                       |
| 1     | 40   | 41 | Price Type                        |       |                                       | This field is used for layby functionality.                                                           |
| 1     | 41   | 42 | Charge Related Tender             |       |                                       | The field is used to link items to tenders that are used as 'Charge' tenders. This is required during |

| Bytes | From | To | Data           | Bits | Explanation | Remarks                                                                                                                                                                        |
|-------|------|----|----------------|------|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|       |      |    |                |      |             | layby. For example, if an item is linked to this tender, when the customer purchases this item, the tender is used to charge the amount paid by the customer towards the item. |
| 2     | 42   | 44 | Subtracted Qty |      |             |                                                                                                                                                                                |
| 20    | 44   | 64 | Tail           |      |             |                                                                                                                                                                                |
| 64    |      |    | Total          |      |             |                                                                                                                                                                                |

## 05 – Transaction Info Parcel

### 0 X 05

**Explanation:** The Transaction Info Parcel opcode is generated when a customer uses the parcel pickup or home delivery service. The opcode records the type of service, a description of the parcels, as well as the number of parcels.

| Bytes | From | To | Data           | Bits  | Explanation              | Remarks |
|-------|------|----|----------------|-------|--------------------------|---------|
| 1     | 0    | 1  | Opcode         |       | 70 – Log Information     |         |
| 1     | 1    | 2  | Function       |       | 0 x 05 Trans Info Parcel |         |
| 2     | 2    | 4  | Parcel ID      |       |                          |         |
| 1     | 4    | 5  | Flags          |       |                          |         |
|       |      |    |                | Bit 0 | Home Delivery            |         |
|       |      |    |                | Bit 1 | Parcel Pickup            |         |
|       |      |    |                | Bit 2 | Void                     |         |
|       |      |    |                | Bit 3 | Return                   |         |
|       |      |    |                | Bit 4 | Not Used                 |         |
|       |      |    |                | Bit 5 | Not Used                 |         |
|       |      |    |                | Bit 6 | Not Used                 |         |
|       |      |    |                | Bit 7 | Not Used                 |         |
| 20    | 5    | 25 | Description    |       |                          |         |
| 1     | 25   | 26 | Quantity       |       |                          |         |
| 1     | 26   | 27 | Parcel Type    |       |                          |         |
| 2     | 27   | 29 | Minor Location |       | Used for Lay by parcels  |         |
| 15    | 29   | 44 | Not Used       |       |                          |         |
| 20    | 44   | 64 | Tail           |       |                          |         |
| 64    |      |    | Total          |       |                          |         |

## 06 – Transaction Info Charge Data

### 0 X 06

**Explanation:** The Transaction Info Charge Data opcode is generated when a customer uses the parcel pickup or home delivery service. The opcode records the number of parcels, the value of the parcels and the fee charged by the store for the service. The flag “ignore” is used when there is no charge for the service. In addition, any layby processing is recorded.

| Bytes | From | To | Data         | Bits  | Explanation                        | Remarks                    |
|-------|------|----|--------------|-------|------------------------------------|----------------------------|
| 1     | 0    | 1  | Opcode       |       | 70 – Log Information               |                            |
| 1     | 1    | 2  | Function     |       | 0 x 06 Trans Info Charge Data      |                            |
| 1     | 2    | 3  | Sub Function |       | 1 Home Delivery<br>2 Parcel Pickup |                            |
| 1     | 3    | 4  | Charge Type  |       |                                    |                            |
| 4     | 4    | 8  | Charge Value |       |                                    |                            |
| 2     | 8    | 10 | Parcel Qty   |       |                                    |                            |
| 4     | 10   | 14 | Total Amount |       |                                    |                            |
| 10    | 14   | 24 | Fee Code     |       |                                    |                            |
| 1     | 24   | 25 | Flags        |       |                                    |                            |
|       |      |    |              | Bit 0 | Ignore                             |                            |
|       |      |    |              | Bit 1 | Return                             | Added for layby processing |
|       |      |    |              | Bit 2 | Not Used                           |                            |
|       |      |    |              | Bit 3 | Not Used                           |                            |
|       |      |    |              | Bit 4 | Not Used                           |                            |
|       |      |    |              | Bit 5 | Not Used                           |                            |
|       |      |    |              | Bit 6 | Not Used                           |                            |
|       |      |    |              | Bit 7 | Not Used                           |                            |
| 19    | 25   | 44 | Not Used     |       |                                    |                            |
| 20    | 44   | 64 | Tail         |       |                                    |                            |
| 64    |      |    | Total        |       |                                    |                            |



## 07 – Transaction Info RSS (Reduced Space Symbology) Data 1

0 X 07

| Bytes | From | To | Data                  | Bits | Explanation                 | Remarks |
|-------|------|----|-----------------------|------|-----------------------------|---------|
| 1     | 0    | 1  | Opcode                |      | 70 – Log Information        |         |
| 1     | 1    | 2  | Function              |      | 0 x 07 Trans Info RSS Data1 |         |
| 1     | 2    | 3  | Weight Digits         |      |                             |         |
| 3     | 3    | 6  | Weight                |      |                             |         |
| 1     | 6    | 7  | Embedded Price Digits |      |                             |         |
| 8     | 7    | 15 | Embedded Price        |      |                             |         |
| 4     | 15   | 19 | Quantity              |      |                             |         |
| 3     | 19   | 22 | Packaging Date        |      | YYMMDD                      |         |
| 3     | 22   | 25 | Sell By Date          |      | YYMMDD                      |         |
| 3     | 25   | 28 | Expiration Date       |      | YYMMDD                      |         |
| 6     | 28   | 34 | Production Date       |      |                             |         |
| 10    | 34   | 44 | Reserved              |      |                             |         |
| 20    | 44   | 64 | Tail                  |      |                             |         |
| 64    |      |    | Total                 |      |                             |         |

## 08 – Transaction Info RSS (Reduced Space Symbology) Data 2

0 X 08

| Bytes | From | To | Data                | Bits | Explanation                 | Remarks |
|-------|------|----|---------------------|------|-----------------------------|---------|
| 1     | 0    | 1  | Opcode              |      | 70 – Log Information        |         |
| 1     | 1    | 2  | Function            |      | 0 x 08 Trans Info RSS Data2 |         |
| 20    | 2    | 22 | Batch Lot<br>Number |      |                             |         |
| 20    | 22   | 42 | Serial Number       |      |                             |         |
| 2     | 42   | 44 | Country of origin   |      |                             |         |
| 20    | 44   | 64 | Tail                |      |                             |         |
| 64    |      |    | Total               |      |                             |         |

## 09 – Transaction Info Cash Lift

### 0 X 09

**Explanation:** Transaction Info Cash Lift supports big numbers.

| Bytes             | From | To | Data              | Bits  | Explanation                 | Remarks |
|-------------------|------|----|-------------------|-------|-----------------------------|---------|
| 1                 | 0    | 1  | Opcode            |       | 70 – Log Information        |         |
| 1                 | 1    | 2  | Function          |       | 0 x 09 Trans Info Cash Lift |         |
| 1                 | 2    | 3  | Sub Function      |       | 1 Regular<br>2 POST Pickup  |         |
| <b>IF</b>         |      |    |                   |       |                             |         |
| <b>Big_Number</b> |      |    |                   |       |                             |         |
| 4                 | 3    | 7  | Amount            |       |                             |         |
| 2                 | 7    | 9  | Count             |       |                             |         |
| 1                 | 9    | 10 | Tender            |       | PC Generated options        |         |
| 1                 | 10   | 11 | Flags             |       |                             |         |
|                   |      |    |                   | Bit 0 | Previous period             |         |
|                   |      |    |                   | Bit 1 | Employee update             |         |
|                   |      |    |                   | Bit 2 | Reprocess                   | B/O use |
|                   |      |    |                   | Bit 3 | Remote                      |         |
|                   |      |    |                   | Bit 4 | Not Used                    |         |
|                   |      |    |                   | Bit 5 | Not Used                    |         |
|                   |      |    |                   | Bit 6 | Not Used                    |         |
|                   |      |    |                   | Bit 7 | Not Used                    |         |
| 1                 | 11   | 12 | POS Number        |       |                             |         |
| 1                 | 12   | 13 | PC Number         |       |                             |         |
| 4                 | 13   | 17 | Supervisor number |       |                             |         |
| 2                 | 17   | 19 | Cashier Number    |       |                             |         |
| 25                | 19   | 44 | Not Used          |       |                             |         |
| <b>Else</b>       |      |    |                   |       |                             |         |
| 8                 | 3    | 11 | Amount            |       |                             |         |
| 2                 | 11   | 13 | Count             |       |                             |         |
| 1                 | 13   | 14 | Tender            |       | PC Generated options        |         |
| 1                 | 14   | 15 | Flags             |       |                             |         |
|                   |      |    |                   | Bit 0 | Previous period             |         |
|                   |      |    |                   | Bit 1 | Employee update             |         |

| Bytes | From | To | Data                 | Bits  | Explanation | Remarks |
|-------|------|----|----------------------|-------|-------------|---------|
|       |      |    |                      | Bit 2 | Reprocess   | B/O use |
|       |      |    |                      | Bit 3 | Remote      |         |
|       |      |    |                      | Bit 4 | Int64       |         |
|       |      |    |                      | Bit 5 | Not Used    |         |
|       |      |    |                      | Bit 6 | Not Used    |         |
|       |      |    |                      | Bit 7 | Not Used    |         |
| 1     | 15   | 16 | POS number           |       |             |         |
| 1     | 16   | 17 | PC number            |       |             |         |
| 4     | 17   | 21 | Supervisor<br>number |       |             |         |
| 2     | 21   | 23 | Cashier number       |       |             |         |
| 21    | 23   | 44 | Not Used             |       |             |         |
| 20    | 44   | 64 | Tail                 |       |             |         |
| 64    |      |    | Total                |       |             |         |

## 0C – Info MobileLime Data Loyalty – Loyalty Record

0 x 0C

| Bytes | From | To | Data          | Bits | Explanation          | Remarks                               |
|-------|------|----|---------------|------|----------------------|---------------------------------------|
| 1     | 0    | 1  | Opcode        |      | 70 – Log Information |                                       |
| 1     | 1    | 2  | Function      |      | 0 x 0C               |                                       |
| 1     | 2    | 3  | Sub function  |      | 0x01                 | Loyalty Record                        |
| 1     | 3    | 4  | Status        |      |                      | 1: OK, 2:Denied,<br>3:Pending/Timeout |
| 5     | 4    | 9  | Mobile number |      |                      | BCD                                   |
| 20    | 9    | 29 | Segments      |      |                      |                                       |
| 15    | 29   | 44 | Not Used      |      |                      |                                       |
| 20    | 44   | 64 | Tail          |      |                      |                                       |
| 64    |      |    | Total         |      |                      |                                       |

## 0C – Info MobileLime Data Loyalty – EFT record

0 X 0C

| Bytes | From | To | Data            | Bits | Explanation          | Remarks                               |
|-------|------|----|-----------------|------|----------------------|---------------------------------------|
| 1     | 0    | 1  | Opcode          |      | 70 – Log Information |                                       |
| 1     | 1    | 2  | Function        |      | 0 x 0C               |                                       |
| 1     | 2    | 3  | Sub function    |      | 0x02                 | EFT record                            |
| 1     | 3    | 4  | Status          |      |                      | 1: OK, 2:Denied,<br>3:Pending/Timeout |
| 5     | 4    | 9  | Mobile number   |      |                      | BCD                                   |
| 4     | 9    | 13 | Net amount      |      |                      |                                       |
| 4     | 13   | 17 | Discount amount |      |                      |                                       |
| 27    | 17   | 44 | Not Used        |      |                      |                                       |
| 20    | 44   | 64 | Tail            |      |                      |                                       |
| 64    |      |    | Total           |      |                      |                                       |

## 0D – Info MobileLime Data Loyalty – Comments Header

0 X 0D

| Bytes | From | To | Data                                | Bits | Explanation          | Remarks       |
|-------|------|----|-------------------------------------|------|----------------------|---------------|
| 1     | 0    | 1  | Opcode                              |      | 70 – Log Information |               |
| 1     | 1    | 2  | Function                            |      | 0 x 0D               |               |
| 1     | 2    | 3  | Sub function                        |      | 0x01                 | Header Record |
| 2     | 3    | 5  | Number of<br>MobileLime<br>Comments |      |                      |               |
| 2     | 5    | 7  | MobileLime<br>Comments Size         |      |                      |               |
| 37    | 7    | 44 | Not Used                            |      |                      |               |
| 20    | 44   | 64 | Tail                                |      |                      |               |
| 64    |      |    | Total                               |      |                      |               |

## 0D – Info MobileLime Data Loyalty – Comments Data

0 X 0D

| Bytes | From | To | Data            | Bits | Explanation          | Remarks          |
|-------|------|----|-----------------|------|----------------------|------------------|
| 1     | 0    | 1  | Opcode          |      | 70 – Log Information |                  |
| 1     | 1    | 2  | Function        |      | 0 x 0D               |                  |
| 1     | 2    | 3  | Sub function    |      | 0x02                 | Comments Record  |
| 1     | 3    | 4  | Sequence number |      |                      | BCD 0x00 to 0x99 |
| 40    | 4    | 44 | Data            |      |                      |                  |
| 20    | 44   | 64 | Tail            |      |                      |                  |
| 64    |      |    | Total           |      |                      |                  |



## 12 – Info Zipped Text

0 X 12

| Bytes | From | To | Data            | Bits | Explanation          | Remarks |
|-------|------|----|-----------------|------|----------------------|---------|
| 1     | 0    | 1  | Opcode          |      | 70 – Log Information |         |
| 1     | 1    | 2  | Function        |      | 0 x 11               |         |
| 1     | 2    | 3  | Data Type       |      |                      |         |
| 1     | 3    | 4  | Filled Bytes    |      |                      |         |
| 38    | 4    | 42 | Compressed Text |      |                      |         |
| 2     | 42   | 44 | Not Used        |      |                      |         |
| 20    | 44   | 64 | Tail            |      |                      |         |
| 64    |      |    | Total           |      |                      |         |

## 17 – Info2 Fuel Voucher

0 X 17

| Bytes | From | To | Data            | Bits | Explanation          | Remarks                                             |
|-------|------|----|-----------------|------|----------------------|-----------------------------------------------------|
| 1     | 0    | 1  | Opcode          |      | 70 – Log Information |                                                     |
| 1     | 1    | 2  | Function        |      | 0 x 17 Sub opcode    |                                                     |
| 1     | 2    | 3  | Action          |      |                      | Set to 0 = create record                            |
| 4     | 3    | 7  | Barcode         |      |                      | BCD                                                 |
| 4     | 7    | 11 | Promo number    |      |                      | Promotion number pulled from template               |
| 4     | 11   | 15 | Discount amount |      |                      | Summed up total that will be rewarded when redeemed |
| 3     | 15   | 18 | Expire date     |      |                      | Date the voucher will expire                        |
| 26    | 18   | 44 | Reserved        |      |                      |                                                     |
| 20    | 44   | 64 | Tail            |      |                      |                                                     |
| 64    |      |    | Total           |      |                      |                                                     |

## 31 – Info2 Local Barcode

0 X 31

**Explanation:** This opcode is recorded when the barcode is scanned.

| Bytes | From | To | Data           | Bits  | Explanation                                                 | Remarks |
|-------|------|----|----------------|-------|-------------------------------------------------------------|---------|
| 1     | 0    | 1  | Opcode         |       | 70 – Log Information                                        |         |
| 1     | 1    | 2  | Function       |       | 0 x 31 Trans Info2 Local Barcode                            |         |
| 1     | 2    | 3  | Sub Function   |       | 0 – Barcode printed (issued)<br>1 – Barcode used            |         |
| 20    | 3    | 23 | Barcode        |       | BCD format – barcode buffer (right justify, leading zeroes) |         |
| 4     | 23   | 27 | Amount         |       |                                                             |         |
| 3     | 27   | 30 | Issued Date    |       | BCD format YYMMDD                                           |         |
| 3     | 30   | 33 | Expiry Date    |       | BCD format YYMMDD                                           |         |
| 1     | 33   | 34 | Barcode length |       |                                                             |         |
| 1     | 34   | 35 | Flag           |       |                                                             |         |
|       |      |    |                | Bit 0 | Manual Accept For Limit Start Day                           |         |
|       |      |    |                | Bit 1 | Manual Accept For Limit End Day                             |         |
|       |      |    |                | Bit 2 | Manual Accept of Coupon                                     |         |
|       |      |    |                | Bit 3 | Returned                                                    |         |
|       |      |    |                | Bit 4 | Not used                                                    |         |
|       |      |    |                | Bit 5 | Not used                                                    |         |
|       |      |    |                | Bit 6 | Not used                                                    |         |
|       |      |    |                | Bit 7 | Not used                                                    |         |
| 1     | 35   | 36 | Flag           |       |                                                             |         |
|       |      |    |                | Bit 0 | NOT_USED                                                    |         |
|       |      |    |                | Bit 1 | NOT_USED                                                    |         |
|       |      |    |                | Bit 2 | External TRS Present                                        |         |
|       |      |    |                | Bit 3 | Not Used                                                    |         |
|       |      |    |                | Bit 4 | Not Used                                                    |         |
|       |      |    |                | Bit 5 | Not Used                                                    |         |
|       |      |    |                | Bit 6 | Not Used                                                    |         |
|       |      |    |                | Bit 7 | Not Used                                                    |         |

| Bytes | From | To | Data                      | Bits | Explanation | Remarks |
|-------|------|----|---------------------------|------|-------------|---------|
| 3     | 36   | 39 | Date YYMMDD               |      |             |         |
| 1     | 39   | 40 | External Tender<br>Number |      |             |         |
| 1     | 40   | 41 | Redemption<br>Type        |      |             |         |
| 1     | 41   | 42 | POS No.                   |      |             |         |
| 2     | 42   | 44 | Store No.                 |      |             |         |
| 20    | 44   | 64 | Tail                      |      |             |         |
| 64    |      |    | Total                     |      |             |         |

## 32 – Info2 Member Account

### 0 X 32

**Explanation:** This opcode is recorded when a member account transaction is performed. Member accounts are required for loyalty customers who accumulate points or credits within accounts during purchases, or promotions on offer. The member's opening balance, closing balance, name, etc. are all recorded.

| Bytes        | From | To | Data              | Bits | Explanation                                                                                                                                                                                                                                                                                                                                                                                   | Remarks |
|--------------|------|----|-------------------|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| 1            | 0    | 1  | Opcode            |      | 70 – Log Information                                                                                                                                                                                                                                                                                                                                                                          |         |
| 1            | 1    | 2  | Function          |      | 0 x 32 Trans Info2 Member Account                                                                                                                                                                                                                                                                                                                                                             |         |
| 1            | 2    | 3  | Sub Function      |      | 1 – Member Account open balance info<br>2 – Member Account closing balance info<br>3 – First Name<br>4 – Surname<br>5 – Server Date<br>6 – Member account manually updated info<br>7 – Member account immediate reward<br>8 – Member Account redemption<br>9 – Member account triggers promotion<br>10 – Member account rewarded by promotion<br>11 – Member account accumulated by promotion |         |
| 4            | 3    | 7  | Member Account ID |      |                                                                                                                                                                                                                                                                                                                                                                                               |         |
| <b>Inf 1</b> |      |    |                   |      |                                                                                                                                                                                                                                                                                                                                                                                               |         |
| 4            | 7    | 11 | Open Balance      |      |                                                                                                                                                                                                                                                                                                                                                                                               |         |
| 4            | 11   | 15 | Session ID        |      |                                                                                                                                                                                                                                                                                                                                                                                               |         |
| 22           | 15   | 37 | Not Used          |      |                                                                                                                                                                                                                                                                                                                                                                                               |         |
| <b>Inf 2</b> |      |    |                   |      |                                                                                                                                                                                                                                                                                                                                                                                               |         |
| 4            | 7    | 11 | Earned Value      |      |                                                                                                                                                                                                                                                                                                                                                                                               |         |
| 4            | 11   | 15 | Redeemed Value    |      |                                                                                                                                                                                                                                                                                                                                                                                               |         |
| 4            | 15   | 19 | Closing Balance   |      |                                                                                                                                                                                                                                                                                                                                                                                               |         |
| 4            | 19   | 23 | Session Id        |      |                                                                                                                                                                                                                                                                                                                                                                                               |         |
| 4            | 23   | 27 | Open Balance      |      |                                                                                                                                                                                                                                                                                                                                                                                               |         |

| Bytes        | From | To | Data                         | Bits  | Explanation          | Remarks |
|--------------|------|----|------------------------------|-------|----------------------|---------|
| 4            | 27   | 31 | Earned Value<br>from Zero    |       |                      |         |
| 1            | 31   | 32 | Flag                         | Bit 0 | Instant Redemption   |         |
|              |      |    |                              | Bit 1 | Written From Recover |         |
|              |      |    |                              | Bit 2 | Not Used Info2       |         |
|              |      |    |                              | Bit 3 | Not Used Info2       |         |
|              |      |    |                              | Bit 4 | Not Used Info2       |         |
|              |      |    |                              | Bit 5 | Not Used Info2       |         |
|              |      |    |                              | Bit 6 | Not Used Info2       |         |
|              |      |    |                              | Bit 7 | Not Used Info2       |         |
| 5            | 32   | 37 | Not Used                     |       |                      |         |
| <b>Inf 3</b> |      |    |                              |       |                      |         |
| 30           | 7    | 37 | Loyalty Member<br>First Name |       |                      |         |

| Bytes | From | To | Data                    | Bits  | Explanation                   | Remarks                                                          |
|-------|------|----|-------------------------|-------|-------------------------------|------------------------------------------------------------------|
| Inf 4 |      |    |                         |       |                               |                                                                  |
| 30    | 7    | 37 | Member Surname          |       |                               |                                                                  |
| Inf 5 |      |    |                         |       |                               |                                                                  |
| 12    | 7    | 19 | Server Date             |       |                               |                                                                  |
| 18    | 19   | 37 | Not Used                |       |                               |                                                                  |
| Inf 6 |      |    |                         |       |                               |                                                                  |
| 4     | 7    | 11 | Manually added value    |       |                               |                                                                  |
| 1     | 11   | 12 | Flag                    |       |                               |                                                                  |
|       |      |    |                         | Bit 0 | Loyalty Card Required         |                                                                  |
|       |      |    |                         | Bit 1 | Update Promotion Server       |                                                                  |
|       |      |    |                         | Bit 2 | Not Used                      |                                                                  |
|       |      |    |                         | Bit 3 | Not Used                      |                                                                  |
|       |      |    |                         | Bit 4 | Not Used                      |                                                                  |
|       |      |    |                         | Bit 5 | Not Used                      |                                                                  |
|       |      |    |                         | Bit 6 | Not Used                      |                                                                  |
|       |      |    |                         | Bit 7 | Not Used                      |                                                                  |
| 20    | 12   | 32 | Barcode                 |       |                               |                                                                  |
| 2     | 32   | 34 | Original Barcode length |       |                               | Need this field due to pak/unpack change for the barcode length. |
| 3     | 34   | 37 | Not Used                |       |                               |                                                                  |
| Inf 7 |      |    |                         |       |                               |                                                                  |
| 4     | 7    | 11 | Points                  |       |                               |                                                                  |
| 1     | 11   | 12 | Flags                   |       |                               |                                                                  |
|       |      |    |                         | Bit 0 | Barcode Points                |                                                                  |
|       |      |    |                         | Bit 1 | Was Cancelled                 |                                                                  |
|       |      |    |                         | Bit 2 | Extract Reward Coupon         |                                                                  |
|       |      |    |                         | Bit 3 | Update Member Account Balance |                                                                  |
|       |      |    |                         | Bit 4 | Not Used                      |                                                                  |
|       |      |    |                         | Bit 5 | Not Used                      |                                                                  |
|       |      |    |                         | Bit 6 | Not Used                      |                                                                  |
|       |      |    |                         | Bit 7 | Not Used                      |                                                                  |
| 4     | 12   | 16 | Promotion ID            |       |                               |                                                                  |

| Bytes | From | To | Data                    | Bits  | Explanation    | Remarks                                       |
|-------|------|----|-------------------------|-------|----------------|-----------------------------------------------|
| 2     | 16   | 18 | Promotion Trigger Count |       |                | The number of times a promotion was triggered |
| 19    | 19   | 38 | Not Used                | 17    |                |                                               |
| Inf 8 |      |    |                         |       |                |                                               |
| 7     | 7    | 14 | PLU Code                |       |                |                                               |
| 2     | 14   | 16 | Department Number       |       |                |                                               |
| 4     | 16   | 20 | Promotion Number        |       |                |                                               |
| 4     | 20   | 24 | Value                   |       |                |                                               |
| 4     | 24   | 28 | Sequence Number         |       |                |                                               |
| 1     | 28   | 29 | Flag                    |       |                |                                               |
|       |      |    |                         | Bit 0 | Return Flag    |                                               |
|       |      |    |                         | Bit 1 | Order discount |                                               |
|       |      |    |                         | Bit 2 | Voided         |                                               |
|       |      |    |                         | Bit 3 | Not Used       |                                               |
|       |      |    |                         | Bit 4 | Not Used       |                                               |
|       |      |    |                         | Bit 5 | Not Used       |                                               |
|       |      |    |                         | Bit 6 | Not Used       |                                               |
|       |      |    |                         | Bit 7 | Not Used       |                                               |
| 8     | 29   | 37 | Reserved                |       |                |                                               |
| End   |      |    |                         |       |                |                                               |
| 5     | 37   | 42 | Promotion ID            |       |                |                                               |
| 2     | 42   | 44 | Not Used                |       |                |                                               |
| 20    | 44   | 64 | Tail                    |       |                |                                               |
| 64    |      |    | Total                   |       |                |                                               |



## 33 – Info2 Ticket Type

### 0 X 33

**Explanation:** This opcode records information regarding the ticket type. External Data Transactions (0x95) will follow this transaction type. The data in the 0x33 transaction will hold the number of External Data Transaction to expect.

| Bytes | From | To | Data        | Bits | Explanation                                        | Remarks |
|-------|------|----|-------------|------|----------------------------------------------------|---------|
| 1     | 0    | 1  | Opcode      |      | 70 – Log Information                               |         |
| 1     | 1    | 2  | Function    |      | 0 x 33 Trans Info2 Ticket Type                     |         |
| 2     | 2    | 4  | Ticket Type |      | 1 – Add Customer                                   |         |
|       |      |    |             |      | 2 – Modify Customer (includes delete)              |         |
|       |      |    |             |      | 3 – Add Layby                                      |         |
|       |      |    |             |      | 4 – Modify Layby (includes delete)                 |         |
|       |      |    |             |      | 5 – Layby Payment                                  |         |
|       |      |    |             |      | 6 – Finalize Layby                                 |         |
|       |      |    |             |      | 7 – Cancel Layby (customer)                        |         |
|       |      |    |             |      | 8 – RTS Confirmation                               |         |
|       |      |    |             |      | 9 – Refund Unclaimed deposit                       |         |
|       |      |    |             |      | 10 – Payment reversal                              |         |
|       |      |    |             |      | 11 – Cancel Layby (store)                          |         |
|       |      |    |             |      | 12 – Loyalty Message Ticket                        |         |
|       |      |    |             |      | 13 – Delivery Ticket (Stock Management DLL)        |         |
|       |      |    |             |      | 14 – Stock Provider Request (Stock Management DLL) |         |
|       |      |    |             |      | 15 – Third Party Loyalty Active                    |         |
|       |      |    |             |      | 18 – NCR Copient Loyalty Comm Log                  |         |
|       |      |    |             |      | 19 – XML ticket data                               |         |
|       |      |    |             |      | 20 – Dynamic Receipt Printing Data                 |         |
|       |      |    |             |      | 21 – RX information – PDX Pharmacy                 |         |

If you are going to add another struct to this union, that will be a link to a 0x95 transaction (Zipped XML), please make sure that the first 4 fields are as specified in the following bytes.

#### Loyalty Message Header

|   |   |   |                      |
|---|---|---|----------------------|
| 1 | 0 | 1 | Loyalty Message Type |
| 2 | 1 | 3 | Message Quantity     |

| Bytes                       | From | To | Data                      | Bits  | Explanation                     | Remarks                                            |
|-----------------------------|------|----|---------------------------|-------|---------------------------------|----------------------------------------------------|
| 4                           | 3    | 7  | Uncompressed Message Size |       |                                 |                                                    |
| 4                           | 7    | 11 | Compressed Message Size   |       |                                 |                                                    |
| 1                           | 11   | 12 | Flag                      |       |                                 |                                                    |
|                             |      |    |                           | Bit 0 | Offline                         |                                                    |
|                             |      |    |                           | Bit 1 | Retroactive                     |                                                    |
|                             |      |    |                           | Bit 2 | Not Retroactive in Wrong Ticket | This is to specify unusual transactions from RTAPS |
|                             |      |    |                           | Bit 3 | Not Used                        |                                                    |
|                             |      |    |                           | Bit 4 | Not Used                        |                                                    |
|                             |      |    |                           | Bit 5 | Not Used                        |                                                    |
|                             |      |    |                           | Bit 6 | Not Used                        |                                                    |
|                             |      |    |                           | Bit 7 | Not Used                        |                                                    |
| 2                           | 12   | 14 | Original Ticket Not Used  |       |                                 |                                                    |
| 26                          | 14   | 40 | Not Used                  |       |                                 |                                                    |
| Struct Stock Message Header |      |    |                           |       |                                 |                                                    |
| 1                           | 0    | 1  | Stock Message Type        |       |                                 |                                                    |
| 2                           | 1    | 3  | Message Qty               |       |                                 |                                                    |
| 4                           | 3    | 7  | Uncompressed Message Size |       |                                 |                                                    |
| 4                           | 7    | 11 | Compressed Message Size   |       |                                 |                                                    |
| 29                          | 11   | 40 | Not Used                  |       |                                 |                                                    |
| Struct TicketData           |      |    |                           |       |                                 |                                                    |
| 1                           | 0    | 1  | Stock Message Type        |       |                                 |                                                    |
| 2                           | 1    | 3  | Msgs Quantity             |       |                                 |                                                    |
| 4                           | 3    | 7  | Uncompressed Msg Size     |       |                                 |                                                    |
| 4                           | 7    | 11 | Compressed Msg Size       |       |                                 |                                                    |
| 29                          | 11   | 40 | Not Used                  |       |                                 |                                                    |

| Bytes | From | To | Data     | Bits | Explanation | Remarks |
|-------|------|----|----------|------|-------------|---------|
| 4     | 40   | 44 | Not Used |      |             |         |
| 20    | 44   | 64 | Tail     |      |             |         |
| 64    |      |    | Total    |      |             |         |

## 3B – End of Ticket Apportionment

### 0 X 3B

**Explanation:** This opcode is used at the end of a ticket apportionment that data has been requested from the promotion engine.

| Bytes | From | To | Data     | Bits | Explanation                        | Remarks |
|-------|------|----|----------|------|------------------------------------|---------|
| 1     | 0    | 1  | Opcode   |      | 70 – Log Information               |         |
| 1     | 1    | 2  | Function |      | 0 x 3B End of Ticket Apportionment |         |
| 42    | 2    | 44 | Not Used |      |                                    |         |
| 20    | 44   | 64 | Tail     |      |                                    |         |
| 64    |      |    | Total    |      |                                    |         |

## 45 – Trans Info2 External Loyalty Reward

0 X 45

**Explanation:** This opcode sends external loyalty reward information. For example, it records reward information, general information, and information such as the redemptions counter, service code, security code, loyalty transaction counter info, etc.

| Bytes | From | To | Data                        | Bits  | Explanation          | Remarks                       |
|-------|------|----|-----------------------------|-------|----------------------|-------------------------------|
| 1     | 0    | 1  | Opcode                      |       | 70 – Log Information |                               |
| 1     | 1    | 2  | Sub Opcode                  |       | 0 x 45               |                               |
| 1     | 2    | 3  | Type                        |       |                      | From here reward information  |
| 7     | 3    | 10 | PLU Code                    |       |                      |                               |
| 2     | 10   | 12 | Department Number           |       |                      |                               |
| 4     | 12   | 16 | No. of rewards              |       |                      |                               |
| 1     | 16   | 17 | Flags                       |       |                      | From here General information |
|       |      |    |                             | Bit 0 | Response OK          |                               |
|       |      |    |                             | Bit 1 | Not Used             |                               |
|       |      |    |                             | Bit 2 | Not Used             |                               |
|       |      |    |                             | Bit 3 | Not Used             |                               |
|       |      |    |                             | Bit 4 | Not Used             |                               |
|       |      |    |                             | Bit 5 | Not Used             |                               |
|       |      |    |                             | Bit 6 | Not Used             |                               |
|       |      |    |                             | Bit 7 | Not Used             |                               |
| 4     | 17   | 21 | Total rewards per ticket    |       |                      |                               |
| 4     | 21   | 25 | Previous Balance            |       |                      |                               |
| 4     | 25   | 29 | Open Balance                |       |                      | From here Rocks information   |
| 4     | 29   | 33 | Loyalty redemptions counter |       |                      |                               |
| 4     | 33   | 37 | Loyalty Trx Counter         |       |                      |                               |
| 2     | 37   | 39 | Service code                |       |                      |                               |
| 5     | 39   | 44 | Security code               |       |                      |                               |
| 20    | 44   | 64 | Tail                        |       |                      |                               |
| 64    |      |    | Total                       |       |                      |                               |

## 4B – Phone Card Act Ext

0 X 4B

| Bytes | From | To | Data                      | Bits | Explanation               | Remarks |
|-------|------|----|---------------------------|------|---------------------------|---------|
| 1     | 0    | 1  | Opcode                    |      | 70 – Log Information      |         |
| 1     | 1    | 2  | Function                  |      | 0 x 4B Phone Card Act Ext |         |
| 10    | 2    | 12 | Template                  |      |                           |         |
| 20    | 12   | 32 | Barcode<br>Description    |      |                           |         |
| 7     | 32   | 39 | Item Expiry Date          |      |                           |         |
| 4     | 39   | 43 | Transaction<br>Amount     |      |                           |         |
| 1     | 43   | 44 | Suspend<br>Transaction CC |      |                           |         |
| 20    | 44   | 64 | Tail                      |      |                           |         |
| 64    |      |    | Total                     |      |                           |         |

## 51 – Trans Info2 Add Segment

0 X 51

**Explanation:** This transaction sends information segments to the pos terminal in order to enable the promotion engine to trigger rewards.

| Bytes | From | To | Data                        | Bits  | Explanation                                    | Remarks        |
|-------|------|----|-----------------------------|-------|------------------------------------------------|----------------|
| 1     | 0    | 1  | Opcode                      |       | 70 – Log Information                           |                |
| 1     | 1    | 2  | Function                    |       | 0 x 51                                         |                |
| 4     | 2    | 6  | Segment                     |       |                                                |                |
| 1     | 6    | 7  | Segment top code            |       |                                                |                |
| 1     | 7    | 8  | Flag                        |       |                                                |                |
|       |      |    |                             | Bit 0 | Ignore                                         |                |
|       |      |    |                             | Bit 1 | Third Party Report                             |                |
|       |      |    |                             | Bit 2 | Desc on Customer Display                       |                |
|       |      |    |                             | Bit 3 | Desc on Operator Display                       |                |
|       |      |    |                             | Bit 4 | Not Used                                       |                |
|       |      |    |                             | Bit 5 | Not Used                                       |                |
|       |      |    |                             | Bit 6 | Not Used                                       |                |
|       |      |    |                             | Bit 7 | Not Used                                       |                |
| 1     | 8    | 9  | Trigger Type                |       | 0 – Barcode Programming<br>1 – Manual Function |                |
| 1     | 9    | 10 | Barcode Length              |       |                                                |                |
| 10    | 10   | 20 | Barcode                     |       |                                                | Barcode in BCD |
| 1     | 20   | 21 | Number of Rewards Triggered |       |                                                |                |
| 23    | 21   | 44 | Reserved                    |       |                                                |                |
| 20    | 44   | 64 | Tail                        |       |                                                |                |
| 64    |      |    | Total                       |       |                                                |                |

## 76- Transaction Info2 Local Barcode Issued EXT

0 X 76

**Explanation:** This opcode records the rewards in the local barcode issued.

| Bytes  | From | To | Data                       | Bits | Explanation                                      | Remarks                                          |
|--------|------|----|----------------------------|------|--------------------------------------------------|--------------------------------------------------|
| 1      | 0    | 1  | Opcode                     |      | 70 – Log Information                             |                                                  |
| 1      | 1    | 2  | Function                   |      | 0 x 76 Transaction Info2 Local Barcode Issue Ext |                                                  |
| 10     | 2    | 12 | Reference Number           |      |                                                  |                                                  |
| Struct |      |    |                            |      |                                                  |                                                  |
| 1      | 12   | 13 | Type                       | } X3 |                                                  | The condition under which the barcode is issued. |
| 4      | 13   | 17 | Value                      |      |                                                  |                                                  |
| 1      | 27   | 28 | Number of Valid Conditions |      |                                                  |                                                  |
| 2      | 28   | 30 | Reward1                    |      |                                                  |                                                  |
| 2      | 30   | 32 | Reward2                    |      |                                                  |                                                  |
| 2      | 32   | 34 | Reward3                    |      |                                                  |                                                  |
| 2      | 34   | 36 | Reward4                    |      |                                                  |                                                  |
| 2      | 36   | 38 | Ticket Number              |      |                                                  |                                                  |
| 2      | 38   | 40 | Barcode Progress Reference |      |                                                  | Reference number from the barcode programming    |
| 4      | 42   | 44 | Not Used                   |      |                                                  |                                                  |
| 20     | 44   | 64 | Tail                       |      |                                                  |                                                  |
| 64     |      |    | Total                      |      |                                                  |                                                  |



## 77- Transaction Info2 Voucher Reward

0 X 77

**Explanation:** This opcode records the voucher reward triggered in the ticket.

| Bytes | From | To | Data            | Bits | Explanation                                                                                                                                                        | Remarks |
|-------|------|----|-----------------|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| 1     | 0    | 1  | Opcode          |      | 70 – Log Information                                                                                                                                               |         |
| 1     | 1    | 2  | Function        |      | 0 x 77Transaction Info2<br>Voucher Reward                                                                                                                          |         |
| 5     | 2    | 7  | Promotion ID    |      |                                                                                                                                                                    |         |
| 4     | 7    | 11 | Promotion Count |      |                                                                                                                                                                    |         |
| 4     | 11   | 15 | Reward Amount   |      |                                                                                                                                                                    |         |
| 4     | 15   | 19 | Quantity Spent  |      |                                                                                                                                                                    |         |
| 1     | 19   | 20 | Type            |      | 0 – voucher<br>Voucher reward transaction<br>voucher<br>1 – coupon<br>Voucher reward transaction<br>coupon<br>2 – external<br>Voucher reward transaction<br>coupon |         |
| 24    | 20   | 44 | Not Used        |      |                                                                                                                                                                    |         |
| 20    | 44   | 64 | Tail            |      |                                                                                                                                                                    |         |
| 64    |      |    | Total           |      |                                                                                                                                                                    |         |

## 7A- Transaction Info2 Promotion Extension

### 0 X 7A

**Explanation:** This opcode records the additional information received in apportionment response from the LPE (Loyalty Promotion Engine). Promotion complexity indicates if the promotion triggered was Simple/Complex. Simple Promotion - indicates that the triggering items in a promotion are the same item (barcode). A Complex Promotion – indicates that the triggering items in a promotion are different items (barcodes).

| Bytes | From | To | Data                         | Bits  | Explanation                                  | Remarks                                                                                                                                                      |
|-------|------|----|------------------------------|-------|----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1     | 0    | 1  | Opcode                       |       | 70 – Log Information                         |                                                                                                                                                              |
| 1     | 1    | 2  | Function                     |       | 0 x 7A Transaction Info2 Promotion Extension |                                                                                                                                                              |
| 20    | 2    | 22 | Description                  |       |                                              |                                                                                                                                                              |
| 1     | 22   | 23 | Flag 1                       |       |                                              |                                                                                                                                                              |
|       |      |    |                              | Bit 0 | Promotion Complexity                         |                                                                                                                                                              |
|       |      |    |                              | Bit 1 | Item already triggered promotion             |                                                                                                                                                              |
|       |      |    |                              | Bit 2 | Triggered Promotion                          |                                                                                                                                                              |
|       |      |    |                              | Bit 3 | Cashier Invoked                              |                                                                                                                                                              |
|       |      |    |                              | Bit 4 | Not Used                                     |                                                                                                                                                              |
|       |      |    |                              | Bit 5 | Not Used                                     |                                                                                                                                                              |
|       |      |    |                              | Bit 6 | Not Used                                     |                                                                                                                                                              |
|       |      |    |                              | Bit 7 | Not Used                                     |                                                                                                                                                              |
| 1     | 23   | 24 | Discount Allocation Printing |       |                                              |                                                                                                                                                              |
| 4     | 24   | 28 | New Quantity                 |       |                                              | Added for Organized receipt quantity, and can be 0 on re calculation. Unlike the quantity field on 03, which is always bigger than 0, even on recalculation. |
| 4     | 28   | 32 | Plu Dep Amount               |       |                                              |                                                                                                                                                              |
| 4     | 32   | 36 | Org Reward Value             |       |                                              | Organized receipt reward value.                                                                                                                              |
| 4     | 36   | 40 | WghDecimalVal                |       |                                              | Store the weight\decimal\volume value                                                                                                                        |
| 1     | 40   | 41 | ORScheme                     |       |                                              |                                                                                                                                                              |
| 1     | 41   | 42 | Apportionment algorithm      |       |                                              |                                                                                                                                                              |

| Bytes | From | To | Data     | Bits | Explanation | Remarks |
|-------|------|----|----------|------|-------------|---------|
| 2     | 42   | 44 | Not Used |      |             |         |
| 20    | 44   | 64 | Tail     |      |             |         |
| 64    |      |    | Total    |      |             |         |

## 84- Transaction Info 2 Head Trigger

0 X 84

**Explanation:** This opcode records the number of times a promotion was triggered at the end of a ticket. This occurs when the same promotion is triggered more than once. This data is then sent to the database and can then be used to view the promotion's information.

| Bytes | From | To | Data            | Bits | Explanation                           | Remarks |
|-------|------|----|-----------------|------|---------------------------------------|---------|
| 1     | 0    | 1  | Opcode          |      | 70 – Log Information                  |         |
| 1     | 1    | 2  | Function        |      | 0 x 84 Transaction info2 Head Trigger |         |
| 5     | 2    | 7  | Promotion ID    |      |                                       |         |
| 4     | 7    | 11 | Promotion Count |      |                                       |         |
| 4     | 11   | 15 | Qualify Spent   |      |                                       |         |
| 29    | 15   | 44 | Not Used        |      |                                       |         |
| 20    | 44   | 64 | Tail            |      |                                       |         |
| 64    |      |    | Total           |      |                                       |         |

## 86 - Transaction Info2 RX Sale

0 X 86

| Bytes | From | To | Data                      | Bits  | Explanation                   | Remarks |
|-------|------|----|---------------------------|-------|-------------------------------|---------|
| 1     | 0    | 1  | Opcode                    |       | 70 – Log Information          |         |
| 1     | 1    | 2  | Function                  |       | 0 x 86 Info 2 RX Sale         |         |
| 5     | 2    | 7  | RX Number                 |       |                               | BCD     |
| 1     | 7    | 8  | Flags                     |       |                               |         |
|       |      |    |                           | Bit 0 | RX E-Ticket                   |         |
|       |      |    |                           | Bit 1 | Is voided                     |         |
|       |      |    |                           | Bit 2 | Not Used                      |         |
|       |      |    |                           | Bit 3 | Not Used                      |         |
|       |      |    |                           | Bit 4 | Not Used                      |         |
|       |      |    |                           | Bit 5 | Not Used                      |         |
|       |      |    |                           | Bit 6 | Not Used                      |         |
|       |      |    |                           | Bit 7 | Not Used                      |         |
| 4     | 8    | 12 | RX Quantity               |       |                               |         |
| 2     | 12   | 14 | RX Fill Number            |       |                               |         |
| 4     | 14   | 18 | RX Partial Fill           |       |                               |         |
| 1     | 18   | 19 | Received Price Request    |       |                               |         |
| 4     | 19   | 23 | RX Third Party Pay Amount |       |                               |         |
| 4     | 23   | 27 | RX Co-pay Amount          |       |                               |         |
| 4     | 27   | 31 | RX Bonus Points           |       |                               |         |
| 7     | 31   | 38 | RX PLU                    |       |                               |         |
| 1     | 38   | 39 | Flags                     |       |                               |         |
|       |      |    |                           | Bit 0 | Print Plu Key Flg             |         |
|       |      |    |                           | Bit 1 | Print Rx Num Key Flg          |         |
|       |      |    |                           | Bit 2 | Print Copay Amt Flg           |         |
|       |      |    |                           | Bit 3 | Print Adjudicated Pay Amt Flg |         |
|       |      |    |                           | Bit 4 | Print Points Key Flg          |         |
|       |      |    |                           | Bit 5 | Print Rx Qty Key Flg          |         |
|       |      |    |                           | Bit 6 | Print Rx Fill Num Key Flg     |         |
|       |      |    |                           | Bit 7 | Print Rx Partial Fill Key Flg |         |
| 5     | 39   | 44 | Not Used                  |       |                               |         |

| Bytes | From | To | Data  | Bits | Explanation | Remarks |
|-------|------|----|-------|------|-------------|---------|
| 20    | 44   | 64 | Tail  |      |             |         |
| 64    |      |    | Total |      |             |         |

## 87- Transaction Info2 FSA

0 X 87

| Bytes | From | To | Data          | Bits | Explanation          | Remarks |
|-------|------|----|---------------|------|----------------------|---------|
| 1     | 0    | 1  | Opcode        |      | 70 – Log Information |         |
| 1     | 1    | 2  | Function      |      | 0 x 87               |         |
| 6     | 2    | 6  | RX Amount     |      |                      |         |
| 4     | 6    | 10 | Non Rx Amount |      |                      |         |
| 10    | 10   | 44 | Not Used      |      |                      |         |
| 20    | 44   | 64 | Tail          |      |                      |         |
| 64    |      |    | Total         |      |                      |         |

## 8C Transaction Info 2 Member Account Update

0 X 8C

| Bytes       | From | To | Data                | Bits | Explanation                                                                                                                                                                              | Remarks                                      |
|-------------|------|----|---------------------|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|
| 1           | 0    | 1  | Opcode              |      | 70 – Log Information                                                                                                                                                                     |                                              |
| 1           | 1    | 2  | Function            |      | 0 x 8C                                                                                                                                                                                   |                                              |
| 10          | 2    | 12 | Loyalty Card Number |      |                                                                                                                                                                                          |                                              |
| 1           | 12   | 13 | Operation Source    |      | Member Account Transaction Source POS<br>Member Account Transaction Source FO<br>Member Account Transaction Source External                                                              |                                              |
| 1           | 13   | 14 | Type                |      | Member Account TRS Type Earn<br>Member Account TRS Type Redeem<br>Member Account TRS Type Manual Update                                                                                  |                                              |
| 1           | 14   | 15 | Redeem Type         |      | Member Account Redeem type Gift<br>Member Account Redeem Type Voucher<br>Member Account Redeem Type Prom<br>Member Account Redeem Gift Start<br>Member Account Redeem Type Voucher Start |                                              |
| 4           | 15   | 19 | Member Account ID   |      |                                                                                                                                                                                          |                                              |
| 4           | 19   | 23 | Value               |      |                                                                                                                                                                                          | Can be positive or negative (for voiding)    |
| Info1<br>20 | 23   | 43 | POS BCD Dest        |      |                                                                                                                                                                                          | Size equal to Member Account Max Redeem Dest |
| Info2<br>16 | 23   | 39 | BCD Dest            |      |                                                                                                                                                                                          | Destination                                  |
| 4           | 39   | 43 | Batch Number        |      |                                                                                                                                                                                          |                                              |



| Bytes | From | To | Data        | Bits | Explanation | Remarks |
|-------|------|----|-------------|------|-------------|---------|
| 1     | 43   | 44 | Reason Code |      |             |         |
| 20    | 44   | 64 | Tail        |      |             |         |
| 64    |      |    | Total       |      |             |         |

## 99 – Transaction Info EBTWIC Ticket End

0 X 99

| Bytes | From | To | Data              | Bits | Explanation          | Remarks                  |
|-------|------|----|-------------------|------|----------------------|--------------------------|
| 1     | 0    | 1  | Opcode            |      | 70 – Log Information |                          |
| 1     | 1    | 2  | Function          |      | 0 x 99               |                          |
| 1     | 2    | 3  | Sub Function      |      |                      |                          |
| 2     | 3    | 5  | POS Number        |      |                      | Pos Number BCD (0-9999)  |
| 10    | 5    | 15 | PAN               |      |                      | PAN Number BCD           |
| 1     | 15   | 16 | PAN Length        |      |                      | PAN number length (0-99) |
| 2     | 16   | 18 | State Code        |      |                      |                          |
| 1     | 18   | 19 | szStateFIPS       |      |                      | State FIPS (HEX)         |
| 2     | 19   | 21 | State Code Length |      |                      |                          |
| 4     | 21   | 25 | Session Date      |      |                      | BCD YYYYMMDD             |
| 3     | 25   | 28 | Session Time      |      |                      | BCD HHMMSS               |
| 16    | 28   | 44 | Not Used          |      |                      |                          |
| 20    | 44   | 64 | Tail              |      |                      |                          |
| 64    |      |    | Total             |      |                      |                          |

## 99 – Transaction Info2 EBTWIC 01

0 X 99

| Bytes | From | To | Data              | Bits | Explanation                           | Remarks                  |
|-------|------|----|-------------------|------|---------------------------------------|--------------------------|
| 1     | 0    | 1  | Opcode            |      | 70 – Log Information                  |                          |
| 1     | 1    | 2  | Function          |      | 0 x 99                                |                          |
| 1     | 2    | 3  | Subopcode         |      | 0x01 EBTWIC INFO TRAN<br>TICKET FRAME |                          |
| 2     | 3    | 5  | POS No.           |      |                                       | Pos Number               |
| 10    | 5    | 15 | PAN               |      |                                       | Pan Number               |
| 1     | 15   | 16 | PAN Length        |      |                                       | PAN number length (0-99) |
| 2     | 16   | 18 | State Code        |      |                                       | State Code               |
| 1     | 18   | 19 | State FIPS        |      |                                       | State FIPS (hex)         |
| 2     | 19   | 21 | State Code Length |      |                                       |                          |
| 4     | 21   | 25 | Session Date      |      |                                       | BCD YYYYMMDD             |
| 3     | 25   | 28 | Session Time      |      |                                       | BCD HHMMSS               |
| 16    | 28   | 44 | Not Used          |      |                                       |                          |
| 20    | 44   | 64 | Tail              |      |                                       |                          |
| 64    |      |    | Total             |      |                                       |                          |

## 99 – Transaction Info2 EBTWIC 02

0 X 99

| Bytes | From | To | Data                 | Bits | Explanation                         | Remarks              |
|-------|------|----|----------------------|------|-------------------------------------|----------------------|
| 1     | 0    | 1  | Opcode               |      | 70 – Log Information                |                      |
| 1     | 1    | 2  | Function             |      | 0 x 99                              |                      |
| 1     | 2    | 3  | Subopcode            |      | 0x02 EBTWIC INFO TRANS<br>ITEM SALE |                      |
| 7     | 3    | 10 |                      |      |                                     | BCD PLU Code of item |
| 2     | 10   | 12 | Category             |      |                                     | WIC Category         |
| 2     | 12   | 14 | Sub Category         |      |                                     | WIC sub category     |
| 4     | 14   | 18 | Quantity             |      |                                     |                      |
| 2     | 18   | 20 | Count                |      |                                     | Item count           |
| 4     | 20   | 24 | Price                |      |                                     |                      |
| 4     | 28   | 28 | Sell Amount          |      |                                     |                      |
| 7     | 28   | 35 | Link UPC             |      |                                     | BCD                  |
| 1     | 35   | 36 | PLU/UPC<br>Indicator |      |                                     |                      |
| 4     | 36   | 40 | Count                |      |                                     |                      |
| 4     | 40   | 44 | Not Used             |      |                                     |                      |
| 20    | 44   | 64 | Tail                 |      |                                     |                      |
| 64    |      |    | Total                |      |                                     |                      |

## 99 – Transaction Info2 EBTWIC 06

0 X 99

| Bytes | From | To | Data       | Bits | Explanation                     | Remarks                  |
|-------|------|----|------------|------|---------------------------------|--------------------------|
| 1     | 0    | 1  | Opcode     |      | 70 – Log Information            |                          |
| 1     | 1    | 2  | Function   |      | 0 x 99                          |                          |
| 1     | 2    | 3  | Subopcode  |      | 0x06 EBTWIC INFO TRANS<br>Error |                          |
| 10    | 3    | 13 | PAN        |      |                                 | BCD PAN Number           |
| 1     | 13   | 14 | PAN Length |      |                                 | PAN number length (0-99) |
| 2     | 14   | 16 | Error Code |      |                                 | Error Code BCD (0-9999)  |
| 2     | 16   | 18 | State Code |      |                                 |                          |
| 1     | 18   | 19 | State FIPS |      |                                 | Hex                      |
| 25    | 19   | 44 | Not Used   |      |                                 | Not used EBTWIC error.   |
| 20    | 44   | 64 | Tail       |      |                                 |                          |
| 64    |      |    | Total      |      |                                 |                          |

**99 – Transaction Info2 EBTWIC 08**

0 X 99

| Bytes | From | To | Data                   | Bits | Explanation                            | Remarks                                     |
|-------|------|----|------------------------|------|----------------------------------------|---------------------------------------------|
| 1     | 0    | 1  | Opcode                 |      | 70 – Log Information                   |                                             |
| 1     | 1    | 2  | Function               |      | 0 x 99                                 |                                             |
| 1     | 2    | 3  | Subopcode              |      | 0x08 EBTWIC INFO TRANS<br>Ticket Total |                                             |
| 4     | 3    | 7  | Tender Amount          |      |                                        |                                             |
| 4     | 7    | 11 | WIC Coupon<br>Total    |      |                                        |                                             |
| 4     | 11   | 15 | WIC Promotion<br>Total |      |                                        |                                             |
| 4     | 15   | 19 | WIC Discount<br>total  |      |                                        |                                             |
| 4     | 19   | 23 | WIC Item Total         |      |                                        |                                             |
| 4     | 23   | 27 | WIC Item Count         |      |                                        |                                             |
| 4     | 27   | 31 | WIC Net Total          |      |                                        | Item ttl – cpn ttl + disc ttl<br>+ prom ttl |
| 13    | 31   | 44 | Not Used               |      |                                        |                                             |
| 20    | 44   | 64 | Tail                   |      |                                        |                                             |
| 64    |      |    | Total                  |      |                                        |                                             |

## 99 – Transaction Info2 EBTWIC 09

0 X 99

| Bytes | From | To | Data       | Bits | Explanation                               | Remarks      |
|-------|------|----|------------|------|-------------------------------------------|--------------|
| 1     | 0    | 1  | Opcode     |      | 70 – Log Information                      |              |
| 1     | 1    | 2  | Function   |      | 0 x 99                                    |              |
| 1     | 2    | 3  | Subopcode  |      | 0x09 EBTWIC INFO TRANS<br>Benefit Details |              |
| 15    | 3    | 18 | Issuer ID  |      |                                           |              |
| 4     | 18   | 22 | Start Date |      |                                           | BCD YYYYMMDD |
| 4     | 22   | 26 | End Date   |      |                                           | BCD YYYYMMDD |
| 18    | 26   | 44 | Not Used   |      |                                           |              |
| 20    | 44   | 64 | Tail       |      |                                           |              |
| 64    |      |    | Total      |      |                                           |              |

## 99 – Transaction Info2 EBTWIC 0A

0 X 99

| Bytes | From | To | Data                 | Bits | Explanation                    | Remarks                                                                               |
|-------|------|----|----------------------|------|--------------------------------|---------------------------------------------------------------------------------------|
| 1     | 0    | 1  | Opcode               |      | 70 – Log Information           |                                                                                       |
| 1     | 1    | 2  | Function             |      | 0 x 99                         |                                                                                       |
| 1     | 2    | 3  | Subopcode            |      | 0x0A EBTWIC INFO TRANS<br>Sign |                                                                                       |
| 1     | 3    | 4  | TransSignLen         |      |                                | Length 0-99                                                                           |
| 1     | 4    | 5  | Number of<br>records |      |                                | How many trans sign<br>data records total                                             |
| 1     | 5    | 6  | Record Number        |      |                                |                                                                                       |
| 38    | 6    | 44 | TransSignData        |      |                                | Data can be up to 99 byte<br>total, so we need to<br>support continuation<br>records. |
| 20    | 44   | 64 | Tail                 |      |                                |                                                                                       |
| 64    |      |    | Total                |      |                                |                                                                                       |



## 99 – Transaction Info2 EBTWIC 0B

0 X 99

| Bytes | From | To | Data           | Bits | Explanation                          | Remarks |
|-------|------|----|----------------|------|--------------------------------------|---------|
| 1     | 0    | 1  | Opcode         |      | 70 – Log Information                 |         |
| 1     | 1    | 2  | Function       |      | 0 x 99                               |         |
| 1     | 2    | 3  | Subopcode      |      | 0x0B EBTWIC INFO TRANS<br>Ticket Tax |         |
| 1     | 3    | 4  | Tax Number     |      |                                      |         |
| 4     | 4    | 8  | Taxable amount |      |                                      |         |
| 4     | 8    | 12 | Tax Amount     |      |                                      |         |
| 32    | 12   | 44 | Not Used       |      |                                      |         |
| 20    | 44   | 64 | Tail           |      |                                      |         |
| 64    |      |    | Total          |      |                                      |         |

## 99 – Transaction Info2 EBTWIC 0C

0 X 99

| Bytes | From | To | Data                        | Bits     | Explanation                                  | Remarks |
|-------|------|----|-----------------------------|----------|----------------------------------------------|---------|
| 1     | 0    | 1  | Opcode                      |          | 70 – Log Information                         |         |
| 1     | 1    | 2  | Function                    |          | 0 x 99                                       |         |
| 1     | 2    | 3  | Subopcode                   |          | 0x0C EBTWIC INFO TRANS<br>Ticket Tax Details |         |
| 7     | 3    | 10 | PLU Code                    |          |                                              | BCD     |
| 1     | 10   | 11 | Flag                        |          |                                              |         |
|       |      |    |                             | Bit 0    | FS payment                                   |         |
|       |      |    |                             | Bit 1    | Cost Plus                                    |         |
|       |      |    |                             | Bit 2    | Non Merchandise                              |         |
|       |      |    |                             | Bit 3    | Negative                                     |         |
|       |      |    |                             | Bit 4    | Discount Allowed                             |         |
|       |      |    |                             | Bits 5-7 | Not Used                                     |         |
| 1     | 11   | 12 | Tax Ptr                     |          |                                              |         |
| 1     | 12   | 13 | Multi Sell Unit             |          |                                              |         |
| 4     | 13   | 17 | Amount                      |          |                                              |         |
| 4     | 17   | 21 | Return Surcharge<br>Percent |          |                                              |         |
| 4     | 21   | 25 | Quantity                    |          |                                              |         |
| 2     | 25   | 27 | Department                  |          |                                              |         |
| 17    | 27   | 44 | Not Used                    |          |                                              |         |
| 20    | 44   | 64 | Tail                        |          |                                              |         |
| 64    |      |    | Total                       |          |                                              |         |

## 99 – Transaction Info2 EBTWIC 20

0 X 99

| Bytes | From | To | Data                               | Bits | Explanation                                                                                           | Remarks                                                                                  |
|-------|------|----|------------------------------------|------|-------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| 1     | 0    | 1  | Opcode                             |      | 70 – Log Information                                                                                  |                                                                                          |
| 1     | 1    | 2  | Function                           |      | 0 x 99                                                                                                |                                                                                          |
| 1     | 2    | 3  | Subopcode                          |      | 0x20 EBTWIC INFO Benefits List                                                                        | Data is used to rebuild class C BenefitsList to print reports (at EOT or recover ticket) |
| 1     | 3    | 4  | Type                               |      | 0x01 Original benefits<br>0x02 eligible benefits<br>0x03 Ending Benefits<br>0x04 Next period benefits | Benefits List<br>Benefits Worlarea<br>Benefits Balance<br>Next Benefits List             |
| 1     | 4    | 5  | Sub Type                           |      | 0x01 Header<br>0x02 Details                                                                           |                                                                                          |
| Info1 |      |    | EBTWIC benefits header             |      |                                                                                                       |                                                                                          |
| 2     | 5    | 7  | Number of detail Recs              |      |                                                                                                       | Length 0-9999                                                                            |
| 10    | 7    | 17 | PAN                                |      |                                                                                                       | PAN BCD                                                                                  |
| 1     | 17   | 18 | PAN Length                         |      |                                                                                                       | PAN number length (0-99)                                                                 |
| 2     | 18   | 20 | State Code                         |      |                                                                                                       |                                                                                          |
| 4     | 20   | 24 | End Date                           |      |                                                                                                       | BCD YYYYMMDD                                                                             |
| 2     | 24   | 26 | Block Count                        |      |                                                                                                       |                                                                                          |
| 2     | 26   | 28 | Compressed Buffer Size             |      |                                                                                                       |                                                                                          |
| 2     | 28   | 30 | Uncompressed Buffer Size           |      |                                                                                                       |                                                                                          |
| 14    | 30   | 34 | Not Used                           |      |                                                                                                       |                                                                                          |
| Info2 |      |    | EBTWIC Benefits Details compressed |      |                                                                                                       |                                                                                          |
| 2     | 5    | 7  | Record Number                      |      |                                                                                                       |                                                                                          |
| 1     | 7    | 8  | Number of bytes                    |      |                                                                                                       |                                                                                          |
| 36    | 8    | 44 | Benefits list data                 |      |                                                                                                       |                                                                                          |
| 20    | 44   | 64 | Tail                               |      |                                                                                                       |                                                                                          |
| 64    |      |    | Total                              |      |                                                                                                       |                                                                                          |

## 99 – Transaction Info2 EBTWIC 99

0 X 99

| Bytes | From | To | Data                 | Bits | Explanation                          | Remarks |
|-------|------|----|----------------------|------|--------------------------------------|---------|
| 1     | 0    | 1  | Opcode               |      | 70 – Log Information                 |         |
| 1     | 1    | 2  | Function             |      | 0 x 99                               |         |
| 1     | 2    | 3  | Subopcode            |      | 0x99 EBTWIC INFO TRANS<br>Ticket End |         |
| 2     | 3    | 5  | POS Number           |      |                                      | BCD     |
| 10    | 5    | 15 | PAN                  |      |                                      | BCD     |
| 1     | 15   | 16 | PAN Length           |      |                                      | 0-99    |
| 2     | 16   | 18 | State Code           |      |                                      |         |
| 1     | 18   | 19 | State FIPS           |      |                                      | (hex)   |
| 2     | 19   | 21 | State Code<br>Length |      |                                      |         |
| 4     | 21   | 25 | Session Date         |      |                                      |         |
| 3     | 25   | 28 | Session Time         |      |                                      |         |
| 16    | 28   | 44 | Not Used             |      |                                      |         |
| 20    | 44   | 64 | Tail                 |      |                                      |         |
| 64    |      |    | Total                |      |                                      |         |

## 9A – Transaction Info2 Dynamic Attribute

0 X 9A

Explanation:

| Bytes | From | To | Data                  | Bits  | Explanation                                                           | Remarks                                                                                                                                            |
|-------|------|----|-----------------------|-------|-----------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| 1     | 0    | 1  | Opcode                |       | 70 – Log Information                                                  |                                                                                                                                                    |
| 1     | 1    | 2  | Function              |       | 0 x 9A<br>TRANS_INFO2_DYNAMIC_ATT<br>TTRIBUTE                         |                                                                                                                                                    |
| 7     | 2    | 9  | PLU Code              |       | BCD KEY PLU Number                                                    |                                                                                                                                                    |
| 1     | 9    | 10 | Record type           |       | 1 – Att Value open text<br>2 –Att Value Combo<br>3 – Att Value Amount |                                                                                                                                                    |
| 2     | 10   | 12 | Att ID                |       |                                                                       |                                                                                                                                                    |
| 1     | 12   | 13 | Subject               |       |                                                                       | Dynamic attribute<br>allocated to PLU or<br>Department                                                                                             |
| 1     | 13   | 14 | Flag                  |       |                                                                       |                                                                                                                                                    |
|       |      |    |                       | Bit 0 | Allow As Member Promotion<br>Reward                                   |                                                                                                                                                    |
|       |      |    |                       | Bit 1 | MRP                                                                   |                                                                                                                                                    |
|       |      |    |                       | Bit 2 | DataTrsFollows                                                        | This flag indicates that<br>the transaction<br>TRANS_INFO2_DATA<br>will follow, and it will<br>have the item attribute<br>text value if it exists. |
|       |      |    |                       | Bit 3 | Prohibit Promotion Reward                                             |                                                                                                                                                    |
|       |      |    |                       | Bit 4 | Promotions Allowed On This<br>Attribute                               |                                                                                                                                                    |
|       |      |    |                       | Bit 5 | Send Dynamic Attribute<br>Transaction                                 |                                                                                                                                                    |
|       |      |    |                       | Bit 6 | Not Used                                                              |                                                                                                                                                    |
|       |      |    |                       | Bit 7 | Not Used                                                              |                                                                                                                                                    |
| 4     | 14   | 18 | Att Value             |       |                                                                       |                                                                                                                                                    |
| 21    | 18   | 39 | Not Used              |       |                                                                       |                                                                                                                                                    |
| 4     | 39   | 43 | Override Att<br>Value |       |                                                                       |                                                                                                                                                    |
| 1     | 43   | 44 | Flags                 | Bit 0 | Value is override                                                     |                                                                                                                                                    |
|       |      |    |                       | Bit 1 | Not Used                                                              |                                                                                                                                                    |
|       |      |    |                       | Bit 2 | Not Used                                                              |                                                                                                                                                    |
|       |      |    |                       | Bit 3 | Not Used                                                              |                                                                                                                                                    |

| Bytes | From | To | Data  | Bits  | Explanation | Remarks |
|-------|------|----|-------|-------|-------------|---------|
|       |      |    |       | Bit 4 | Not Used    |         |
|       |      |    |       | Bit 5 | Not Used    |         |
|       |      |    |       | Bit 6 | Not Used    |         |
|       |      |    |       | Bit 7 | Not Used    |         |
| 20    | 44   | 64 | Tail  |       |             |         |
| 64    |      |    | Total |       |             |         |

## A0 – Transaction Info2 Promotion Ext2

0 X A0

| Bytes | From | To | Data                                    | Bits | Explanation                                                                                                                                                                   | Remarks                                                |
|-------|------|----|-----------------------------------------|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|
| 1     | 0    | 1  | Opcode                                  |      | 70 – Log Information                                                                                                                                                          |                                                        |
| 1     | 1    | 2  | Function                                |      | 0 x A0                                                                                                                                                                        |                                                        |
| 10    | 2    | 12 | Organized<br>Receipt Scheme<br>Template |      |                                                                                                                                                                               |                                                        |
| 1     | 12   | 13 | Last Triggered<br>Promotion             |      |                                                                                                                                                                               |                                                        |
| 4     | 13   | 17 | Config Reward<br>Amount                 |      |                                                                                                                                                                               | We need to know<br>promotion reward<br>amount          |
| 1     | 17   | 18 | Decimal Place in<br>Reward              |      | The value should be consistent<br>with how the promotion is<br>configured:<br>0 – System Default Decimal<br>9 – NO Decimal Point<br>1-3 – this means 1 to 3 decimal<br>points | We need to know the<br>decimal places in the<br>reward |
| 19    | 18   | 28 | External Ref ID                         |      |                                                                                                                                                                               |                                                        |
| 16    | 28   | 44 | Not Used                                |      |                                                                                                                                                                               |                                                        |
| 20    | 44   | 64 | Tail                                    |      |                                                                                                                                                                               |                                                        |
| 64    |      |    | Total                                   |      |                                                                                                                                                                               |                                                        |

## A4 – Transaction Info2 ORC Reward Split by Redemption Info

0 X A4

| Bytes | From | To | Data                  | Bits  | Explanation                         | Remarks                                                              |
|-------|------|----|-----------------------|-------|-------------------------------------|----------------------------------------------------------------------|
| 1     | 0    | 1  | Opcode                |       | 70 – Log Information                |                                                                      |
| 1     | 1    | 2  | Function              |       | 0 x A4                              |                                                                      |
| 7     | 2    | 9  | PLU Code              |       |                                     | Item Number BCD                                                      |
| 1     | 9    | 10 | Flag                  |       |                                     |                                                                      |
|       |      |    |                       | Bit 0 | Item Was Subtracted                 |                                                                      |
|       |      |    |                       | Bit 1 | Item Was Cancelled                  |                                                                      |
|       |      |    |                       | Bit 2 | Manual Discount                     |                                                                      |
|       |      |    |                       | Bit 3 | Percentage Discount                 |                                                                      |
|       |      |    |                       | Bit 4 | Points Reward                       | Points given as reward                                               |
|       |      |    |                       | Bit 5 | Discount Flag                       | Item/department<br>'discount allowed' Used<br>in cases of promotions |
|       |      |    |                       | Bit 6 | Prom Complexity                     |                                                                      |
|       |      |    |                       | Bit 7 | Item Already Triggered<br>promotion |                                                                      |
| 2     | 10   | 12 | Department<br>Number  |       |                                     |                                                                      |
| 1     | 12   | 13 | Tax Comb              |       |                                     |                                                                      |
| 4     | 13   | 14 | Return Type<br>Number |       |                                     |                                                                      |
| 4     | 14   | 18 | Quantity              |       |                                     |                                                                      |
| 4     | 18   | 22 | Price                 |       |                                     |                                                                      |
| 4     | 22   | 26 | Amount                |       |                                     |                                                                      |
| 4     | 26   | 30 | Redemption<br>Number  |       |                                     |                                                                      |
| 4     | 30   | 34 | Promotion<br>Number   |       |                                     |                                                                      |
| 1     | 34   | 35 | Apportionment<br>type |       |                                     |                                                                      |
| 1     | 35   | 36 | Reward type           |       |                                     |                                                                      |
| 1     | 36   | 37 | Group type            |       |                                     |                                                                      |
| 1     | 37   | 38 | Flag                  | Bit 0 | Dep trans Disc                      |                                                                      |
|       |      |    |                       | Bit 1 | PLU trans Disc                      |                                                                      |
|       |      |    |                       | Bit 2 | Multisaver                          |                                                                      |
|       |      |    |                       | Bit 3 | Rewarded Item                       |                                                                      |



| Bytes | From | To | Data  | Bits  | Explanation | Remarks |
|-------|------|----|-------|-------|-------------|---------|
|       |      |    |       | Bit 4 | Not Used    |         |
|       |      |    |       | Bit 5 | Not Used    |         |
|       |      |    |       | Bit 6 | Not Used    |         |
|       |      |    |       | Bit 7 | Not Used    |         |
| 6     | 38   | 44 | NU_38 |       |             |         |
| 20    | 44   | 64 | Tail  |       |             |         |
| 64    |      |    | Total |       |             |         |

## A6– Transaction Info2 Data

### 0 X A6

Explanation: Records Organized Receipt Scheme Enhancement information. This opcode is to be used with all generic transactions that hold data. The new data is recorded by a sub function.

| Bytes                            | From | To | Data                  | Bits     | Explanation                                                                                                                                                                                                                                                                               | Remarks                               |
|----------------------------------|------|----|-----------------------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| 1                                | 0    | 1  | Opcode                |          | 70 – Log Information                                                                                                                                                                                                                                                                      |                                       |
| 1                                | 1    | 2  | Function              |          | Opcode value 0xA6                                                                                                                                                                                                                                                                         |                                       |
| 1                                | 2    | 3  | Sub function          |          | Sub function code:<br>1 – display total discount<br>2 – Print promotion block header<br>3 – Item Attribute text value<br>4 – Ask Promotion What Triggered<br>5 – Edit Tender ECCA Name<br>6 - Edit Tender ECCA Number<br>7 - Edit Tender Customer Number<br>8 - Edit Tender Customer Name |                                       |
| Union 1 General Data             |      |    |                       |          |                                                                                                                                                                                                                                                                                           |                                       |
| 41                               | 3    | 44 | General Data          |          | Maximum size of this union is 41 bytes. New structure or data should go into this union.                                                                                                                                                                                                  |                                       |
| Union 2 Display Total Discount   |      |    |                       |          |                                                                                                                                                                                                                                                                                           |                                       |
| 1                                | 3    | 4  | Flags                 |          |                                                                                                                                                                                                                                                                                           |                                       |
|                                  |      |    |                       | Bit 0    | Old Layby ticket                                                                                                                                                                                                                                                                          |                                       |
|                                  |      |    |                       | Bits 1-7 | Not Used                                                                                                                                                                                                                                                                                  |                                       |
| 4                                | 4    | 8  | Total Discount amount |          |                                                                                                                                                                                                                                                                                           | Used with Display Total discount only |
| 36                               | 8    | 44 | Not Used              |          |                                                                                                                                                                                                                                                                                           |                                       |
| Union 3 Print Promo Block Header |      |    |                       |          |                                                                                                                                                                                                                                                                                           |                                       |
| 1                                | 3    | 4  | Flags                 |          |                                                                                                                                                                                                                                                                                           |                                       |
|                                  |      |    |                       | Bit 0    | Old Layby ticket                                                                                                                                                                                                                                                                          |                                       |
|                                  |      |    |                       | Bits 1-7 | Not Used                                                                                                                                                                                                                                                                                  |                                       |
| 10                               | 4    | 14 | Templ Promo           |          |                                                                                                                                                                                                                                                                                           | Used with Print Promo                 |

| Bytes                | From | To | Data           | Bits     | Explanation | Remarks           |
|----------------------|------|----|----------------|----------|-------------|-------------------|
| 30                   | 14   | 44 | Block Header   |          |             | Block Header only |
|                      |      |    | Not Used       |          |             |                   |
| Union 43 Edit Tender |      |    |                |          |             |                   |
| 1                    | 3    | 4  | Flags          |          |             |                   |
|                      |      |    |                | Bit 0    | Reprocess   |                   |
|                      |      |    |                | Bit 1    | Last field  |                   |
|                      |      |    |                | Bits 2-7 | Not Used    |                   |
| 40                   | 4    | 44 | New field data |          |             |                   |
| 20                   | 44   | 64 | Tail           |          |             |                   |
| 64                   |      |    | Total          |          |             |                   |

## B0 – Transaction Info2 ORC Reward Split By Redemption Info Ext

0 X B0

**Explanation:** Records Organized Receipt information.

| Bytes | From | To | Data        | Bits | Explanation           | Remarks |
|-------|------|----|-------------|------|-----------------------|---------|
| 1     | 0    | 1  | Opcode      |      | 70 – Log Information  |         |
| 1     | 1    | 2  | Function    |      | Opcode value 0xB0     |         |
| 20    | 2    | 22 | Description |      | Promotion description |         |
| 22    | 22   | 44 | Not Used    |      |                       |         |
| 20    | 44   | 64 | Tail        |      |                       |         |
| 64    |      |    | Total       |      |                       |         |

## B2 – Transaction Info 2 FSA

### 0 X B2

**Explanation:** The FSA transaction is a new transaction type designed to accommodate the new FSA Government regulations. The FSA transaction records will indicate only the FSA amounts.

| Bytes | From | To | Data          | Bits | Explanation                  | Remarks |
|-------|------|----|---------------|------|------------------------------|---------|
| 1     | 0    | 1  | Opcode        |      | 70 – Log Information         |         |
| 1     | 1    | 2  | Function      |      | 0 x B2 Transaction info2 FSA |         |
| 4     | 2    | 6  | RX Amount     |      | Prescription amount          |         |
| 4     | 6    | 10 | Non RX Amount |      | Non Prescription Amount      |         |
| 10    | 34   | 44 | Not Used      |      |                              |         |
| 20    | 44   | 64 | Tail          |      |                              |         |
| 64    |      |    | Total         |      |                              |         |

## C2 – Info 2 MTX Receipts

| Bytes | From | To | Data                     | Bits | Explanation                                      | Remarks          |
|-------|------|----|--------------------------|------|--------------------------------------------------|------------------|
| 1     | 0    | 1  | Opcode                   |      | 70 – Log Information                             |                  |
| 1     | 1    | 2  | Function                 |      | 0 x C2 MTX Receipts                              |                  |
| 1     | 2    | 3  | Sub Type                 |      | 0x01 MTX Receipt Header<br>0x02 MTX Receipt Data |                  |
| Info1 |      |    | MTX Receipt Header       |      |                                                  |                  |
| 1     | 3    | 4  | Receipt Type             |      |                                                  |                  |
| 4     | 4    | 8  | Receipt Lines Count      |      |                                                  |                  |
| 4     | 8    | 12 | Compressed Buffer Size   |      |                                                  |                  |
| 4     | 12   | 16 | Uncompressed Buffer Size |      |                                                  |                  |
| 2     | 16   | 18 | Num of Data Sequence     |      |                                                  |                  |
| 5     | 18   | 23 | Sequence Number          |      |                                                  |                  |
| 4     | 23   | 27 | ERC Required Data Option |      |                                                  |                  |
| 17    | 27   | 44 | Not Used                 |      |                                                  |                  |
| Info2 |      |    | MTX Receipt Data         |      |                                                  |                  |
| 1     | 3    | 4  | Sequence Number          |      |                                                  | BCD 0x00 to 0x99 |
| 1     | 4    | 5  | Number of bytes          |      |                                                  |                  |
| 39    | 5    | 44 | Data                     |      |                                                  |                  |
| 20    | 44   | 64 | Tail                     |      |                                                  |                  |
| 64    |      |    | Total                    |      |                                                  |                  |

## CC – Info 2 Copient Logix

0 X CC

| Bytes                 | From | To       | Data                             | Bits | Explanation                          | Remarks                           |
|-----------------------|------|----------|----------------------------------|------|--------------------------------------|-----------------------------------|
| 1                     | 0    | 1        | Opcode                           |      | 70 – Log Information<br>Trans Info 2 |                                   |
| 1                     | 1    | 2        | Function                         |      | 0xCC Trans Info 2 Copient<br>Logix   |                                   |
| 1                     | 2    | 3        | Copient<br>transaction<br>opcode |      |                                      |                                   |
| <b>Union</b>          |      |          |                                  |      |                                      |                                   |
| First data            |      | Opcode 0 |                                  |      |                                      |                                   |
| 40                    | 3    | 43       | Raw                              |      |                                      |                                   |
| User<br>extension 3   |      | Opcode 1 |                                  |      |                                      |                                   |
| 7                     | 3    | 10       | Id                               |      | Promotion id                         | BCD                               |
| 1                     | 10   | 11       | Status                           |      |                                      | i.e. issued, redeemed,<br>claimed |
| 4                     | 11   | 15       | Reward amount<br>per gallon      |      |                                      |                                   |
| 4                     | 15   | 19       | Reward amount                    |      |                                      |                                   |
| 4                     | 19   | 23       | Abandoned<br>amount              |      |                                      |                                   |
| 4                     | 23   | 27       | Gallon limit                     |      |                                      |                                   |
| 4                     | 27   | 31       | Computed<br>redeemed amount      |      |                                      |                                   |
| 4                     | 31   | 35       | Computed<br>breakage amount      |      |                                      |                                   |
| 7                     | 35   | 42       | Card number                      |      |                                      | BCD                               |
| 1                     | 42   | 43       | ID type                          |      | External id type                     |                                   |
| Fuel Savings<br>Offer |      | Opcode 2 |                                  |      |                                      |                                   |
| 4                     | 3    | 7        | Id                               |      | Promotion number                     |                                   |
| 4                     | 7    | 11       | Entry id                         |      | Promotion entry id                   |                                   |
| 4                     | 11   | 15       | Item entry id                    |      | Attached item entry id               |                                   |
| 4                     | 15   | 19       | Amount                           |      | Reward amount                        | Per gallon                        |
| 5                     | 19   | 24       | Aux id                           |      |                                      | BCD                               |

| Bytes                    | From | To       | Data               | Bits     | Explanation                       | Remarks                                                       |
|--------------------------|------|----------|--------------------|----------|-----------------------------------|---------------------------------------------------------------|
| 1                        | 24   | 25       | Amount flag        |          | Ext price flag                    |                                                               |
| 1                        | 25   | 26       | Amount flag reason |          | Ext price flag reason             |                                                               |
| 1                        | 26   | 27       | Flag               |          | Reward flag                       |                                                               |
| 1                        | 27   | 28       | Type               |          | Reward type                       |                                                               |
| 4                        | 28   | 32       | Count              |          | Quantity                          |                                                               |
| 1                        | 32   | 33       | Count type         |          | Quantity type                     |                                                               |
| 2                        | 33   | 35       | Volume limit       |          |                                   |                                                               |
| 1                        | 35   | 36       | Discount type      |          |                                   |                                                               |
| 1                        | 36   | 37       | Detailed           |          | Detailed reward                   |                                                               |
| 1                        | 37   | 38       | Summary            |          | Summary Reward                    |                                                               |
| 3                        | 38   | 41       | Expiration         |          |                                   | BCD                                                           |
| 1                        | 41   | 42       | Vendor             |          | Vendor flag                       |                                                               |
| 1                        | 42   | 43       | Flag               |          |                                   |                                                               |
|                          |      |          |                    | Bit 0    | Opt ext 1                         | Extended transaction present (description)                    |
|                          |      |          |                    | Bits 1-2 | Opt ext 2                         | Extended transaction present (extended text up to 4)          |
|                          |      |          |                    | Bit 3    | Opt ext 3                         | Extended transaction present                                  |
|                          |      |          |                    | Bits 4-7 | Reserved                          |                                                               |
| Fuel savings offer ext 1 |      | Opcode 3 |                    |          |                                   |                                                               |
| 40                       | 3    | 43       | Description        |          |                                   |                                                               |
| Fuel savings offer ext 2 |      | Opcode 4 |                    |          |                                   |                                                               |
| 1                        | 3    | 4        | Id                 |          | Message id                        |                                                               |
| 38                       | 4    | 42       | Message            |          |                                   |                                                               |
| 1                        | 42   | 43       | Reserved           |          |                                   |                                                               |
| Ticket summary           |      | Opcode 5 |                    |          |                                   |                                                               |
| 1                        | 3    | 4        | Status             |          | Ticket status                     | 0-online, 1-offline logix host, 2- offline logix local server |
| 4                        | 4    | 8        | Coupon count       |          | Number of logix coupons processed |                                                               |
| 4                        | 8    | 12       | Coupon amount      |          | Amount of logix coupons processed |                                                               |



| Bytes                        | From | To | Data          | Bits | Explanation         | Remarks |
|------------------------------|------|----|---------------|------|---------------------|---------|
| 10                           | 12   | 22 | Card number   |      |                     | BCD     |
| 17                           | 22   | 39 | Reserved      |      |                     |         |
| 2                            | 39   | 41 | Pos number    |      |                     |         |
| 2                            | 41   | 43 | Ticket number |      |                     |         |
|                              |      |    |               |      |                     |         |
| User<br>extension 3<br>ext 1 |      |    | Opcode 6      |      |                     |         |
| 20                           | 3    | 23 | Serial        |      | Internal logix id   |         |
| 3                            | 23   | 26 | Expiration    |      |                     | BCD     |
| 7                            | 26   | 33 | Parent id     |      | Promotion parent id | BCD     |
| 5                            | 33   | 38 | Aux id        |      |                     | BCD     |
| 5                            | 38   | 43 | Reserved      |      |                     |         |
| 1                            | 43   | 44 | reserved      |      |                     |         |
| 20                           | 44   | 64 | Tail          |      |                     |         |
| 64                           |      |    | Total         |      |                     |         |

## D0 – Info 2 Gift Card Activation Extension 2

0 X D0

| Bytes | From | To | Data                                 | Bits | Explanation                                | Remarks |
|-------|------|----|--------------------------------------|------|--------------------------------------------|---------|
| 1     | 0    | 1  | Opcode                               |      | 70 – Log Information<br>Trans Info 2       |         |
| 1     | 1    | 2  | Sub Opcode                           |      | 0xD0 Trans Info 2 Extension<br>Gift Card 2 |         |
| 6     | 2    | 8  | Ext POS form<br>EFT Account<br>Types |      |                                            |         |
| 36    | 8    | 44 | Not Used                             |      |                                            |         |
| 20    | 44   | 64 | Tail                                 |      |                                            |         |
| 64    |      |    | Total                                |      |                                            |         |

## D8 – Info 2 Phone Card Activation Extension 2

0 X D8

| Bytes | From | To | Data               | Bits | Explanation                                            | Remarks |
|-------|------|----|--------------------|------|--------------------------------------------------------|---------|
| 1     | 0    | 1  | Opcode             |      | 70 – Log Information<br>Trans Info 2                   |         |
| 1     | 1    | 2  | Sub Opcode         |      | 0xD8 Trans Info 2 Phone Card<br>Activation Extension 2 |         |
| 5     | 2    | 7  | Sequence<br>Number |      |                                                        |         |
| 37    | 7    | 44 | Not Used           |      |                                                        |         |
| 20    | 44   | 64 | Tail               |      |                                                        |         |
| 64    |      |    | Total              |      |                                                        |         |

## DF – Info 2 Update Transaction

0 X DF

| Bytes | From | To | Data                                    | Bits | Explanation                           | Remarks                                                                          |
|-------|------|----|-----------------------------------------|------|---------------------------------------|----------------------------------------------------------------------------------|
| 1     | 0    | 1  | Opcode                                  |      | 70 – Log Information<br>Trans Info 2  |                                                                                  |
| 1     | 1    | 2  | Sub Opcode                              |      | 0xDf Trans Info Update<br>Transaction |                                                                                  |
| 1     | 2    | 3  | Function                                |      |                                       | 0x01 –Sale<br>0x03 -Discount                                                     |
| 4     | 3    | 7  | Updated item<br>reference number        |      |                                       | Sequence number of the<br>item/dep being voided                                  |
| 4     | 7    | 11 | Current item<br>reference number        |      |                                       | Sequence number of the<br>void                                                   |
| 4     | 11   | 15 | Ticket start<br>reference number        |      |                                       |                                                                                  |
| 4     | 15   | 19 | Quantity<br>removed                     |      |                                       | Add quantity of this line<br>that was removed by<br>either cancel or subtract    |
| 4     | 19   | 23 | Quantity<br>removed sell<br>amount      |      |                                       | Add sell amount of this<br>line that was removed by<br>either cancel or subtract |
| 4     | 23   | 27 | Sub updated Item<br>Reference<br>number |      |                                       |                                                                                  |
| 17    | 27   | 44 | Not Used                                |      |                                       |                                                                                  |
| 20    | 44   | 64 | Tail                                    |      |                                       |                                                                                  |
| 64    |      |    | Total                                   |      |                                       |                                                                                  |

## E5 – Info 2 Recovery

0 X E5

| Bytes | From | To | Data                     | Bits     | Explanation                          | Remarks      |
|-------|------|----|--------------------------|----------|--------------------------------------|--------------|
| 1     | 0    | 1  | Opcode                   |          | 70 – Log Information<br>Trans Info 2 |              |
| 1     | 1    | 2  | Function                 |          | 0xE5 - Recovery                      |              |
| 1     | 2    | 3  | Recovery trans<br>opcode |          |                                      |              |
| 36    | 3    | 39 | Reserved                 |          |                                      |              |
| 1     | 39   | 40 | Flag                     | Bit 0    | Execute                              | Execute flag |
|       |      |    |                          | Bits 1-7 | Reserved                             |              |
| 2     | 40   | 42 | Recover mode             |          |                                      |              |
| 2     | 42   | 44 | Merge fuel<br>prepay     |          |                                      |              |
| 20    | 44   | 64 | Tail                     |          |                                      |              |
| 64    |      |    | Total                    |          |                                      |              |

## F0 – Info 2 Databar Coupon

0 X F0

| Bytes | From                | To   | Data      | Bits  | Explanation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Remarks |
|-------|---------------------|------|-----------|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| 1     | 0                   | 1    | Opcode    |       | 70 – Log Information<br>Trans Info 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |         |
| 1     | 1                   | 2    | Function  |       | 0xF0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |         |
| 1     | 2                   | 3    | SubOpcode |       | DATABAR_CPN_TRANS_TICKET_FRAME 0x01<br>DATABAR_CPN_TRANS_BARCODE0x02<br>DATABAR_CPN_TRANS_PRIMARY_PURCHASE 0x03<br>DATABAR_CPN_TRANS_SECOND_PURCHASE 0x04<br>DATABAR_CPN_TRANS_THIRD_PURCHASE 0x05<br>DATABAR_CPN_TRANS_DATA_1 0x06<br>DATABAR_CPN_TRANS_DATA_2 0x07<br>DATABAR_CPN_TRANS_DATA_3 0x08<br>DATABAR_CPN_TRANS_ITEM_LINKS 0x09<br>DATABAR_CPN_TRANS_TICKET_END 0x89<br>DATABAR_CPN_TRANS_MANUAL_ENTRY 0x99<br>//When one record is broken up into header and associated data records<br>TRS_DATABAR_CPN_HEADER 0x01<br>TRS_DATABAR_CPN_DATA 0x02 |         |
| Union |                     |      |           |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |         |
|       | Coupon Ticket Frame | 0x01 |           |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |         |
| 1     | 3                   | 4    | Flag      |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |         |
|       |                     |      |           | Bit 0 | Was Cancelled                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |         |
|       |                     |      |           | Bit 1 | Not Used                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |         |
|       |                     |      |           | Bit 2 | Not Used                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |         |
|       |                     |      |           | Bit 3 | Not Used                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |         |
|       |                     |      |           | Bit 4 | Not Used                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |         |
|       |                     |      |           | Bit 5 | Not Used                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |         |
|       |                     |      |           | Bit 6 | Not Used                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |         |
|       |                     |      |           | Bit 7 | Not Used                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |         |
| 40    | 4                   | 44   | Not Used  |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |         |

| Bytes | From | To | Data                      | Bits | Explanation | Remarks                                                             |
|-------|------|----|---------------------------|------|-------------|---------------------------------------------------------------------|
|       |      |    | Coupon trans Barcode      |      | 0x02        |                                                                     |
| 1     | 3    | 4  | Type                      |      |             |                                                                     |
| Union |      |    |                           |      |             |                                                                     |
|       |      |    | Barcode Header            |      | Type = 0x01 |                                                                     |
| 4     | 4    | 8  | Number of Data records    |      |             | There will be a maximum of 2 records – max barcode is 70 characters |
| 36    | 8    | 44 | Not Used                  |      |             |                                                                     |
|       |      |    | Barcode Data              |      | Type = 0x02 |                                                                     |
| 1     | 4    | 5  | Record No.                |      |             |                                                                     |
| 39    | 5    | 44 | Data                      |      |             |                                                                     |
|       |      |    | Primary Purchase          |      | 0x03        |                                                                     |
| 13    | 3    | 16 | Company prefix            |      |             |                                                                     |
| 3     | 16   | 19 | Family Code               |      |             |                                                                     |
| 4     | 19   | 23 | Purchase Requirement      |      |             |                                                                     |
| 4     | 23   | 27 | Purchase requirement code |      |             |                                                                     |
| 17    | 27   | 44 | Not Used                  |      |             |                                                                     |
|       |      |    | Second Purchase           |      | 0x04        |                                                                     |
| 13    | 3    | 16 | Company Prefix            |      |             |                                                                     |
| 3     | 16   | 19 | Family Code               |      |             |                                                                     |
| 4     | 19   | 23 | Purchase Requirement      |      |             |                                                                     |
| 4     | 23   | 27 | Purchase Requirement Code |      |             |                                                                     |
| 17    | 27   | 44 | Not Used                  |      |             |                                                                     |
|       |      |    | Third Purchase            |      | 0x05        |                                                                     |
| 13    | 3    | 16 | Company Prefix            |      |             |                                                                     |
| 3     | 16   | 19 | Family Code               |      |             |                                                                     |
| 4     | 19   | 23 | Purchase Requirement      |      |             |                                                                     |

| Bytes | From         | To | Data                               | Bits | Explanation | Remarks                                                                   |
|-------|--------------|----|------------------------------------|------|-------------|---------------------------------------------------------------------------|
| 4     | 23           | 27 | Purchase Requirement code          |      |             |                                                                           |
| 17    | 27           | 44 | Not Used                           |      |             |                                                                           |
|       | Trans Data 1 |    | 0x06                               |      |             |                                                                           |
| 4     | 3            | 7  | Amount                             |      |             |                                                                           |
| 4     | 7            | 11 | Qty                                |      |             |                                                                           |
| 6     | 11           | 17 | Offer Code                         |      |             |                                                                           |
| 4     | 17           | 21 | Save Value                         |      |             |                                                                           |
| 4     | 21           | 25 | Additional Purchase Rules Code     |      |             |                                                                           |
| 6     | 25           | 31 | Expiration Date                    |      |             | YYMMDD                                                                    |
| 6     | 31           | 37 | Start Date                         |      |             | YYMMDD                                                                    |
| 7     | 37           | 44 | Not Used                           |      |             |                                                                           |
|       | Trans Data 2 |    | 0x07                               |      |             |                                                                           |
| 15    | 3            | 18 | Serial Number                      |      |             |                                                                           |
| 13    | 18           | 31 | Retailer GS1 Company Prefix        |      |             |                                                                           |
| 4     | 31           | 35 | Save Value Code                    |      |             |                                                                           |
| 4     | 35           | 39 | Save Value Applies To              |      |             |                                                                           |
| 4     | 39           | 43 | Store Coupon Flag                  |      |             | 0 = Not Store Coupon<br>1-9 = Store Coupon, value is limit qty            |
| 1     | 43           | 44 | Not Used                           |      |             |                                                                           |
|       | Trans Data 3 |    | 0x08                               |      |             |                                                                           |
| 4     | 3            | 7  | Multiply allowed flag              |      |             | 0 = allowed<br>1 = Not allowed                                            |
| 4     | 7            | 11 | Checker intervention required flag |      |             | 0 = no cashier intervention required<br>1 = cashier intervention required |
| 4     | 11           | 15 | General error flag                 |      |             |                                                                           |
| 4     | 15           | 19 | Start Date Status                  |      |             |                                                                           |
| 4     | 19           | 23 | Expiry Date Status                 |      |             |                                                                           |



| Bytes | From               | To | Data                 | Bits | Explanation | Remarks                                              |
|-------|--------------------|----|----------------------|------|-------------|------------------------------------------------------|
| 4     | 23                 | 27 | Svat Qualifier Field |      |             |                                                      |
| 17    | 27                 | 44 | Not Used             |      |             |                                                      |
|       | Trans Item Links   |    | 0x09                 |      |             |                                                      |
| 1     | 3                  | 4  | Type                 |      |             |                                                      |
| Union | Header             |    | Type = 0x01          |      |             |                                                      |
| 2     | 4                  | 6  | Num of links         |      |             | Repeat this data record for the number of item links |
| 38    | 6                  | 44 | Not Used             |      |             |                                                      |
|       | Data               |    | Type = 0x02          |      |             |                                                      |
| 14    | 4                  | 18 | PLU Code             |      |             |                                                      |
| 4     | 18                 | 22 | Sequence             |      |             |                                                      |
| 4     | 22                 | 26 | Sub Sequence         |      |             |                                                      |
| 4     | 26                 | 30 | Item Qualifier       |      |             |                                                      |
| 14    | 30                 | 14 | Not Used             |      |             |                                                      |
|       | Trans Manual Entry |    | 0x99                 |      |             |                                                      |
| 18    | 3                  | 21 | Databar Number       |      |             |                                                      |
| 2     | 21                 | 23 | Dept                 |      |             |                                                      |
| 4     | 23                 | 27 | Amount               |      |             |                                                      |
| 17    | 27                 | 44 | Not Used             |      |             |                                                      |
| 20    | 44                 | 64 | Tail                 |      |             |                                                      |
| 64    |                    |    | Total                |      |             |                                                      |

## F3 – eWIC

0 X F3

| Bytes | From                     | To | Data         | Bits | Explanation                                                                                                                                                                                                                                                                                                                                                          | Remarks    |
|-------|--------------------------|----|--------------|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| 1     | 0                        | 1  | Opcode       |      | 70 – Log Information<br>Trans Info 2                                                                                                                                                                                                                                                                                                                                 |            |
| 1     | 1                        | 2  | Function     |      | 0xF3                                                                                                                                                                                                                                                                                                                                                                 |            |
| 1     | 2                        | 3  | SubOpcode    |      | 0x01: EWIC_INFO_TRANS_TICKET_FRAME<br>0x02: EWIC_INFO_TRANS_ITEM_SALE<br>0x03: EWIC_INFO_TRANS_XREF<br>0x06: EWIC_INFO_TRANS_ITEM_ERROR<br>0x08: EWIC_INFO_TRANS_TICKET_TOTAL<br>0x09: EWIC_INFO_TRANS_RX_DETAILS<br>0x0B: EWIC_INFO_TRANS_TICKET_TAX<br>0x0C: EWIC_INFO_TRANS_ITEM_TAX_DETAILS<br>0x20: EWIC_INFO_BENEFITS_LIST<br>0x99: EWIC_INFO_TRANS_TICKET_END |            |
| Union |                          |    |              |      |                                                                                                                                                                                                                                                                                                                                                                      |            |
|       | Transaction Ticket Frame |    | 0x01         |      |                                                                                                                                                                                                                                                                                                                                                                      |            |
| 2     | 3                        | 5  | POS Number   |      | Pos number (BCD) (0-9999)                                                                                                                                                                                                                                                                                                                                            |            |
| 10    | 5                        | 15 | PAN Number   |      | PAN number (BCD)                                                                                                                                                                                                                                                                                                                                                     |            |
| 1     | 15                       | 16 | PAN Length   |      | PAN number length (0-99)                                                                                                                                                                                                                                                                                                                                             |            |
| 2     | 16                       | 18 | State Code   |      |                                                                                                                                                                                                                                                                                                                                                                      |            |
| 1     | 18                       | 19 | State FIPS   |      | State FIPS (hex)                                                                                                                                                                                                                                                                                                                                                     |            |
| 4     | 19                       | 23 | Session Date |      |                                                                                                                                                                                                                                                                                                                                                                      | BCD MMDDYY |
| 3     | 23                       | 26 | Session Time |      |                                                                                                                                                                                                                                                                                                                                                                      | BCD HHMMSS |
| 18    | 26                       | 44 | Not Used     |      |                                                                                                                                                                                                                                                                                                                                                                      |            |
|       | Transaction Item Sale    |    | 0x02         |      |                                                                                                                                                                                                                                                                                                                                                                      |            |
| 7     | 3                        | 10 | Plu Code     |      | PLU Code of Item (BCD)                                                                                                                                                                                                                                                                                                                                               |            |
| 2     | 10                       | 12 | Category     |      | WIC Category                                                                                                                                                                                                                                                                                                                                                         |            |
| 2     | 12                       | 14 | Subcategory  |      | WIC Subcategory                                                                                                                                                                                                                                                                                                                                                      |            |
| 4     | 14                       | 18 | Quantity     |      |                                                                                                                                                                                                                                                                                                                                                                      |            |

| Bytes | From | To                          | Data                | Bits | Explanation                                         | Remarks |
|-------|------|-----------------------------|---------------------|------|-----------------------------------------------------|---------|
| 2     | 18   | 20                          | Item Action Code    |      | Item action code returned from HOST                 |         |
| 4     | 20   | 24                          | Price               |      |                                                     |         |
| 4     | 24   | 28                          | Amount              |      | Sell Amount                                         |         |
| 7     | 28   | 35                          | Link UPC            |      | Linked PLU Code (BCD)                               |         |
| 1     | 35   | 36                          | PLU Indicator       |      | PLU/UPC Indicator                                   |         |
| 4     | 36   | 40                          | Count               |      | Item count                                          |         |
| 4     | 40   | 44                          | Approved Price      |      | Approved item price per the host                    |         |
|       |      | Transaction Cross Reference | 0x03                |      |                                                     |         |
| 2     | 3    | 5                           | Sequence No         |      | Sequence # of the eWic transaction - used for voids |         |
| 39    | 5    | 44                          | Not Used            |      |                                                     |         |
|       |      | Transaction Item Error      | 0x06                |      |                                                     |         |
| 7     | 3    | 10                          | Plu Code            |      | PLU Code of Item (BCD)                              |         |
| 2     | 10   | 12                          | Category            |      | WIC Category                                        |         |
| 2     | 12   | 14                          | Subcategory         |      | WIC Subcategory                                     |         |
| 2     | 14   | 16                          | Item Action Code    |      | Item action code returned from HOST                 |         |
| 4     | 16   | 20                          | Quantity            |      | Approved Quantity                                   |         |
| 4     | 20   | 24                          | Item Price          |      | Approved Price                                      |         |
| 4     | 24   | 28                          | Original Item Price |      |                                                     |         |
| 4     | 28   | 32                          | Original Quantity   |      |                                                     |         |
| 12    | 32   | 44                          | Not Used            |      |                                                     |         |
|       |      | Ticket Total                | 0x08                |      |                                                     |         |
| 4     | 3    | 7                           | Tender Amount       |      | Tender amount                                       |         |
| 4     | 7    | 11                          | WIC Coupon Total    |      |                                                     |         |
| 4     | 11   | 15                          | WIC Promotion Total |      |                                                     |         |
| 4     | 15   | 19                          | WIC Discount Total  |      |                                                     |         |
| 4     | 19   | 23                          | WIC Item Total      |      |                                                     |         |

| Bytes | From | To                        | Data                      | Bits  | Explanation                                                              | Remarks                                                |
|-------|------|---------------------------|---------------------------|-------|--------------------------------------------------------------------------|--------------------------------------------------------|
| 4     | 23   | 27                        | WIC Item Count            |       |                                                                          |                                                        |
| 4     | 27   | 31                        | WIC Net Total             |       |                                                                          |                                                        |
| 13    | 31   | 44                        | Not Used                  |       |                                                                          |                                                        |
|       |      | Transaction<br>RX Details | 0x09                      |       |                                                                          |                                                        |
| 4     | 3    | 7                         | End Date                  |       |                                                                          | BCD YYYYMMDD                                           |
| 37    | 7    | 44                        | Not Used                  |       |                                                                          |                                                        |
|       |      | Ticket Tax                | 0x0B                      |       |                                                                          |                                                        |
| 1     | 3    | 4                         | Char tax no               |       |                                                                          |                                                        |
| 4     | 4    | 8                         | Taxable Amount            |       |                                                                          |                                                        |
| 4     | 8    | 12                        | Tax Amount                |       |                                                                          |                                                        |
| 32    | 12   | 44                        | Not Used                  |       |                                                                          |                                                        |
|       |      | Item Tax<br>Details       | 0x0C                      |       |                                                                          |                                                        |
| 7     | 3    | 10                        | Plu Code                  |       | PLU Code of Item (BCD)                                                   |                                                        |
| 1     | 10   | 11                        | Flag                      |       |                                                                          |                                                        |
|       |      |                           |                           | Bit 0 | FS Payment                                                               |                                                        |
|       |      |                           |                           | Bit 1 | Cost Plus                                                                |                                                        |
|       |      |                           |                           | Bit 2 | Non Merch                                                                |                                                        |
|       |      |                           |                           | Bit 3 | Negative                                                                 |                                                        |
|       |      |                           |                           | Bit 4 | Discount allowed                                                         |                                                        |
|       |      |                           |                           | Bit 5 | Not Used                                                                 |                                                        |
|       |      |                           |                           | Bit 6 | Not Used                                                                 |                                                        |
|       |      |                           |                           | Bit 7 | Not Used                                                                 |                                                        |
| 1     | 11   | 12                        | Tax Ptr                   |       |                                                                          |                                                        |
| 1     | 12   | 13                        | Mult Sell Unit            |       |                                                                          |                                                        |
| 4     | 13   | 17                        | Amount                    |       |                                                                          |                                                        |
| 4     | 17   | 21                        | Retn Surcharge<br>Percent |       |                                                                          |                                                        |
| 4     | 21   | 25                        | Quantity                  |       |                                                                          |                                                        |
| 2     | 25   | 27                        | Department                |       |                                                                          |                                                        |
| 17    | 27   | 44                        | Not Used                  |       |                                                                          |                                                        |
|       |      | Benefits List             | 0x20                      |       |                                                                          |                                                        |
| 1     | 3    | 4                         | Type                      |       | 0x01 Original benefits<br>0x02 Eligible benefits<br>0x03 Ending Benefits | Benefits List<br>Benefits Worlarea<br>Benefits Balance |

| Bytes | From | To | Data                               | Bits | Explanation               | Remarks                  |
|-------|------|----|------------------------------------|------|---------------------------|--------------------------|
|       |      |    |                                    |      | 0x04 Next period benefits | Next Benefits List       |
| 1     | 4    | 5  | Sub Type                           |      | 0x01 Header               |                          |
|       |      |    |                                    |      | 0x02 Details              |                          |
| Info1 |      |    | eWIC benefits header               |      |                           |                          |
| 2     | 5    | 7  | Number of detail Recs              |      |                           | Length 0-9999            |
| 10    | 7    | 17 | PAN                                |      |                           | PAN BCD                  |
| 1     | 17   | 18 | PAN Length                         |      |                           | PAN number length (0-99) |
| 2     | 18   | 20 | State Code                         |      |                           |                          |
| 4     | 20   | 24 | End Date                           |      |                           | BCD YYYYMMDD             |
| 2     | 24   | 26 | Block Count                        |      |                           |                          |
| 2     | 26   | 28 | Compressed Buffer Size             |      |                           |                          |
| 2     | 28   | 30 | Uncompressed Buffer Size           |      |                           |                          |
| 14    | 30   | 34 | Not Used                           |      |                           |                          |
| Info2 |      |    | EBTWIC Benefits Details compressed |      |                           |                          |
| 2     | 5    | 7  | Record Number                      |      |                           |                          |
| 1     | 7    | 8  | Number of bytes                    |      |                           |                          |
| 36    | 8    | 44 | Benefits list data                 |      |                           |                          |
|       |      |    | eWIC Ticket End                    |      | 0x99                      |                          |
| 2     | 3    | 5  | POS Number                         |      | Pos number (BCD) (0-9999) |                          |
| 10    | 5    | 15 | PAN Number                         |      | PAN number (BCD)          |                          |
| 1     | 15   | 16 | PAN Length                         |      | PAN number length (0-99)  |                          |
| 2     | 16   | 18 | State Code                         |      |                           |                          |
| 1     | 18   | 19 | State FIPS                         |      | State FIPS (hex)          |                          |
| 4     | 19   | 23 | Session Date                       |      |                           | BCD MMDDYY               |
| 3     | 23   | 26 | Session Time                       |      |                           | BCD HHMMSS               |
| 18    | 26   | 44 | Not Used                           |      |                           |                          |
| 20    | 44   | 64 | Tail                               |      |                           |                          |
| 64    |      |    | Total                              |      |                           |                          |

## F4 – External 2 Coupon

0 X F4

| Bytes | From | To | Data                                | Bits | Explanation                          | Remarks |
|-------|------|----|-------------------------------------|------|--------------------------------------|---------|
| 1     | 0    | 1  | Opcode                              |      | 70 – Log Information<br>Trans Info 2 |         |
| 1     | 1    | 2  | Function                            |      | 0xF4 – External 2 Coupon             |         |
| 20    | 2    | 22 | Electronic<br>Coupon<br>Description |      |                                      |         |
| 22    | 22   | 44 | Reserved                            |      |                                      |         |
| 20    | 44   | 64 | Tail                                |      |                                      |         |
| 64    |      |    | Total                               |      |                                      |         |

## F5 – External Coupon Data

0 X F5

| Bytes | From | To | Data                   | Bits | Explanation                                                                             | Remarks |
|-------|------|----|------------------------|------|-----------------------------------------------------------------------------------------|---------|
| 1     | 0    | 1  | Opcode                 |      | 70 – Log Information                                                                    |         |
| 1     | 1    | 2  | Function               |      | 0 x F5 External Coupon Data                                                             |         |
| 1     | 2    | 3  | Sub Function           |      | 0x01 Consumer ID<br>0x02 Coupon Not Sold<br>0x03 Transaction ID<br>0x04 Message 2 Error |         |
| Union |      |    | Consumer ID            |      | 0x01                                                                                    |         |
| 20    | 3    | 23 | Consumer ID            |      |                                                                                         |         |
| 1     | 23   | 24 | Opt Was Cancelled      |      |                                                                                         |         |
| 20    | 24   | 44 | Not Used               |      |                                                                                         |         |
|       |      |    | Coupon Not Sold        |      | 0x02                                                                                    |         |
| 1     | 3    | 4  | Type                   |      | Coupon Barcode Header<br>Type = 0x01                                                    |         |
| 4     | 4    | 8  | Number of Data Records |      |                                                                                         |         |
| 36    | 8    | 44 | Not Used               |      |                                                                                         |         |
| 1     | 3    | 4  | Type                   |      | Coupon Barcode Data<br>Type = 0x02                                                      |         |
| 1     | 4    | 5  | Record Number          |      |                                                                                         |         |
| 39    | 5    | 44 | Data                   |      |                                                                                         |         |
|       |      |    | Transaction ID         |      | Type = 0x03                                                                             |         |
| 40    | 3    | 43 | Transaction ID         |      |                                                                                         |         |
| 1     | 43   | 44 | Transaction ID Length  |      |                                                                                         |         |
|       |      |    | Message 2 Error        |      | Type =0x04                                                                              |         |
| 4     | 3    | 7  | Message 2 Status       |      |                                                                                         |         |
| 37    | 7    | 44 | Not Used               |      |                                                                                         |         |
| 20    | 44   | 64 | Tail                   |      |                                                                                         |         |
| 64    |      |    | Total                  |      |                                                                                         |         |

## F7 – Info 2 Lane Manual Add Item

0 X F7

| Bytes | From | To | Data         | Bits | Explanation                                                             | Remarks |
|-------|------|----|--------------|------|-------------------------------------------------------------------------|---------|
| 1     | 0    | 1  | Opcode       |      | 70 – Log Information<br>Trans Info 2                                    |         |
| 1     | 1    | 2  | Function     |      | 0xF7                                                                    |         |
| 1     | 2    | 3  | Action       |      | 0 = Exact UPC Match<br>1 = Manufacturer Code Match<br>2 = Generic Match |         |
| 7     | 3    | 10 | PLU Code     |      |                                                                         | BCD     |
| 7     | 10   | 17 | Display Code |      | Matching Code from LH List                                              | BCD     |
| 27    | 17   | 44 | Not Used     |      |                                                                         |         |
| 20    | 44   | 64 | Tail         |      |                                                                         |         |
| 64    |      |    | Total        |      |                                                                         |         |



## F9 – Info 2 DPS

0 X F9

| Bytes | From | To                  | Data        | Bits | Explanation                                                  | Remarks |
|-------|------|---------------------|-------------|------|--------------------------------------------------------------|---------|
| 1     | 0    | 1                   | Opcode      |      | 70 – Log Information<br>Trans Info 2                         |         |
| 1     | 1    | 2                   | Function    |      | 0xF9                                                         |         |
| 1     | 2    | 3                   | Sub Opcode  |      | 0x01 Fuel CC Info<br>0x02 MTX Pan Hash<br>0x03 CC Owner Name |         |
| 1     | 3    | 4                   | Type        |      |                                                              |         |
| Union |      |                     |             |      |                                                              |         |
|       |      | Variable Data       | 0x01        |      |                                                              |         |
| 39    | 4    | 43                  | Data        |      |                                                              |         |
| 1     | 43   | 44                  | Data Length |      |                                                              |         |
|       |      | Variable Data Small | 0x02        |      |                                                              |         |
| 37    | 4    | 41                  | Record No.  |      |                                                              |         |
| 1     | 41   | 42                  | Data Length |      |                                                              |         |
| 1     | 42   | 43                  | Count       |      |                                                              |         |
| 1     | 43   | 44                  | Index       |      |                                                              |         |
|       |      | Variable Data Large | 0x03        |      |                                                              |         |
| 35    | 4    | 39                  | Data        |      |                                                              |         |
| 1     | 39   | 40                  | Data Length |      |                                                              |         |
| 2     | 40   | 42                  | Count       |      |                                                              |         |
| 2     | 42   | 44                  | Index       |      |                                                              |         |
|       |      | Fixed Data 320      | 0x04        |      |                                                              |         |
| 40    | 4    | 44                  | Data        |      |                                                              |         |
|       |      | Fixed Data          | 0x05        |      |                                                              |         |

| Bytes | From | To         | Data     | Bits | Explanation | Remarks |
|-------|------|------------|----------|------|-------------|---------|
|       |      | 256        |          |      |             |         |
| 32    | 4    | 36         | Data     |      |             |         |
| 8     | 36   | 44         | Reserved |      |             |         |
|       |      | Fixed Data | 0x06     |      |             |         |
|       |      | 128        |          |      |             |         |
| 16    | 4    | 20         | Data     |      |             |         |
| 24    | 20   | 44         | Reserved |      |             |         |
| 20    | 44   | 64         | Tail     |      |             |         |
| 64    |      |            | Total    |      |             |         |

## FA – Info 2 Lane Hawk Clear Item

0 X FA

| Bytes | From | To | Data     | Bits | Explanation                          | Remarks |
|-------|------|----|----------|------|--------------------------------------|---------|
| 1     | 0    | 1  | Opcode   |      | 70 – Log Information<br>Trans Info 2 |         |
| 1     | 1    | 2  | Function |      | 0xFA                                 |         |
| 7     | 2    | 9  | PLU Code |      |                                      | BCD     |
| 35    | 9    | 44 | Not Used |      |                                      |         |
| 20    | 44   | 64 | Tail     |      |                                      |         |
| 64    |      |    | Total    |      |                                      |         |

## FB – Info 2 Promotion Tax Info

0 X FB

| Bytes | From | To | Data                           | Bits     | Explanation                          | Remarks |
|-------|------|----|--------------------------------|----------|--------------------------------------|---------|
| 1     | 0    | 1  | Opcode                         |          | 70 – Log Information<br>Trans Info 2 |         |
| 1     | 1    | 2  | Function                       |          | 0xFB                                 |         |
| 1     | 2    | 3  | Flags                          |          |                                      |         |
|       |      |    |                                | Bit 0    | Opt plu                              |         |
|       |      |    |                                | Bit 1    | Opt dep                              |         |
|       |      |    |                                | Bit 2    | Opt disc dept                        |         |
|       |      |    |                                | Bit 3    | Opt pay credit or FS item            |         |
|       |      |    |                                | Bit 4    | Opt cost plus                        |         |
|       |      |    |                                | Bit 5    | Opt return item                      |         |
|       |      |    |                                | Bits 6-7 | Reserved                             |         |
| 1     | 3    | 4  | Tax comb                       |          |                                      |         |
| 4     | 4    | 8  | Return<br>surcharge<br>percent |          |                                      |         |
| 4     | 8    | 12 | Amount                         |          |                                      |         |
| 2     | 12   | 14 | Dept                           |          |                                      |         |
| 7     | 14   | 21 | Plu                            |          |                                      |         |
| 4     | 21   | 25 | PLU Sequence #                 |          |                                      |         |
| 4     | 25   | 29 | Promotion #                    |          |                                      |         |
| 1     | 29   | 30 | Promotion<br>reward type       |          |                                      |         |
| 14    | 30   | 44 | Reserved                       |          |                                      |         |
| 20    | 44   | 64 | Tail                           |          |                                      |         |
| 64    |      |    | Total                          |          |                                      |         |

## FD – Info 2 WIC CVV Info

0 X FD

| Bytes | From | To | Data                           | Bits | Explanation      | Remarks |
|-------|------|----|--------------------------------|------|------------------|---------|
| 1     | 0    | 1  | Opcode                         |      | 70 –Trans Info 2 |         |
| 1     | 1    | 2  | Function                       |      | 0xFD             |         |
| 2     | 2    | 4  | WIC CVV<br>Index               |      |                  |         |
| 4     | 4    | 8  | WIC CVV Total<br>Voucher Value |      |                  |         |
| 1     | 8    | 9  | CVV Issue Day                  |      |                  |         |
| 1     | 9    | 10 | CVV Issue<br>Month             |      |                  |         |
| 2     | 10   | 12 | CVV Issue Year                 |      |                  |         |
| 1     | 12   | 13 | CVV Exp Day                    |      |                  |         |
| 1     | 13   | 14 | CVV Exp<br>Month               |      |                  |         |
| 2     | 14   | 16 | CVV Exp Year                   |      |                  |         |
| 28    | 16   | 44 | Reserved                       |      |                  |         |
| 20    | 44   | 64 | Tail                           |      |                  |         |
| 64    |      |    | Total                          |      |                  |         |

## FE – Info 2 WIC CVV Tax Info

0 X FE

| Bytes | From | To | Data                                 | Bits | Explanation      | Remarks |
|-------|------|----|--------------------------------------|------|------------------|---------|
| 1     | 0    | 1  | Opcode                               |      | 70 –Trans Info 2 |         |
| 1     | 1    | 2  | Function                             |      | 0xFE             |         |
| 1     | 2    | 3  | Tax Number                           |      |                  |         |
| 4     | 3    | 7  | WIC CVV<br>Forgive Taxable<br>Amount |      |                  |         |
| 4     | 7    | 11 | WIC CVV<br>Forgive Tax<br>Amount     |      |                  |         |
| 33    | 11   | 44 | Not Used                             |      |                  |         |
| 20    | 44   | 64 | Tail                                 |      |                  |         |
| 64    |      |    | Total                                |      |                  |         |

## FF –Info 2 Fuel Voucher Redeemed

0 X FF

| Bytes | From | To | Data                | Bits | Explanation      | Remarks |
|-------|------|----|---------------------|------|------------------|---------|
| 1     | 0    | 1  | Opcode              |      | 70 –Trans Info 2 |         |
| 1     | 1    | 2  | Function            |      | 0xFF             |         |
| 4     | 2    | 6  | Barcode             |      |                  | BCD     |
| 4     | 6    | 10 | Promotion<br>Number |      |                  |         |
| 34    | 40   | 44 | Reserved            |      |                  |         |
| 20    | 44   | 64 | Tail                |      |                  |         |
| 64    |      |    | Total               |      |                  |         |

## 88 – Transaction QDX Update

0 X 88

**Explanation:** The QDX Update function is to write and increment the QDX database, recording the QDX Number, Position within the record, File Size, etc.

| Bytes | From | To | Data       | Bits  | Explanation                                    | Remarks                                            |
|-------|------|----|------------|-------|------------------------------------------------|----------------------------------------------------|
| 1     | 0    | 1  | Opcode     |       |                                                |                                                    |
| 1     | 1    | 2  | SubOpcode  |       |                                                |                                                    |
| 1     | 2    | 3  | Function   |       | 1 – Write<br>2 – increment (according to size) |                                                    |
| 1     | 3    | 4  | QDX number |       |                                                |                                                    |
| 12    | 4    | 16 | Index      |       |                                                | If relative file then record number left justified |
| 2     | 16   | 18 | Position   |       | Position within the record                     |                                                    |
| 1     | 18   | 19 | Size       |       |                                                |                                                    |
| 1     | 19   | 20 | Flag       |       |                                                |                                                    |
|       |      |    |            | bit 0 | Send_maint                                     |                                                    |
|       |      |    |            | bit 1 | Not Used                                       |                                                    |
|       |      |    |            | bit 2 | Not Used                                       |                                                    |
|       |      |    |            | bit 3 | Not Used                                       |                                                    |
|       |      |    |            | bit 4 | Not Used                                       |                                                    |
|       |      |    |            | bit 5 | Not Used                                       |                                                    |
|       |      |    |            | bit 6 | Not Used                                       |                                                    |
|       |      |    |            | bit 7 | Not Used                                       |                                                    |
| 1     | 20   | 21 | org_pos_no |       |                                                |                                                    |
| 23    | 21   | 44 | Data       |       |                                                |                                                    |
| 20    | 44   | 64 | Tail       |       |                                                |                                                    |
| 64    |      |    | Total      |       |                                                |                                                    |



## 95 – Transaction External Data

0 X 95

**Explanation:** This opcode is used to send external messages via the T-LOG. Prior to this transaction a Info 2, ticket type (0x33) transaction will be written to indicate Ticket type.

| Bytes | From | To | Data      | Bits                       | Explanation                                                                                                                                                                                                                                                                             | Remarks              |
|-------|------|----|-----------|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| 1     | 0    | 1  | Opcode    |                            |                                                                                                                                                                                                                                                                                         |                      |
| 1     | 1    | 2  | Data Type |                            | 1 – Loyalty Message (zipped XML)<br>2 – Stock Messages<br>3 – Stock Print Messages<br>4 – Copient (Logix) NCR Loyalty Transaction Log<br>5 – POS transaction schema in XML format<br>6 – POS transaction data in XML format<br>7 – Reserved IL<br>8 – PDX Sold Request<br>9 – MDot Msg3 | Next data types here |
| 41    | 2    | 43 | Data      |                            |                                                                                                                                                                                                                                                                                         |                      |
| 1     | 43   | 44 | Flag      | Bit 0<br>Bit 1<br>Bits 2-6 | Start Bit<br>End Bit<br>Data Length                                                                                                                                                                                                                                                     |                      |
| 20    | 44   | 64 | Tail      |                            |                                                                                                                                                                                                                                                                                         |                      |
| 64    |      |    | Total     |                            |                                                                                                                                                                                                                                                                                         |                      |

## 0A – Cashier Time/Performance Statistics

0 X 0A

**Explanation:** This Opcode represents the POS Mode and the time that each item is registered by the cashier. For each POS terminal the following data is recorded: time in which the cash register is in Tender Mode, Secure Mode, or in Maintenance. Other times, e.g., Sign On and Sign Off are also registered.

| Bytes | From | To | Data                      | Bits  | Explanation                                                     | Remarks                                                                               |
|-------|------|----|---------------------------|-------|-----------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 1     | 0    | 1  | Opcode                    |       | 0A – Cashier Time/<br>Performance statistics                    |                                                                                       |
| 1     | 1    | 2  | POS Mode                  |       | Logs the mode the POS was in<br>(Sale, Tender, Idle, etc.)      |                                                                                       |
| 2     | 2    | 4  | Item Registration<br>Time |       | The following log is the total<br>time during the cashier shift |                                                                                       |
| 2     | 4    | 6  | Idle time                 |       | Total idle time                                                 |                                                                                       |
| 2     | 6    | 8  | Secure Time               |       | Total secure time                                               |                                                                                       |
| 2     | 8    | 10 | Tender Time               |       | Total tender time                                               |                                                                                       |
| 2     | 10   | 12 | Wait Time                 |       | Total wait time                                                 |                                                                                       |
| 2     | 12   | 14 | Inquiry time              |       | Total inquiry time                                              |                                                                                       |
| 2     | 14   | 16 | Other Time                |       | Total other time                                                |                                                                                       |
| 1     | 16   | 17 | Flag 1                    |       |                                                                 |                                                                                       |
|       |      |    |                           | bit 0 | Quarter – hour                                                  | TESCO                                                                                 |
|       |      |    |                           | bit 1 | Sign off                                                        | TESCO                                                                                 |
|       |      |    |                           | bit 2 | Not Used                                                        |                                                                                       |
|       |      |    |                           | bit 3 | Not Used                                                        |                                                                                       |
|       |      |    |                           | bit 4 | Not Used                                                        |                                                                                       |
|       |      |    |                           | bit 5 | Not Used                                                        |                                                                                       |
|       |      |    |                           | bit 6 | Not Used                                                        |                                                                                       |
|       |      |    |                           | bit 7 | Express Order                                                   | Express Ticket (less than<br>10 times)<br><br>Delta time: time since<br>last 0x0A TRS |
| 2     | 17   | 19 | delta_item_reg_time;      |       | Item registration time                                          |                                                                                       |
| 2     | 19   | 21 | delta_idle_time           |       | Idle time                                                       |                                                                                       |
| 2     | 21   | 23 | delta_secure_time         |       | Secure time                                                     |                                                                                       |
| 2     | 23   | 25 | delta_tender_time         |       | Tender time                                                     |                                                                                       |
| 2     | 25   | 27 | delta_wait_time           |       | Wait time                                                       |                                                                                       |
| 2     | 27   | 29 | delta_inq_time            |       | Inquiry time                                                    |                                                                                       |

| Bytes | From | To | Data               | Bits | Explanation                     | Remarks |
|-------|------|----|--------------------|------|---------------------------------|---------|
| 2     | 29   | 31 | delta_other_time   |      | Other time                      |         |
| 2     | 31   | 33 | Sign on time       |      | Total sign on time              |         |
| 2     | 33   | 35 | Delta sign on time |      | Delta sign on time              |         |
| 4     | 35   | 39 | Maintenance 1      |      | Maintenance received statistics |         |
| 4     | 39   | 43 | Maintenance 2      |      | Maintenance received statistics |         |
| 1     | 43   | 44 | Local_maint_Q      |      | Pending Maintenance records     |         |
| 20    | 44   | 64 | Tail               |      |                                 |         |
| 64    |      |    | Total              |      |                                 |         |

## 0B – Cashier Declaration

0 X 0B

**Explanation:** The Cashier declaration records the amount of cash that the cashier declares at the beginning and end of a shift, recording the Amount, Cashier No., Count, Tender Number, etc.

| Bytes | From | To | Data               | Bits  | Explanation                                                    | Remarks                                                                                                          |
|-------|------|----|--------------------|-------|----------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| 1     | 0    | 1  | Opcode declaration |       | 0B – Cashier                                                   |                                                                                                                  |
| 1     | 1    | 2  | Function           |       | 01 – Regular<br>02 – POST declaration<br>10 – Safe declaration |                                                                                                                  |
| 4     | 2    | 6  | Amount             |       | Total amount declared in period                                | DOS Systems.                                                                                                     |
| 2     | 6    | 8  | Count              |       | Total quantity declared for this tender                        | DOS Systems                                                                                                      |
| 1     | 8    | 9  | Tender Number      |       |                                                                |                                                                                                                  |
| 4     | 9    | 13 | Total              |       | PC generated option                                            |                                                                                                                  |
| 1     | 13   | 14 | Flag               |       |                                                                |                                                                                                                  |
|       |      |    |                    | bit 0 | Previous period                                                | Declaration for previous period                                                                                  |
|       |      |    |                    | bit 1 | Do not update employee record                                  |                                                                                                                  |
|       |      |    |                    | bit 2 | Reprocess                                                      | B/O Use<br>Process only if in reprocess mode.                                                                    |
|       |      |    |                    | bit 3 | Additive                                                       | B/O Use<br>Additive declaration: add “this time” to existing values                                              |
|       |      |    |                    | bit 4 | Remote                                                         | Remote declaration                                                                                               |
|       |      |    |                    | bit 5 | Int64                                                          | Amount is stored in int64 field. This bit is used when performing declaration at the POS (Drawer Accountability) |
|       |      |    |                    | bit 6 | First                                                          |                                                                                                                  |
|       |      |    |                    | bit 7 | Information                                                    | Informative only, ignore this record.                                                                            |
| 4     | 14   | 18 | Amount this time   |       | Amount declared this time.                                     |                                                                                                                  |
| 2     | 18   | 20 | Count this time    |       | Quantity declared this time.                                   |                                                                                                                  |

| Bytes | From | To | Data           | Bits | Explanation                     | Remarks |
|-------|------|----|----------------|------|---------------------------------|---------|
| 1     | 20   | 21 | POS Number     |      | POS number (POS accountability) |         |
| 2     | 21   | 23 | Cashier Number |      |                                 |         |
| 21    | 23   | 44 | Not Used       |      |                                 |         |
| 20    | 44   | 64 | Tail           |      |                                 |         |
| 64    |      |    | Total          |      |                                 |         |

## B0 – New Sequence Number

0 X B0

**Explanation:** The New Sequence Number Opcode is used when testing for problems with the sequence number in the transaction file.

| Bytes | From | To | Data   | Bits | Explanation                                                                                  | Remarks |
|-------|------|----|--------|------|----------------------------------------------------------------------------------------------|---------|
| 1     | 0    | 1  | Opcode |      | B0 – Transaction New Sequence Number                                                         |         |
| 1     | 1    | 2  | Type   |      | 1 - New Seq After EOD<br>2 – New Seq After Cold Start<br>3 – New Seq After Reset Transaction |         |
| 42    | 2    | 44 | Data   |      |                                                                                              |         |
| 20    | 44   | 64 | Tail   |      |                                                                                              |         |
| 64    |      |    | Total  |      |                                                                                              |         |

## C5 – Transaction Media Extension 6

0 X C5

| Bytes | From | To | Data           | Bits  | Explanation                    | Remarks |
|-------|------|----|----------------|-------|--------------------------------|---------|
| 1     | 0    | 1  | Opcode         |       | C5 Transaction Media Extension |         |
| 42    | 1    | 43 | EFT Owner Name |       |                                |         |
| 1     | 43   | 44 | Flag           | Bit 0 | Opt Media Ext 7                |         |
|       |      |    |                | Bit 1 | Not Used                       |         |
| 20    | 44   | 64 | Tail           |       |                                |         |
| 64    |      |    | Total          |       |                                |         |

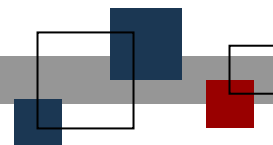
## C9 – Transaction General Long Data

0 X C9

| Bytes | From | To | Data                         | Bits | Explanation                                            | Remarks |
|-------|------|----|------------------------------|------|--------------------------------------------------------|---------|
| 1     | 0    | 1  | Opcode                       |      | C9 Transaction General Long Data                       |         |
| 1     | 1    | 2  | Function                     |      | Possible value:<br>1 – general data encrypted password |         |
| 1     | 2    | 3  | Current Transaction Position |      |                                                        |         |
| 1     | 3    | 4  | Total Transaction Count      |      |                                                        |         |
| 4     | 4    | 8  | Data Length                  |      |                                                        |         |
| 36    | 8    | 44 | Data                         |      |                                                        |         |
| 20    | 44   | 64 | Tail                         |      |                                                        |         |
| 64    |      |    | Total                        |      |                                                        |         |







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