



-  *ISS45 Version 8 Transaction File*
-  *Technical Reference*
-  *Version 8.6*
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ISS45 V8 Transaction File Technical Reference

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Overview

This document contains all the descriptions, specifications and record formats of the Retailix Ltd. System 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 possible 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

File Number 15

Name	TRANSACT.QDX
File Type	QuickDex FIFO file
Record Size	64
Flag Offset	63
File Size	Dependent on disk size
Description	<p>This file contains the POS transaction records information and is the main means of transferring information from the POS to the server.</p> <p>All events are recorded as transactions. Transactions can be generated by the PCs for cashier functions and inventory movement purposes.</p> <p>At the end of each transaction is a 20-byte tail.</p>

Tail Format

Transaction File, Tail Format

Explanation: At the end of every transaction is the 20-byte tail. 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
2	0	2	Not Used			
1	2	3	External Device POS No.		If Pay at Pump get virtual POS number	
1	3	4	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	Not used	
2	4	6	Ticket Number			
3	6	9	Date		6 Digits YYMMDD	
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	Coupon Ticket	
				bit 7	Wastage mode	
2	13	15	Cashier Number			
1	15	16	POS Number (Hex)		MFS1 241 MFS2 242	
2	16	18	Transaction Seq. No		Transaction Sequential No.	
1	18	19	1/2b TV# + 1/2b PC#(0-15)		PC Number 0-3 (0-15) TV# 4-7 (0-15)	
1	19	20	Not Used byte for QuickDex must be 0			
20			Tail Total			

Opcodes:01 to 56 (B0)

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.

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 exists	
				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	
				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 pre item	Item was sold as a result of link to previous item
				bit 0	opt_nu1	PRJ_ROW (Not used in Rest of World projects)
				bit 0	non ROW projects	
				bit 1	Promotion	
				bit 2	Reduction	
				bit 3	Offer	

Main Opcodes

Bytes	From	To	Data	Bits	Explanation	Remarks
1	11	12	Flag 4	bit 4	Non Merchandise	
				bit 5	Store Coupon	
				bit 6	Vendor Coupon	
				bit 7	Item Discount Flag	
				bit 0	Scanned Item	
				bit 1	Read from PC	Item read from front office
				bit 2	Following transaction is related to this transaction	
				bit 3	Multi Saver	Not used
				bit 4	External Promotion	Item on member promotion
				bit 5	Price Embedded	ROW: indicates that a tax exclusive price TRS follows
				bit 5	Add Calculated Price Transaction	IF PRJ_ROW
				bit 5	opt_phone_card	Else (Storeline) Phone card
				bit 6	opt_grid_price_calc	Grid price calculation
bit 7	opt_nu1	Not used				
1	12	13	Flag 5	bit 0-2	opt_nu2	IF PRJ_ROW Else (Storeline)
				bit 0	Offer Discount	03 will follow
				bit 1	Offer Continue	Continuation offer
				bit 2	Offer First	01 & 03 will follow
				bit 3	Counter Department	Tesco taken from dep
				bit 4	Return to Stock	Tesco taken from return
				bit 5	Cost Plus	
				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	MSU		Multi Sell Unit	
1	16	17	Return type		Return type number	
1	17	18	Tax Pointer			
4	18	22	Qty		Quantity sold	

Bytes	From	To	Data	Bits	Explanation	Remarks
4	22	26	Price		Item price	
4	26	30	Amount		Amount received for this item	
4	30	34	No Tax Price			ROW: Tax exclusive price
4	34	38	No Tax Amount			ROW: Tax exclusive 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_ext_2	PLU extension record 0x22 follows
				Bit 1	Markdown	Markdown given on this item
				Bit 2	Member discount	Members as frequent shopper, discount given.
				Bit 3	Bottle Deposit	Bottle deposit/refund
				Bit 4	Bottle Refund	Bottle deposit/refund
				Bit 5	Rep code	Rep code captured (ROW)
				Bit 6	Limited Quantity Promotion	A's Limited quantity promotion (ROW)
				Bit 7	Quantity case	Case Item Sale
20	44	64	Tail			
64			TOTAL			

Main Opcodes

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 exists	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	opt_scr_sls_flag (Pharmacy script)	PRJ_ROW
				bit 7	opt_accounting_flag (Barcode programming)	Else (only Storeline)
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 Liters	Fuel item sold in gallons
1	5	6	Fag 3	bit 0	Chained pre item	Item was sold as a result of link to previous item
				bit 1	Cost Plus Department	
				bit 2	Promotion	Item promotion flag
				bit 3	Non Merchandise	Non merchandize Dep.
				bit 4	Store Coupon	Store Coupon Dep.

Bytes	From	To	Data	Bits	Explanation	Remarks
				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
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	Add calc price transaction	PRJ_ROW
				bit 7	Department additional data	Else (Storeline)
1	7	8	Return Type			
1	8	9	Tax Pointer			Tax flags
1	9	10	Product Code		Storeline Fuel Sale	(Tesco, taken from dept.)
1	10	11	Pre Pay Pump Number		POSPump Pre-Pay	
4	11	15	Cancelled Pre Pay Sync Number		POSPump Pre-Pay	
1	15	16	Flags	Bit 0	Surcharge	Indicates Surcharge Department
				Bit 1	Delivery Charge	Indicates Delivery Charge Department Sale
				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	Qty			Quantity sold

Main Opcodes

Bytes	From	To	Data	Bits	Explanation	Remarks
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 (ICL, "manual dept. MSU sale")			
4	40	44	Return Surcharge Percent			
20	44	64	Tail			
64			Total			

03 – Discount

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), 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	
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 3			IF PRJ_ROW
				bit 0	Price override treated as discount	
				bit 1-2	Not used	
						Else (Storeline)
				bit 0	Promotion	Promotion type
				bit 1	Reduction	Promotion type
				bit 2	Offer	Promotion type

Main Opcodes

Bytes	From	To	Data	Bits	Explanation	Remarks
				bit 3	Multisaver	
				bit 4	Extended Promotion	
				bit 5	Non netted Promotion	
				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			
4	20	24	Qty		Item quantity	
4	24	28	Price		Item price	
4	28	32	Amount		Discount amount	
1	32	33	Flag4			IF PRJ_ROW
				bit 0	Extra fee 1	Else (Storeline)
				bit 0	Points given as a reward	
				bit 1	Extra fee 2	
				bit 2	Finance fee	
				bit 3	Automatic Discount	
				bit 4	Delayed Promotion	(Lucky)
				bit 5	Report as tender	Report discount as tender (Lucky)
				bit 6	Not Used optnot_net_fx	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 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

Main Opcodes

Bytes	From	To	Data	Bits	Explanation	Remarks
				bit 6	Media_ext	Media extensions transaction follows
				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	Recall invoice indicator	
				bit 6	Credit sale indicator	Transaction splits here
				bit 6	Media extension 3	PRJ_ROW
				bit 7	Media extension 2 follows	Else (only Storeline)
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 0 – Not a ticket total 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	
				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 Qbuster	Send to Qbuster @POS
				bit 6	Not Used	
				bit 7	Not Used	
2	3	5	Ticket Number			Ticket amount
4	5	9	Tax Value		Not Used	
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	

Main Opcodes

Bytes	From	To	Data	Bits	Explanation	Remarks
6	27	33	Grand Total		POS grand total sales value	
1	33	34	Return Type		Return type number (if a return ticket)	
4	34	38	Food Stamp Real Payment			
4	38	42	Amount Without Electronic Coupons		Total amount excluding electronic coupons	
2	42	44	Not Used			
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.

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			

Main Opcodes

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 02- Add on float 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			

Main Opcodes

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 02 – POST pickup	
4	2	6	Amount			
2	6	8	Count			
1	8	9	Tender Number			
4	9	13	Reserved		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	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
1	14	15	POS_no			
1	15	16	PC_no			
4	16	20	Supervisor number for pickup			SAL54
2	20	22	Cashier Number			
22	22	44	Not Used			
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, or 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/ Performance statistics	
1	1	2	POS Mode		Logs the mode the POS was in (Sale, Tender, Idle, etc.)	
2	2	4	Item Registration Time		The following log is the total 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 10 times) Delta time: time since 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	

Main Opcodes

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 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 02 – POST declaration 10 – Safe declaration	
4	2	6	Amount			
2	6	8	Count			
1	8	9	Tender Number			
4	9	13	Total		PC generated option	
1	13	14	Flag			
				bit 0	Previous period	
				bit 1	Do not update employee record	
				bit 2	Reprocess	B/O Use
				bit 3	Additive	B/O Use
				bit 4	Remote	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Information	
4	14	18	Amount this time			
2	18	20	Count this time			
1	20	21	POS Number			
2	21	23	Cashier Number			
21	23	44	Not used			
20	44	64	Tail			
64			Total			

Main Opcodes

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 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	
				bit 1	Fuel Transaction	
				bit 2	Recalled Transaction	ALB Fuel/TESCO Garage
				bit 3	Drive Off	ALB Fuel
				bit 4	prepay_trs	ALB Fuel
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
1	9	10	Flag 2			
				bit 0	CS Tax Comb.	
				bit 1	Self Scanning Additional Item	
				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	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 – needed for SQL tables, not used in TESCO

Main Opcodes

Bytes	From	To	Data	Bits	Explanation	Remarks
4	21	25	Price			
4	25	29	Amount			
4	29	33	Fuel Display Price			3 decimal digits
11	33	44	Reserved			
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 Extenuation Record	
2	1	3	Department Number			
1	3	4	Flag 1	bit 0	Pump Test	
				bit 1	Fuel Transaction	
				bit 2	Recalled Transaction	Alb Fuel / TESCO Garage
				bit 3	Current Transaction	TESCO Garage
				bit 4	Drive off	ALB Fuel
				bit 5	Self scanning additional item	
				bit 6	Not Used	
				bit 7	Not Used	
1	4	5	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	5	6	Pump number			
1	6	7	Fuel Grade			
4	7	11	POS Pump Transaction Number			

Main Opcodes

Bytes	From	To	Data	Bits	Explanation	Remarks
1	11	12	Nozzle			Copy of values from DEP transaction – needed for SQL tables, 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			

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, 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			IF PRJ_ROW
3	36	39	Tender Date			
3	39	42	Date Issued			
6	36	42	Check Number			Else (Storeline)
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	opt_not_created_inv	IF PRJ_ROW (Indicator

Main Opcodes

Bytes	From	To	Data	Bits	Explanation	Remarks
						for Not created invoice) Split trans.
				bit 6	Change Convert	Else (Storeline)
				bit 7	Loyalty voucher	
1	43	44	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 Foodstamps Balance	
				Bit 3	Void Tender not allowed	
				Bit 4	Voucher Tender	Return Voucher Redemption
				Bit 5	Voucher	Loyalty Voucher Redemption
				Bit 6	Display tender negative amount flag	
				Bit 7	Media Ext 3	
2	13	15	EFT Tender No.			
8	15	23	Settlement Date			Quest
1	23	24	Card Type			Quest
2	24	26	Account Type			Quest
2	26	28	Transaction Type			Quest
4	28	32	EFT handle			Nomad EFT Transaction handle
10	32	42	Voucher No.			Voucher Redemption (BCD Format)
1	42	43	Voucher length			
1	43	44		Bit 0	Accepted in Sale Mode	
				Bit 1	Barcode Tender Coupon	
				Bit 2	Not Used	
				Bit 3	Not Used	
				Bit 4	Not Used	
				Bit 5	Not Used	
				Bit 6	Not Used	

Main Opcodes

Bytes	From	To	Data	Bits	Explanation	Remarks
				Bit 7	Not Used	
1	43	44	Not Used			
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	
1	1	2	Cash Back Type		None, Prompt, Operator, Smart	
4	2	6	Cash Back Value			
1	6	7	Flags			
				bit 0	Immediately Cashback	Condition of open drawer
				bit 1	bNameTRSFollow	
				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	7	9	Tender Number			
12	9	21	SBankAccount		Chip card payment account	
12	21	33	SDomiciliation		Chip card domiciliation number	
11	33	44	Not Used			
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		Back office use	
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) 2 – T7 of-line (void) 3 – Bank of-line (sale) 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			
10	30	40	Issuer Name t7			
4	40	44	Reserved			
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.

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	
					05 – Manual Recover Ticket	Does not exist in Tesco
					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 prev, 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	

Bytes	From	To	Data	Bits	Explanation	Remarks
					29 – START Reorg Print	
					30 – END Reorg Print	
					99 – PC Start of Day	
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	B/O Use
				bit 3	Not Used	
				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			Was 25
1	40	41	Cashier Message Number			
1	41	42	Flag 2			
				bit 0	Reset message	

Main Opcodes

Bytes	From	To	Data	Bits	Explanation	Remarks
				bit 1	Set message	
				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	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 process	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	Tender purchase ticket
1	2	3	Flag 2		bit 0 – Factura ticket	Not used
				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	
1	3	4	Return Type			Return ticket number
2	4	6	Ticket number			
2	6	8	Void Ticket No.			
2	8	10	Recall Ticket number			Recall the original (saved) ticket no.
2	10	12	Factura number			
15	12	27	Factura ID			
1	27	28	WIC Exp. Day			
1	28	29	WIC Exp. Month			
2	29	31	WIC Exp. Year			

Main Opcodes

Bytes	From	To	Data	Bits	Explanation	Remarks	
4	31	35	WIC Amount				
3	35	38	Store number				
1	38	39	Recall POS Number			Recall original POS number	
1	39	40	Garage flags		bit 0 Drive off balancing ticket		
				bit 1	Customer to pay		
				bit 2	Drive off		
				bit 3	Fuel Test		
				bit 4	Family-favorite choices		
				bit 5	Store count	Not a garage flag	
				bit 6	Eat in		
				bit 7	Take away		
1	40	41	Stuttafords flag		bit 0 – Account cheque payment		
				bit 1	Charge enquiry		
				bit 2	Account payment		
				bit 3	Account fast payment		
				bit 4	Credit reentry		
				bit 5	Self scanning ticket		
				bit 6	Cash Deposit Withdrawal	Cash deposit	
				bit 7	Express Order	Express ticket	
1	41	42	Other flags		bit 0 – WIC issue date		
				bit 1	Coupon Ticket		
				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	
				bit 7	Deposit Ticket		
1	42	43	Home Shopping Origin Number			Tesco	
1	43	44	Scan Point flags		bit 0	Opt esep ticket	Easyshop and Expresspoint
				bit 1	Opt esep ticket		

Bytes	From	To	Data	Bits	Explanation	Remarks
				bit 2	Opt esep ticket	
				bit 3	Charge post. at beginning of ticket	
						IF PRJ_ROW
				bit 1	Opt_electronic_sale	Electronic orders
				bit 1	NU_2	Else (Self scanning voided ticket)
				bit 4	Barcoded tender	Coinstar
				bit 5	Self scanning rescan ticket	
				bit 6	Self scanning with force rescan	
				bit 7	Home shopping scanning	
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	Not Used	
				Bit 3	Not Used	
				Bit 4	Not Used	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	
34	10	44	Reserved			
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			

Main Opcodes

25 – Dummy Ticket Total

0 X 25

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

Opcode 56, Sub-Opcodes: 0 X 00 to 0 X 19

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 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	
				bit 4	Update Safe	
				bit 5	Previous Period	
				bit 6	Header	
				bit 7	Info	
2	10	12	Cashier/POS No.			
1	12	13	PC Number			
2	13	15	Bank ID			
16	15	31	Reference			
13	31	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 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 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			

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, and is then 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 2 – POS 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			

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			

Main Opcodes

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			

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 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			

Main Opcodes

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 2 – New Seq After Cold Start 3 – New Seq After Reset Transaction	
42	2	44	Data			
20	44	64	Tail			
64			Total			

Opcode 60, Sub-Opcodes: 0 X 01 to 0 X D9

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	
				bit 1	Inquiry	Item looked 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	
1	10	11	Flag 2	bit 0	POS Offline	Indicates POS offline
				bit 1	Unknown item logic	If using the unknown item logic (Sainsbury's)
				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	
11	33	44				
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	Status		00 – End request 01 – Fail clear input 02 – Time-out on First ACK 03 – NAK on first req. 04 – Not ACK on first req. 05 – Big time-out 06 – Time-out between message chars 07 – More than 1000 chars 08 – Got bad LRC 09 – General 09 – General 10 – Got more than buffer can hold	
1	3	4	EFT_RC			
1	4	5	Amount		Includes cash back in pay currency	
2	8	10	Tender Number			
10	10	20	Account		BCD	
3	20	23	Start Time			
21	23	44	account_str			Not pak account
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			
1	4	5	Month			
2	5	7	Year			
37	7	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 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 Number			
1	4	5	Type			
21	5	26	Account Number			
9	26	35	Authorization Number			
9	35	44	Print Authorization 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			
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 on sales in percentages, 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		0B – Expense	
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			

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	Prelim_rtrn	
				bit 2	Credit_rtrn	
				bit 3	credit_sale	
				bit 4	auth_voids	
				bit 5	mngr_disc	
				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			
15	29	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) 2 – Address (30) 3 – Phone (10)	
10	3	13	Account			
1	13	14	Flag 1	bit 0 bit 1 bit 2 bit 3 bit 4 bit 5 bit 6 bit 7	New_ec Not Used Not Used Not Used Not Used Not Used Not Used Not Used	
20	14	34	Name			
30	14	44	Address			Union - the highest value 30
10	14	24	Phone			
20	44	64	Tail			
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) 1 – Name (40) 2 – Address (40) 3 – Address (40) 4 – Address (40) 5 – Phone (20) 6 – Date (20) 7 – Time (10) 8 – Customer Message (40)	
1	3	4	Flag 1	bit 0 bit 1 bit 2 bit 3 bit 4 bit 5 bit 6 bit 7	First Last Customer account Not Used Not Used Not Used Not Used Not Used	Customer details
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	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	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
4	28	32	Filler			
4	32	36	Original Amount			
8	36	44	Reserved			
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 1 – Enhanced 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	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	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	Information Transaction	MBA
				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	Promotion Type			
1	4	5	Extended Promotion Type			
1	5	6	Department Extended Promotion Type			
7	6	13	Code			
2	13	15	Promotion Number			
1	15	16	Bucket Number			
2	16	18	External Promotion Number			
1	18	19	External Bucket Number			
2	19	21	Department Ext Promotion Number			
1	21	22	Department Ext Bucket Number			
1	22	23	Reward Type			

60 – Information

Bytes	From	To	Data	Bits	Explanation	Remarks
1	23	24	Extended Reward Type			
1	24	25	Department Extended Reward Type			
4	25	29	Quantity Attached Total			Progressive
6	29	35	Quantity Attached Bucket			Progressive
4	35	39	Promotion Number			PROM_CHNG Does not exist in Tesco
1	39	40	Group Type			
4	40	44	Reserved			
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	CC Re-entry	
				bit 6	Frequent Shopper accepted	Progressive
				bit 7	Frequent Shopper rejected	Progressive
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	Customer Message			
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	Promotion	Prom_Chng
				bit 3	Homestore	
				bit 4	Account update	
				bit 5	Change Conversion	
				bit 6	Message Update	
				bit 7	Barcode points	
1	3	4	Scheme Number			
2	4	6	Promotion No.			Lowest bytes (right)
20	6	26	Card Number			Card No. in ASCII null terminated
4	26	30	Qualify Spent			
1	30	31	Promotion Type			
1	31	32	Count		Number of times reward was accepted	
1	32	33	Flag	bit 0	origion_points	
				bit 1	Points updated in chip card	
				bit 2	Cancel	
				bit 3	Was Canceled	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
1	33	34	Not Used			
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	Not Used	
				bit 3	Not Used	
				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	Q_Dex 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	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 Number in ASCII null terminated	
1	24	25	Customer Type		Panel flag	
4	25	29	Customer Redemption value			
4	29	33	Customer Redemption Used			
11	33	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 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	Rcvd_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			
2	40	42	CVV2			
2	42	44	Reserved			
20	44	64	Tail			
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	Off-line Authorization	
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 1-10 – Host Answer -1 – Bad -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			
1	40	41	Refused Type			
1	41	42	Card Type Flag			
				bit 0	Cheque Guarantee Card Type	
				bit 1	Debit Card Type	
				bit 2	Credit Card Type	

60 – Information

Bytes	From	To	Data	Bits	Explanation	Remark
				bit 3	Fuel Card Type	
				bit 4	Security Card Type	
				bit 5	Loyalty Card Type	
				bit 6	Staff Discount Card Type	
				bit 7	Consumer Panel Card Type	
1	42	43	Flags			
				bit 0	Cheque guarantee	
				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	Pump			
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	Cancel last request	For Delhaize Smash
				bit 3	Repeat Information request	For Delhaize Smash
				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			Nul 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	
1	40	41	Card Type			
1	41	42	Tender Number			
1	42	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 Extra		0 X 05 – OLA Results	
20	3	23	Result Message		Message from Authorizer	
2	23	25	Expiry Date			
1	25	26	Flag			
				bit 0	Hot Card	
				bit 1	MCR Used	
				bit 2	Reason for Printer Problem	
				bit 3	Reason for Wrong Signature	
				bit 4	Reason for Frozen Card	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
1	26	27	Card Type			
10	27	37	Account		BCD up to 19 digits	
1	37	38	Account length			
1	38	39	Issue Number			
4	39	43	Provide Error Number			
1	43	44	Not Used			
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 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 Used			
2	12	14	Answer Return Code		0 – OK 1-10 Host Answer -1 Bad -6 Timeout	
10	14	24	Auth Code		Authorization Code	
1	24	25	Not Used			
10	25	35	Account		BCD up to 19 digits	
1	35	36	Acc Length		Account Length	
4	36	40	Amount			
3	40	43	Response Code			
1	43	44	Not Used			
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	
				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		Nul 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 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			
1	7	8	Card Type Flag			
10	8	18	Account		BCD up to 19 digits	
1	18	19	Account Length			
24	19	43	Reserved			
1	43	44	Pump Number			
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	Original Price			
4	22	26	Qty			
4	26	30	Diff Amount			
14	30	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 1 – End 2 – Start rejected
6	3	9	host_batch_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			
8	36	44	Reserved			
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 Number			
2	19	21	Department 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 Eccca 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 nul 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			
20	44	64	Tail			
64			Total			

31 – Location

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 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
				bit 3	opt_frgn_cust	Customer is an export customer
				bit 4	frc_crd_return	Force credit return
				bit 5	express_pos	Express POS
				bit 6	Not Used	
				bit 7	Not Used	
6	3	9	Store ID		Store number (Alphanumeric)	
1	9	10	POS Terminal Type		'O/I/S'	
1	10	11	Checkout Bank Number		(0-99)	
5	11	16	EFT Location		Location as defined on POS configuration	
1	16	17	POS Terminal Profile		Till profile as defined on POS configuration	
1	17	18	Doc Type		El-Salvador Tax Report	
					1 = Ticket	
					2 = Factura	
					3 = Credito fiscal	
2	18	20	POS Terminal No			
2	20	22	Cashier No.			
1	22	23	wholesale_trs _type			
8	23	31	Invoice Number		Wholesale invoice number	
3	31	34	Invoice Date		Invoice generation date	

60 – Information

Bytes	From	To	Data	Bits	Explanation	Remarks
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, 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	Manual Keyed	
				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 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, e.g., Promotion Points, Promotion Messages, Club Card Scheme Variant, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function Extension		3B – Clubcard	
20	2	22	Promotion Points			
5	22	27	Promotion Message			
1	27	28	Flag 1		Bit 0 – Smart Card 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	28	29	Club Card Scheme Variant			
4	29	33	Customer Keys			
1	33	34	Hidden Panel Start Digit			
1	34	35	Hidden Panel End Digit			
			er_avail_flag			
9	35	44	Not Used			
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	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			

3E – Charge Reverse Bal

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 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	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			
23	21	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 cash bankable or non-bankable at the end of a shift. The Card and Check Numbers are specified where the deposit is Checks, or Cards, etc.

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	Start deposit from	
				bit 1	Start deposit to	
				bit 2	End deposit	
				bit 3	Bankable approved	
				bit 4	Print voucher	
				bit 5	MCR used	
				bit 6	Deposit Rejected	
				bit 7	Not Used	
20	3	23	Card Number Null Terminated		Card number in ASCII	
4	23	27	Bankable Amount			
4	27	31	Non Bankable Amount			
2	31	33	Tender Number			
1	33	34	Cheque Sequence Number			
10	34	44	Not Used			
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	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	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
4	24	28	Quantity		For balancing Back Office Reports	
16	28	44	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, Freq.Shop.Type/Value and Freq.Shop.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	Staff Discount Card Only substr_staff(1)			
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	
				bit 2	Manual Entry Values	
				bit 3	Invoice Not Found	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
2	8	10	Branch			
2	10	12	Checkout Bank			
4	12	16	Invoice Amount			
8	16	24	Invoice No.			
3	24	27	Invoice Date			
2	27	29	Sequence No.			
3	29	32	Time			
12	32	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 E – Cheque	
1	3	4	Option		1 – Debit 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/ Manager Number			
7	13	20	PLU Code			
2	20	22	Dep Number			
22	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, Freq.Shop.Type/Value and Freq.Shop.Item Limit during PLU maintenance.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function 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 51

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 Number			
1	6	7	POS Terminal 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**

Explanation:

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	Reserved			
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			
10	34	44	Not Used			
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			
10	34	44	Not Used			
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 Name			
12	18	30	Charge Posting Account Number			
10	30	40	Charge Posting Related Account 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	Not Used	
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 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 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 Online			
1	3	4	CCMS Customer Off-Line			
40	4	44	Not Used			
20	44	64	Tail			
64			Total			

68 – Info Bonus Buy

0 X 68

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	Not used by Tesco
1	1	2	Function		68 – Info Bonus Buy	
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	Bonus Buy Value			
4	18	22	Sale Value			
4	22	26	Savings			
18	26	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, MicroTrax
4	2	6	EBT Cash Balance			
4	6	10	EBT Foodstamps Balance			
9	10	19	Authorization Number			
11	19	30	EFT Reference Number			
1	30	31	Flags			
				bit 0	EBT Cash balance	
				bit 1	EBT Foodstamps balance	
				bit 2	Enhanced MPR voucher print	
				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			

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 – O1 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 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			
12	32	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****Explanation:** Clicks EFT

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	Not Used	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
1	36	37	Manual Entry Type		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

Explanation: Clicks EFT

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	
11	2	13	EFT Terminal Return			
11	13	24	EFT Sequence Return			
15	24	39	EFT Merchant Return			
5	39	44	Reserved			
20	44	64	Tail			
64			Total			

71 – Info EFT Nomad Print Slip1

0 X 71

Explanation: Clicks EFT

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 Points Program 1			
4	6	10	Redemption Points Program 2			
4	10	14	Redemption Points Program 3			
4	14	18	Redemption Points Program 4			
4	18	22	Redemption Points Program 5			
4	22	26	Redemption Points Program 6			
4	26	30	Redemption Points Program 7			
4	30	34	Redemption Points Program 8			
4	34	38	Redemption Points Program 9			
4	38	42	Redemption Points Program 10			
2	42	44	Not Used			
20	44	64	Tail			
64			Total			

74 – Info EFT Nomad Budget

0 X 74

Explanation: Clicks EFT

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

Explanation: Clicks EFT

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 Clear Code			
16	6	22	EFT Cheque Account Number			
4	22	26	EFT Cheque 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 Scanned			
4	6	10	Rescanned			
4	10	14	Scanpoint Scanned Weight			
4	14	18	Rescanned 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		
				bit 7		
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			
16	28	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) Coupon Category Code (2) Medium (1) Vehicle (2) 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	
				bit 6	Not Used	

60 – Information

Bytes	From	To	Data	Bits	Explanation	Remarks
				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			
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			
3	33	36	Beginning Balance			
4	37	41	Transaction Amount			
1	41	42	Flag	bit 0	Activation	Gift card activation
				bit 1	Recharge gift card	
				bit 2	Variable	Card price was manually entered
				bit 3	Manually Swiped	Card was manually swiped
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
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 1 – Redemption 2 – Payment	
10	3	13	VCR Number		Voucher number in BCD	
4	13	17	Voucher Amount			
2	17	19	Redemption Tender Number			
10	19	29	Customer 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 1 – Paid through an account payment offline. 2 – Split TRS paid offline 3 – Split TRS paid online See also Invoice_Payment_Type	
3	11	14	inv_issue_dt		Invoice issue date	
3	14	17	inv_issue_tm		Invoice issue date	
1	17	18	pmt_type_sot		Payment type at SOT 1 – Cash 2 – Credit	
1	18	19	Flag			
				bit 0	Void payment	Flag for indication that payment was voided
				bit 1	Invoice recalled	
				bit 2	Recall by payment	Recall invoice and sale (immediately cashback)
				bit 3	Force credit return	
				bit 4	Not created invoice	
				bit 5	Not Used	For future use
				bit 6	Not Used	For future use
				bit 7	Not Used	For future use
10	19	29	Customer No.			
1	29	30	Sale Type			
4	30	34	Amount		Invoice Value	
10	34	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; Sale_Proc: ACC_PAYM_ALL_TENDER
1	2	3	Type of Payment EOT			
4	3	7	Tender Amount			
4	7	11	Amount Total			
2	11	13	Tender Number			
20	13	33	Customer 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: '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 0101 = Repetition of request 0400 = Cancellation of Authorization 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 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 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 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 Department 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	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
7	15	22	Attached PLU		For coins PLU attached	
2	22	24	Count			
20	24	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 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	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
20	3	23	Describe Message PLU			
7	23	30	Link PLU Code			
2	30	32	Department Number			
12	33	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			
1	16	17	Tax_ptr			
27	17	44	Not Used			
20	44	64	Tail			
64			Total			

8E – Information Segment

0 X 8E

Explanation:

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 – Waste PLU Sale - Tesco**0 X 91**

Explanation: The Waste PLU Sale is a transaction used by Tesco that records the items marked as wastage and not saleable.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		91 – Waste PLU Sale	
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 was keyed	
				bit 3	Manual price allowed for item	
				bit 4	Weight from scale	No manual weight entry
				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	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	11	12	Flags	bit 0	Scanned item	

Bytes	From	To	Data	Bits	Explanation	Remarks
				bit 1	Read from PC	
				bit 2	Next info	
				bit 3	Saver	Used in generic only
				bit 4	Extended promotion	
				bit 5	Price embedded	
				bit 6	FF drags modifier	Coffee shop great 8 item
				bit 7	FF modifier	Coffee shop great 8 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		Are used for the net value	
4	34	38	No-tax amount		Are used for the net value	
4	38	42	Return surcharge percent			
1	42	43	Product code			
1	43	44	Flags	bit 0	Coffee great 8 modifier + price	
				bit 1	opt_markdown	
				bit 2	Member discount	Not used for Tesco
				bit 3	Bottle deposit	Not used for Tesco
				bit 4	Bottle refund	Not used for Tesco
				bit 5	CSSC sale	CSSS barcode
				bit 6	Embedded price	
				bit 7	Embedded weight	
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	
				bit 7	Item discount flag	

Bytes	From	To	Data	Bits	Explanation	Remarks
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	
				bit 1	Markdown	
				bit 2	Member discount	

60 – Information

Bytes	From	To	Data	Bits	Explanation	Remarks
				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 Authorization 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 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			

60 – Information

Bytes	From	To	Data	Bits	Explanation	Remarks
2	23	25	Items With Time Restrict Exception			
2	25	27	Maximum Customer Age			
17	27	44	Not Used			
20	44	64	Tail			
64			Total			

95 – Info EFT Nomad Print Slip2

0 X 95

Explanation: Clicks_EFT

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

Explanation: Clicks_EFT

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			
31	13	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 Information on Bad Accounts	
10	2	12	Account Number		(BCD 19)	
1	12	13	Account Length			
1	13	14	Card Range Number			
1	14	15	Flags			
				bit 0	MCR Used	Magnetic Card Reader 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	
29	15	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 Information on Price Inquiry	
7	2	9	PLU Code			
4	9	13	Inquiry Amount		Total Inquiry	
4	13	17	Promotion 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	dec_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 Items	
				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			
32	12	44	Reserved			
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	Sale Price			
1	19	20	Sale Qty			
4	20	24	Amount			
4	24	28	Quantity			
16	28	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	Tax Exclusive	Tax amount is exclusive (added to) item price
				bit 4	Not Used	Future use
				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			

B1 – OLA Request**0 X B1**

Explanation: A Clubcard E-Topup request is generated on completing the sale of a product. A sequential message sequence number is generated for the request (using the next sequential number for the trading day), and the message number is set to 1.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		B1 – OLA Request	
1	2	3	Flag 1			
				bit 0	Open Com Failed	
				bit 1	Tx Failed no_ack	check this
				bit 2	Not Used tx_failed	check
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
1	3	4	Flag 1			
				bit 0	E Top Up	
				bit 1	Reversal	
				bit 2	End of Transaction Update	
				bit 3	Not Used	
				bit 4	Not Used	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
10	4	14	Card Number			Either Clubcard or E-Topup card
2	14	16	Message Sequence No			The sequential message sequence number allocated to this conversation. Used as the index into the Clubcard OLA disk queue.
1	16	17	Message Type			The message type sent
27	17	44	Not Used			
20	44	64	Tail			
64			Total			

B2 – CC OLA Response**0 X B2**

Explanation: The CC OLA Response records when receiving responses from OLA. The POS Terminal writes the response to the Clubcard OLA queue file.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function Response		B2 – CC OLA	
1	2	3	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	
2	3	5	Message Sequence No			
1	5	6	Countdown			
1	6	7	Message Type			
37	7	44	Not Used			
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	Negative	The item in this TRS needs to be reversed, item was voided or returned.
				bit 4	Total Transaction discount	
				bit 5	Promotion discount	
				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	Wet Tax Rate		In percentage	
20	44	64	Tail			
64			Total			

B3 – Topup Record

0 X B3

Explanation: The Topup Record function is recorded when a Topup (airtime) is bought for a Mobile Phone. The Topup transaction records the Card Number, Airtime Scheme, EAN, Value, etc.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		B3 – Topup Record	
1	2	3	Flag 1			
				bit 0	Reversal Sent	
				bit 1	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	3	13	Card Number			
1	13	14	Airtime Scheme			
7	14	21	EAN			
4	21	25	Value			
2	25	27	Message Sequence No			
15	27	42	Transaction ID			
1	42	43	Status			
1	43	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	
4	27	31	Discount Percent		Staff Discount Percent	
13	31	44	Not Used			
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 Number			
4	22	26	Current Points Earned			
4	26	30	Points 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 2 – Item	
7	3	10	PLU Code			
4	10	14	Quantity			
1	14	15	Flags			
				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 2 – Inf2 3 – Inf3 4 – Inf4	
41	3	44	Data			
			Inf1			
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 Used	
				bit 5	Foreign	
				bit 6	Not Used	
				bit 7	Not Used	
1	16	17	Flags			
				bit 0	Inv_RRP	
				bit 1	Invoice Markdown	
				bit 2	Invoice Barcode	
				bit 3	VAT Exempt	
				bit 4	Credit Card Fee	
				bit 5	Delivery Charge	
				bit 6	Order Entry	

Bytes	From	To	Data	Bits	Explanation	Remarks
				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 Percent			
2	35	37	Customer at SOT 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 at SOT			Sale Proc
1	42	43	Type Return		Start up menu return	
1	43	44	Invoice Option		RRP Indicator	
			Inf2			
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			
1	37	38	Force Credit Return			
4	38	42	Force Credit Amount			
2	42	44	Reserved			

60 – Information

Bytes	From	To	Data	Bits	Explanation	Remarks
Inf3						
3	3	6	Wet Expiry Date			
1	6	7	Flags			
				bit 0	Wet Expiry Message	
				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	7	8	Wet Date Expiry			
10	8	18	Order Number			
16	18	34	Tax ID			
7	34	41	Reference Order Number			
3	41	44	Not Used			
Inf4						
1	3	4	Delivery Charge Type		Delivery Charge	
4	4	8	Delivery Charge Value			
36	8	44	Reserved			
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 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 used: handle send in 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 BE

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	sCard Number		0 – Customer Specific Message 1 – All Loyalty	
1	26	27	cDestination		2 – Non-Loyalty Customers	
1	24	25	Flag 1			
				bit 0	bRemoveSpecificLink	
				bit 1	bMessageExpired	
				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	
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 Used			
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	
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	Out Print Message	
				bit 3	Cancel Last Request	
				bit 4	Repeat Information Request	
				bit 5	Not Used	
				bit 6	Not Used	
				bit 7	Not Used	
1	7	8	Card Type		0 – Cheque card 1 – Debit card 2 – Credit card 3 – Charge card 4 – Fuel card 6 – Security card 7 – Loyalty card 8 – Staff discount 9 – Consumer panel	Includes check cards
2	8	10	Card Range Number			
9	10	19	XAuthCode		BASE24 “0000” if online authorization source BASE24 “IHCF” if only checked in bad account list	

60 – Information

Bytes	From	To	Data	Bits	Explanation	Remarks
1	19	20	ChAuthorizSrc		1 – Bank Authorization 2 – Main Provider Authorization 3 – SubProvider Authorization 4 – Offline Authorization 5 – Manual Authorization	
4	20	24	Terminal ID			For Smash Delhaize
4	24	28	Transaction Number			For Smash Delhaize
2	28	30	EFT Type Number			For Smash Delhaize
14	30	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 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			
10	16	26	sMaster Account number			
1	26	27	Flag	bit 0	bchipcard_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	27	29	CardStoreNum		Member Card Store Number	
15	29	44	Reserved			
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 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 Successfully
				bit 6	Not Used	
				bit 7	Not Used	
1	3	4	Self System Type		1 – Fast_Track 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				
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 Storeline, 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			
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:** ROW – 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 Number			
4	11	15	Tax on Customer Discount			
4	15	19	Tax on Staff Discount			
4	19	23	Tax on Case Discount Amount			
4	23	27	Tax on Surcharge Amount			
4	27	31	Tax on Broken Pack			
4	31	35	Tax on Service Fee			
4	35	39	Tax on Extra Fee 1			
4	39	43	Tax on Extra Fee 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		CF – Information Supplementary Data	
2	2	4	Tender Number			
1	4	5	Type			
8	5	13	Data			
31	13	44	Not Used			
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			
2	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	Immediate 1 – immediate 0 - Delayed	
				bit 1	Cancel	If set F\O should ignore this request
				bit 2	Current ticket	This flag will be set if the invoice is from the current ticket
				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 2 – Phone number 3 – Foreign VAT	
10	4	14	Invoice Number		Belgium VAT/Phone 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 Alternative ID			
2	37	39	RC			
5	39	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 Coupon redemption	
20	2	22	Card Number			
20	22	42	Coupon Number			
2	42	44	Message ID		Coupon Message ID Number	
20	44	64	Tail			
64			Total			

D4 – Information Belgacom Transaction

0 X D4

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		D4 – Info Belgacom	
7	2	9	encrypted_tid		BCD	
1	9	10	Counter Offset			
1	10	11	Encryption Table Reference			0,3,4
2	11	13	Store Number			
2	13	15	New Counter			
2	15	17	Message ID			
4	17	21	Amount			
23	21	44	Reserved			
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 0 – Uncommitted 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 2 – Inf 2	
			Inf 1			
1	3	4	Status		Status of Prescription 0 – Uncommitted 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			
1	8	9	Flag	Bit 0	Barcode points	
				Bit 1	Original points	
				Bit 2	Not Used	
				Bit 3	Not Used	
				Bit 4	Not Used	
				Bit 5	Not Used	
				Bit 6	Not Used	
				Bit 7	Not Used	
35	9	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	1	2	Action Type			
22	2	24	Card Number			
9	24	33	Authorization Number			
1	33	34	Flag	Bit 0	Manually 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	
9	34	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 bit 1 bit 2 bit 3 bit 4 bit 5 bit 6 bit 7	Opt_scan opt_key_entered Not used Not used Not used Not used Not used Not used	
30	5	35	BCD – Barcode Buffer			Right justify, leading zeroes
9	35	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	
4	15	19	Tender amount		Amount accumulated to tender voucher	
1	19	20	Point Return Type		Return type of points voucher	
1	20	21	Tender Return Type		Return type of tender voucher	
1	21	22	Reason Code		Reason code of point 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:

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 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:

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			
36	8	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	Not Used	
				Bit 6	Not Used	
				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			
14	30	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 2 – Item Line Status	
5	3	8	Order Number			
5	8	13	Customer Reference Number			
3	13	16	Order Date			
1	16	17	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 1 – Errors during process	
1	43	44	Inf1			
IF Item Line Status						
7	17	24	Item code			
19	24	43	Not Used			
1	43	44	Inf2			
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. Foodstuffs are developing retail fuel sites in conjunction with selected Pak’N Save stores. 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 0 – OK	
17	27	44	Not Used			
20	44	64	Tail			
64			Total			

E5 – Information Customer Account Tendering

0 X E5

Explanation: The Information Customer Account Tendering function sends the tendering details when this function is triggered during the POS process of customer identification, if a customer center Id is detected.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		E5 – Transaction Information	
1	2	3	Sub Function		EF : 1 – Account Charge 2 – Account payment 3 – Account Reversal	
10	3	13	Account Number			
4	13	17	Payment amount			
1	17	18	Tender due day			
1	18	19	Tender due month			
2	19	21	Tender due year			
23	21	44	Not Used			
20	44	64	Tail			
64			Total			

E6 – Information Barcode Coupon

0 X E6

Explanation:

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 Number			
2	24	26	Reward			
18	26	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			

E8 – Information POS Report

0 X E8

Explanation:

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		E8 –Information POS Report	
2	2	4	Store Number			
2	4	6	POS Number			
6	6	12	Filler			
2	12	14	Z Count			
4	14	18	Sales			
4	18	22	Discount/ Refunds			
4	22	26	Gross Takings			
4	26	30	Security Number			
1	30	31	Report Mode		0=X 1=Z	
3	31	34	EOD Date			
3	34	37	New Working Day Date			
4	37	41	Promotions			
3	41	44	Reserved			
20	44	64	Tail			
64			Total			

EB – Information Invoice Header

0 X EB

Explanation:

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		EB –Information Invoice Header	
1	2	3	Sub Function		For Future Use	
1	3	4	Count		The total number of transactions	
1	4	5	Sequence		The sequence of the transaction in the queue of the sent transactions. (Start from 1 end at count)	
39	5	44	Information		Invoice header data in sequences	
20	44	64	Tail			
64			Total			

EC – Information Document Sequence

0 X EC

Explanation:

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		EC –Information document Sequence	
1	2	3	Doc Type		The document type	
4	3	7	Sequence		The document sequence	
37	7	44	Filler		Invoice header data in sequences	
20	44	64	Tail			
64			Total			

ED – Information Reason Code

0 X ED

Explanation:

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		ED –Information reason code	
1	2	3	Type		Reason code type (movement or return)	
2	3	5	Reason ID			
16	5	21	Description			
23	21	44	Not Used			
20	44	64	Tail			
64			Total			

EE – Information Reduce Tax Scheme

0 X EE

Explanation: The Information Reduce Tax Scheme function records new tax schemes used in a ticket during the POS process of customer identification, if a customer center Id is detected.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		EE –Information Reduce Tax Scheme	
1	2	3	Source		Source of selection 1 – Checkout bank 2 – Customer scheme 3 – Manual selection	
1	3	4	Scheme ID			
16	4	20	Description			
8	20	28	Table			
16	28	44	Not Used			
20	44	64	Tail			
64			Total			

F0 – Information Customer Center

0 X F0

Explanation: The Information Customer Center function enables the POS to extract and record the Customer Center ID from the customer account record.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		F0 –Information Customer Center	
10	2	12	ID		Customer Center ID	
32	12	44	Not Used			
20	44	64	Tail			
64			Total			

F1 – Information Customer Address

0 X F1

Explanation: The Information Customer Address opcode is used to log customer address information. It sends the details when the POS searches for an address record that is linked to the customer ID, in the address info database. The POS provides address details and figures that are taken before the itemization stage at the POS starts.

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		F1 –Information Customer Center Address	
1	2	3	uchSeq		Address Sequence (1-99)	
1	3	4	Flags	Bit 0	Delivery Address	
				Bit 1	Main Address	
				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	uch Source			
39	5	44	Not Used			
20	44	64	Tail			
64			Total			

F2 – Information Tender Additional

0 X F2

Explanation:

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		60 – Log Information	
1	1	2	Function		F2 –Information Tender Additional	
1	2	3	Sub Function		0 – Comments 1 – First Data 2 – Second Data 3 – Third Data	
Union						
10	3	13	Cheques			
20	13	33	Branche			
2	33	35	Bank Code			
1	35	36	Company Code			
8	36	44	Filler			
First Data						
20	3	23	Issuer Bank Name			
10	23	33	Issuer Account			
10	33	44	Filler			
Second Data						
35	3	38	Issuer Name			
4	38	42	Vat ID			
2	42	44	Filler			
Third Data						
41	3	44				
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 (1-237)	
					10 – Printer error	
					11 – Drawer error	
					12 – Scanner error	
					13 – Customer display error	
					14 – Swipe keyboard error	
					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	
					40 – Drawer full (assistance)	

Bytes	From	To	Data	Bits	Explanation	Remarks
					41 Topup (not enough cash change)	
					42 – Q length	
					45 – Password violation	
					50 – OLA off-line	
					60 – Catering Switch Form	
					80 – POS software version	
					89 – File refresh	
					90/1 – Start RS batch	
					90/2 - End RS batch	
					91 – Program corrupt	
					101 – POS terminals missing from POLL list	
					110 – Storeboard message	
					252 – Package Abort	
					BACK OFFICE-generated alerts (200-500)	
					200 – System start	
					201 EOD start	
					202 EOD finish	
					203 – EOD POPS off-line	
					204 – Exit DOS	
					205 – Unbalanced POS	
					210 – Dangerous program	
					211 – Program not from menu	
					230 – Program version	
					232 – No comm to POS	
					233 – Secure password violation	
					234/1 PLU build key, pos	
					234/2 PLU build key, item	
					234/3 PLU build key, inter	
					234/5 PLU build key, name	
					234/6 – PLU build key, dep	
					237/0 – Alert CFM	
					237/1 – Alert CFM, Update	
					237/2 – Alert CFM, Recovery	
					237/3 – Alert CFM, File	

Bytes	From	To	Data	Bits	Explanation	Remarks
					237/4 – Alert CFM, End	
					237/5 – Alert Emergency CFM, Fail Sync	
					238 – Disk space alert	
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_ grand_total			
8	15	23	today_grand_ 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 function		89 – File Refresh	
1	3	4	Function		3 0	
1	4	5	Flag 1	bit 0	Not Used	
				bit 1	Not Used	
				bit 2	Not Used	
				bit 3	Use original POS number	
				bit 4-7	Not Used	
1	5	6	QDX File		File Number. 0 represents all files	
1	6	7	Status		1 – Start refresh checksum fails 2 – Start refresh TV problem 3 – Suspend load user abort 4 – Resume load 5 – Start refresh force request 6 – Start refresh CFM request 7 – File refreshing completed	
4	7	11	Number of Records			#10593
2	11	13	POS Checksum			
4	13	17	FO_Number of records			#10593
2	17	19	FO_Checksum			
23	19	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_number			
4	11	15	host_records			
4	15	19	accepted_records			
23	19	42	Data			
1	42	43	org_pos_no			
1	43	44	org_pc_no			
20	44	64	Tail			
64			Total			

Package

Explanation: This alert notifies the system of a new 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	
4	5	9	Package number			
33	9	42	Data			
1	42	43	POS number			
1	43	44	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 1 – Alert CFM Update 2 – Alert CFM Recovery 3 – Alert CFM File 4 – Alert CFM End 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 1 – 10 - MFS1 – LFS10	
1	6	7	Old OLA Provider		0 – Means Offline 1 – 10 MFS1 – LFS10	
35	7	42	Data			
35	7	42	Message Text			
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			

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

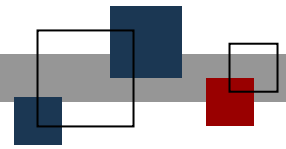
3. The “Parameter” field contains the original message parameter.
In fuel reconciliation this field is used as a sequence number. (For more information, refer to “MPS – NEXT GEN FUEL RECONCILIATION INTERFACE SPEC” section 3).
4. Using the “Current block number”, and “Total number of blocks”, the UNIX 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.

Opcode 68 ZIP Printout

Transaction ZIP Printout

Bytes	From	To	Data	Bits	Explanation	Remarks
1	0	1	Opcode		68 – Transaction ZIP Printout	
1	1	2	Number of Bytes			
42	2	44	Data			
20	44	64	Tail			
64			Total			



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