Pathway Ree	utomated Payment End-to-end conciliation Process For Release NR2 - Incident Management & Resolution
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Ref: CS/PRD/044 Version 1.0 : 16/06/99 Date:

Abstract

This document:

- was jointly produced by ICL Pathway and POCL;
- was reviewed, validated and approved by the APS Reconciliation Panel;
- describes the results of work carried out during the period January 1999 to April 1999;
- focuses on:
 - observed APS exceptions which could affect the accounting processes carried out within post office outlets and POCL central functions;
 - the local resolution of exceptions;
 - the raising of incidents when exceptions cannot be resolved locally;
 - resolution of the incidents.

Exceptions may be caused by user error, reference data error, hardware failure, communications failure or software error.

Process definitions for EPOSS reconciliation and reference data error management are detailed in separate documents (see associated documents in section 0.3). This document concentrates on APS transactions carried out at Horizon enabled post offices using release NR2 software.

This document includes all APS reconciliation related exceptions which have been identified to date and the planned method of handling them. It is recognised that other incidents may arise during live trial. If any new unexpected incidents occur in the future they will be investigated by the appropriate authorities and the relevant processes will be amended to accommodate the new incident types.

Validation and reconciliation of APS data is carried out at a number of points within the APS process chain - see appendix A for detail. Validation and reconciliation may highlight exceptions. Exceptions may be resolved locally within the outlet or central POCL organisations. Exceptions which cannot be resolved locally are raised as incidents with the appropriate helpdesk. At release NR2 Horizon enabled outlets will be supported by two help desks, i.e. the existing ICL Pathway Horizon System Helpdesk (HSH) and the new POCL Network Business Support Centre (NBSC). A set of principles are included in this document which describe the scope of each help desk and the key help desk interactions at NR2.

Within this document exceptions and incidents that are directly related to APS accounting reconciliation are described in detail.

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Summary information is provided for incidents that relate to (a) help desk advice and guidance, (b) incorrect operation of hardware, comms. or software, (c) file transfer errors and (d) reference data errors.

This document will be maintained under change control for the life of release NR2 and updated when appropriate to reflect information gained from live trial.

0 **Document control**

Versio n	Date	Reason
Scoping doc.	22.3.99	To support the first Automated Payment Reconciliation Panel meeting scheduled for 23.3.99.
0.1	1.4.99	To support the second Automated Payment Reconciliation Panel meeting scheduled for 12.4.99.
0.2	27.4.99	Second draft for APS Reconciliation Panel sign-off
1.0	16.6.99	First definitive issue.

0.1 Document history

0.2 Approval authorities

Name	Position	Signature	Date
ICL Pathway			
Stephen Muchow	Director Customer Service		
POCL			
Ruth Holleran			

0.3 Associated documents

Reference	Ver s	Date	Title	Source
CS/PRD/045	1.0	16.6.99	EPOSS End-to-end Reconciliation Process For Release NR2 - Incident Management & Resolution	ICL Pathway

Automated Payment End-to-end Reconciliation Process For Release NR2 - Incident Management & Resolution

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CS/PRD/046	tba	tba	Reference Data Error Management	ICL Pathway
CS/PRO/058	2.0	15.2.99	ICL Pathway BSU Incident Reconciliation Procedures for NR2	ICL Pathway
CS/PRD/059	0.1	29.3.99	NR2 End to End Incident Processes for TPS System	ICL Pathway
CS/PRD/051	0.1	9.12.98	NR2 End to End Incident Processes for Automated Payment Service System	ICL Pathway
CS/PRO/073	0.8	26.5.99	Operational Level Agreement for Automated Payments Service	ICL Pathway
APGEN10.do c			APS Data Entry Validation Rules	POCL

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0.4 Abbreviations

APS	Automated payment service
BES	Benefit encashment service
BSU	Business Support Unit (ICL Pathway)
CAP	Cash account period
DSS	Department of Social Security
EPOSS	Electronic point of sale service
HSH	Horizon System Helpdesk (ICL Pathway)
ISU	Individual stock unit
NBSC	Network Business Support Centre (POCL)
OBCS	Order book control system
POCL	Post Office Counters Limited
POITS	Post Office IT Services
PW	ICL Pathway Limited
RED	Reconciliation exception database
SSU	Shared stock unit
ТР	Transaction Processing

Changes in this version

BPS information removed plus cosmetic changes.

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1 Introduction

This document:

- was jointly produced by ICL Pathway and POCL;
- was reviewed, validated and approved by the APS Reconciliation Panel;
- describes the results of work carried out in the period January to April 1999;

This document contains:

- a list of process design principles;
- a high-level end-to-end model (post office outlets to ICL Pathway to POCL to POCL Clients);
- lower-level models which show where exceptions may be detected;
- information on the raising and routing of incidents within POCL and/or ICL Pathway;
- information on incident resolution.

Cross-references are made to:

- EPOSS end-to-end reconciliation incident management and resolution processes;
- the Reference Data error management processes;

For the purposes of this document an APS reconciliation incident is defined as a mismatch within the end-to-end APS process which results in incorrect accounting records.

Validation and reconciliation of APS data is carried out at a number of points within the APS process chain - see appendix A for detail.

2 Scope

The scope of this document includes:

- the APS service delivered at the post office outlet;
- the flow of automated payment information from post office outlets to the central POCL systems and accounting functions;
- the detection of automated payment accounting reconciliation related exceptions and the raising of automated payment reconciliation incidents at post offices, within POCL and within ICL Pathway;
- the resolution of automated payment reconciliation incidents;

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• if applicable, the assignment of liability for automated payment reconciliation incidents using ICL Pathway/POCL agreed case law;

The scope excludes:

- detailed EPOSS reconciliation processes;
- detailed reference data error management processes;
- hardware, software, communications or operational incidents that have no direct impact on Automated Payment accounting records;
- supply of consumables, e.g. printer paper;
- external supplies, e.g. power;
- detailed POCL settlement processes;
- detailed POCL client processes.

3 Purpose

- To define a process framework for the:
 - management of automated payment reconciliation incidents;
 - resolution of automated payment reconciliation incidents.
- To support the development, enhancement and validation of local procedures.

4 Approach

- ICL Pathway and POCL team approach to reconciliation process definition, including joint authorship and joint validation/approval via an APS Reconciliation Panel.
- Joint agreement of scope, purpose and approach.
- Joint development/validation/maintenance of:
 - process design principles;
 - high-level end-to-end process model;
 - lower-level process models.
- Identification of points within POCL and ICL Pathway where APS accounting reconciliation related exceptions may be detected.
- Capture and validation of processes for raising and routing APS accounting reconciliation related incidents within POCL and ICL Pathway.

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- Joint development/validation/maintenance of processes for resolving APS accounting reconciliation related incidents.
- Process definitions approved signed-off by the APS Reconciliation Panel;
- Following APS Reconciliation Panel approval, process definitions approved and signed-off by nominated ICL Pathway and POCL senior managers;
- Following sign-off by nominated ICL Pathway and POCL senior managers, process definitions progressed to contract controlled status.

5 Principles for Automated Payment Reconciliation Incident Management and Resolution

The following principles were used in the development of the Release NR2 APS end-to-end reconciliation process. Changes to the principles may necessitate the review and revision of the processes detailed within this document.

Note 1: Within this document the term "exception" is used to describe an exceptional situation that occurs locally within an outlet or within the POCL TP (Transaction Processing) organisation.

Note 2: Within this document an "incident" is deemed to have occurred when an exceptional situation is reported to and recorded by either the ICL Pathway HSH (Horizon System Helpdesk), the POCL NBSC (Network Business Support Centre) or the Incident Management Point within POCL TP.

Note 3: The general principles below include the initial handling of reference data errors because there is a significant interaction between reference data and APS system functionality. In exceptional circumstances an incident may be initially thought to be a POCL reference data error but later found to be an error within the ICL Pathway domain. It is also possible that an incident may initially be thought to have been caused by an error within the ICL Pathway domain but later found to be a POCL reference data error. Both these situations require secondary routing of the initial incident. Details of this is provided within the Reference Data Error Management process - ref. CS/PRD/046.

5.1 APS Reconciliation Process Design Principles

P1 Outlets will, wherever possible, eliminate user errors before raising an incident.

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- P2 POCL TP Incident Management will, wherever possible, eliminate human error and errors within POCL systems before raising an incident with ICL Pathway.
- P3 Wherever possible, APS related incidents that have accounting reconciliation implications will be predefined so that they can be easily identified and routed to the correct resolution point.
- P4 For each predefined incident category there will be an agreed "initial incident management contact point". In the case of outlets this will either be the ICL Pathway HSH or the POCL NBSC. Outlets will not be advised to contact both. In the case of POCL TP the initial contact point will be POCL TP Incident Management.
- P5 Incidents reported to the HSH that are defined as "APS Predefined Business Incidents", indicating that there are ICL Pathway reconciliation implications, will be routed to the ICL Pathway BSU (Business Support Unit). A category of "new" will be used for unexpected incidents that are shown to have APS reconciliation implications. Following investigation, valid new incidents will be added to the list of APS Predefined Business Incidents.
- P6 The BSU will investigate APS predefined business incidents and report findings on an APS RED (Reconciliation Exception Database) Report.
- P7 APS RED reports will be distributed to a defined single point within POCL.
- P8 POCL will define a single point for the receipt of APS RED reports.
- P9 Outlets will be advised to report detected Horizon system hardware or communications incidents directly to the ICL Pathway HSH.
- P10 Outlets will be advised to report incidents that are likely to have been caused by a Horizon system software error directly to the ICL Pathway HSH.
- P11(a) Outlets will be advised to report incidents that are likely to have been caused by an error in the POCL reference data (regardless of where the <u>source</u> of the error actually is) error directly to the POCL NBSC.
- P11(b) Outlets will be advised to report incidents that are likely to have been caused by an error in the ICL Pathway reference data (regardless of where the <u>source</u> of the error actually is) directly to the HSH.
- P12 In situations where an incident could have been caused by either a POCL reference data error or a Horizon system software

error, the incident will initially be treated as a potential POCL reference data error, i.e. incident raised with the POCL NBSC.

- P13 In situations where a key outlet business process is impacted by an unresolved incident of any type, the outlet will be advised to contact the POCL NBSC for advice and guidance.
- P14 ICL Pathway and POCL will work together to ensure that the advice and guidance information provided by the HSH and the POCL NBSC is compatible with the knowledge and culture within the outlet.
- P15 Where appropriate, ICL Pathway technical domains will trigger the raising of an APS predefined business incident, e.g. when an ICL Pathway technical incident is shown to have caused APS reconciliation implications.
- P16 Where appropriate, the ICL Pathway BSU will trigger the raising of a technical incident, e.g. when an APS predefined business incident suggests that there might be an underlying ICL Pathway software error.
- P17 Both the HSH and NBSC will conform to the principles described above. If an outlet makes a call to the HSH which relates to P11(a), P12 or P13, the call will be treated as inappropriate and the outlet will be advised by the HSH to call the NBSC. If an outlet makes a call to the NBSC which relates to P9, P10 or P11(b), the call will be treated as inappropriate and the outlet will be advised to call the HSH. If either help desk starts handling a call because it initially appears to be appropriate, but then finds that it is the responsibility of the other desk, then the help desk handling the call will inform the outlet that they are referring the call to the other help desk, terminate the call with the outlet and inform the other desk. The other desk will contact the outlet and continue advice and guidance and/or resolution.
- P18 Both the HSH and NBSC will take action to avoid outlets being passed backwards and forwards between the two help desks. If when calling a help desk the outlet mentions that they have already been referred from the other help desk, then the help desk taking the call second will take control of the call and interact with the other desk to agree how the incident will be progressed.

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6 Automated Payment Reconciliation Incident Management

6.1 Summary of Automated Payment Reconciliation Related Exceptions Identified at Outlets

The following provides a summary of the categories of exception which may be detected within a post office outlet and the action taken. Specific exceptions are discussed later in this document. Exceptions become incidents when they are reported to and recorded on either the POCL incident management system (TP Incident Management at Chesterfield or NBSC at Leeds) or the ICL Pathway HSH. The handling of APS reconciliation related incidents within POCL and ICL Pathway is described in sections entitled POCL Incident Management and ICL Pathway Incident Management at the rear of this document.

6.1.1 Impacted Accounting Processes

This category includes situations where a key accounting process, performed by outlets, is impacted by an unresolved incident of any type.

Type of Exception Detected Within Outlet	Outlet action	Contact ICL Pathway	ICL Pathway Desk Name	Contact POCL	POCL Desk Name
Time-critical business process, e.g. stock unit or account rollover, impacted by an unresolved incident of any type.		No	-	Yes - for advice Further inform- ation provided in section 9.	NBSC

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6.1.2 Horizon Advice & Guidance, Hardware, Communications and Software Exceptions

Type of Exception Detected Within Outlet	Outlet action	Contact ICL Pathway	ICL Pathwa y Desk Name	Contact POCL	POCL Desk Name
Horizon system advice and guidance required.	Follow advice given by HSH	Yes	HSH	No	-
Horizon counter system hardware not working correctly, e.g. printer will not work.	Use fallback procedure s	Yes - for advice and/or resolution	HSH	No	-
Horizon counter system unable to communicate with central systems.	Use fallback procedure s	Yes - for advice and/or resolution	HSH	No	-
Horizon counter system observed to operate incorrectly indicating that there may be a software error, e.g. error message, system not responding.	Use fallback procedure s	Yes - for advice and/or resolution	HSH	No	-

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6.1.3 Reference Data Exceptions

Type of Exception Detected Within Outlet	Outlet action	Contact ICL Pathway	ICL Pathway Desk Name	Contact POCL	POCL Desk Name
Price information on Horizon system incorrect, includes situations where scales show correct weight but wrong price.	Eliminate any input errors	No	-	Yes - for advice and where necessary resolution	NBSC
Expected product not available.	Eliminate any input errors	No	-	Yes - for advice and where necessary resolution	NBSC
Product information wrong, e.g. min/max price or quantity incorrect.	Eliminate any input errors	No	-	Yes - for advice and where necessary resolution	NBSC
Post office/phone number incorrect.	-	No	-	Yes - to resolve	NBSC
Method of payment wrong.	Eliminate any input errors	Νο	-	Yes - for advice and where necessary resolution	NBSC
Other reference data related exceptions - see CS/PRD/046 for further information	-	No	-	Yes	NBSC

6.1.4 APS Predefined Business Incidents Requiring ICL Pathway BSU Action

APS reconciliation incidents that require ICL Pathway BSU involvement in their resolution are known within ICL Pathway as "APS Predefined Business Incidents".

When appropriate these incidents are communicated by the outlet to the ICL Pathway HSH. The handling of APS Predefined Business Incidents within ICL Pathway is described in the section entitled ICL Pathway Incident Management at the rear of this document. No incidents of this type are currently identified.

6.1.5 Inappropriate Calls to either the POCL NBSC or the ICL Pathway HSH

If outlets make calls to the ICL Pathway HSH that relate to the exceptions described in 6.1.1 above or reference data related exceptions described in 6.1.3 above, the HSH advises the outlet to contact the NBSC.

If outlets make calls to the NBSC that relate to the exceptions described in 6.1.2 above, the NBSC advises the outlet to contact the HSH.

6.2 APS Reconciliation Related Exceptions Detected Within POCL Transaction Processing

6.2.1 Specific exceptions/incidents

Specific exceptions are discussed later in this document. TP exceptions become incidents when they are reported to and recorded by the TP Incident Management Point. The TP Incident Management system is linked with the NBSC at Leeds. Suspected reference data incidents are reported by TP Incident Management to the NBSC.

6.2.2 APS Predefined Business Incidents Requiring ICL Pathway BSU Action

APS reconciliation incidents that require ICL Pathway BSU involvement in their resolution are known within ICL Pathway as "APS Predefined Business Incidents".

When appropriate these incidents are communicated by POCL TP Incident Management to the ICL Pathway HSH. The handling of APS Predefined Business Incidents within ICL Pathway is described in the section entitled ICL Pathway Incident Management at the rear of this document.

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6.3 HAPS File Transfer Exceptions/Incidents Detected Within POCL

Exceptions related to HAPS file transfer from ICL Pathway may be detected within POCL System Support (POITS) in Farnborough or POCL OSG. POITS will detect files not received and OSG will be aware of error and OK files returned to ICL Pathway. During POCL normal working hours all communications regarding incident and file management will be between OSG and HSH. During POCL out of hours all communications for incident and file management will be between POITS and HSH.

6.4 HAPS File Transfer Exceptions/Incidents Detected Within ICL Pathway

File transfer exceptions that are detected within ICL Pathway Operations are reported to the HSH. Incidents are raised by the HSH and routed to the appropriate expert domain for resolution.

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7 End-to-end Process

7.1 Process model



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7.2 Process Descriptions

NB: References 1, 2 and 3 were previously used for BPS processes, which are now no longer relevant.

Processes 4, , 5 and 6 - Reference data processes

These processes describe how product and outlet reference data is manage - see ICL Pathway documents CS/PRD/030 (product) and CS/PRD/050 (outlet). References data error management is described in CS/PRD/046.

Process 7 - Control APS

Includes the APS functionality provided within the Horizon system - see ICL Pathway document CS/PRD/044 for further information.

Process 8 - Control OBCS

Includes the OCBS functionality provided within the Horizon system.

Event A - Customer requests service

Includes requests for automated payment and/or EPOSS transactions. Also includes enquiries relating to automated payment and/or EPOSS transactions.

Process 9 - Complete customer session (OBCS/APS/EPOSS)

A session comprises one or more OBCS, APS or EPOSS transactions. Included are transactions completed using the automated features of the Horizon system, e.g. card reader, bar code reader, receipt printer, etc.. Also included are transactions completed when peripheral equipment is temporarily unavailable. In these situations the outlet enters transaction details via the keyboard, prepares manual receipts, etc.

An expanded view of the Complete Customer Session process is provided within this document in section entitled Lower Level Models.

Further details are available in POCL business process diagrams :

EPOSS - 17/12/8/9/10/11/60/26/27/18

APS - 1/8/16

OBCS - 10/9/11/6/4&5/1&2

Process 10 - Complete customer session (fallback)

If the Horizon system is unavailable, e.g. PC hardware failure, the outlet reverts to manual operation. The manual receipts and counter-foils used during fallback are used later when recovery (process 11) is carried out.

An expanded view of the Complete Customer Process (fallback) process is provided within this document in section entitled Lower Level Models.

Further details are available in POCL business process diagrams :

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Event B - Outlet triggers recovery

Transactions completed in fallback need to be entered into the Horizon system when the system returns to normal operation. Recovery can be completed as soon as the system is available or when the user has time to enter the transactions. However, recovery must be completed before the end of the Cash Account Period.

Process 11 - Recover fallback transactions

Transactions processed during fallback are entered to the system as part of the recovery process. AP has a recovery modes for this purpose. EPOSS transactions are entered in bulk or individually.

An expanded view of the Recover Fallback Transactions process is provided within this document in section entitled Lower Level Models.

Further details available in POCL business process diagrams :

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Process 12 - Maintain EPOSS records

The system maintains a log of all the transactions performed in the outlet which is updated as the transactions are entered to the system. The transaction log can be accessed at any time to assist with enquiries or to perform other activities in the stock unit, e.g. reports, balancing, transaction reversals, etc.

Event C - Automatic end of day marker set

At the end of the trading day (either 30mins after office closing or 7pm) an accounting marker is set which indicates the end of the trading day for the outlet - see ICL Pathway document CS/PRD/044 for further information.

Process 13 - Manage end of day

The end of day marker indicates the end of the outlet trading day. The setting of the end of day marker prevents the reversal of automated payment transactions performed during the day. A manual end of day activities facility can be selected by the user. This displays the outstanding mandatory daily activities for the stock unit.

Further details are available in POCL business process diagrams :

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See ICL Pathway document CS/PRD/044 for further information.

Process 14 - Maintain/communicate EPOSS and APS records

This process includes the communication of transaction details from post office outlets to the ICL Pathway correspondence servers, onward communication to the central ICL Pathway systems and then on to the POCL TIP and HAPS system interfaces.

An expanded view of the Maintain/Communicate EPOSS and APS Records process is provided within this document in section entitled Lower Level Models.

Process 15 - Reconcile and settle

This process includes the receipt of the information which makes up the Cash Account, validation against volume/value and storage for various purposes (e.g. RMMI (Royal Mail Management Information)). When the full week's data has been received it is then reported to CBDB.

TIP receives the cash declaration from the outlets which forms part of the snapshot balance and supports the information which appears on the Cash Account. TIP does not receive daily/weekly reports or stock unit balances. TIP only receives the outlet cash account.

TIP also receives STX records which are stock holdings per item on hand at the end of the accounting week. The information is used to reconcile and settle with each client.

The information is received on a daily basis (between 8.00am and 15.00) by File Transfer Protocol (FTP) from the gateway PC.

An expanded view of the Reconcile and Settle process is provided within this document in section entitled Lower Level Models.

Process 16 - Consolidate and reconcile automated payment records

AP transactions accepted at the outlet are polled on a daily basis after the end of day marker has been set. The information is sent via HAPS to Farnborough who sort the data into clients. The information is forwarded to settlements so that payment can be made to the client.

Further details are available in POCL business process diagrams :

APS - 3

The information received from Farnborough updates APACHI and is compared to the entry on cash account by outlet. Discrepancies discovered are investigated and corrected within Transaction Processing.

See ICL Pathway document CS/PRD/044 for further information.

Process 17 - Maintain automated payment records

POCL clients receive automated payment transaction information from Farnborough. Clients use this information to support settlement processes.

Event D - End of trading day

The end of the trading day for a user/stock unit usually occurs at completion of the daily shift.

Process 18 - Complete daily cash declaration

The cash on hand is declared to the Horizon system, on a daily basis, for reporting purposes, at the end of the user/stock unit trading day.

An expanded view of the Complete Daily Cash Declaration process is provided within this document in section entitled Lower Level Models.

Further details are available in the POCL business process diagrams :

EPOSS - 38

Event E - Daily despatch of product reports required

Documents accepted during the trading day into the stock unit are despatched internally within POCL and externally to POCL clients.

Process 19 - Complete daily reports

At the agreed time for the outlet, each stock unit produces the mandatory daily reports. The user checks that the report agrees with the actual documents, amends if necessary and despatches the documents with the supporting report.

An expanded view of the Complete Daily Reports process is provided within this document in section entitled Lower Level Models.

Further details are available in the POCL business process diagrams :

EPOSS - 35&36/56&57

Event F - Weekly despatch of product reports required

Documents which are not despatched daily are sent on a weekly basis when the cash account has been produced.

Process 20 - Complete weekly reports

Each stock unit produces the reports to support the documents (as process 18). Some products also require an outlet report which is a summary of all the stock unit reports.

An expanded view of the Complete Weekly Reports process is provided within this document in section entitled Lower Level Models.

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Further details are available in the POCL business process diagrams :

EPOSS - 35&36/54/56&57

Event G - End of balance period for stock unit

On transfer of accountability of a stock unit or at the end of the cash account period (CAP) all stock units have to be balanced.

Process 21 and 22 - Balance stock unit and roll-over

The purpose of balancing is to assess the state of the stock unit by confirming the entries on the Horizon system against the documents, cash and stock on hand. Once the user confirms that the balance is accurate the stock unit is rolled into the next BP or CAP depending on what is required by the user/outlet. The impact of rolling the stock unit removes the transaction information from the stock unit, carrying forward the cash and stock on hand to the next accounting period.

Stock units may be individual stock units or shared stock units.

An expanded view of the Balance Stock Unit and Roll-over process is provided within this document in section entitled Lower Level Models.

Further details are available in the POCL business process diagrams :

EPOSS - 37/59/39/58

Event H - End of cash account period

The cash account is a summary of all the transactions performed within the outlet during the accounting week and a declaration of cash and stock on hand at the close of the accounting period. The accounting period is usually one week and the account is therefore produced weekly.

Process 23, 24, 25 and 26 - Balance cash account and roll over

The cash account is an amalgamation of all the stock unit balances for the outlet. When the cash account is completed and produced the outlet moves forward to the next cash account period (CAP).

Cash accounts usually cover one week. However, by exception cash accounts may cover two or three weeks. A final cash account is produced when an outlet changes ownership or when an outlet is temporarily or permanently closed. An initial cash account is used when an outlet migrates to the Horizon system.

An expanded view of the Balance Cash Account and Roll-over process is provided within this document in section entitled Lower Level Models.

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Further details are available in the POCL business process diagrams :

EPOSS - 40/50/51

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8 Lower Level Models and Exception Handling

8.1 Complete Customer Session (Automated Payment) expansion of process 9 on end-to-end model



Ref: CS/PRD/044 Version 1.0 Date: 16/06/99

8.1.1 Complete automated payment transaction using magnetic card - expansion of process 9.4



Ref: CS/PRD/044 Version 1.0 : Date: 16/06/99

8.1.2 Exceptions detected in process 9.4 Magnetic card transaction

Process ref.	Exception type	Action by post office outlet
9.4.1	Card will not swipe	User keys number in manually
		If the problem is repeated on several cards the hardware problem is reported to the HSH.
		If the problem is repeated on a batch of client cards the problem should be reported to the NBSC who will advise the client account manager.
9.4.3	MoP displayed does not correspond with users expectations	User checks the acceptable MoP with manual instructions (Counter News/ Counter Operations Manual)
	and/or customer's payment.	If the system is correct:
	payment.	 Advise the customer to tender correct MoP
		If the system is incorrect:
		• Contact the NBSC - problem could be reference data.
		The user will enter the transaction selecting the incorrect MoP as part of the AP transaction but will settle the customer session with the MoP tendered by the customer.
		If the NBSC prove the problem is not with POCL Reference Data the incident is passed to HSH.
9.4.4	4.4 Value entered by the user is not accepted by the system	User checks the acceptable value with manual instructions (Counter News/ Counter Operations Manual)
		If system is incorrect:
		 Contact the NBSC - problem could be reference data
		The user will enter the transaction to the system as a fallback transaction while the customer is present. As this is a different screen to the 'serve customer' screen the user may have to enter two

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	1	transactions if the sustance is
		transactions if the customer is purchasing other products.
		If system is correct:
		 Less than minimum on the system - inform the customer and refuse the transaction
		Multiple value not met - inform the customer and change value to meet the customer's requirements
		 More than the maximum on the system - accept multiple transactions to meet the amount required by the customer
• 9.4.5	No receipt produced	User checks the printer to ensure that it has sufficient paper.
		If it has not :
		 Replenish and reprint the receipt
		(if the outlet has no supplies the user will contact the supplier for emergency supplies and transfer the session to another node with paper in the printer (if available) or issue a manual receipt (no agreement to this at present))
		If it has:
		Contact HSH
		(user may have to complete a manual receipt - no agreement to this at present)
9.4.5	Second receipt not printed (office copy)	User checks the printer to ensure that it has sufficient paper.
		If it has not :
		Replenish and reprint the receipt
		(if the outlet has no supplies the user will contact the supplier for emergency supplies and transfer the session to another node with paper in the printer (if available) or issue a manual receipt (no agreement to this at present))

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If it has:
 The user may have swiped another card too quickly or selected a function button during the production of the receipts. The user selects receipt (before the end of the customer session) which will display any outstanding AP receipts and the user selects the required receipt and the system will produce the second receipt
If the above does not solve the problem then the user will need to :
Contact HSH
(user may have to complete a manual receipt - no agreement to this at present)

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8.1.3 Complete automated payment transaction using bar-coded bill - expansion of process 9.4



Ref: CS/PRD/044 Version 1.0 : Date: 16/06/99

8.1.4 Exceptions detected in process 9.4 - Barcoded bill transactions

Process ref.	Exception type	Action by post office outlet
9.4.6	Barcode will not scan	User keys number in manually
		If the problem is repeated on several barcodes the hardware problem is reported to the HSH.
		If the problem is repeated on a batch of client barcodes the problem should be reported to the NBSC who will advise the client account manager.
9.4.2	Default amount displayed is incorrect	User checks the amount displayed with the amount on the bill and processes as normal if the amount is correct.
		If there is a discrepancy:
		 User overwrites the amount with the correct amount
		 contacts the HSH - problem could be hardware / software / reference data.
		If the problem is highlighted on several bills of the same product the faulty barcodes are reported to the NBSC.
9.4.2	Default amount is missing	The user may not be aware that the default amount is missing.
		User enters the amount and confirms.
		If the problem is highlighted on several bills of the same product the faulty barcodes are reported to the NBSC.
9.4.4	Value entered by the user is not accepted by the system	User checks the acceptable value with manual instructions (Counter News / Counters Operations Manual)
		If system is incorrect:
		 Contact the NBSC - problem could be reference data
		The user will enter the transaction to the system as a

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		fallback transaction while the customer is present. As this is a different screen to the 'serve customer' screen the user may have to enter two transactions if the customer is purchasing other products. If system is correct:
		 Less than minimum on the system - inform the customer and refuse the transaction;
		 Multiple value not met - inform the customer and change value to meet the customer's requirements;
		 More than the maximum on the system - accept multiple transactions to meet the amount required by the customer.
• 9.4.3	MoP displayed does not correspond with users expectations	User checks the acceptable MoP with manual instructions (Counter News/Counters Operations Manual)
	and/or customer's	If the system is correct :
	payment.	 Advise the customer to tender correct MoP
		If the system is incorrect :
		 Contact the NBSC - problem could be reference data
		• The user will enter the transaction selecting the incorrect MoP as part of the AP transaction but will settle the customer session with the MoP tendered by the customer.
		 If the NBSC prove the problem is not with POCL Reference Data the incident is passed to HSH.
• 9.4.5	No receipt produced	User checks the printer to ensure that it has sufficient paper
		If it has not :
		 Replenish and reprint the receipt

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		 If the outlet has no supplies the user will contact the supplier for emergency supplies and transfer the session to another node with paper in the printer (if available) or issue a manual receipt (no agreement to this at present) If it has: Contact HSH User may have to complete a manual receipt (no agreement to this at present)
• 9.4.5	Second receipt not printed (office copy)	User checks the printer to ensure that it has sufficient paper
		If it has not :
		Replenish and reprint the receipt
		 If the outlet has no supplies the user will contact the supplier for emergency supplies and transfer the session to another node with paper in the printer (if available) or issue a manual receipt (no agreement to this at present)
		If it has:
		 If the user has swiped another card too quickly or selected a function button during the production of the receipts. The user selects receipt (before the end of the customer session) which will display any outstanding AP receipts and the user selects the required receipt and the system will produce the second receipt
		If the above does not solve the problem then the user will need to :
		Contact HSH
		 User may have to complete a manual receipt (no agreement to this at present)

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8.1.5 Complete automated payment transaction by manual keying - expansion of process 9.4



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8.1.6 Exceptions detected in process 9.4 - Manually keyed transactions

Process ref.	Incident type	Action by post office outlet
9.4.7	User selects incorrect	User notices :
	type (BC/MC) and the system accepts it.	 User reverses the transaction and re-enters it correctly
		User does not notice :
		 This may create a customer / client enquiry to Transaction Processing (AP team) - existing procedure is in place to address this.
• 9.4.8	Reference number keyed incorrectly	User checks the number entered on the system against the card or bill and re-keys (total of 3 entries) the number if there is a discrepancy
9.4.8	Reference number keyed correctly but is not accepted by the system	User checks that the card / barcoded bill is for a valid scheme from manual instructions (Counter News/Counters Operations Manual)
		If invalid :
		 Inform the customer and terminate the transaction
		If valid :
		 Contact the NBSC - to eliminate incorrect use of the system by the user / reference data
		 The user processes the transaction as a fallback transaction
		 If the NBSC prove the problem is not with POCL Reference Data the incident is passed to HSH
• 9.4.4	Value entered by the user is not accepted by the system	User checks the acceptable value with manual instructions (Counter News/Counters Operations Manual)
		If system is incorrect :
		 Contact the NBSC - problem could be reference data
		The user will enter the transaction to the system as a fallback

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		transaction while the customer is present. As this is a different
		screen to the 'serve customer' screen the user may have to enter two transactions if the customer is purchasing other products.
		If system is correct :
		 Less than minimum on the system - inform the customer and refuse the transaction
		 Multiple value not met - inform the customer and change value to meet the customer's requirements
		More than the maximum on the system - accept multiple transactions to meet the amount required by the customer
• 9.4.3	MoP displayed does not correspond with users expectations	User checks the acceptable MoP with manual instructions (Counter News/ Counters Operations Manual)
	and/or customer's payment.	If the system is correct :
	puyment.	 Advise the customer to tender correct MoP
		If the system is incorrect :
		 Contact the NBSC - problem could be reference data
		 The user will enter the transaction selecting the incorrect MoP as part of the AP transaction but will settle the customer session with the MoP tendered by the customer.
		 If the NBSC prove the problem is not with POCL Reference Data the incident is passed to HSH
• 9.4.5	No receipt produced	User checks the printer to ensure that it has sufficient paper.
		If it has not:
		Replenish and reprint the receipt
		 If the outlet has no supplies the

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		user will contact the supplier for emergency supplies and transfer the session to another node with paper in the printer (if available) or issue a manual receipt (no agreement to this at present) If it has: • Contact HSH
		 User may have to complete a manual receipt (no agreement to this at present)
• 9.4.5	Second receipt not printed (office copy)	 User checks the printer to ensure that it has sufficient_ paper If it has not : Replenish and reprint the receipt If the outlet has no supplies the user will contact the supplier for emergency supplies and transfer the session to another node with paper in the printer (if available) or issue a manual receipt (no agreement to this at present) If it has: If the user has swiped another card too quickly or selected a function button during the production of the receipts. The user selects receipt (before the end of the customer session) which will display any outstanding AP receipts and the user selects the required receipt and the system will produce the second receipt If the above does not solve the problem then the user will need to : Contact HSH User may have to complete a manual receipt (no agreement to this at present)
• 9.4.8	Service code not accepted by the system	User checks the entry to the system against the card and re-keys if necessary

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		If the problem is not resolved :
		 The user contacts the NBSC who may be able to confirm the correct service code
		 If the service code is correct the NBSC prove that the problem is not with POCL Reference Data and the incident is passed to HSH.
		The transaction will be processed as an APS EPOSS transaction.
• 9.4.8	Out of hours trxns The receipt from the transaction cannot be entered as a manual transaction (reference number recorded incorrectly or receipt is unreadable)	The user will process the transaction as an APS EPOSS transaction
9.4.8	Out of hours trxns The receipt from the transaction cannot be entered as a manual transaction (perameter checks	Contact NBSC who will advise the user if they can input it as a recovery transaction or as an APS EPOSS transaction.
	have failed)	
	have failed) Out of hours trxns The service code is not in the PAN and has not been captured on the manual receipt	Contact NBSC as they may be able to establish the service code, if not the user will process as an APS EPOSS transaction
9.4.8	Out of hours trxns The service code is not in the PAN and has not been captured on the	establish the service code, if not the user will process as an APS EPOSS

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8.2 Reversal transactions

8.2.1 Process



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8.2.2 Exceptions detected in process 9 -	Reversal transaction
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Process ref	Exception type	Action by post office outlet
•	System will not reverse the transaction because it cannot	 User checks the customer receipt to confirm it is the same outlet, stock unit and that the date is current
	find the original transaction	 User checks that the number selected is correct and re-enters if incorrect
		If this does not solve the problem :
		 Contact the HSH - could be crash recovery transaction that has not been recovered / crash recovery transaction but the EOD marker has been set/ system fault / wrong outlet / outlet opening hours have changed and the reference data has not been updated and the EOD marker has been set at the wrong time in the outlet.
• 9.4.8	System will not reverse the transaction because	 User contacts NBSC who will eliminate any problem with POCL Reference Data
	the product is not reversible	 If the problem is not POCL Reference Data the incident is passed to HSH
• 9.4.9	User selects the correct number but the incorrect transaction is displayed	 User checks the customer receipt to confirm it is the same outlet and that the date is current
		 User checks that the number selected is correct and re-enters if incorrect
		If this does not solve the problem :
		 Contact the HSH - could be crash recovery error / system fault / wrong outlet / multiple use of the transaction number on the node
• 9.4.9	User selects incorrect number but a	No impact at the outlet
	number but a transaction of the same amount is	• TP will only act if a customer/client enquiry is received when they

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Resolution

	displayed and user does not notice and reverses the transaction	copies of the receipts from the
• 9.4.12	No receipt or insufficient receipts produced	

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8.3 Complete Customer Session Fallback (Automated Payment) - expansion of process 10 on end-to-end model



8.3.1 Complete automated payment fallback transaction - expansion of process 10.4



8.3.2 Exceptions detected in process 10.4 - Fallback transactions

Process ref.	Exception ty	pe	Action by post office outlet
10.4.4 & 10.4.6	The outlet h stationery complete transaction	nas no to the	 Contact the supplier emergency supplies

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8.4 Recover Fallback Transactions (Automated Payment) - expansion of process 11 on end-to-end model



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8.4.1 Recover automated payment fallback transaction - expansion of process 11



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8.4.2 Exceptions detected in process 11 - recover transactions accepted in fallback

Process ref.	Exception type	Action by post office outlet
11.4.2	User enters incorrect	User notices :
	date (system prevents and future date but allows a	 Amends on screen if the transaction has not been committed
	past date up to 1930)	 Reverses the transaction and re- inputs if it has been committed
		Unnoticed by the user :
		 The transaction will be processed as normal and have no impact on the outlet.
		 It will be highlighted in TP as it will cause a contra error if the date entered is in a different Cash Account Period; it could be rejected in the pre APCHI validation checks if it is more than 98 days old or there may be customer/client enquiries. This creates errors currently and there are processes in place to address the errors.
• 11.4.4	The receipt from the fallback transaction cannot be entered in recovery(reference number recorded incorrectly or receipt is unreadable)	• Enter transaction via APS EPOSS product and send the receipts to Transaction Processing on a daily basis using Special Delivery
• 11.4.4	The service code is not in the PAN and has not been captured on the manual receipt	 Contact NBSC as they may be able to establish the service code if not process as an EPOSS transaction (see above)
• 11.4.4	The counterfoil kept during the fallback barcode bill transaction has no barcode	 Currently BT bills only The user would process as a non- barcded bill using the existing methods

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8.5 Crash recovery - expansion of process 11

8.5.1 Process



8.5.2 Exceptions detected in process 11 - Crash recovery of transactions

Crash recovery transaction must be performed at the original node

Process	Exception type	Action by post office outlet
ref.	Transactions entered on a disconnected terminal is followed by a hard disk crash	The system will not be aware of the AP transactions that have been entered at the terminal because the information was not replicated.
	(two hardware incidents that HSH will be aware of)	 The user would need to identify the transactions that have been lost from the office receipts
		• The user would re-enter the transaction on a connected terminal. All the system receipts for the transactions would be associated. The impact is that the customer receipt and electronic information sent to the client would have different transaction numbers and will impact on Transaction Processing if a customer or client enquiry is made on that transaction.
• 11.4.1 3	User identifies crash the transactions to be recovered but does not enter them and	EPOSS does not prevent stock unit or outlet balance when there are outstanding crash recovery transactions.
	performs a stock unit balance	The outlet would either :
		 Recover the transactions in another stock unit (see incident below)
		 Recover the transactions in the correct stock unit but in the next CAP (see incident below)
		 Recover the transactions in a different CAP but the same SU
•	Transactions are not recovered and the outlet has rolled into	The transactions would have to be recovered in the next CAP and the same stock unit if possible.
	the next CAP	This would create contra errors in TP
	Transaction recovery is not performed by	The incident will only come to light during the stock unit balance (The

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tr	ne same stock unit	original stock unit will show a gain and the recovering stock unit will show a loss)
		Options:
		• Reverse transaction(s) from incorrect stock unit and re-enter in the correct stock unit as a fallback transaction
		(impact : customer receipt / office receipt / client information would have different information/numbers)
		 Both stock units accept the discrepancies and they are associated.
		 The original stock unit gives the money to recovering stock unit and therefore both show no discrepancy
		DN : Awaiting confirmation from POCL business assurance on how it should be handled
aq tr	he system crashes gain before the first ansaction(s) have	The user would print the product report to identify the transactions which are not held on the system.
sy	een recovered (the ystem only supports ne gap per terminal)	The original transactions are entered as fallback transactions.
		(impact : customer receipt / office receipt / client information would have different information/numbers)
	ser enters incorrect	Gap too big :
	eceipt number to lentify the gap.	User enters the extra receipt numbers as lost transactions.
		Gap too small :
		User enters the extra transactions in fallback and associates the two receipts.
		(impact : customer receipt / office receipt / client information would have different information/numbers and customers will have duplicate transaction IDs)
	ser selects the	User notices :
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transaction	Amends on screen if the transaction has not been committed
	 Reverses the transaction and re- inputs as a recovery transaction if it has been committed and associates the two receipts.
	Unnoticed by the user :
	The transaction will be processed.
	Impact :
	 on customer /client enquiry
	 penalty payment to the client
	 transactions over 98days old will be rejected in the pre APACHI validation checks
Crashed termin	
not working and unit balance and account is require	cash • Delay balance and cash account
(multi-terminal only)	- Input the transactions as fallback
	 Balance stock unit without recovering the transactions and accept the discrepancy. Recover transaction(s) in the next CAP and show compensating discrepancy
	See section 9.1 for NBSC advice on dealing with this situation.
User enters rev	
transaction as but fails to re the transaction	I = Choot would receive the intermetion
	 TP would only be aware of this incident if the outlet identified it and brought it to their attention
User enters	the • User's stock unit misbalances
reversal transact crash recovery	• Client would receive the information and settlement for both transactions

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۲	TP	would	only	be	aware	e of	this
		ncident and brou					

8.6 Complete Daily and Weekly Reports

8.6.1 Process

See EPOSS End-to-end Reconciliation $\ensuremath{\mathsf{Process}}$ - CS/PRD/045 for detail.

Reports for AP are not compulsory for the user and would only be required if the stock unit had a problem.

8.6.2 Exceptions detected in daily/weekly reporting

Process ref	Exception type	Action by post office outlet
19.		User identifies the differences :
3	does not reflect the receipts	 recovers any fallback transactions
		 reverses any duplicate transactions (if possible)
		If this does not resolve the problem :
		Contact the HSH
•19 .2	The system report will not print	See EPOSS reconciliation document (CS/PRD/045) section 9.4.3
19. 3	The user has processed duplicate	The user would reverse the incorrect transaction.
	transactions	If the end of day marker has been set :
		Contact the NBSC who record the information on the database which will be available to the TP Incident Manager (replacing the current capture of information by Farnborough).

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8.7 Manage End of Day - Process 13 on End-to-end Model



or

Outlet closed and all users logged off



Outlet trading in new business day

8.8 Maintain and Communicate EPOSS and APS Records -Process 14 on End-to-end Model

This section is included for completeness. Any exceptions that are detected by ICL Pathway that related to the transfer of information from outlets to ICL Pathway central systems and from ICL Pathway central systems to the TIP and HAPS interfaces will be reported to the HSH and routed to the relevant expert domain.

Further information is provided in ICL Pathway documents:

- CS/PRD/051 NR2 End to End Incident Processes for the Automated payment Service System;
- CS/PRD/059 NR2 End to End Incident processes for the TPS System.

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8.9 Reconcile and Settle (POCL TP Chesterfield)

8.9.1 Expansion of process 15 - reconcile and settle (Chesterfield)



Notes:

- 1. Some of the information is at transaction level and some at summary level.
- RTI this report lists any offices where there is a discrepancy between the cash account and supporting document amount and any differences, i.e. as PIVOT but produced daily.

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8.9.1.1 Expansion of process 15.1 reconcile transaction records



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8.9.1.2 Exceptions detected by POCL Transaction Processing Apachi Pre-validation Checks

Process ref.	Exception type	Action by POCL central business units
15.1.6	Invalid FAD Code A FAD code is received which is not recognised by CBDB Currently results	Not expected from Horizon. If it occurs it will be raised as an Incident via the Transaction Processing incident manager • Contact the NBSC who will clear any
	from mis-keying/mis- reading of FAD code at Data Central	POCL Reference Data. If this does not clear the incident is passed to HSH
		 Systems Support will assign transactions to the correct FAD code using current process
• 15.1.6	<u>Office Closed</u> AP transactions are	Problems b & c could still occur under Horizon
	received for an office which is closed in CBDB	If either occurs it will be raised as an Incident via the Transaction Processing incident manager
	 CBDB Currently occurs from a. Non Cash Account offices sending AP vouchers direct to Data Central instead of via their parent office. Systems Support will assign txns to the parent office code. b. An office is regraded and allocated a new FAD code but transactions are received for the superceded office code. b. Systems 	 Contact the NBSC who will clear any POCL Reference Data. If this does not clear the problem the incident is passed to HSH Systems Support will handle as now

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• 15.1.6	the "new" FAD code. c. A POCL Region fails to advise TP that an office has re-opened/opened. Systems Support will open office in CBDB. A NCA office is re- graded to a cash account office and allocated a new code. Systems Support will open office in CBDB. <u>Invalid Client/Client</u> Scheme AP transactions are received for a client/client scheme which is not recognised (not set up in Apachi) Occurs infrequently as a result of HAPS/Apachi reference data being out of step. Systems Support investigate with TP Accounting Procedures Team. Scheme set up and txns assigned to the first day of scheme set up - creates contra errors between weeks	 will clear POCL Reference Data error. If this does not clear the problem the incident is passed to HSH. NB: invalid client IDs will have been identified by HAPS and appear on the "Undeliverables" report
• 15.1.6	Invalid Start Date AP transactions are received with a date earlier than the scheme start date. Occurs now a If a client issues	 a - should not occur because Horizon terminal will prevent acceptance until correct start date. NB: Even if an office were to accept the transactions in fallback they would be unable to enter them into the terminal until the due date.

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	cards earlier than expected.	 If problem is a disjoint between HAPS/Apachi handle as now
	b HAPS/Apachi reference data is out of step. Systems Support change the date to match the Apachi start date - creates contra errors between weeks.	 If problem is a disjoint between POCL/Pathway Transaction Processing Incident Manager will raise an incident with NBSC who will clear POCL Reference Data error. If this does not clear the problem the incident is passed to HSH.
15.1.6	Old DatesAP transactions have a date which older than 98 days.Occurs nowa Error resolution team have undertaken AP recovery and not advised System Support of "old" dates. Systems Support relaxes the validation check	Could still occur - Horizon terminal currently allows entry of dates back to 1930. Transaction Processing contact the outlet to confirm the correct date and clear using the current process.
15.1.6	<u>Future Dates</u> AP transactions are received with a future date	Not expected as the Horizon terminal prevents entry of future dates. If it occurs an will be raised with HSH via the Transaction Processing Incident Manager.

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8.9.1.3 Expansion of process 15.2 - settle with clients



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Process ref	Exception type	Action by POCL central business units	
15.3	Customer / client enquiry because the amount credited to customer account is inconsistent with the	-	Reasons :
		 user mis-keyed reference number when recovering a fallback transaction 	
	receipt	• user selected incorrect date during recovery	
		 user reverses the incorrect transaction 	
		 user selected the incorrect option (MC/BC) during manual keying or recovery of the transaction 	
		 user entered a different value to the amount the customer paid 	
		 lost transaction - TP have no warning of these transactions as lost receipts are not produced by the system - how are they handled by TP ? 	
		 user failed to recover fallback or crash transactions 	
		• user fails to reverse the original reversal transaction during crash recovery or is unable to because the EOD marker has been set	
		duplicate transactions	
		TP are working on the process to address these areas and will identify any incidents during that work	
	Transactions passed to the client are outside the agreed perameters (client enquiry to Transaction Processing)	Can happen during fallback when the rules are relaxedthe clients have been informed.	
		Problem with Reference Data The current process will be followed	

8.9.1.5 Exceptions detected by POCL Transaction Processing

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	Receipts received in TP as unrecoverable are recoverable	TP will process the receipts and advise the outlet and RNM.
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8.9.1.6 Cash Account incidents

Process ref	Exception type	Action by POCL central business units
15.3	Incorrect entry	Reasons :
		 SMART trxns not entered by the user as APS EPOSS trxns
		 Unrecoverable trxns not entered by the user as APS EPOSS trxns
		 Client enquiry e.g. the cash account and supporting information stream match but there is an enquiry outstanding.
		 Incorrect use of the APS EPOSS product by the user
		Duplicate trxns
		Reference Data
		System error
		TP are working on the process to address these areas and will identify any incidents during that work
• 15.3	Contra error	Reasons :
	(between cash account weeks)	 Outlet fails to roll stock units into the correct accounting week (APACHI uses the trxn date to allocate the trxn to the correct CAP).
		 Outlet rolls into the next CAP early and processes AP trxns.
		 Fallback trxns are recovered in the wrong cash account week (as above)
		The exception would be resolved by current TP processes
15.3	2/3 week accounts (outlet has not	This will result in contra errors between the weeks.
	received permission and the flag has not been set in CBDB)	The exception would be resolved by current TP processes

8.9.1.7 Supporting Document errors

Process ref	Exception type	Action by POCL central business units
15.3	Supporting documents not received or late	The user has entered an amount against an APS EPOSS transaction but no supporting documents have been received.
		Resolved using current Transaction Processing process
15.3	Contra error (between Horizon outlets)	Transaction Processing will enter unrecoverable transactions any may allocated them to the incorrect office.
		This is a Transaction Processing internal error that will be cleared using the current process.
15.3	Contra error (between a Horizon outlet and non- Horizon outlet)	This will happen if Data Central mis- key an office code and the information is allocated to a Horizon outlet. This is a TP internal error and will be resolved using the current process

8.9.1.8 Expansion of process 15.4 - receive and validate TIP data



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8.10 Consolidate and Reconcile Automated Payment Records (POCL Farnborough) - Process 16 on End-toend model

8.10.1 Process





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8.10.2 Exceptions Detected by POCL Farnborough

Process ref	Exception	Action by POCL central business units
16.3	Transaction(s) rejected by HAPS because the Client ID details are unrecognisable.	See ICL document 'BSU Incident Reconciliation Procedure for NR2 (CS/PRO/058)

8.11 Maintain Payment Records (POCL Clients) - Process 17 on End-to-end Model

This section is included for completeness. The processes used by POCL clients are not affected by the introduction of Release NR2.

POCL clients compare transaction level information provided by POCL with settlement information. If there are differences the POCL client would raise a query with the POCL Error Management Team in Chesterfield. Valid queries would trigger an adjustment to settlement. This is shown in section 9.12.1 (expansion of process 15) where client queries are received by process 15.3 (manage errors) and error notifications are sent to process 15.2 (settle with clients). Valid POCL client queries would lead to an incident being raised by POCL TP Incident Management. If the POCL investigation showed that the incident was caused by an underlying error within the ICL Pathway domain, then POCL TP Incident Management would raise an incident with the ICL Pathway HSH.

In addition. a customer could raise a query with a POCL client if a difference was observed between their personal records and the bill/statement provided by the POCL client. If an investigation by the POCL client indicated that the root cause was within the POCL domain, then the POCL client would raise an incident with the POCL Error Management Team in Chesterfield. The process would then progress as described in the paragraph above.

9 POCL Incident Management and Resolution Processes for Automated Payment Related Incidents

At release NR2 automated payment incidents are handled by four organisations:

- NBSC (Leeds)
- TP Incident Management Point (Chesterfield) linked to the NBSC
- OSG (Farnborough)
- POITS (Farnborough)

The NBSC provides advice and guidance for business issues, e.g. for situations where outlet business process are impacted by an unresolved incident of any type. The NBSC also handles reference data related incidents raised by outlets or POCL TP.

The TP Incident Management Point records incidents occurring within TP and raises incidents with the ICL Pathway HSH or the NBSC.

OSG reports incidents to HSH that have occurred during file transfer across the HAPS interface - normal POCL hours.

POITS report incidents to HSH that have occureed during file transfer across the HAPS interface - outside normal POCL hours.

9.1 Advice for outlets on completion of key business process while awaiting resolution of incident

Situation	Example advice given by the NBSC
User unable to input transactions to the system.	 Process transactions manually (fallback) and keep on one side and input when the system is available.
• User unable to make daily cash declaration	 Record details of cash on hand manually and input at the next log on.
	If the down time exceeds one day the system provides no facility to input previous days figures.
	 In this scenario the Outlet will calculate the value of their ONCH manually and enter the total on the ONCH declaration, which will be despatched as per normal operating instructions.
 User unable to 	The only reports which are dependent on the

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complete daily or	system are :
weekly reports	<u>At stock unit level</u>
	 Girobank in and outpayments
	 Pension and allowances payments (OBCS and manual)
	• BT bills
	Green giros
	<u>At outlet level</u>
	Saving stamp redeemed
	Counters revenue schedule
	• P 2311MA (x 2)
	Daily Summaries
	When the system is down at end of day the outlet must complete manual versions of the required daily summaries. On resumption of the service, the outlet must, if applicable, recover those transactions necessary and complete a system summary and cut off. This system produced summary can then be discarded.
	Weekly Summaries
	As part of the fallback process for Cash Account production, the outlet in the case of system / power failure will not be required to complete a Cash Account until the following week. In this Scenario, no weekly reports will be required.
	In the event of printer failure, the outlet must preview the reports on screen until the printer service is restored. On resumption of the service, the outlet must select the reprint functionality and forward the reports immediately to TP.
User unable to complete stock unit balance	1. In the event of printer failure, the user should preview the stock unit balance. On resumption of the service, the outlet must select the reprint functionality and retain the report in the outlet.
	2. In the event of system / power failure then the outlet will be asked by the NBSC whether

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	they have balanced sufficient SUs to operate a service on the following day. If they have then there is no issue. The outlet simply continues in fallback mode, and on restoration of the service completes fallback recovery of any outstanding transactions. When operationally feasible, the outlet will then balance any outstanding SUs from the previous CAP. If however, no SUs have been balanced then the outlet will be instructed to suspend balancing until the following Wednesday.
User unable to complete cash account	1. In the event of printer failure, the system will automatically preview the final cash account. On resumption of the service, the outlet must select the reprint functionality and forward the report immediately to TP.
	2. In the event of system / power failure then the outlet will be asked by the NBSC whether they have balanced sufficient SUs to operate a service on the following day. If they have then there is no issue. The outlet simply continues in fallback mode, and on restoration of the service completes fallback recovery of any outstanding transactions. When operationally feasible, the outlet will then balance any outstanding SUs and the Cash Account from the previous week.
	If however, no SUs have been balanced then the outlet will be instructed to suspend balancing until the following Wednesday.

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10 ICL Pathway Incident Management and Resolution Processes for Automated Payment Related Incidents

10.1 Key Interfaces



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The vast majority of automated payment related incidents handled by ICL Pathway concern the operation of the APS service, e.g. Horizon system advice and guidance, hardware incidents, communications incidents, software incidents. These types of incidents do not normally have accounting reconciliation implications.

The main focus of this section is the management of incidents that:

- have accounting reconciliation implications;
- require ICL Pathway BSU involvement in resolution.

The preceding diagram shows four categories of incidents. Each of these is discussed below.

10.1.1 Automated Payment predefined business incidents

Wherever possible automated payment incidents that involve reconciliation of accounting information by the BSU are predefined so that they can be easily separated from other incidents, clearly labelled and routed to the BSU by the most direct route. Within ICL Pathway, automated payment incidents that have accounting reconciliation implications are referred to as "AP Predefined Business Incidents". These incidents include a category of "other" which can be used if new unexpected incidents are encountered. Following investigation and resolution, the new incident is added to the list of predefined business incidents so that it can be dealt with effectively if/when it is encountered again.

Predefined business incidents may be reported to the HSH by post office outlets, POCL TP incident management or ICL Pathway organisations. The HSH routes predefined business incidents to the BSU via the SMC.

All predefined business incidents are added to the RED (Reconciliation Exception Database) by the BSU. The BSU investigates the incident and reports findings via a RED report.

10.1.2 General Horizon system advice and guidance, hardware, communications, software and file transfer related incidents

These incidents form the majority of incidents handled by the HSH. Incidents are either resolved by the HSH during the initial call, e.g. Horizon system advice and guidance, or routed to the appropriate technical expert domain for resolution. The SMC filters known errors.

Advice and guidance associated with the operation of the Horizon system is provided by the HSH at the request to post office outlets. Hardware, comms. and software incidents associated with the counter systems are reported by the post office outlet directly to the HSH.

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During normal POCL hours incidents associated with the operation of HAPS interface are reported to the HSH by POCL OSG (Farnborough). Outside normal POCL hours incidents associated with the HAPS interface are reported to the HSH by POITS.

10.1.3 Reference data errors

Post office outlet gueries relating to prices, product information, and other POCL reference data type information are initially handled by the POCL NBSC. The NBSC checks reference data and resolves any errors that have occurred within POCL domain. If POCL perceive that the reference data error was caused by an underlying error within the ICL Pathway domain, the NBSC raises a reference data incident with the HSH. The HSH routes the incident to the SMC where checks are made to see if the error was cause by a "transient error" e.g. late delivery of reference data or a known communications problems. If this does not explain why a reference data incident has occurred the incident is routed to the ICL Pathway technical domain (System Support Centre) for further investigation. The further investigation, where appropriate, involves the ICL Pathway Reference Data Team. A detailed description is provided in ICL Pathway process definition document CS/PRD/046.

10.1.4 BSU raised system incidents

The BSU raise a system incident with the HSH if they perceive that a specific system error has occurred. They raise a problem is a trend is observed.

10.2 Inappropriate calls from outlets

The HSH will consider the following calls to be inappropriate:

- calls relating to situations where a key outlet business processes, e.g. cash account rollover, is impacted by an incident of any type;
- calls relating to price, product or other POCL reference data type queries.

The HSH will advise the outlet to contact the NBSC.

NB: If the HSH starts to provide advice and guidance to an outlet or starts to diagnose an incident raised by an outlet, but then discovers that it is an incident that is normally dealt with by the NBSC, the HSH will inform the outlet that it is referring the incident to the NBSC, terminate the call with the outlet and inform the NBSC.

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10.3 Automated Payment Predefined Business Incidents

Incident raised by	Incident type	Incident detail
Post office outlet	None currently identified	Procedures can accommodate new incident types if any are identified in the future.
POCL TP incident management point	APS reconciliation related incidents that are perceived by POCL TP to have been caused by a error within the ICL Pathway domain, e.g. duplicate transactions, incorrect values, invalid office codes, invalid accounting dates, invalid client services,	Incident raised with the HSH and routed to the BSU. Investigated by the BSU. Results reported on an APS RED report.
	Client reported error	Query on a automated payment bill has been reported to POCL and passed on to ICL Pathway because the error is perceived to be within the ICL Pathway domain. Incident raised. Investigated by the BSU. Results reported on an APS RED report.
POCL OSG Farnborough	HAPS undeliverable (client ID cannot be read)	Incident raised within ICL Pathway. Investigated by the BSU. Results reported on an APS RED report.
ICL Pathway	Difference between TIP	Incident raised within ICL Pathway. Investigated by

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and HAPS data streams	the BSU. Results reported on an APS RED report.
Incidents reported by APS reconciliation reports	Confirmed exceptions on the APS reconciliation report trigger the raising incident. Investigated by the BSU. Results reported on an APS RED report.
Unmatched reversals	Host APS rejects a reversed transaction because it cannot find the original. Incident raised. Investigated by the BSU. Results reported on an APS RED report.

11 Appendix A - Validation and Reconciliation within the Automated Payment Process Chain

The steps referred to below are detailed later in this Appendix.

Exception handling and incident management/resolution that is triggered by validation and reconciliation handling is described in the main part of this document.

	Step	Reconciliation and Validation	
Post office counter	1	Validation: Data entry validated against system rules.	
Customer	2	Reconciliation: Comparison of bill, receipt and cash/cheque passed to clerk.	
ICL Pathway	5	Validation: Harvested data validated against Oracle table format in ICL Pathway host systems.	
Post office counter	6	Reconciliation: Stock unit balance.	
Post office counter	7	Reconciliation: Cash account balance.	
ICL Pathway	9	Validation: Validity of APS transaction file checked.	
ICL Pathway	10	Reconciliation: Comparison of HAPS and TIP data stream.	
POCL	12	Validation: Validity of APS transaction file checked.	
POCL	15	Reconciliation: Comparison of AP data received from all post offices, with AP data sent to POCL clients, with AP data sent to POCL TP via Apachi.	
POCL	18	Reconciliation: Comparison of cash account data with Apachi data on CBDB.	
POCL client	22	Reconciliation: Comparison of POCL settlement data with AP transaction data.	
Customer	25	Reconciliation: Comparison of bill from POCL client with customer's personal records.	

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Unit. The BSU will investigate and issue a RED report to POCL.



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The above reflects what a typical customer might be expected to do when a difference between a bill and personal records is detected. The customer queries the payment with the POCL client.