

ICL Pathway

**CSR+ AUTOMATED PAYMENT SERVICE
Processes and Procedures Description**

Ref: CS/PRO/091

Version: 4.0

Date: 12/12/00

Commercial in Confidence

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Abstract: This document describes the procedures required to provide the Automated Payment Service at post office counters

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0.0 Document Control

0.1 Document History

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0.3 Associated Documents

Reference	Version	Title	Source
CR/FSP/0004		Service Architecture Design Document	ICL Pathway
CS/DES/014		CSR+ APS PPD Design	ICL Pathway
CS/PRO/090		CSR+ Access Control and User Administration PPD	ICL Pathway
CS/PRO/092		CSR+ Horizon System Helpdesk PPD	ICL Pathway
CS/PRO/093		CSR+ Introduction PPD	ICL Pathway
CS/PRO/094		CSR+ Order Book Control Service PPD	ICL Pathway
CS/PRO/095		CSR+ Electronic Point of Sale Service PPD	ICL Pathway
CS/PRO/096		CSR+ Logistics Feeder Service PPD	ICL Pathway
CS/PRO/097		CSR+ Operating Environment PPD	ICL Pathway
PA/STR/013		ICL Pathway Core System Release Plus Contents Description	ICL Pathway
SD/DES/005		Horizon OPS Reports and Receipts – Pathway Horizon Office Platform Service	ICL Pathway
SD/DOC/009		Horizon OPS Desktop Messages and Help Text: CSR+	ICL Pathway
SD/SPE/016		Horizon OPS Menu Hierarchy: Release 2	ICL Pathway

Unless a specific version is referred to above, reference should be made to the current Approved version of documents.

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0.4 Abbreviations/Definitions

Abbreviation	Definition
APS	Automated Payment Service
BC	Bar-code
BP	Balance Period
BT	British Telecommunications
CAP	Cash Account Period
CRN	Customer Reference Number
CSR+	Core System Release Plus
DVLNI	Driver and Vehicle Licensing Northern Ireland
EPOSS	Electronic Point of Sale Service
FAD	Financial Accounts Division (of the Post Office)
HAPS	Host Automated Payment System
HSH	Horizon System Helpdesk
ICL	International Computers Limited
ISDN	Integrated Services Digital Network
LAN	Local Area Network
LFS	Logistics Feeder Service
MC	Magnetic Card
OBCS	Order Book Control Service
OPS	Office Platform Service
PAN	Primary Account Number
PC	Personal Computer
POCL	Post Office Counters Ltd
PPD	Processes and Procedures Description
QM	Quantum
SPM	Simple Payment Module
WC	Water Card

0.5 Changes in this Version

Version	Changes
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0.2	Comments received on V0.1 incorporated. Checksums included and recovery clarified.
0.3	Comments received on V0.2 incorporated. Change of button name at the end of AP report procedures from 'Complete' to 'Exit' (CCN557). Addition of second depression of the RECPT key as an alternative method of producing a copy receipt (CCN557). Removal of option to postpone disaster recovery (CP2190).
0.4	Comments received on V0.3 incorporated.
1.0	Comments received on V0.4 incorporated. Alteration to message Msg00107 (PinICL PC0038881). Alteration to message Msg29022 (PinICL PC0039585). Correction of reference number validation in disaster recovery (PinICL PC0041381). Addition of time limit for SPM reversals (CCN623).

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1.1	<p><u>Changes arising from testing and ICL Pathway:</u></p> <p><i>Section 4.3 Automated payment using a smart card:</i> Addition of exception for rejection of specific Quantum smart cards (CCN628).</p> <p><i>Section 8 Recovery:</i> Replacement of text describing how reloads invoke recovery (CP2608).</p> <p><u>Document-only changes (e.g. arising from the Horizon System User Guide review) (CP2742):</u></p> <p><i>Section 4.1 Automated payment using a magnetic card:</i> Clarification that the exceptions to step 5 are instead of the screen display rather than the selection of the Tick option.</p> <p><i>Section 4.1 Automated payment using a magnetic card and Section 4.3 Automated payment using a smart card:</i> Correction of PPD cross-referenced for settlement.</p> <p><i>Section 4.1 Automated payment using a magnetic card, Section 4.2 Automated payment using a bar-coded document and Section 4.3 Automated payment using a smart card:</i> Clarification of which exceptions occur instead of which steps. Clarification that the current amount must first be deleted should it need to be altered. Additions of potential occurrences of MSG68.</p> <p><i>Section 4.2 Automated payment using a bar-coded document:</i> Correction of mention of 'card' in message nPServerMsgs:00002 exception to 'document'.</p> <p><i>Section 4.3 Automated payment using a smart card:</i> Clarification that the SPM 'card full' message is only displayed when an attempt is made to add credit to the card.</p> <p><i>Section 6.1 Entering a bar-coded document's bar-code number manually and Section 6.2 Entering a magnetic card's PAN manually:</i> Alteration to the gist of message MSG68 (PinICL PC0044177) and expansion of the action taken.</p> <p><i>Section 6.4 Dealing with smart card exceptions:</i> Deletion of spurious 'or MSG439' from Exception J since this message is described in Exception M.</p> <p><i>Section 8.2 Disaster Recovery procedure:</i> Correction in step 1 Scenario B of the next action performed from step 10 to 11.</p> <p><i>Section 8.3 Fallback recovery:</i> Deletion in step 3 of spurious Exception A.2.1 and Scenario A.3. Renaming of Exception A.3.1 to 'Scenario A.3:If the receipt is neither an imprinter foil nor a bar-coded bill foil'.</p>
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1.2	<p><i>Throughout:</i> Changes to HSH call cross-references (CCN630).</p> <p><i>Addition of manual processes (CP2663) as follows:</i></p> <ul style="list-style-type: none"> • <i>Section 8 Recovery:</i> Addition of business rule for a disaster recovery receipt temporarily lost and subsequently found (PinICL PC0042580). • <i>Section 8.1 Session recovery procedure:</i> Addition of Exception A.1 to step 4 for a mismatch of smart card original and recovery receipt amounts (PinICL PC004178). <p><u>Documentation-only changes (CP2742):</u></p> <p><i>Section 3.1 Transaction initiation:</i> The phrase 'and entering the customer token details' replaced by 'and entering the magnetic card or bar-coded bill details'.</p> <p><i>Section 4.1 Automated payment using a magnetic card:</i> The instruction in step 2 Scenarios B.1.1 and C.1 changed from 'Advise the customer that the card cannot be accepted...' to 'Accept the transaction as a manual AP transaction'. Correction in step 5 Exceptions A and B to continue at step 4 instead of step 5.</p> <p><i>Section 4.2 Automated payment using a bar-coded document:</i> Deletion of the note in step 2 Exception A that if a bar-code does not have manual fallback the clerk cannot perform the transaction. The instruction in step 2 Scenario C.1 changed from 'Advise the customer that the document cannot be accepted...' to 'Accept the transaction as a manual AP transaction'.</p> <p><i>Section 4.3 Automated payment using a smart card:</i> Correction in step 2 Exception B to continue at step 7 instead of step 5.</p> <p><i>Section 5.2.1 Producing an AP transactions By User report:</i> Removal of the instruction to clear totals (step 6), as user reports do not require cut-off.</p> <p><i>Section 6.1 Entering a bar-coded document's bar-code number manually:</i> The instruction in step 4 Scenario A.1.1 changed from 'Advise the customer that the document cannot be accepted...' to 'Accept the transaction as a manual AP transaction'.</p> <p><i>Section 6.2 Entering a magnetic card's PAN manually:</i> The instruction in step 4 Scenario B.1.1 changed from 'Advise the customer that the card cannot be accepted...' to 'Accept the transaction as a manual AP transaction'.</p> <p><i>Section 7.4.1.1 Manual receipt for automated payment using a magnetic card:</i> Deletion of '(if not embedded in the PAN)' from the instruction to write down the service code in step 3.</p>
2.0	<p>Alteration to the gist of message Msg29031 (PinICL PC0053442) so that 'changed' is now 'charged'.</p>

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Section 4.1 Automated payment using a magnetic card and Section 4.2 Automated payment using a bar-coded document: Amendment in step 2 Exception C 2nd bullet from 'a post office' to 'this post office'. Addition to step 2 Scenario C.2 1st bullet of ', and that the customer should present it at the correct office or contact the issuer'.

Section 4.2 Automated payment using a bar-coded document: Deletion of the note in step 2 Exception B that if a bar-code does not have manual fallback the clerk cannot perform the transaction. Manual acceptance added as follows: Last three bullet points of step 2 Exception B amended to form new scenarios B.1 and B.2 to match C.1 and C.2, and Exceptions B.2.1 and B.3.1 amended to match A.2.1 and A.3.1. Cross-reference in step 6 corrected from CS/PRO/024 to CS/PRO/097.

Section 6.4 Dealing with smart card transaction exceptions: Addition to Scenario I.2.2 of bullet point to 'ask the customer to return it to the utility company for a replacement'.

Section 7.8 Network failure – ISDN connection failure: Replacement of the last sentence of 1st paragraph by 'The transaction received at the data centre during the day are batched and sent overnight to the relevant clients. Initially this will take place via the POCL HAPS system until client migration has completed.'

Section 8 Recovery: Addition of the following new system rule: 'Disaster recovery does not allow the entry of a Water Card transaction that has lower case characters in the receipt's Ref2 field. The receipt should therefore be sent to Chesterfield for the payment to be processed – refer to the Counter Operations Manual.'

Section 8.2 Disaster recovery: Addition of new Exception B.2 to step 6 Scenario B that if the Ref2 field on the receipt contains lower case characters, the receipt is sent to Chesterfield for processing and then Previous is selected and the procedure continues from step 10.

2.1	<p><u>Document-only changes (CP2844):</u></p> <p><i>Section 8.3 Fallback recovery:</i> Removal of step 4 (instruction to select Tick after selecting the token type) (PinICL PC0049503).</p> <p>Change to the APS disaster recovery message (CP2735) as follows:</p> <p><i>Section 8 Recovery:</i> 2nd bullet point of 'When recovery is entered' –</p> <p>'The clerk is asked whether they have any receipts...' replaced by 'The clerk is asked whether <u>the Horizon system has been replaced and</u> they have any receipts...'.</p> <p><i>Section 8.2 Disaster recovery procedure:</i></p> <p>Step 1 – 'The system asks you if you have any receipts...' replaced by 'The system asks you if <u>the Horizon system has been replaced and you have any receipts...</u>'</p> <p>Scenario A – replaced by:</p> <p><i>SCENARIO A: If you know that the Horizon system has been replaced or you are not sure:</i></p> <ul style="list-style-type: none"> • Check to see if you have any receipts in the specified range. <p><i>SCENARIO A.1: If you have any receipts in the specified range:</i></p> <ul style="list-style-type: none"> • Select the Tick option. The system displays the Checksum screen. • Proceed to step 2. <p><i>SCENARIO A.2: If you do not have any receipts in the specified range:</i></p> <ul style="list-style-type: none"> • Select the Cross option. • Proceed to step 11. <p>Scenario B – 'If you do not have any receipts...' replaced by 'If you know the Horizon system has not been replaced'</p>
2.2	<p><u>Document-only changes (CP2844):</u></p> <p>See below.</p>

Section 4 AP transactions: Addition to 2nd business rule 'if they wish to continue with the transaction. In the case of magnetic card and bar-coded payments for which the customer wishes to make a payment above the maximum limit, the clerk need not advise the customer but can accept the payment as two or more transactions.'

Section 4.1 Automated payment using a magnetic card: In step 2 Exception B.1 1st bullet, "(refer to the Counters Operations Manual)" inserted before 'then proceed'. In

step 5 Exception C, in 2nd bullet 'within the range' replaced by 'a multiple as' and in 3rd bullet 'an amount within the stated range' replaced by 'a stated multiple'.

Section 4.2 Automated payment using a bar-coded document: In step 3, Exception A.3 in 2nd bullet 'within the range' replaced by 'a multiple as', Exception B.3 in 2nd bullet 'within the range' replaced by 'a multiple as' and in 3rd bullet 'an amount within the stated range' replaced by 'a stated multiple'.

Section 4.3 Automated payment using a smart card: '; premature removal could cause corruption of the card' appended to 4th sentence. In step 3 Exception A st sentence 'changed' corrected to 'charged', and in 3rd bullet 'by inserting the card into the utility company's meter' removed. In step 4 Exception A 1st sentence replaced by 'If the customer does not wish to pay an amount but only to know how much is on the card' and 1st bullet replaced by 'Advise the customer of the current credit shown in the screen details'.

Section 4.4 Reversing AP transactions: 1st business rule (transactions shall only be reversed in the original office) moved to system rules.

Section 5.1 AP transactions report: In last sentence, '(that is, the report does not need to be produced to enable stock unit balancing)' added after 'in Horizon system terms'.

Sections 6.1 Entering a bar-coded document's bar-code number manually and 6.2 Entering a magnetic card's PAN manually: order of sections swapped, and order of bullets in Section 6 adjusted accordingly.

Section 6.4: Dealing with smart card transaction exceptions: Exception C replaced by the following:

- 'Select the Tick option.
- Check the card to see if it appears valid for payment at this post office then proceed as follows:

SCENARIO C.1: If the card appears valid:

- Telephone the Horizon System Helpdesk [Call Reference data:missing icon/product (Core product and AP)].

SCENARIO C.2: If the card does not appear valid:

- Advise the customer that the card cannot be accepted.
- This ends the transaction.'

Section 7.4.1.2 Manual receipt for automated payment using a bar-coded document: Note (procedure relevant only as Transcash) removed.

Section 7.6.2 PC failure (single-counter office): In 2nd sentence 'or bar-coded documents' deleted. After 2nd sentence 'Bar-coded document transactions should be undertaken using Transcash' inserted. In 3rd sentence 'AP transactions' preceded by 'magnetic card'. 1st bullet incorporated into 4th sentence by deletion of 'in the following manner: For automated payment using magnetic card' and replacement of 'follow' by 'by following', 'ignore' by 'ignoring' and 'omit' by 'omitting'.
2nd bullet removed.

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Section 7.8 Network failure – ISDN connection failure: '(at least every 15 minutes)' removed from 1st sentence.

Section 8.2 Disaster recovery procedure: After the 1st sentence in step 1, addition of '(Note that, if there are no APS transactions in the counter system, then the date and time given in the message will default to 01/05/1999 00:00.)'

Section 8.3 Fallback recovery procedure: In step 8 Scenario B.1 2nd bullet 'comes within the stated range' replaced by 'is a stated multiple'.

Version	Changes
3.0	None.
3.1	<i>Section 0.3 Associated documents:</i> Removal of version numbers from document references and addition of 'Unless a specific version is referred to above, reference should be made to the current Approved version of documents.'
4.0	None.

0.6 Changes Expected

Changes
Change of first line of support from HSH to NBSC (CRP0111).
<i>Section 8.2 Disaster recovery:</i> Addition of the following to step 3 Scenario B: 'Note: Where the date on the receipt is in the format <i>dd/mm/yyyy</i> , it should be entered as <i>dd/mm/yy</i> , e.g. 20/12/2000 should be entered as 20/12/00. (CP2851).'

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1 Purpose

This PPD describes the processes and procedures at post office counters in respect of the Automated Payment Service (APS), in accordance with ICL Pathway Core System Release Plus (CSR+).

This PPD provides a description of all the processes involved in order to enable the contractual agreement of procedures and to be a source from which authors can develop the further user documentation needed.

2 Scope

This PPD describes the following processes and procedures:

- Automated payment using a magnetic card.
- Automated payment using a bar-coded document.
- Automated payment using a smart card.
- General processes and procedures, for example, manual input of bar-code number from a bar-coded document or Primary Account Number (PAN) from a magnetic card and re-printing an AP transaction receipt.
- Fallback procedures.
- Recovery procedures for session, disaster and fallback recovery scenarios.

This PPD is one of a set of PPDs provided for CSR+. The way in which the set fits together is described in the CSR+ Introduction PPD [Ref. CS/PRO/093].

The use of the bar-code reader, magnetic card reader, smart card reader and counter printer is described in the CSR+ Operating Environment PPD [Ref. CS/PRO/097].

Generic procedures such as rejecting or accepting entered data, altering an entered value, responding to a value error message and pre-viewing a receipt are described in the CSR+ Operating Environment PPD [Ref. CS/PRO/097].

Information on settling transactions and accounting is provided in the CSR+ EPOSS PPD [Ref. CS/PRO/095].

The screen messages described in this PPD are summarised and suffixed with a cross-reference in the form: '[*Message Collection:ObjectName*]' where *Collection* is the Collection name and *ObjectName* is the ObjectName within this collection. These relate to an entry in the Horizon OPS Desktop Messages and Help Text: CSR+ [Ref. SD/DOC/009] that defines the text of the message.

The format of the APS reports and receipts is described in Horizon OPS Reports and Receipts [Ref. SD/DES/005].

The helpdesk calls described in this PPD are cross-referenced to the calls described in the CSR+ Horizon System Helpdesk PPD [Ref. CS/PRO/092] as follows: 'Telephone the Horizon System Helpdesk [Call *Type:Problem*]' where *Type* is the call type and *Problem* is the problem within this type, for example Hardware:counter printer fault. (Note that these cross-references are provided solely to assist PPD reviewers; the call references are not relevant to the helpdesk callers.)

3 Overview

The Automated Payment Service (APS) is a service that enables POCL to provide a range of payment services to the customers of many POCL Clients including utility companies and local authorities. These payment services are typified by their use of magnetic cards, bar-coded documents and smart cards that are presented by customers at the counter either in support of payments or as pre-payments to their account.

APS counter transactions use APS Product and APS Token reference data that specifies details such as the minimum payment amount, card interpretation rules and specific receipt wording.

APS is provided at every post office counter position, unless directed otherwise by POCL, and is configured at installation to the particular products appropriate to a particular post office.

3.1 Transaction initiation

AP transactions are typically initiated at the counter by a peripheral event such as reading a magnetic card, a utility bill bar-code or a smart card. Two copies of the receipt (a customer copy and an office copy) are produced for every successful AP transaction. The office copy of the receipt is used to facilitate transaction recovery in the case of a failure scenario.

Some transactions (such as AP manual transactions and recovery procedure transactions) can be initiated by selecting the relevant menu item and entering the magnetic card or bar-coded bill details.

The recovery procedure may be automatically entered following logon if APS detects that it is necessary.

3.2 AP receipt retention period

AP receipts should be retained in the office for two years.

4 AP transactions

AP transactions are invoked using a magnetic card, a bar-coded document or a smart card.

System rules:

- Before the user can perform an AP transaction, the Serve Customer screen must be displayed.
- The system checks to see whether the POCL client service/product to whom the customer is making payment is supported by the outlet. If this is not the case, the system rejects their payment.
- The system will not accept payment amounts that are outside the pre-set payment parameters for that particular transaction.
- Where a customer reference number is specified, it is validated by the system.
- Smart card transactions cannot be suspended or transferred.

Business rules:

- If the POCL client service/product to whom the customer is making payment is not supported by the outlet, the customer must be advised of this fact.
- If the payment amount tendered by the customer is not accepted by the system because it does not lie within the permitted parameters or required method of payment for this scheme, the customer must be advised of this and asked to amend their payment amount or method of payment, if they wish to continue with the transaction. In the case of magnetic card and bar-coded payments for which the customer wishes to make a payment above the maximum limit, the clerk need not advise the customer but can accept the payment as two or more transactions.

4.1 Automated payment using a magnetic card

The customer is supplied with a magnetic stripe card by the utility or company to whom the account is payable. The card's magnetic stripe contains details of the customer's account or reference number with the company to whom the account is payable. The clerk swipes the card through the magnetic card reader and the system reads and processes the account/customer information held in the card.

4.1 Automated payment using a magnetic card (contd)

The procedure to accept an automated payment from a customer using a magnetic card is as follows:

Step 1. Obtain and check the customer's magnetic card and payment - Refer to the Counters Operations Manual.

Step 2. Swipe the card.

(The system displays the Amount screen.)

EXCEPTION A: If the card is not read, swipe the card again up to a maximum of THREE times, then:

- Enter the Primary Account Number manually (see Section 6.1. Entering a magnetic card's PAN manually).
- Proceed to step 3.

EXCEPTION B: If the magnetic card is corrupt, the system displays a message saying that the data has been read but not recognised [Message nPServerMsgs:00002]:

- Select the Tick option.
- Enter the PAN manually (see Section 6.1 Entering a magnetic card's PAN manually.)
- Proceed to step 3.

EXCEPTION B.1: If the system will not accept the PAN:

- Check the card to see if it appears valid for this type of payment at a post office (refer to the Counter Operations Manual) then proceed as follows:

SCENARIO B.1.1: If the card appears to be valid:

- Accept the transaction as a manual AP transaction.
- A call should be made to the Horizon System Helpdesk [Call Reference data:product detail incorrect].
- This ends the transaction.

SCENARIO B.1.2: If the card does not appear to be valid:

- Advise the customer that the card cannot be accepted.
- This ends the transaction.

4.1 Automated payment using a magnetic card (contd)

EXCEPTION C: If the magnetic card is not valid at this office or there is no matching reference data, the system says that the card or bar-code was not recognised [Message APS MessageDefs:MSG68]:

- Select the Tick option.
- Check the card to see if it appears valid for this type of payment at this post office then proceed as follows:

SCENARIO C.1: If the card appears to be valid:

- Accept the transaction as a manual AP transaction.
- A call should be made to the Horizon System Helpdesk [Call Reference data:product detail incorrect].
- This ends the transaction.

SCENARIO C.2: If the card does not appear to be valid:

- Advise the customer that the card cannot be accepted, and that the customer should present it at the correct office or contact the issuer.
- This ends the transaction.

Step 3. Place the card aside.

Step 4. Enter the amount that the customer wishes to pay and select the Tick option.

Step 5. The system displays the Method of Payment screen.

EXCEPTION A: If the value you have entered is too large, the system displays the Invalid Value screen showing the range of values allowed and a message saying that the value entered is outside the allowed range [Message EPOSS:MSG12]:

- Select the Tick option.
- Delete the current amount and proceed to step 4, ensuring that you enter an amount within the stated range. Unless otherwise stated, enter the amount as two or more separate transactions with all but the last being at the maximum level.

EXCEPTION B: If the value you have entered is too small, the system displays the Invalid Value screen showing the range of values allowed and a message saying that the value entered is outside the allowed range [Message EPOSS:MSG12]:

- Select the Tick option.

4.1 Automated payment using a magnetic card (contd)

- Advise the customer that the value of the payment must be within the range stated on the system and request them to amend the payment value.
- Delete the current amount and proceed to step 4, ensuring that you enter an amount within the stated range.

EXCEPTION B.1: If the customer doesn't wish to amend the value:

- Select the Previous option.
- This ends the transaction.

EXCEPTION C: If the value you have entered is an incorrect multiple, the system displays the Invalid Value screen and a message saying that the product can only be sold in specified multiples [Message APS MessageDefs:MSG431]:

- Select the Tick option.
- Advise the customer that the value of the payment must be a multiple as stated on the system and request them to amend the payment value.
- Delete the current amount and proceed to step 4, ensuring that you enter a stated multiple.

EXCEPTION C.1: If the customer doesn't wish to amend the value:

- Select the Previous option.
- This ends the transaction.

EXCEPTION D: If the customer changes their mind about the amount they wish to pay:

- Delete the current amount and proceed to step 4, ensuring that you enter the amount that the customer now wishes to pay.

Step 6. On the Method of Payment screen, select the appropriate method of payment.

Step 7. The system displays a message telling you to wait while the receipts are printed [Message APS MessageDefs:MSG377] and then the counter printer prints the first copy of the receipt.

The system displays a message telling you to tear off the printed receipt and confirm to print the next copy [Message EPOSS:MSG207].

4.1 Automated payment using a magnetic card (contd)

EXCEPTION A: If the printer is not available:

- The system displays the Printer Error screen with a Retry and a Cancel option.
- Check the printer connections (see the CSR+ Operating Environment PPD [Ref. CS/PRO/097]).
- Select the Retry option.
- Proceed to step 8.

EXCEPTION A.1: If the printer is still not available:

- Select the Cancel option and preview the receipt (see the CSR+ Operating Environment PPD [Ref. CS/PRO/097]).
- Make a manual copy of the receipt (see *Section 7.4.1 Producing manual receipts*).
- Proceed to step 11.

Step 8. Tear off the first copy of the receipt and select the Tick option.
(The counter printer prints a second copy of the receipt.)

EXCEPTION A: If the first copy of the receipt is illegible:

- Change the printer's print ribbon cassette cartridge (see the CSR+ Operating Environment PPD [Ref. CS/PRO/097]).
- Select the Tick option on the screen telling you to confirm to print the next copy.
- Proceed to step 10.

Step 9. While the second receipt is printing, hand the customer their magnetic card and the first copy of the receipt. (Advise the customer to retain their copy of the receipt as proof of payment.)

EXCEPTION A: If the printer is not available:

- The system displays the Printer Error screen with a Retry and a Cancel option.
- Check the printer connections (see the CSR+ Operating Environment PPD [Ref. CS/PRO/097]).
- Select the Retry option.
- Proceed to step 9.

4.1 Automated payment using a magnetic card (contd)

EXCEPTION A.1: If the printer is still not available:

- Select the Cancel option and preview the receipt (see the CSR+ Operating Environment PPD [Ref. CS/PRO/097]).
- Make a manual copy of the receipt (see *Section 7.4.1 Producing manual receipts*).
- Hand the customer their magnetic card and their copy of the manual receipt.
- Proceed to step 11.

Step 10. Tear off the second copy of the receipt and place it and the customer's payment in the drawer.

EXCEPTION A: If the second copy of the receipt was illegible and you had to change the printer's print ribbon cassette:

- Re-print the receipt to obtain a second copy as described in *Section 6.3 Re-printing an AP transaction receipt*.

EXCEPTION B: If you tear either copy of the receipt in half when removing it from the printer:

- Re-print the receipt to obtain another copy as described in *Section 6.3 Re-printing an AP transaction receipt*.

Step 11. Select the Finish option to settle the transaction.

(The system displays the Settlement screen. If this is a simple cash transaction, select the Fast Cash option to settle the transaction (see the CSR+ EPOSS PPD [Ref. CS/PRO/095] for information on settling transactions.)

EXCEPTION A: If the first copy of the receipt was illegible and you had to change the printer's print ribbon cassette:

- Re-print the receipt to obtain a first copy as described in *Section 6.3 Re-printing an AP transaction receipt*.
- Hand the customer their magnetic card and the reprinted receipt.
- Proceed to step 11.

EXCEPTION B: If another transaction has been requested:

- Refer to the appropriate PPD.

4.2 Automated payment using a bar-coded document

The bar-code from an AP document typically contains an Issuer Identification Number and customer account details. The clerk scans the document's bar-code with the bar-code reader and the system reads and processes the account/customer information contained in the bar-code.

The procedure to accept an automated payment from a customer with a bar-coded document is as follows:

Step 1. Obtain and check the customer's document and payment - Refer to the Counters Operations Manual.

Step 2. Scan the bar-code on the document.

(The system displays the Amount screen.)

EXCEPTION A: If the bar-code is not read, scan the bar-code again up to a maximum of THREE times, then:

- Enter the bar-code number manually (see *Section 6.2 Entering a bar-coded document's bar-code number manually*).

EXCEPTION A.1: If the bar-code is on a BT bill:

- Accept the payment as a manual BT payment and treat the bill as a non bar-coded bill. (For information on recording a receipt transaction, see the CSR+ EPOSS PPD [Ref. CS/PRO/095].)
 - This ends the transaction.
- Proceed to step 3.

EXCEPTION B: If the bar-code is read but is invalid, the system displays a message saying that the data has been read but not recognised [Message nPServerMsgs:00002]:
- Select the Tick option.
- Enter the bar-code number manually (see *Section 6.2 Entering a bar-coded document's bar-code number manually*).
- If you cannot enter the bar-code number manually, check the document to see if it appears valid for this type of payment at this post office then proceed as follows:

SCENARIO B.1: If the document appears to be valid:

- Accept the transaction as a manual AP transaction.
 - A call should be made to the Horizon System Helpdesk [Call Reference data:product detail incorrect].
 - This ends the transaction.

4.2 Automated payment using a bar-coded document (contd)

SCENARIO B.2: If the document does not appear to be valid:

- Advise the customer that the document cannot be accepted, and that the customer should present it at the correct office or contact the issuer.
- This ends the transaction.

EXCEPTION C: If the document is not valid at this office or there is no matching reference data, the system says that the card or bar-code was not recognised [Message APS MessageDefs:MSG68]:

- Select the Tick option.
- Check the document to see if it appears valid for this type of payment at this post office then proceed as follows:

SCENARIO C.1: If the document appears to be valid:

- Accept the transaction as a manual AP transaction.
- A call should be made to the Horizon System Helpdesk [Call Reference data:product detail incorrect].
- This ends the transaction.

SCENARIO C.2: If the document does not appear to be valid:

- Advise the customer that the document cannot be accepted, and that the customer should present it at the correct office or contact the issuer.
- This ends the transaction.

Step 3. Place the document aside.

SCENARIO A: If the bill indicates a default amount to be paid:

- The Amount screen shows the default amount.
- Select the Tick option to accept the default amount.
(The system displays the Method of Payment screen.)
- Proceed to step 4.

EXCEPTION A.1: If the client has created a default amount on the bar-coded bill which is higher than their maximum payment, the system displays the Invalid Value screen showing the range of values allowed and a message saying that the value is outside the allowed range [Message EPOSS:MSG12]:

- Select the Tick option.

4.2 Automated payment using a bar-coded document (contd)

- Delete the current amount, then enter an amount that is within the stated range and select the Tick option. Unless otherwise stated, enter the amount as two or more separate transactions with all but the last being at the maximum level.
- Proceed to step 4.

EXCEPTION A.2: If the client has created a default amount on the bar-coded bill which is lower than their minimum payment, the system displays the Invalid Value screen showing the range of values allowed and a message saying that the value is outside the allowed range [Message EPOSS:MSG12]:

- Select the Tick option.
- Advise the customer that the value of the payment must be within the range stated on the system and request them to amend the value of their payment.
- Delete the current amount, then enter an amount that is within the stated range and select the Tick option.
- Proceed to step 4.

EXCEPTION A.2.1: If the customer insists on paying the default amount:

- Select the Previous option.
- The bill should be taken as manual (for example, a bar-coded transcash bill should be taken as transcash).
- This ends the transaction.

EXCEPTION A.2.1.1: If there is no manual transaction:

- Advise the customer that the payment cannot be accepted.
- Select the Previous option.
- This ends the transaction.

EXCEPTION A.3: If the client has created a default amount on the bar-coded bill which is not in a multiple of their stated multiple, the system displays the Invalid Value screen and a message saying that the product can only be sold in specified multiples [Message APS MessageDefs:MSG431]:

- Select the Tick option.
- Advise the customer that the value of the payment must be a multiple as stated on the system and ask them for an amount which is a correct multiple.

4.2 Automated payment using a bar-coded document (contd)

- Delete the current amount, then enter an amount that is a stated multiple and select the Tick option.
- Proceed to step 4.

EXCEPTION A.3.1: If the customer insists on paying the default amount:

- The bill should be taken as manual (for example, a bar-coded transcash bill should be taken as transcash).
- This ends the transaction.

EXCEPTION A.3.1.1: If there is no manual transaction:

- Advise the customer that the payment cannot be accepted.
- This ends the transaction.

EXCEPTION A.4: If the customer changes their mind about the amount they wish to pay:

- Delete the default amount, then enter the amount that the customer now wishes to pay and select the Tick option.
- Proceed to step 4.

SCENARIO B: If the bill does not indicate a default amount to be paid:

- Enter the amount the customer wishes to pay.
- Select the Tick option.
(The system displays the Method of Payment screen.)
- Proceed to step 4.

EXCEPTION B.1: If the value you have entered is too large, the system displays the Invalid Value screen showing the range of values allowed and a message saying that the value entered is outside the allowed range [Message EPOSS:MSG12]:

- Select the Tick option.
- Delete the current amount, then enter an amount that is within the stated range and select the Tick option. Unless otherwise stated, enter the amount as two or more separate transactions with all but the last being at the maximum level.
- Proceed to step 4.

4.2 Automated payment using a bar-coded document (contd)

EXCEPTION B.2: If the value you have entered is too small, the system displays the Invalid Value screen showing the range of values allowed and a message saying that the value entered is outside the allowed range [Message EPOSS:MSG12]:

- Select the Tick option.
- Advise the customer that the value of the payment must be within the range stated on the system and request them to amend the payment value.
- Delete the current amount, then enter an amount that is within the stated range and select the Tick option.
- Proceed to step 4.

EXCEPTION B.2.1: If the customer doesn't wish to amend the value:

- Select the Previous option.
- The bill should be taken as manual (for example, a bar-coded transcash bill should be taken as transcash).
- This ends the transaction.

EXCEPTION B.2.1.1: If there is no manual transaction:

- Advise the customer that the payment cannot be accepted.
- Select the Previous option.
- This ends the transaction.

EXCEPTION B.3: If the value you have entered is an incorrect multiple, the system displays the Invalid Value screen and a message saying that the product can only be sold in specified multiples [Message APS MessageDefs:MSG431]:

- Select the Tick option.
- Advise the customer that the value of the payment must be a multiple as stated on the system and request them to amend the payment value.
- Delete the current amount, then enter an amount that is a stated multiple and select the Tick option.
- Proceed to step 4.

EXCEPTION B.3.1: If the customer doesn't wish to amend the value:

- Select the Previous option.

4.2 Automated payment using a bar-coded document (contd)

- The bill should be taken as manual (for example, a bar-coded transcash bill should be taken as transcash).
- This ends the transaction.

EXCEPTION B.3.1.1: If there is no manual transaction:

- Advise the customer that the payment cannot be accepted.
- This ends the transaction.

EXCEPTION B.4: If the customer changes their mind about the amount they wish to pay:

- Delete the current amount, then enter the amount that the customer now wishes to pay and select the Tick option.
- Proceed to step 4.

Step 4. On the Method of Payment screen, select the appropriate method of payment.

Step 5. The system displays a message telling you to wait while the receipts are printed [Message APS MessageDefs:MSG377] and then the counter printer prints the first copy of the receipt.
The system displays a message telling you to tear off the printed receipt and confirm to print the next copy [Message EPOSS:MSG207]).

EXCEPTION A: If the printer is not available:

- The system displays the Printer Error screen with a Retry and a Cancel option.
- Check the printer connections (see the CSR+ Operating Environment PPD [Ref. CS/PRO/097]).
- Select the Retry option.
- Proceed to step 6.

EXCEPTION A.1: If the printer is still not available:

- Select the Cancel option and preview the receipt (see the CSR+ Operating Environment PPD [Ref. CS/PRO/097]).
- Make a manual copy of the receipt (see *Section 7.4.1 Producing manual receipts*).
- Proceed to step 9.

4.2 Automated payment using a bar-coded document (contd)

Step 6. Tear off the first copy of the receipt and select the Tick option.

(The counter printer prints a second copy of the receipt.)

EXCEPTION A: If the first copy of the receipt is illegible:

- Change the printer's print ribbon cassette cartridge (see the CSR+ Operating Environment PPD [Ref. CS/PRO/097]).
- Select the Tick option on the screen telling you to confirm to print the next copy.
- Proceed to step 8.

Step 7. While the second receipt is printing, hand the customer their bar-coded document and the first copy of the receipt. (Advise the customer to retain their copy of the receipt as proof of payment.)

EXCEPTION A: If the printer is not available:

- The system displays the Printer Error screen with a Retry and a Cancel option.
- Check the printer connections (see the CSR+ Operating Environment PPD [Ref. CS/PRO/097]).
- Select the Retry option.
- Proceed to step 7.

EXCEPTION A.1: If the printer is still not available:

- Select the Cancel option and preview the receipt (see the CSR+ Operating Environment PPD [Ref. CS/PRO/097]).
- Make a manual copy of the receipt (see *Section 7.4.1 Producing manual receipts*).
- Hand the customer their bar-coded document and their copy of the manual receipt.
- Proceed to step 9.

Step 8. Tear off the second copy of the receipt and place it and the customer's payment in the drawer.

EXCEPTION A: If the second copy of the receipt was illegible and you had to change the printer's print ribbon cassette:

- Re-print the receipt to obtain a second copy as described in *Section 6.3 Re-printing an AP transaction receipt*.

EXCEPTION B: If you have torn either copy of the receipt in half when removing it from the printer:

- Re-print the receipt to obtain another copy as described in *Section 6.3 Re-printing an AP transaction receipt*.

4.2 Automated payment using a bar-coded document (contd)

Step 9. Select the Finish option to settle the transaction.

(The system displays the Settlement screen. If this is a simple cash transaction, select the Fast Cash option to settle the transaction (see the CSR+ EPOSS PPD [Ref. CS/PRO/095] for information on settling transactions).

EXCEPTION A: If the first copy of the receipt was illegible and you had to change the printer's print ribbon cassette:

- Re-print the receipt to obtain a first copy as described in *Section 6.3 Re-printing an AP transaction receipt*.
- Hand the customer their bar-coded document and the reprinted receipt.
- Proceed to step 9.

EXCEPTION B: If another transaction has been requested:

- Refer to the appropriate PPD.

4.3 Automated payment using a smart card

The customer is supplied with a smart card by the utility or company to whom the account is payable. The card's memory contains details of the customer's account or reference number with the company to whom the account is payable. The clerk inserts the card into the smart card reader and the system reads and updates the account/customer information held on the card. The card must be left in the card reader until the system displays a message to remove it; premature removal could cause corruption of the card. If the system detects a mismatch with the reference data, the clerk is advised to contact the Horizon System Helpdesk. If the transaction is abandoned after the Amount screen has been displayed, a receipt is produced.

The procedure to accept an automated payment from a customer using a smart card is as follows:

Step 1. Obtain and check the customer's smart card and payment - Refer to the Counters Operations Manual.

Step 2. Insert the card into the smart card reader.

The system displays a message saying that it is processing the card and that the card must not be removed until instructed [Message APS SMStdMessages:Msg00105].

4.3 Automated payment using a smart card (contd)

EXCEPTION A: If the system displays a message saying the product you have tried to sell is not currently in use [Message APS MessageDefs:MSG433]:

- Select the Tick option.
- Remove the card when prompted [Message APS SMStdMessages:Msg00102] and return it to the customer.
- Telephone the Horizon System Helpdesk [Call Reference data:Product detail incorrect].

EXCEPTION B: If a Quantum card contains 'MN' in positions 5 and 6 of the customer ID file, the system displays a message telling you that this is an Invalid card/Customer Id [Message APS SMStdMessages:Msg29015]:

- Select the Tick option.
- Tell the customer to contact the utility company.
- Proceed to step 7.

EXCEPTION C: If the smart card is not valid at this office or there is no matching reference data, the system says that the card or bar-code was not recognised [Message APS MessageDefs:MSG68]:

- Select the Tick option.
- Remove the card when prompted [Message APS SMStdMessages:Msg00102].
- Check the card to see if it appears valid for this type of payment at a post office then proceed as follows:

SCENARIO C.1: If the card appears to be valid:

- Advise the customer that the card cannot be accepted at this post office at this time. They may wish to try another post office.
- A call should be made to the Horizon System Helpdesk [Call Reference data:product detail incorrect].
- This ends the transaction.

SCENARIO C.2: If the card does not appear to be valid:

- Advise the customer that the card cannot be accepted.
- This ends the transaction.

Step 3. The system displays the Amount screen, showing the initial credit for this card.

4.3 Automated payment using a smart card (contd)

EXCEPTION A: If there is credit on an SPM card, the system displays a message telling you that the card already contains some credit and cannot be charged until the existing credit has been used [Message APS SMStdMessages:Msg29031]:

- Select the Tick option.
- Remove the smart card when prompted (Message APS SMStdMessages:Msg00102) and return it to the customer.
- Ask the customer to use the credit.
- This ends the transaction.

Step 4. Enter the amount that the customer wishes to pay and select the Tick option.

EXCEPTION A: If the customer does not wish to pay an amount but only to know how much is on the card:

- Advise the customer of the current credit shown in the screen details.
- Select the Previous option (or enter an amount of zero and select the Tick option).
- Proceed to step 7.

Step 5. The system displays the Method of Payment screen.

EXCEPTION A: If the card was already full, and you have entered an amount of more than zero, the system displays a message saying that the card is full [Message APS MessageDefs:MSG428 value=1]:

- Select the Tick option.
- Advise the customer that the card is full.
- Proceed to step 7.

EXCEPTION B: If the value you have entered is outside the allowed range, the system displays a message saying that it is unable to make the credit adjustment [Message APS MessageDefs:MSG428 values 2 and 3]:

- Select the Tick option.
- Advise the customer that the value of the payment must be within the range stated on the system and request them to amend the payment value.
- Delete the current amount and proceed to step 4, ensuring that you enter an amount that is within the stated range.

4.3 Automated payment using a smart card (contd)

EXCEPTION B.1: If the customer doesn't wish to amend the value:

- Select the Previous option.
- Proceed to step 7.

EXCEPTION C: If the customer changes their mind about the amount they wish to pay:

- Delete the current amount and proceed to step 4, ensuring that you enter the amount that the customer now wishes to pay.

For other exceptions that could occur, see Section 6.4 Dealing with smart card transaction exceptions.

Step 6. On the Method of Payment screen, select the appropriate method of payment.

Step 7. Remove the smart card when prompted [Message APS SMStdMessages:Msg00101 (if the transaction completed successfully) or Msg00102 (if the transaction was abandoned)].

Step 8. The system displays a message telling you to wait while the receipts are printed [Message APS MessageDefs:MSG377] and then the counter printer prints the first copy of the receipt.
The system displays a message telling you to tear off the printed receipt and confirm to print the next copy [Message EPOSS:MSG207].

EXCEPTION A: If the printer is not available:

- The system displays the Printer Error screen with a Retry and a Cancel option.
- Check the printer connections (see the CSR+ Operating Environment PPD [Ref. CS/PRO/097]).
- Select the Retry option.
- Proceed to step 9.

EXCEPTION A.1: If the printer is still not available:

- Select the Cancel option and preview the receipt (see the CSR+ Operating Environment PPD [Ref. CS/PRO/097]).
- Make a manual copy of the receipt (see *Section 7.4.1 Producing manual receipts*).
- Proceed to step 12.

Step 9. Tear off the first copy of the receipt and select the Tick option.
(The counter printer prints a second copy of the receipt.)

4.3 Automated payment using a smart card (contd)

EXCEPTION A: If the first copy of the receipt is illegible:

- Change the printer's print ribbon cassette cartridge (see the CSR+ Operating Environment PPD [Ref. CS/PRO/097]).
- Select the Tick option on the screen telling you to confirm to print the next copy.
- Proceed to step 11.

Step 10. While the second receipt is printing, hand the customer their smart card and the first copy of the receipt. (Advise the customer to retain their copy of the receipt as proof of payment.)

EXCEPTION A: If the printer is not available:

- The system displays the Printer Error screen with a Retry and a Cancel option.
- Check the printer connections (see the CSR+ Operating Environment PPD [Ref. CS/PRO/097]).
- Select the Retry option.
- Proceed to step 10.

EXCEPTION A.1: If the printer is still not available:

- Select the Cancel option and preview the receipt (see the CSR+ Operating Environment PPD [Ref. CS/PRO/097]).
- Make a manual copy of the receipt (see *Section 7.4.1 Producing manual receipts*).
- Hand the customer their smart card and their copy of the manual receipt.
- Proceed to step 12.

Step 11. Tear off the second copy of the receipt and place it and the customer's payment in the drawer.

EXCEPTION A: If the second copy of the receipt was illegible and you had to change the printer's print ribbon cassette:

- Re-print the receipt to obtain a second copy as described in *Section 6.3 Re-printing an AP transaction receipt*.

EXCEPTION B: If you tear either copy of the receipt in half when removing it from the printer:

- Re-print the receipt to obtain another copy as described in *Section 6.3 Re-printing an AP transaction receipt*.

4.3 Automated payment using a smart card (contd)

Step 12. Select the Finish option to settle the transaction.

(The system displays the Settlement screen. If this is a simple cash transaction, select the Fast Cash option to settle the transaction (see the CSR+ EPOSS PPD [Ref. CS/PRO/095] for information on settling transactions.)

EXCEPTION A: If the first copy of the receipt was illegible and you had to change the printer's print ribbon cassette:

- Re-print the receipt to obtain a first copy as described in *Section 6.3 Re-printing an AP transaction receipt*.
- Hand the customer their smart card and the reprinted receipt.
- Proceed to step 12.

EXCEPTION B: If another transaction has been requested:

- Refer to the appropriate PPD.

4.4 Reversing AP transactions

AP transactions cannot be voided once an amount has been entered and a receipt has been printed. If, for example, the customer wants their money back, the transaction must be completed and then reversed.

Business rules:

- The customer must present a receipt for the original transaction.
- A transaction cannot be reversed if it has been forwarded to POCL or the Client.
- A transaction must be available for reversal until the end of the business day on which it was performed.
- Eligibility for reversal is subject to the constraints of the token technology of the transaction and the AP Client Specification.
- Reversals are not available during manual periods of operation.

System rules:

- Transactions shall only be reversed in the office in which the original transaction took place.
- A transaction must be reversed in the stock unit used for the original transaction.
- For a smart card transaction, the customer must present the card used in the original transaction.
- A transaction cannot be reversed after the end of day marker has been set for the day in which the original transaction took place.

-
- A previously reversed transaction cannot be reversed.
 - A reversal transaction cannot be reversed.
 - Eligibility for reversal is determined by reference data.
 - A reversal must take place within the same Cash Account Period (CAP) as the original transaction, even if the end of day marker has not been set.
 - The original transaction number must be known.
 - In a multi-counter position outlet, if a counter is operational but disconnected from the local site LAN, a reversal is not permitted at that counter. This rule does not apply in single counter position outlets.
 - A transaction reversal is not allowed until the customer session in which the original transaction was performed is complete.
 - An SPM card reversal must take place within a predefined time of the original transaction. The time limit is specified in a parameter that is centrally configurable in the Horizon system's message store, and is set to a value defined by Post Office Counters Ltd.

4.4.1 Reversing an AP transaction: procedure

The procedure to reverse an AP transaction is as follows:

Step 1. Obtain the receipt for the original transaction from the customer - refer to the Counters Operations Manual.

Step 2. From the Serve Customer screen, select the Desktop option, the Transactions option, the Reversals option then the AP Reversal option.

(The system displays the Transaction Reference screen.)

Step 3. Enter the APS transaction number of the AP transaction to be reversed (the number is shown on the receipt) and select the Tick option.

Step 4. The system displays the transaction details and a message saying that you need to verify the transaction details and touch Continue to reverse the transaction [Message APS MessageDefs:MSG147].

Proceed as follows:

SCENARIO A: If the transaction details are those of the transaction to be reversed:

- Select the Tick option.
- Proceed to step 5.

SCENARIO B: If the transaction details are not those of the transaction to be reversed:

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- Select the Cross option.
(The system displays the Reversals menu.)
- This ends the transaction.

4.4.1 Reversing an AP transaction: procedure (contd)

EXCEPTION A: If the product is one for which reversals are not allowed, the system displays a message saying that reversals for this product are not allowed and that the transaction cannot be reversed [Message EPOSS:MSG85 (for a magnetic card or bar-coded document transaction) or APS MessageDefs:MSG434 (for a smart card transaction)]:

SCENARIO A.1: If you have made a mistake and wish to re-enter the APS Transaction number:

- Select the Tick option.
(The system displays the Transaction Reference screen.)
- Re-enter the APS Transaction number.
- Proceed to step 5.

SCENARIO A.2: If you do not wish to re-enter the APS Transaction number:

- Select the Previous option.
(The system displays the Reversals menu.)
- This ends the transaction.

EXCEPTION B: If the transaction is already a reversal, the system displays a message saying that the transaction has already been reversed and giving details of the user performing the reversal and the date and time [Message EPOSS:MSG82 (for a magnetic card or bar-coded document transaction) or APS MessageDefs:MSG440 (for a smart card transaction)]:

SCENARIO B.1: If you have made a mistake and wish to re-enter the APS Transaction number:

- Select the Tick option.
(The system displays the Transaction Reference screen.)
- Re-enter the APS Transaction number.
- Proceed to step 5.

SCENARIO B.2: If you do not wish to re-enter the APS Transaction number:

- Select the Previous option.
(The system displays the Reversals menu.)
- This ends the transaction.

4.4.1 Reversing an AP transaction: procedure (contd)

EXCEPTION C: If the transaction was not performed at the current stock unit, the system displays a message saying that the transaction cannot be reversed [Message APS MessageDefs:MSG442]:

SCENARIO C.1: If you have made a mistake and wish to re-enter the APS Transaction number:

- Select the Tick option.
(The system displays the Transaction Reference screen.)
- Re-enter the APS Transaction number.
- Proceed to step 5.

SCENARIO C.2: If you do not wish to re-enter the APS Transaction number:

- Select the Previous option.
(The system displays the Reversals menu.)
- This ends the transaction.

EXCEPTION D: If the AP Transaction was not found in the current CAP, the system displays a message saying that the transaction cannot be reversed [Message APS MessageDefs:MSG441]:

SCENARIO D.1: If you have made a mistake and wish to re-enter the APS Transaction number:

- Select the Tick option.
(The system displays the Transaction Reference screen.)
- Re-enter the APS Transaction number.
- Proceed to step 5.

SCENARIO D.2: If you do not wish to re-enter the APS Transaction number:

- Select the Previous option.
(The system displays the Reversals menu.)
- This ends the transaction.

EXCEPTION E: If the end of day marker has been set for the day in which the original transaction took place, the system tells you that the AP End of Day cut-off rule applies [Message APS MessageDefs:MSG80]:

SCENARIO E.1: If you have made a mistake and wish to re-enter the APS Transaction number:

- Select the Tick option.
(The system displays the Transaction Reference screen.)

4.4.1 Reversing an AP transaction: procedure (contd)

- Re-enter the APS Transaction number.
- Proceed to step 5.

SCENARIO E.2: If you do not wish to re-enter the APS Transaction number:

- Select the Previous option.
(The system displays the Reversals menu.)
- This ends the transaction.

EXCEPTION F: If details of this transaction already exist in the internal recovery data maintained by APS, the system tells you to perform session recovery [Message APS MessageDefs:MSG437]:

SCENARIO F.1: If you have made a mistake and wish to re-enter the APS Transaction number:

- Select the Tick option.
(The system displays the Transaction Reference screen.)
- Re-enter the APS Transaction number.
- Proceed to step 5.

SCENARIO F.2: If you do not wish to re-enter the APS Transaction number:

- Select the Previous option.
(The system displays the Reversals menu.)
- Perform session recovery at the node specified in the message (see *Section 8.1 Session recovery procedure*) then retry the reversal transaction (at any workstation).

EXCEPTION F.2.1: If session recovery cannot be performed:

- This ends the transaction.

EXCEPTION G: If the transaction reference number relates to an SPM card transaction for which the reversal's time limit has expired, the system displays a message saying that the time limit for reversing this transaction has been exceeded [Message APS MessageDefs:MSG462]:

SCENARIO G.1: If you have made a mistake and wish to re-enter the APS Transaction number:

- Select the Tick option.
(The system displays the Transaction Reference screen.)
- Re-enter the APS Transaction number.
- Proceed to step 5.

4.4.1 Reversing an AP transaction: procedure (contd)

SCENARIO G.2: If you do not wish to re-enter the APS Transaction number:

- Select the Previous option.
(The system displays the Reversals menu.)
- This ends the transaction.

Step 5. Proceed as follows:

SCENARIO A: If the transaction being reversed is a smart card transaction:

- Insert the card when prompted [Message APS SMStdMessages:Msg00106].
- The system displays a message saying that it is processing the card and that the card must not be removed until instructed [Message APS SMStdMessages:Msg00105].

EXCEPTION A.1: If the wrong card is inserted, the system displays a message asking you to remove this card and insert the correct one [Message APS SMStdMessages:Msg29000]:

- Remove the wrong card.
- Insert the correct card when prompted [Message APS SMStdMessages:Msg00109].

EXCEPTION A.1.1: If the correct card is not available:

- Advise the customer that the transaction cannot be reversed.
- Select the Cancel option. (The system displays the Reversals menu.)
- This ends the transaction.
- Remove the card when prompted and return it to the customer [Message APS SMStdMessages:Msg00101].

EXCEPTION A.2: If any problems are encountered:

- See Section 6.4 Dealing with smart card transaction exceptions.
- Proceed to step 6.

SCENARIO B: If the transaction being reversed is not a smart card transaction:

- Proceed to step 6.

Step 6. The system displays a message telling you to wait while the receipts are printed [Message APS MessageDefs:MSG377] and then the counter printer prints the first copy of the receipt for the reversal transaction.

4.4.1 Reversing an AP transaction: procedure (contd)

The system displays a message telling you to tear off the printed receipt and confirm to print the next copy [Message EPOSS:MSG207].

EXCEPTION A: If a magnetic card or bar-coded document transaction is not reversed successfully, the system displays a message saying that the reversal has failed and telling the user to contact the Horizon System Helpdesk [Message EPOSS:MSG79]:

- Select the Tick option.
- Telephone the Horizon System Helpdesk [Call Software:software error or Reference data:POCL reference data incorrect].

EXCEPTION B: If the printer is not available:

- The system displays the Printer Error screen with a Retry and a Cancel option.
- Check the printer connections (see the CSR+ Operating Environment PPD [Ref. CS/PRO/097]).
- Select the Retry option.
- Proceed to step 7.

EXCEPTION B.1: If the printer is still not available:

- Select the Cancel option and preview the receipt (see the CSR+ Operating Environment PPD [Ref. CS/PRO/097]).
- Make a manual copy of the receipt (see *Section 7.4.1 Producing manual receipts*).
- Proceed to step 8.

Step 7. Tear off the first copy of the receipt and select the Tick option.

(The counter printer prints a second copy of the receipt and displays the Serve Customer menu.)

EXCEPTION A: If the first copy of the receipt is illegible:

- Change the printer's print ribbon cassette cartridge (see the CSR+ Operating Environment PPD [Ref. CS/PRO/097]).
- Select the Tick option on the screen telling you to confirm to print the next copy.
- Make a manual copy of the receipt (see *Section 7.4.1 Producing manual receipts in the event of printer failure*).
- Proceed to step 8.

EXCEPTION B: If the printer is not available to print the second copy:

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-
- The system displays the Printer Error screen with a Retry and a Cancel option.

4.4.1 Reversing an AP transaction: procedure (contd)

- Check the printer connections (see the CSR+ Operating Environment PPD [Ref. CS/PRO/097]).
- Select the Retry option.
- Proceed to step 8.

EXCEPTION B.1: If the printer is still not available:

- Select the Cancel option and preview the receipt (see the CSR+ Operating Environment PPD [Ref. CS/PRO/097]).
- Make a manual copy of the receipt (see *Section 7.4.1 Producing manual receipts*).
- Perform step 8.
- This ends the transaction.

Step 8. Hand the customer:

- The refund.
- The first copy of the receipt.

Step 9. Tear off the second copy of the receipt, attach it to the original receipt and retain them both in the drawer.

EXCEPTION A: If the second copy of the receipt was illegible:

- Make a manual copy of the receipt (see *Section 7.4.1 Producing manual receipts in the event of printer failure*).

EXCEPTION B: If you tear either copy of the receipt in half when removing it from the printer:

- Make a manual copy of the receipt (see *Section 7.4.1 Producing manual receipts in the event of printer failure*).

5 Production of reports

This section describes the production of:

- The AP transactions report.
- The AP transactions By User report.

5.1 AP transactions report

This report is produced in order to list the day's AP transactions performed for a stock unit. The report can be used to aid fallback recovery procedures (capturing on the system details of transactions performed manually while the system was down). The user matches their receipts against the AP transactions report to ascertain which transactions have not been recorded on the system; unlisted transactions will need to be entered on the system as described in *Section 8.3 Fallback recovery procedure*. While not being a mandatory report in Horizon system terms (that is, the report does not need to be produced to enable stock unit balancing), the AP transactions report is a mandatory report in Post Office terms.

5.1.1 Producing an AP transactions report

The procedure to produce an AP transactions report is as follows:

Step 1. From the Reports menu, select the Counter Daily option.

(The system displays the Reports Counter Daily menu.)

Step 2. From the Reports Counter Daily menu, select the AP Transactions option.

(The system displays the AP Transaction List report screen. The screen shows the stock unit Id, the Cash Account period and the balance period.)

Step 3. Do you wish to preview the report?

SCENARIO A: If you wish to preview the report:

- Select the Preview option.
(The system displays the report on the screen.)
- Proceed to step 4.

SCENARIO B: If you do not wish to preview the report:

- Proceed to step 4.

Step 4. Do you wish to print the report?

SCENARIO A: If you wish to print the report:

- Select the Print option.
(The printer prints the report.)

5.1.1 Producing an AP transactions report

- Proceed to step 5.

SCENARIO B: If you do not wish to print the report:

- Proceed to step 5.

Step 5. Do you require clearing of totals?

SCENARIO A: If you require clearing of totals:

- Select the Cut Off option.
(The system clears totals.)

- Proceed to step 6.

SCENARIO B: If you do not require clearing of totals:

- Proceed to step 6.

Step 6. Select the Exit option.

(The system displays the Reports Counter Daily menu.)

This ends the transaction.

5.2 AP transactions By User report

This report shows the AP transactions performed by a selected user. The report produced lists transactions performed between the last and penultimate cut-off reports. The report is an optional report in both Horizon system and Post Office terms.

5.2.1 Producing an AP transactions By User report

The procedure to produce an AP transactions By User report is as follows:

Step 1. From the Reports menu, select the By User option.

(The system displays the Reports By User menu.)

Step 2. From the Reports By User menu, select the APS transactions option.

(The system displays the User selection screen.)

Step 3. Select the appropriate user from the pick list and select the Select option.

(The system displays the Produce Report by User AP Transaction List screen. The screen shows the currently logged-in stock unit Id, the Cash Account period, the balance period and the user's Id.)

Step 4. Do you wish to preview the report?

SCENARIO A: If you wish to preview the report:

- Select the Preview option.
(The system displays the report on the screen.)

5.2.1 Producing an AP transactions By User report (contd)

- Proceed to step 5.

SCENARIO B: If you do not wish to preview the report:

- Proceed to step 5.

Step 5. Do you wish to print the report?

SCENARIO A: If you wish to print the report:

- Select the Print option.
(The printer prints the report.)
- Proceed to step 6.

SCENARIO B: If you do not wish to print the report:

- Proceed to step 6.

Step 6. Select the Exit option.

(The system displays the Reports By User menu.)
This ends the transaction.

6 General processes and procedures

This section describes how to:

- Enter a magnetic card's PAN manually.
- Enter a bar-coded document's bar-code number manually.
- Re-print an AP transaction receipt.
- Deal with smart card transaction exceptions.

6.1 Entering a magnetic card's PAN manually

If a magnetic card cannot be read by the magnetic card reader, use this procedure to enter the PAN manually.

The procedure to enter a PAN manually from a magnetic card is as follows:

Step 1. Select Other Products, Utilities then the AP Receipt option.

(The system displays the Token Type screen.)

Step 2. Select the appropriate token type (mag card).

(The system displays the Reference Number screen.)

EXCEPTION A: If you have selected the wrong token type:

- Select the Token Type field on the AP Manual Process panel.
(The system re-displays the Token Type screen.)
- Select the correct token type and select the Tick option.
(The system displays the Reference Number screen.)
- Proceed to step 3.

Step 3. Enter the PAN shown on the magnetic card.

(The PAN is the number shown in a large type-face on the card. The PAN is usually embossed.)

Step 4. Select the Tick option.

(The system displays the Amount screen.)

EXCEPTION A: If the Service Code is not embedded in the PAN:

(The system displays the Service Code screen.)

- Enter the Service Code.
(The Service Code is the number(s) usually shown at the extreme left of the bottom line on the magnetic card. There may be between one and four digits in the Service Code. If the Service Code starts with a leading zero, the zero must be entered.)
- Proceed to step 5.

6.1 Entering a magnetic card's PAN manually (contd)

EXCEPTION A.1: If you have entered the Service Code incorrectly, the system displays an error message [Message APS MessageDefs:MSG519]:

- Select the Tick option.
- Re-enter the Service Code and select the Tick option.
- Proceed to step 5.

EXCEPTION B: If you have entered the wrong number, the system says that the card or bar-code was not recognised [Message APS MessageDefs:MSG68]:

- Select the Tick option.
- Re-enter the PAN.
- Proceed to step 5.

EXCEPTION B.1: If you have entered the correct number but the system still says that the card or bar-code was not recognised [Message APS MessageDefs:MSG68]:

- Check the card to see if it appears valid for this type of payment at a post office then proceed as follows:

SCENARIO B.1.1: If the card appears to be valid:

- Accept the transaction as a manual AP transaction.
- A call should be made to the Horizon System Helpdesk [Call Reference data:product detail incorrect].
- This ends the transaction.

SCENARIO B.1.2: If the card does not appear to be valid:

- Advise the customer that the card cannot be accepted.
- This ends the transaction.

Step 5. Continue in accordance with the procedure described in Section 4.1 Automated payment using a magnetic card starting from step 3.

6.2 Entering a bar-coded document's bar-code number manually

If a bar-coded document's bar-code cannot be read by the bar-code reader, use this procedure to enter the number manually.

Business rule:

- This procedure should not be used for BT bar-coded bills.

6.2 Entering a bar-coded document's bar-code number manually (contd)

The procedure to enter the bar-code number manually from a bar-coded document is as follows:

Step 1. Select Other Products, Utilities then the AP Receipt option.

(The system displays the Token Type screen.)

Step 2. Select the appropriate token type (bar-code).

(The system displays the Reference Number screen.)

EXCEPTION A: If you have selected the wrong token type:

- Select the Token Type field.
(The system re-displays the Token Type screen.)
- Select the correct token type and select the Tick option.
(The system displays the Reference Number screen.)
- Proceed to step 3.

Step 3. Enter the bar-code number from the bar-coded document, using the Backspace key to delete any mis-typed digits.

The number is shown near the document's bar-code.

Step 4. Select the Tick option.

(The system displays the Amount screen.)

EXCEPTION A: If you have entered the wrong number, the system says that the card or bar-code was not recognised [Message APS MessageDefs:MSG68]:

- Select the Tick option.
- Re-enter the bar-code number.
- Proceed to step 5.

EXCEPTION A.1: If you have entered the correct number but the system still says that the card or bar-code was not recognised [Message APS MessageDefs:MSG68]:

- Check the document to see if it appears valid for this type of payment at a post office then proceed as follows:

SCENARIO A.1.1: If the document appears to be valid:

- Accept the transaction as a manual AP transaction.
- A call should be made to the Horizon System Helpdesk [Call Reference data:product detail incorrect].
- This ends the transaction.

6.2 Entering a bar-coded document's bar-code number manually (contd)

SCENARIO A.1.2: If the document does not appear to be valid:

- Advise the customer that the document cannot be accepted.
- This ends the transaction.

Step 5. Continue in accordance with the procedures described in Section 4.2 Automated payment using a bar-coded document starting from step 3.

6.3 Re-printing an AP transaction receipt

A customer copy and an office copy receipt are produced automatically by the system for every committed transaction. However, should there be any problems with the system-produced receipts (for example, torn receipts or illegible receipts), you can re-print a receipt as many times as necessary prior to settling the customer session.

System rules:

- A reprint (copy) receipt for the customer session can be printed provided that the session has not been settled.
- Since reversal transactions are settled automatically, reversal receipts cannot be reprinted. (Selection of the reprint facility under these circumstances would produce a reprint of the session receipt.)

6.3.1 Re-printing an AP receipt: procedure

The procedure to reprint an AP receipt is as follows:

Step 1. From the Desktop, select the Transaction option, the Serve Customer option, the Functions option, then the Reprint Receipt option (or press the RECPT key after the second copy of the receipt has been printed and before the session has been settled).

(The system displays a pick list showing the AP transactions in the current customer session.)

Step 2. From the displayed pick list, select the AP transaction for which you wish to reprint a receipt.

Note: a pick list is displayed because the EPOSS facilities are used to re-print the APS receipt before the session is settled. EPOSS does not know automatically what to print (it could be the session receipt or any APS transactions within the session) and for this reason the system displays a pick list.

Step 3. Select the Select option.

(The counter printer prints the receipt.)

6.4 Dealing with smart card transaction exceptions

This section describes exceptions that could occur during payment or reversal smart card transactions. If the exception occurs after the Amount screen has been displayed, a receipt is produced. Where the exception causes a payment transaction to be ended, the customer's money needs to be returned.

EXCEPTION A: If the system displays a message saying that the application associated with this card could not be started [Message APS SMStdMessages:Msg00100]:

- Select the Tick option.
- Retry the transaction.
- If the problem persists, telephone the Horizon System Helpdesk [Call Software:software error].

EXCEPTION B: If the system displays a message asking you to remove and re-insert the card [Message APS SMStdMessages:Msg00107]:

- Remove and re-insert the card, checking that is the right way round.
- Continue with the procedure.

EXCEPTION B.1: If the system redisplay the message asking you to remove and re-insert the card [Message APS SMStdMessages:Msg00107]:

- Remove the card, clean the card's contacts (the gold metallic areas) with a Horizon cleaning wipe, then re-insert the card.
- Continue with the procedure.

EXCEPTION B.1.1: If the system displays a message saying that it is unable to read details from the card [Message APS SMStdMessages:Msg29003]:

- Select the Tick option.
- Ask the customer to return the card to the utility company for a replacement.
- Remove the card and return to the customer.
- This ends the transaction.

6.4 Dealing with smart card transaction exceptions (contd)

EXCEPTION C: If the system displays a message saying that this smart card type is not currently supported [Message APS SMStdMessages: Msg29001]:

- Select the Tick option.
- Check the card to see if it appears valid for payment at this post office then proceed as follows:

SCENARIO C.1: If the card appears valid:

- Telephone the Horizon System Helpdesk [Call Reference data:missing icon/product (core product and AP)].

SCENARIO C.2: If the card does not appear valid:

- Advise the customer that the card cannot be accepted.
- This ends the transaction.'

EXCEPTION D: If the system displays a message saying that transactions for this utility company or this customer are not allowed at this office [Message APS SMStdMessages: Msg29002 or 29014]:

- Select the Tick option.
- Ask the customer to use the office indicated by the utility company.
- Remove the card and return to the customer.
- This ends the transaction.

EXCEPTION E: If the system displays a message saying that this card is corrupt [Message APS SMStdMessages:Msg29005 or 29007] (this could occur if the card was removed while a previous transaction was in progress):

- Select the Tick option.
- Remove the card when prompted [Message APS SMStdMessages:Msg00102] and return it to the customer.
- Ask the customer to return it to the utility company for a replacement.
- This ends the transaction.

6.4 Dealing with smart card transaction exceptions (contd)

EXCEPTION F: If the system displays a message saying an error has occurred applying global, private or tariff data [Message APS SMStdMessages: Msg29020, 29021 or 29022]:

- Select the Tick option.
- Remove the card when prompted [Message APS SMStdMessages:Msg00102] and return it to the customer.
- Ask the customer to reset the card by inserting it into the utility company's meter or to return it to the utility company for a replacement [Msg29020 and 29021], or ask the customer to reset the card by inserting it into the utility company's meter and if the error persists to contact the utility company [Msg29022].
- This ends the transaction.

EXCEPTION G: If the system displays a message saying that it is unable to write data to this card [Message APS SMStdMessages:Msg29041]:

- Select the Tick option.
- Remove the card when prompted [Message APS SMStdMessages:Msg00102].
- Ask the customer whether this problem has occurred before.

SCENARIO G.1: If the customer is not aware that this problem has occurred before:

- Retry the transaction at this counter.
- If the problem persists, return the card to the customer and ask the customer to try the transaction at another counter (in a multi-counter office) or another post office (in a single-counter office).

SCENARIO G.2: If the customer is aware that this problem has occurred before:

- Return the card to the customer.
- Ask the customer to return it to the utility company for a replacement.
- This ends the transaction.

6.4 Dealing with smart card transaction exceptions (contd)

EXCEPTION H: If the system displays a message saying this card cannot be accessed [Message APS SMStdMessages:Msg29120]:

- Select the Tick option.
- Remove the card when prompted [Message APS SMStdMessages:Msg00102] and return it to the customer.
- Ask the customer to return it to the utility company for a replacement.
- This ends the transaction.

EXCEPTION I: If the system displays a message saying that the transaction could not be performed at this time [Message APS SMStdMessages:Msg29998 (for an SPM card) or Msg29999 (for other cards)]:

- Select the Tick option.

SCENARIO I.1: For an SPM card:

- Remove the card when prompted [Message APS SMStdMessages:Msg00102] and return it to the customer.
- Ask the customer to reset the card by inserting it into the utility company's meter.
- This ends the transaction.

SCENARIO I.2: For other cards:

- Remove the card when prompted [Message APS SMStdMessages:Msg00102].
- Ask the customer whether this problem has occurred before.

SCENARIO I.2.1: If the customer is not aware that this problem has occurred before:

- Retry the transaction at this counter.
- If the problem persists, return the card to the customer and ask the customer to try the transaction at another counter (in a multi-counter office) or another post office (in a single-counter office).

6.4 Dealing with smart card transaction exceptions (contd)

SCENARIO I.2.2: If the customer is aware that this problem has occurred before:

- Return the card to the customer.
- Ask the customer to return it to the utility company for a replacement.
- This ends the transaction.
- Telephone the Horizon System Helpdesk [Call Software:system message displayed on screen].

EXCEPTION J: If the system displays a message saying that an internal error has occurred attempting to start the current transaction [Message APS MessageDefs:MSG435]:

- Select the Tick option.
- Remove the card when prompted [Message APS SMStdMessages:Msg00102].
- Log out and log on again, then retry the transaction.
- If the problem persists, telephone the Horizon System Helpdesk [Call Software:system message displayed on screen].

EXCEPTION K: If the system displays a message saying that an internal error or an internal card error has occurred [Message APS MessageDefs:MSG420, MSG421, or MSG422 or APS SMStdMessages:Msg29004]:

- Select the Tick option.
- Remove the card when prompted [Message APS SMStdMessages:Msg00102].
- Log out and log on again, then retry the transaction.
- If the problem persists, telephone the Horizon System Helpdesk [Call Software:system message displayed on screen].

EXCEPTION L: If you remove the smart card in the middle of a transaction, the system displays a message saying that you should not have removed the card while a transaction is in progress [Message APS SMStdMessages:Msg00108]:

- Select the Tick option.
- The transaction is abandoned.
- Retry the transaction.

6.4 Dealing with smart card transaction exceptions (contd)

EXCEPTION M: If the system displays a message saying that an internal error has occurred attempting to start the current transaction [Message APS MessageDefs:MSG439]:

- Select the Tick option.
- If the problem persists, telephone the Horizon System Helpdesk [Call Software:system message displayed on screen].

EXCEPTION N: If the system displays a message saying that this transaction cannot be performed with the credit available on the card [Message APS SMStdMessages:Msg29030]:

- Select the Tick option.
- Advise the customer that the transaction cannot be performed.
- Remove the card when prompted [Message APS SMStdMessages:Msg00102] and return it to the customer.
- This ends the transaction.

7 Fallback procedures

This section deals with the procedures that must be undertaken in order to serve the customer in the event of equipment failure within the post office. The following types of equipment failure will affect the processing of AP transactions:

- Magnetic card reader failure
- Bar-code reader failure
- Smart card reader failure
- Counter printer failure
- Keyboard failure and touch screen failure
- PC failure - Single-counter office
- PC failure - Multi-counter office
- Network - ISDN connection
- Site-related failures

7.1 Magnetic card reader failure

Magnetic card reader failure will affect the following AP transaction:

- Automated payment using a magnetic card.

7.1.1 Manual input of card details

In the event of magnetic card reader failure, automated payment using a magnetic card may be undertaken at another counter position or the transaction may be undertaken as described in *Section 6.1 Entering a magnetic card's PAN manually*.

7.2 Bar-code reader failure

Bar-code reader failure will affect the following AP transaction:

- Automated payment using a bar-coded document.

7.2.1 Manual input of bar-code

In the event of bar-code reader failure, automated payment using a bar-coded document may be undertaken at another counter position or the transaction may be undertaken as described in *Section 6.2 Entering a bar-coded document's bar-code number manually* (with the exception of bar-coded BT bills for the latter option which should be treated as non bar-coded bills).

7.3 Smart card reader failure

Smart card reader failure will affect the following AP transaction:

- Automated payment using a smart card.

In the event of smart card reader failure, automated payment using smart card may be undertaken at another counter position. In a single-counter office, the transaction cannot take place.

7.4 Counter printer failure

Counter printer failure will affect all AP transactions as receipts are a mandatory requirement for these transactions.

7.4.1 Producing manual receipts in the event of printer failure

In the event of counter printer failure, AP transactions may be undertaken at another counter position or a manual receipt must be produced for the transaction as described below.

7.4.1.1 Manual receipt for automated payment using a magnetic card

Step 1. Obtain a triplicate manual receipt form P4565. The stationery used is 3-ply. One of these plies is not required and must be destroyed in case it is used to record the transaction twice.

Step 2. Prepare receipt using card and imprinter (if the card is embossed) - Refer to existing counter procedure.

Step 3. Using the receipt screen preview, write the following details on the receipt:

- Checksum.
- AP transaction reference number.
- Token type (that is, 'MC').
- Customer Reference Number (PAN).
- Service Code.
- Value of transaction.
- Method of payment for transaction.

Step 4. Date stamp both copies of receipt.

Step 5. Issue the top copy of the receipt to the customer.

Step 6. Retain the under copy of the receipt in accordance with current procedures.

7.4.1.2 Manual receipt for automated payment using a bar-coded document**Step 1. Obtain a Miscellaneous Receipt form P1091L.****Step 2. Using the receipt screen preview, write the following details on the receipt:**

- Checksum.
- AP transaction reference number.
- Token type (that is, 'BC').
- Customer Reference Number (bar-code).
- Value of transaction.
- Method of payment for transaction.

Step 3. Date stamp both copies of receipt.**Step 4. Issue the top copy of the receipt to the customer.****Step 5. Retain the under copy of the receipt in accordance with current procedures.****7.4.1.3 Manual receipt for automated payment using a smart card****Step 1. Obtain a triplicate manual receipt form P4565. The stationery used is 3-ply. One of these plies is not required and must be destroyed in case it is used to record the transaction twice.****Step 2. Using the receipt screen preview, write the following details on the receipt:**

- Checksum.
- AP transaction reference number.
- Token type (that is, 'QM', 'SPM', or 'WC').
- Ref1 number.
- Ref2 number.
- Value of transaction.
- Method of payment for transaction.
- Any other information that appears below the 'Amount' line.

Step 3. Date stamp both copies of receipt.**Step 4. Issue the top copy of the receipt to the customer.****Step 5. Retain the under copy of the receipt in accordance with current procedures.**

7.5 Keyboard failure and touch screen failure

For the fallback procedures for keyboard or touch screen failure, see the CSR+ Operating Environment PPD [Ref.CS/PRO/097].

7.6 PC failure

(‘PC’ refers to the PC itself plus the internal cards and monitor.)

This section deals with the fallback procedures which must be undertaken when PC failure occurs in a single-counter or a multi-counter office.

If a PC fails in mid-customer session, the system invokes session recovery procedures on coming back on-line (see *Section 8.1 Session recovery procedure*).

7.6.1 System failure occurring after the first receipt has been printed

If the system fails after the first copy of the receipt (customer copy) has been printed and before the second receipt (post office copy) is printed, a manual receipt should be produced for the transaction (see *Section 7.4.1 Producing manual receipts in the event of printer failure*). The system-printed first copy of the receipt should be associated with the under copy of the manual receipt and retained within the office. No further action will be required by the counter clerk other than the normal recovery procedures described in *Section 8.1 Session recovery procedure*.

In the event that no manual receipt can be produced (i.e. the customer has left the office before a manual receipt is produced), no further action will be required by the counter clerk other than the normal recovery procedures described in *Section 8.1 Session recovery procedure* where a magnetic card or bar-coded document transaction should be recorded as a lost receipt.

7.6.2 PC failure (single-counter office)

PC failure in a single-counter office will affect all AP transactions.

In the event of PC failure in a single-counter office, AP transactions using magnetic cards may be undertaken manually. Bar-coded document transactions should be undertaken using Transcash. Following failure rectification, it will be necessary to recover on the system details of the magnetic card AP transactions undertaken during the period of failure. To ensure this is possible, and to satisfy the mandatory requirement of providing a receipt to the customer, a manual receipt must be produced for the transaction by following the procedure described in *Section 7.4.1.1 Manual receipt for automated payment using a magnetic card*, but in step 3 ignoring the instruction to use the receipt screen preview and omitting the recording of ‘checksum’ and ‘AP transaction reference number’.

AP transactions using smart cards cannot take place.

Note: Once the failure has been rectified, recovery procedures must be undertaken as described in *Section 8.3 Fallback recovery procedure*.

7.6.3 PC failure (multi-counter office)

In the event of a single PC failure in a multi-counter office, business should be directed to the other counter(s). If, because of pressure of business, this is not possible, AP transactions using magnetic cards or bar-coded documents should be carried out manually in accordance with the procedure for PC failure in a single-counter office described in *Section 7.6.2 PC failure (single-counter office)*. However, AP transactions using smart cards cannot be carried out manually and so will have to be performed at another counter.

In the event of all the PCs failing (due to complete loss of power, for example), AP transactions using magnetic cards or bar-coded documents transactions will have to be carried out manually. AP transactions using smart cards cannot take place.

Note: Once the failure has been rectified, recovery procedures must be undertaken as described in *Section 8.3 Fallback recovery procedure*.

7.7 Network failure – within the office

If there is a LAN failure and a terminal becomes isolated from the office network, APS procedures (with the exception of reversals) can be carried out as normal.

7.8 Network failure - ISDN connection failure

In normal circumstances, committed transactions are transferred via the network from the counters to the data centre on a regular basis. The transactions received at the data centre during the day are batched and sent to the relevant clients. Initially this will take place via the POCL HAPS system until client migration has completed.

Network-ISDN failure affects AP transactions in that while the link is down, committed transactions are stored but not transferred to the data centre. Once the link comes up again, all committed transactions are transferred.

7.9 Site-related power failure

In the event of a site-related power failure, all AP transactions using magnetic cards and bar-coded documents will have to be carried out manually as described in *Section 7.6.2 PC failure (single-counter office)*. AP transactions using smart cards cannot be performed.

8 Recovery

AP recovery procedures fall into three categories:

- Session recovery procedure
(For transactions that were performed on the system but had not completed at the time of a system crash. These are confirmed to the system from system or manual receipts.)
- Disaster recovery procedure
(For transactions that were performed on the system but are not currently recorded on the system. These are entered onto the system from system or manual receipts.)
- Fallback recovery procedure
(For transactions that were performed manually during a period of failure. These are entered onto the system from manual receipts.)

Recovery can be entered by two separate routes:

- Whenever the system is reloaded then recovery is invoked during the first logon only. The system is generally reloaded, as a matter of course, at least once a day to take account of the possible delivery of reference data overnight. This means that recovery may be invoked every day if this reload has taken place. If further reloads take place then recovery will be invoked during the first logon after each of these reloads. If the system detects that the previous system was not closed down correctly, a message is output saying that the system has detected that the last session ended in error.
- From the Desktop, the clerk can select the Transactions option then the AP Recovery option. If the clerk has performed fallback transactions, or wishes to perform postponed session recovery or is instructed by the system to perform disaster recovery then the clerk must perform recovery by this means.

When recovery is entered:

- If the system detects incomplete transactions, including postponed recovery of incomplete transactions, it invokes session recovery (see *Section 8.1 Session recovery procedure*).
- When all incomplete transactions have been dealt with or if the clerk chooses to postpone recovery or if none were found, the system decides if disaster recovery (see *Section 8.2 Disaster recovery procedure*) should be invoked. Disaster recovery is only invoked if this is the first logon since the Desktop was loaded or if it was not possible to perform disaster recovery due to any of the reasons described in the system rules below. The clerk is asked whether the Horizon system has been replaced and they have any receipts for unrecovered transactions performed on this node after a particular date and time. If this is the case, the clerk is then given the opportunity to enter these transactions.

-
- Finally, the system invokes fallback recovery (see *Section 8.3 Fallback recovery procedure*) to allow the clerk to input any transactions undertaken manually during the period of failure.

System rules:

- Transactions are recovered into the current logged-in stock unit.
- Recovery sessions cannot be suspended or transferred.
- Session and fallback recovery can be postponed. Disaster recovery cannot be postponed.
- If an active session is transferred, then recovery is inhibited at logon to the transferred counter. The next time an APS transaction is attempted, the system displays a message telling the clerk to perform disaster recovery by selecting the AP Recovery option [Message APS MessageDefs:MSG449]. Acknowledgement of this message abandons the transaction without receipts.
- If a user is attached to the default stock unit, then session recovery is inhibited at logon. If the user subsequently attaches to a valid stock unit and attempts to perform an APS transaction, the system displays the message described in the previous system rule.
- Clerks can invoke recovery themselves using the AP Recovery option from the Transactions menu. In this case, recovery is performed exactly as described earlier (that is, session, disaster, then fallback). The only difference is that, if disaster recovery has already been performed (including the clerk saying that there is no disaster recovery to be done), then disaster recovery is not invoked again in the current load of the Desktop. As disaster recovery cannot be postponed, this is the usual state when the clerk invokes recovery. However, where the recovery conversation has not been invoked during login (that is, in the circumstances described in the two previous system rules), when the clerk invokes recovery then the disaster recovery option is offered in the standard sequence.
- Disaster recovery requires the receipt details to be correct and complete, checking them against a checksum. Therefore, if a transaction that should be recovered during disaster recovery has an incorrectly-completed manual receipt, then the transaction cannot be entered. (If the clerk has begun entry of the transaction (see *Section 8.2 Disaster recovery procedure*), then the entry can be abandoned and the procedure continued from step 10, by selecting the Previous option.)
- Disaster recovery does not allow the entry of a Water Card transaction that has lower case characters in the receipt's Ref2 field. The receipt should therefore be sent to Chesterfield for the payment to be processed - refer to the Counter Operations Manual.

Business rules:

- Clerks need to ensure that all AP transaction receipts are readily available should they be required for AP recovery. This will entail keeping them in a central location and ensuring that they are not locked in an individual till overnight.
- All lost transactions must be recovered.
- If a transaction that should have been recovered during disaster recovery could not be entered because it had an incorrectly-completed manual receipt, then:
 - For a magnetic card or bar-coded document transaction:
The transaction should be entered as a fallback transaction (see *Section 8.3 Fallback recovery procedure*).
 - For a smart card transaction:
The transaction cannot be entered on the system. The receipt should therefore be sent to Chesterfield for the payment to be processed – refer to the Counter Operations Manual.
- If a transaction that should have been recovered during disaster recovery could not be entered because the receipt was temporarily lost, but has been subsequently found, then:
 - The receipt should be checked against the AP Transaction report.
 - If the transaction is not present, the receipt should be sent to Chesterfield for the payment to be processed – refer to the Counter Operations Manual.

8.1 Session recovery procedure

Session recovery procedures are mandatory procedures that must be undertaken to capture details of transactions partially recorded on the system and allocated AP transaction numbers when the system failure occurred. The procedures must be performed once the node at which the original transactions were undertaken is available again.

Although session recovery is mandatory, it may be postponed to a more convenient time. However, it is strongly recommended that session recovery is performed as soon as possible.

Step 1. Have ready all AP receipts for which recovery has not been performed on this node.

Step 2. Select the Tick option on the APS Recovery screen [Message APS MessageDefs:MSG133].

Step 3. The system asks you whether you want to start or postpone recovery [Message APS MessageDefs:MSG423].

8.1 Session recovery procedure (contd)

Proceed as follows:

SCENARIO A: To start recovery now:

- Select the Tick option.
- Proceed to step 4.

SCENARIO B: To postpone recovery:

- Select the Cross option. The system moves on to disaster recovery (see *Section 8.2 Disaster recovery procedure*) unless this has already been completed in this session in which case the system moves on to fallback recovery (see *Section 8.3 Fallback recovery procedure*).

Note: when you wish to recover the transactions, from the Desktop, select Transactions then the AP Recovery option and proceed to step 4.

Step 4. The system displays the details of a transaction that did not complete properly [Message APS MessageDefs:MSG426 (for a smart card transaction) or APS MessageDefs:MSG427 (for a magnetic card or bar-coded document transaction)]. In the case of a magnetic card or bar-coded document transaction, the system asks you whether or not you have a receipt for this transaction.

(Note that, if the system crashed early in the session, some details may not be present.)

Proceed as follows:

SCENARIO A: For a smart card transaction:

- Select the Tick option.
- The system prints a receipt that should be associated with the original receipt and retained in the drawer.
- Proceed to step 5.

EXCEPTION A.1: If the amounts on the original receipt and the recovery receipt do not agree:

- Bundle the receipts together and send to Chesterfield for processing.
- Proceed to step 5.

SCENARIO B: For a magnetic card or bar-coded document transaction for which you have the receipt:

- Select the Tick option.
- The system prints a receipt that should be associated with the original receipt and retained in the drawer.

ICL Pathway

**CSR+ AUTOMATED PAYMENT SERVICE
Processes and Procedures Description**

Commercial in Confidence

Ref: CS/PRO/091

Version: 4.0

Date: 12/12/00

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- Proceed to step 5.

8.1 Session recovery procedure (contd)

SCENARIO C: For a magnetic card or bar-coded document transaction for which you do not have the receipt:

- Select the Cross option. (The transaction is not recovered.)
- Proceed to step 5.

Step 5. Proceed as follows:

SCENARIO A: If the system is aware of more AP transactions requiring session recovery:

- Proceed to step 4.

SCENARIO B: If the system is not aware of any more AP transactions requiring session recovery:

- Proceed to Section 8.2 Disaster recovery procedure.

8.2 Disaster recovery procedure

This procedure is normally performed on the first logon after the Desktop has been loaded in order to determine if the system needs to recover from a catastrophic failure that resulted in the loss of important data. If it is necessary to perform disaster recovery then it must be performed and cannot be postponed. It is not necessary to have completed any outstanding session recovery before performing disaster recovery, although it is advisable.

Step 1. The system asks you if the Horizon system has been replaced and you have any receipts for unrecovered transactions performed on this node after a particular time [Message APS MessageDefs:MSG424]:

(Note that, if there are no APS transactions in the counter system, then the date and time given in the message will default to 01/05/1999 00:00.)

Proceed as follows:

SCENARIO A: If you know the Horizon system has been replaced, or you are not sure:

- Check to see if you have any receipts in the specified range.

SCENARIO A.1: If you have any receipts in the specified range:

- Select the Tick option. The system displays the Checksum screen.
- Proceed to step 2.

8.2 Disaster recovery procedure (contd)

SCENARIO A.2: If you do not have any receipts in the specified range:

- Select the Cross option.
- Proceed to step 11.

SCENARIO B: If you know the Horizon system has not been replaced:

- Select the Cross option.
- Proceed to step 11.

Step 2. Enter the checksum from any of the AP receipts that is to be recovered.

EXCEPTION A: If the checksum you have entered does not agree with what the system was expecting, the system tells you that you have entered invalid data [Message APS MessageDefs:MSG432]:

- Select the Tick option. The system displays the Checksum screen.
- Proceed to step 2.

Step 3. The system displays the AP Recovery Process Date screen.

Proceed as follows:

SCENARIO A: If the displayed default date is the correct date for the AP transaction being recovered:

- Select the Tick option.
(The system displays the APS Number screen.)
- Proceed to step 4.

SCENARIO B: If the displayed default date is not the correct date for the AP transaction being recovered:

- Select the Cross option.
- Enter the date from the AP transaction receipt
(The system displays the APS Number screen.)
- Proceed to step 4.

EXCEPTION A: If the date is not accepted, the system displays the AP Date Incorrect screen:

- Re-enter date from AP receipt.
- Select the Tick option.
(The system displays the APS Number screen.)
- Proceed to step 4.

8.2 Disaster recovery procedure (contd)

EXCEPTION A.1: If the date is still not accepted (this may be due to the clerk not having been able to decipher the date on the receipt or because of a system error):

- Enter the default date (today's date).
(The system displays the APS Number screen.)
- Proceed to step 4.

EXCEPTION B: If the date you have entered does not agree with what the system was expecting, the system tells you that you have entered invalid data [Message APS MessageDefs:MSG432]:

- Select the Tick option. The system displays the AP Recovery Process Date screen.
- Proceed to step 3.

Step 4. Enter the APS Number from the AP transaction receipt.

(The system displays the Token Type screen.)

EXCEPTION A: If details of this transaction already exist in the internal recovery data maintained by APS, the system tells you that this transaction must be recovered during session recovery [Message APS MessageDefs:MSG458]:

- Select the Tick option.
- Proceed to step 10.

EXCEPTION B: If this transaction already exists, the system tells you that no recovery is required for this transaction [Message APS MessageDefs:MSG459]:

- Select the Tick option.
- Proceed to step 10.

EXCEPTION C: If you have entered an incorrect node id, the system tells you that the AP transaction does not belong to this node [Message APS MessageDefs:MSG128]:

- Select the Tick option. The system displays the APS Number screen.
- Re-enter the APS Number and select the Tick option
- Proceed to step 5.

8.2 Disaster recovery procedure (contd)

EXCEPTION D: If you have entered an invalid APS Number, the system tells you that an invalid APS transaction number has been specified [Message APS MessageDefs:MSG129]:

- Select the Tick option. The system displays the APS Number screen.
- Re-enter the APS Number and select the Tick option
- Proceed to step 5.

EXCEPTION E: If the APS Number you have entered does not agree with what the system was expecting, the system tells you that you have entered invalid data [Message APS MessageDefs:MSG432]:

- Select the Tick option. The system displays the APS Number screen.
- Proceed to step 4.

Step 5. Select the appropriate token type from the AP transaction receipt.

(The system displays the Ref screen (for a bar-coded document or magnetic card transaction) or Ref1 screen (for a smart card transaction).)

EXCEPTION A: If the type you selected does not agree with what the system was expecting, the system tells you that you have entered invalid data [Message APS MessageDefs:MSG432]:

- Select the Tick option. The system displays the Token Type screen.
- Proceed to step 5.

Step 6. Proceed as follows:

SCENARIO A: For a bar-coded document or magnetic card transaction (token type = BC or MC):

- Enter the PAN (shown as Ref) from the AP transaction receipt.
- Proceed to Scenario A.1 or A.2 as appropriate.

EXCEPTION A.1: If the PAN you have entered does not match the token reference data in the message store, the system tells you that there is a data mismatch [Message APS MessageDefs:MSG455]:

- Select the Tick option. The system displays the Ref screen.
- Re-enter the PAN and select the Tick option, then proceed to Scenario A.1 or A.2 as appropriate.
- If the problem persists, telephone the Horizon System Helpdesk [Call Reference data:product detail incorrect].

8.2 Disaster recovery procedure (contd)

SCENARIO A.1: If the Service Code is embedded in PAN:

- The system displays the Amount screen.
- Proceed to step 7.

SCENARIO A.2: If the Service Code is not embedded in the PAN:

- The system displays the Service Code screen.
Enter the Service Code from the receipt.
- Select the Tick option.
(The system displays the Amount screen.)
- Proceed to step 7.

SCENARIO B: For a smart card transaction (token type = QM, SPM or WC):

- Enter the Ref1 number from the AP transaction receipt.
- Enter the Ref2 number from the AP transaction receipt.
- The system displays the Amount screen.
- Proceed to step 7.

EXCEPTION B.1: If the reference you have entered does not agree with what the system was expecting, the system tells you that you have entered invalid data [Message APS MessageDefs:MSG432]:

- Select the Tick option. The system displays the Ref1 screen.
- Proceed to step 6 Scenario B.

EXCEPTION B.2: If the Ref2 field on the receipt contains lower case characters:

- Send the receipt to Chesterfield for processing.
- Select the Previous option.
- Proceed to step 10.

Step 7. Enter the value of the transaction.

(The system displays the Method of Payment screen.)

EXCEPTION A: If the value you have entered does not agree with what the system was expecting, the system tells you that you have entered invalid data [Message APS MessageDefs:MSG432]:

- Select the Tick option. The system displays the Amount screen.
- Proceed to step 7.

8.2 Disaster recovery procedure (contd)

Step 8. Proceed as follows:

SCENARIO A: For a bar-coded document or magnetic card transaction (token type = BC or MC):

- Proceed to step 9.

SCENARIO B: For a smart card transaction (token type = QM, SPM or WC):

- Enter the details when requested as follows:

SCENARIO B.1: For a QM card:

- Timestamp.
- Region.
- Credit on Card.

SCENARIO B.2: For an SPM card:

- Meter Number.
- Region.
- Volume on Card.

SCENARIO B.3: For a WC card:

- Meter Number.
- Credit on Card.

- Proceed to step 9.

EXCEPTION B.1: If the value you have entered does not agree with what the system was expecting, the system tells you that you have entered invalid data [Message APS MessageDefs:MSG432]:

- Select the Tick option. The system displays the smart card details screen.
- Proceed to step 8 Scenario B.

Step 9. Select the appropriate method of payment, if applicable.

(The system prints a receipt which should be retained in the drawer.)

8.2 Disaster recovery procedure (contd)

Step 10. The system asks whether you have completed the recovery of unrecovered AP transactions using information from printed receipts [Message APS MessageDefs:MSG454].

Proceed as follows:

SCENARIO A: If you have completed the recovery of all unrecovered transactions:

- Select the Tick option.
- Proceed to step 11.

SCENARIO B: If you have not completed the recovery of all unrecovered transactions:

- Select the Cross option.
- Repeat steps 2 to 9 for each transaction for which you need to perform the disaster recovery procedure.

Step 11. The system asks you whether you wish to start the recovery of any fallback transactions made while the Horizon system was not available [Message APS MessageDefs:MSG130].

Proceed as follows:

SCENARIO A: If you wish to start recovering fallback transactions now:

- Select the Tick option.
(The system displays the AP Fallback Process Date screen.)
- Proceed to *Section 8.3 Fallback recovery procedure*.

SCENARIO B: If you do not wish to start recovering fallback transactions now:

- Select the Cross option.
(The system displays the Transactions menu with the recovered transactions on the stack.)
- Select the Finish option to settle the recovery session (see the CSR+ EPOSS PPD [Ref. CS/PRO/095]).
- When you decide to start entering fallback transactions, proceed as described in *Section 8.3 Fallback recovery procedure*.

8.3 Fallback recovery procedure

When the system is reloaded after a period of failure, the transactions that were undertaken manually during the failure need to be entered on the system using the manual receipts as input. Note that it is not necessary to have completed any session recovery before performing fallback recovery, although it is advisable.

The procedure to enter transactions undertaken manually while the system was down is as follows:

Step 1. Have ready the AP transaction receipts produced manually while the system was down.

Step 2. Proceed as follows:

SCENARIO A: If displayed default date of today's date is correct for the AP transaction:

- Select the Tick option.
(The system displays the Token Type screen.)
- Proceed to step 3.

SCENARIO B: If displayed default date of today's date is not correct for the AP transaction:

- Select the Cross option.
- Enter the correct date.
- Select the Tick option.
(The system displays the Token Type screen.)
- Proceed to step 3.

EXCEPTION A: If the clerk creating the receipt made an error in entering the date on the receipt:

- Select the Tick option to accept the default date.
(The system displays the Token Type screen.)
- Proceed to step 3.

EXCEPTION B: If the receipt is not dated or you are unable to identify the date:

- Select the Tick option to accept the default date.
(The system displays the Token Type screen.)
- Proceed to step 3.

8.3 Fallback recovery procedure (contd)

EXCEPTION C: If the date entered is not accepted, the system displays the AP Date Incorrect screen:

- Re-enter the date from the AP receipt.
- Select the Tick option.
(The system displays the Token Type screen.)
- Proceed to step 3.

EXCEPTION C.1: If you cannot establish the correct date:

- Use the default date of today's date.
- Proceed to step 3.

Step 3. On the Token Type screen, select the appropriate token type as shown on the receipt. (The system displays the Reference Number screen.)

EXCEPTION A: If the token type is not recorded on the receipt:

- Inspect the receipt and proceed as follows:

SCENARIO A.1: If the receipt is an imprinter foil:

- Select the magnetic card token type (MC).
- Proceed to step 4.

SCENARIO A.2: If the receipt is a bar-coded bill foil:

- Select the bar-code token type (BC).
- Proceed to step 4.

SCENARIO A.3: If the receipt is neither an imprinter foil nor a bar-coded bill foil:

- Enter the transaction in the EPOSS line for 'non-product' products.
- Bundle up the receipt and send it to Chesterfield - refer to the Counters Operations Manual.
- This ends the transaction.

Step 4. Enter the customer reference number shown on the receipt.

EXCEPTION A: If the system cannot recognise the customer reference number:

- Enter the transaction in the EPOSS line for 'non-product' products.
- Bundle up the receipt and send it to Chesterfield - refer to the Counters Operations Manual.
- This ends the transaction.

8.3 Fallback recovery procedure (contd)

Step 5. Proceed as follows:

SCENARIO A If the transaction was for a magnetic card:

- Proceed to step 6.

SCENARIO B: If the transaction was for a bar-coded document:

- Proceed to step 7.

Step 6. Proceed as follows:

SCENARIO A: If the Service Code is not embedded in the PAN:

(The system displays the Service Code screen.)

- Enter the Service Code from the receipt.
- Select the Tick option.
(The system displays the Amount screen.)
- Proceed to step 7.

EXCEPTION A.1: If you do not know the Service Code:

- Enter the transaction in the EPOSS line for 'non-product' products.
- Bundle up the receipt and send it to Chesterfield - refer to the Counters Operations Manual.
- This ends the transaction.

EXCEPTION A.2: If the Service Code that you have entered is incorrect and the system cannot recognise it:

- Enter the transaction in the EPOSS line for 'non-product' products.
- Bundle up the receipt and send it to Chesterfield - refer to the Counters Operations Manual.
- This ends the transaction.

EXCEPTION A.3: If the Service Code that you have entered is correct but the system does not recognise it:

- Enter the transaction in the EPOSS line for 'non-product' products.
- Bundle up the receipt and send it to Chesterfield - refer to the Counters Operations Manual.
- This ends the transaction.

8.3 Fallback recovery procedure (contd)

SCENARIO B: If the Service Code is embedded in the PAN:

(The system displays the Amount screen.)

- Proceed to step 7.

Step 7. Enter the value of the transaction.

EXCEPTION A: If the amount is not recorded on the receipt:

- Try to identify the amount by contacting the customer (if known) or associating the transaction with a cheque payment.
Note: these are merely a couple of examples as to how the amount might be identified and are not intended to be a definitive list.
- Enter the amount.
- Proceed to step 8.

EXCEPTION B: If it is impossible to identify the amount:

- Enter the transaction in the EPOSS line for 'non-product' products.
- Bundle up the receipt and send it to Chesterfield - refer to the Counters Operations Manual.
- This ends the transaction.

EXCEPTION C: If the amount is zero:

- Enter the transaction in the EPOSS line for 'non-product' products.
- Bundle up the receipt and send it to Chesterfield - refer to the Counters Operations Manual.
- This ends the transaction.

Step 8. Select the Tick option.

(The system displays the Method of Payment screen.)

EXCEPTION A: If the value you have entered is outside the expected range, the system displays the Invalid Value screen showing the range of values allowed and asking you to double check the value entered [Message APS MessageDefs:MSG511]:

- Check the value that you have entered.
- Proceed as follows:

SCENARIO A.1: If the value that you have entered is incorrect:

- Select the Re-Enter option.
- Alter the amount so that it comes within the stated range and select the Tick option.
- Proceed to step 9.

8.3 Fallback recovery procedure (contd)

SCENARIO A.2: If the value that you have entered is correct:

- Select the Override option.
- Proceed to step 9.

EXCEPTION B: If the value you have entered is not an expected multiple, the system displays the Invalid Multiple screen showing the allowed multiple and asking you to double check the value entered [Message APS MessageDefs:MSG512]:

- Check the value that you have entered.
- Proceed as follows:

SCENARIO B.1: If the value that you have entered is incorrect:

- Select the Re-Enter option.
- Alter the amount so that it is a stated multiple and select the Tick option.
- Proceed to step 9.

SCENARIO B.2: If the value that you have entered is correct:

- Select the Override option.
- Proceed to step 9.

Step 9. Select the appropriate method of payment.

(The counter printer prints a single copy receipt.)

EXCEPTION A: If you do not know the method of payment:

- Select the Cash option.
- Proceed to step 10.

EXCEPTION A.1: If the Cash option is not available:

- Select an appropriate method of payment.
- Proceed to step 10.

Step 10. Associate the single copy receipt with the manual fallback transaction receipt.

Step 11. Place both receipts in the drawer.

8.3 Fallback recovery procedure (contd)

Step 12. The system asks whether you wish to continue fallback recovery [Message APS MessageDefs:MSG438].

Proceed as follows:

SCENARIO A: If you wish to recover more AP manual transactions:

- Select the Tick option.
- Return to step 2 and repeat this procedure.

SCENARIO B: If you do not wish to recover more AP manual transactions:

- Select the Cross option.
(The system displays the Transactions menu with the recovered transactions on the stack.)
- Select the Finish option to settle the recovery session (see the CSR+ EPOSS PPD [Ref. CS/PRO/095])

8.4 Recovery and stock unit balancing

Session/disaster recovery is always performed on the failed PC. When the failed PC is returned to service (or replaced), the user is warned that they must recover potentially outstanding AP transactions as described in *Section 8.1 Session recovery procedure* and *8.2 Disaster recovery procedure*. These AP transactions will be those performed against the stock unit attached at the time of the crash. If an attempt is made to balance this stock unit from another PC, cash discrepancies (overs) are likely to arise against the unrecorded AP transactions.

Note: as a good housekeeping rule, do not attempt to balance a stock unit that was attached to a crashed PC before the PC has been crash-recovered. If balancing is attempted at another PC, the AP receipts should be checked against the AP Transaction report and if any are found to be missing, the attempt to balance should be abandoned.

All transactions for all stock units must be entered before the stock units are balanced and rolled over. If this is not done there will be cash discrepancies (overs) in the current BP/CAP. If this is allowed to happen, the AP transactions should be entered in the next BP/CAP causing equivalent cash discrepancies (shortages) in the next BP/CAP.