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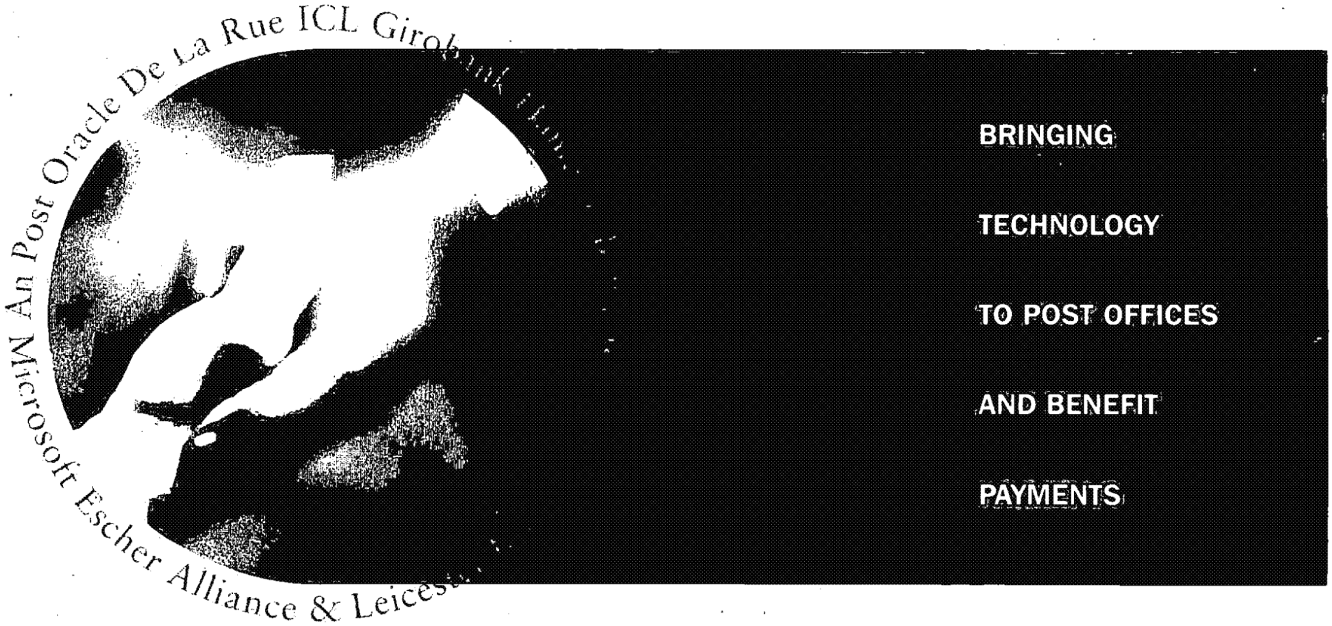
DSS/POCL *Functional* Specification

Pathway

POH-1716D



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FUJ00119561

0. CONTENT

0.1 DOCUMENT HISTORY

Version	Date	Reason
0.1	29/4/96	Early visibility of scope, purposes and objectives
1	10/5/96	For Pathway review
2	17/5/96	For Pathway approval
3	22/5/96	For DSS, POCL and Pathway review
4	21/6/96	Revision following reviews
5	30/6/96	For DSS, POCL and Pathway approval

0.2 ASSOCIATED DOCUMENTS

Version	Date	Title	Source
6	06/03/95	Statement of Service Requirements	DSS/POCL
1.5	27/02/96	POCL Interface Requirements for BA/POCL System	POCL
5	22/1/96	CAPS to PAS/CMS Interface Definitions	DSS
2	23/2/96	BPS MIS Requirements Catalogue	DSS/POCL
1	9/2/96	BA/POCL Service Interface Definition	DSS/POCL
1	19/3/96	Memorandum of Understanding	POCL
1	16/4/96	Invitation to Retender, schedule B3 amendments to ITT baseline.	DSS/POCL
	7/5/96	Contract Schedules	DSS/POCL
	7/5/96	Requirements Catalogue	DSS/POCL
	tba	POCL APS Generic Rules	POCL
	tba	Token Technology Specifications	POCL
	tba	Automated Payments Client Specifications	POCL
	tba	DSS Client Interface Specification - OBCS	DSS
	tba	OBCS Processing Rules	DSS

FUJ00119561

0.3 ABBREVIATIONS

A&L	Alliance & Leicester Building Society
ACC	Area Computer Centre
ACD	Automated Call Distribution
API	Application Programming Interface
APS	Automated Payment Service
ATM	Automated Teller Machine
BA	Benefits Agency
BES	Benefit Encashment Service
BPS	Benefit Payment Service
BT	British Telecom
CAN	Card Activation Number
CAPS	Customer Accounting and Payments Strategy
CAS	CAPS Access Service
CBOS	Common Basis of Settlement
CESG	Communications-Electronic Security Group
CHAP	Challenge Handshake Authentication Protocol
CLI	Calling Line Indication
CMS	Card Management System
COBC	Cashing Other Banks Cheques
CRC	Cyclic Redundancy Check
CRU	Cash Remittance Unit
DNS	Department of National Savings
DSS	Department of Social Security
DVLA	Driver and Vehicle Licensing Authority
EPOSS	Electronic Point Of Sale Service
ESNCS	Electronic Stop Notice Control System
FAD	Financial Accounts Division (of the Post Office)
Forde	Machine currently used to calculate Western Union foreign exchange rates
FS	Functional Specification
FTF	File Transfer Facility
GDN	Government Data Network
GSM	Groupe Systeme Mobile
HSO	High Security Option
HTML	Hypertext Mark-up Language
ID	Identity
IM	Inventory Management
IP	Internet Protocol
ISDN	Integrated Services Digital Network
IT	Information Technology
ITS	IMS to TMS System
ITS Agent	The software module which inserts/extracts IMS-related data to/from TMS

FUJ00119561

ITS Host	The platform on which the ITS runs
KMS	Key Management System
LAN	Local Area Network
LNFS	Local NINO File System
MAC	Medium Access (Layer)
MCR	Magnetic Card Reader
MoP	Method of Payment
MOT	Ministry Of Transport
MVL	Motor Vehicle Licence
NINO	National Insurance Number
NTVLRO	National Television Licence Records Office
OBCS	Order Book Control Service
ONCH	Overnight Cash Holdings
OPS	Office Platform Service
OSPF	Open Shortest Path First
PACE	Police & Criminal Evidence
PAGL	Programme Accounting General Ledger
PAN	Primary Account Number
PAS	Payment Authorisation Service
PFI	Private Finance Initiative
PIRPBS	POCL Interface Requirements for BA/POCL System document. Currently version 1.5, 27 February 1996
PIVOT	Postmaster's Information on Volumes Of Transactions
PO	Post Office
POCL	Post Office Counters Ltd
PPP	Point-point Protocol
PSI	POCL Service Infrastructure
PSTN	Public Switched Telephone Network
PSTN	Public Switched Telephone Network
PUN	Pick Up Notice
RIP	Routing Information Protocol
RTF	Rich Text Format
SADD	Service Architecture Design Document
SCR	Smart Card Reader (/Encoder)
SHA	Secure Hashing Algorithm/Digital Signature Algorithm
SID	BA/POCL Service Interface Definition
SIS	Strategic Infrastructure Service
SMDS	Switched Multi-megabit Data Services
SQL	Structured Query Language
SSA	Social Security Agency (NI)
TIP	Transaction Information Processing
TMS	Transaction Management Service
TTS	TIP to TMS System
TTS Agent	The software module which inserts/extracts TIP-related data to/from TMS

FUJ00119561

TTS Export	The Oracle7 application which takes data from TIP and converts it to the database format required by the TTS Agent
TTS Host	The platform on which the TTS runs
TTS Import	The Oracle7 application which takes information from the TTS agent and converts it to the format required by TIP
UDP	User Datagram Protocol.
VME	Virtual Machine Environment
WAN	Wide Area Network
WPA	War Pensions Agency

FUJ00119561

0.4 TABLE OF CONTENTS

FUJ00119561

FUJ00119561

FUJ00119561

1. ABOUT THIS DOCUMENT

1.1 PURPOSE

Schedule B7 (Authorities' Agreement), paragraph 2.2, requires that Pathway will supply BA/POCL with a Functional Specification (FS) within one week of execution of the contract, for agreement by a target date of 30 June 1996.

The fundamental purpose of this process is to establish an early level of agreement between Pathway and the Authorities concerning a more detailed level of specification of functionality of the services to be supplied, and by association, the underlying products from which such services are derived, such that service and product development activities can be undertaken with expedition and a high degree of confidence.

Schedule B7 paragraph 2.2 provides that changes to the FS definition subsequent to agreement will be subject to a process of agreed change control. The purpose of such change control is to facilitate necessary and agreed change in a scrutinised and orderly manner, and is neither to prevent such change nor implicitly vary any party's obligations under the contracts.

1.2 STRUCTURE AND SCOPE

This FS is organised in a manner which anticipates the Service Architecture Design Document (SADD), which is required according to Clause 401.1 in the Authorities' Agreement. Pathway proposes that this FS is developed under change control from its initial form such that it becomes the SADD itself when satisfactorily complete and detailed and that it is maintained thereafter as the SADD. In this manner there will be a complete description and unbroken audit trail of changes proposed and changes agreed. It is anticipated that the SADD will reach this state in readiness for July 1977.

Figure 1-1 shows the structure required of the SADD according to the terms of the initial agreements.

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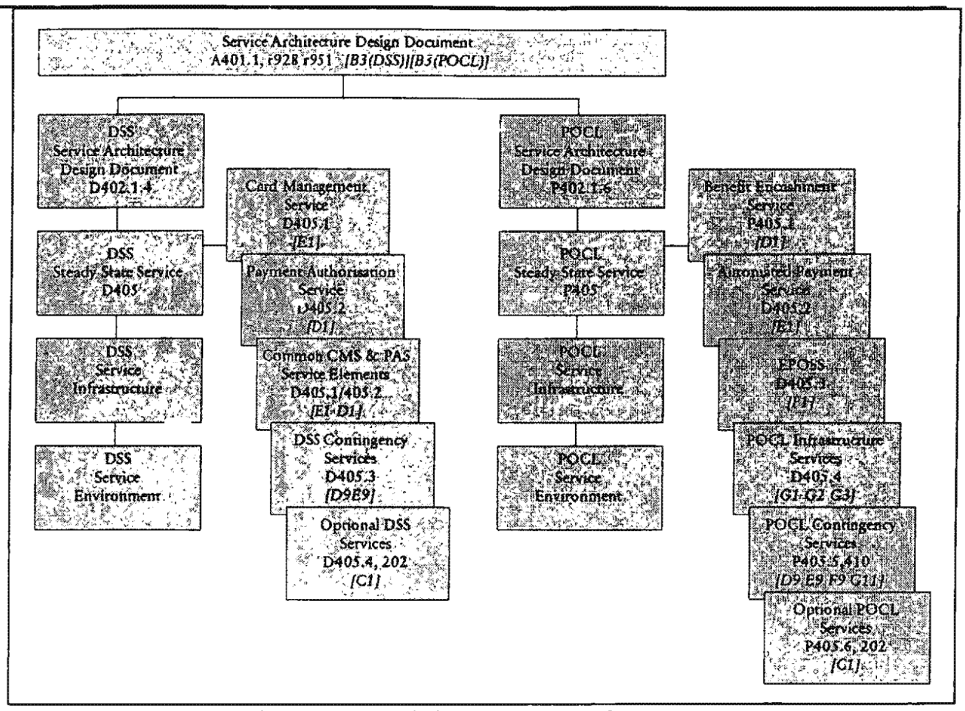

Figure 1-1: Required structure of the Service Architecture Design Document

The scope of the SADD, and hence the target scope of this document, is therefore the Steady State Service Definition of the Pathway Service as a whole, divided principally into the two Steady State Service Definitions applicable to the two Contracting Authorities but with certain topics which are logically for description at the Pathway Service level.

At early levels of revision of the FS only those parts necessary for the immediate purpose will be populated. Over time it is anticipated that material from the body of the document will be abstracted to appropriate appendices.

Sections 2.1 and 2.2 form a concise description of the Service Architecture.

1.2.1 CONTRACTUAL BASIS OF STRUCTURE

Where appropriate, the defining clause for an element is shown; for example, A401.1, D405.2 or P405.4, denoting respectively the Authorities', DSS or POCL Agreement clause in question. Similarly the schedules associated with each element are identified in brackets, in italics where they are to be produced. Requirements and, in due course,

FUJ00119561

Solutions are denoted by Rnnn and Snnn respectively; for example, R951.

The Card Management and Payment Authorisation Services embrace a number of second order services; for example; the BPS Management Information Service. These are grouped as common service elements within the DSS Service Architecture.

1.2.2 PFI SERVICE LEVEL COMPONENTS

It is in the nature of the total service solution that the end-to-end aspects of the Benefit Payment Service (BPS) are for specification at the top level of Service Architecture. The Card Management and Payment Authorisation Services (CMS, PAS), together with several supporting services, are defined within the DSS Service Architecture, while the Benefit Encashment Service (BES) forms part of the POCL Service Architecture.

In addition certain aspects of the security architecture are for specification at the top level of the Pathway Service Architecture.

In order to assist understanding of the operation of the services, this document provides information about the products on which they are to be based. Pathway reserves the right to modify these underlying systems in order to meet its obligations under the agreements.

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2. PFI SERVICE ARCHITECTURE

2.1 PFI SERVICE INFORMATION FLOWS

Figure 2-1 shows the Pathway-centric view of the information flows between Pathway and entities external to Pathway. Many of the information flows are program-based, but some are paper- or voice-based. For example:

A customer paying a bill is served at the counter. Pathway inpayment services will effect the logical completion of the information flow by notifying both the POCL client and the POCL transaction accounting system TIP.

A customer collecting his benefit will be able to do so because CAPS has sent a payment authorisation which Pathway has made visible to the BES application. Pathway will subsequently complete the logical information flow by notifying CAPS that it was paid and notifying TIP that the post office made the payment.

Similarly, a benefit customer who has lost his benefit card will report this by telephoning the Pathway CMS help desk. The CMS help desk will complete the logical information flow by arranging for a Pick Up Notice (PUN) to be sent by Royal Mail to his home address, and a replacement card to be sent by Royal Mail to his nominated post office.

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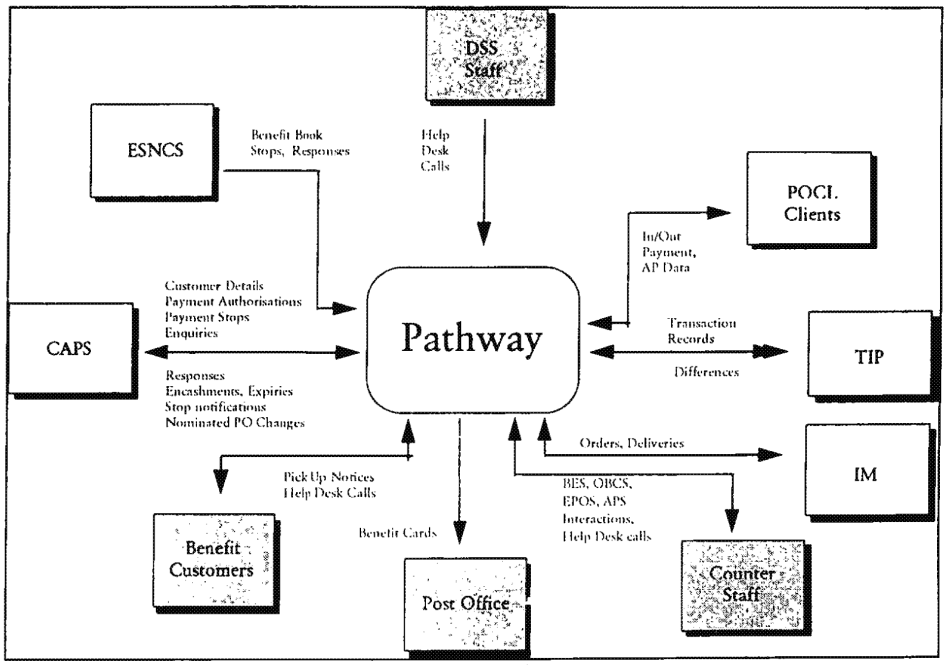

Figure 2-1: Pathway Service information flows

2.2 PATHWAY SERVICE COMPONENT RELATIONSHIPS

Figure 2-2 shows how the total Pathway service is divided into its major service elements and the relationships between them and the program-based entities within DSS and POCL.

It also shows how the principal program information flows referred to above are mapped between the service elements. For example:

The benefit encashment flow starts at CAPS with a payment authorisation which PAS transfers to TMS and BES, having taken information about the customers who can collect it from CMS. BES and TMS then control the payment process. The post office accounting routines will similarly notify TIP of the payment.

The bill payment flow proceeds from the APS or EPOSS service to the recipient POCL client. The post office accounting routines within EPOSS will notify POCL's TIP system of the transaction.

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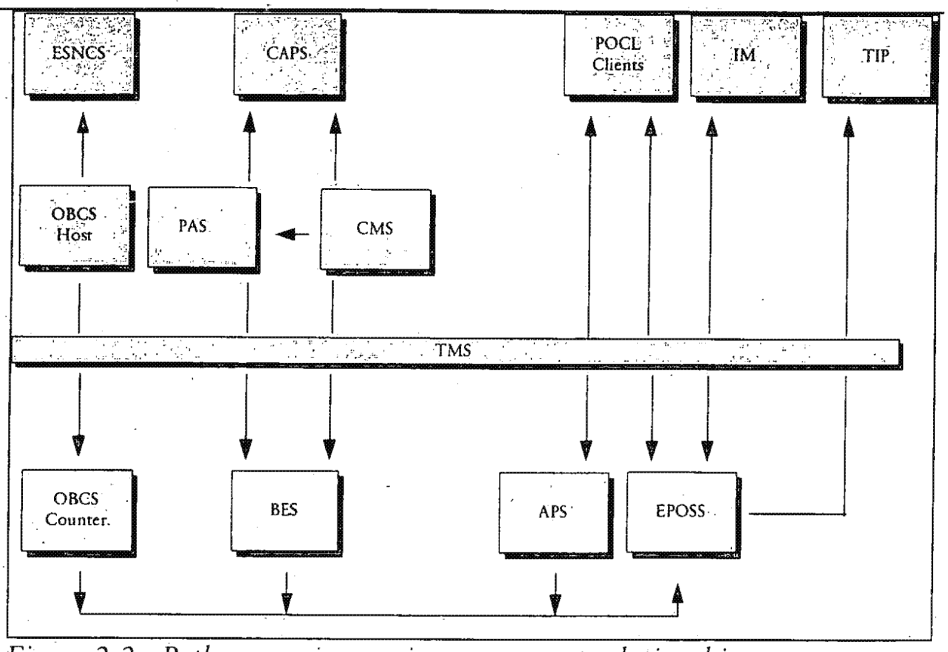

Figure 2-2: Pathway major service component relationships

2.3 BPS END-TO-END SERVICE DEFINITION

2.3.1 PFI RELATIONSHIPS

The Benefit Payment Service (BPS) is defined as the end-to-end service provided by the combination of Benefit Encashment Service (BES), Payment Authorisation Service (PAS) and Card Management Service (CMS) (Schedule A1). As such it is an abstraction comprising a combination of services which themselves are part of both the DSS and POCL Service Architectures.

The BPS is unique within the PFI architecture: the DSS is the only POCL client whose host processing falls within the procurement boundary as shown in Figure 2-3.

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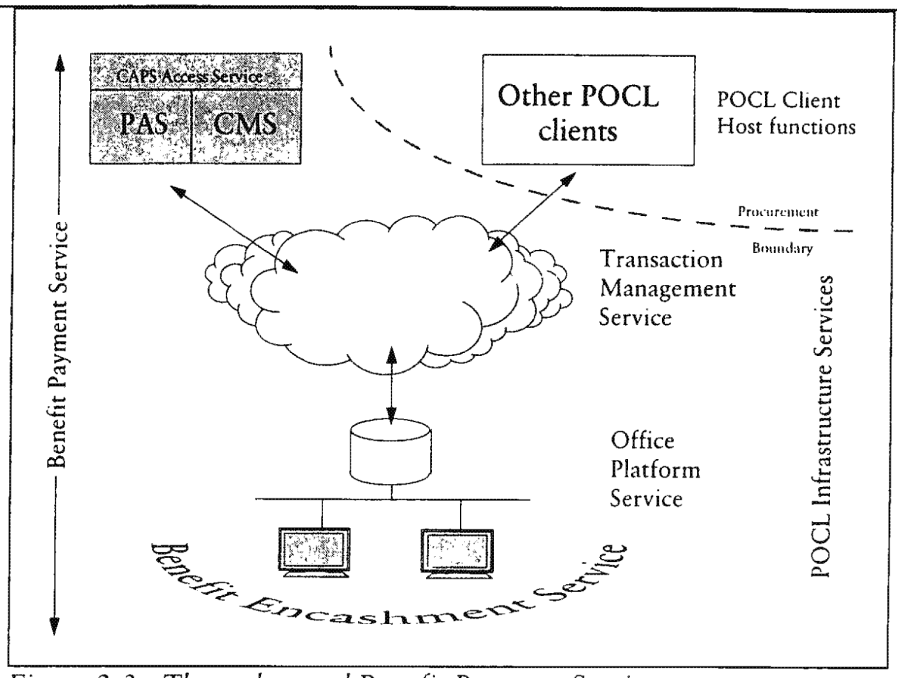

Figure 2-3: The end-to-end Benefit Payment Service

2.3.2 A WALK-THROUGH OF BPS

The physical and logical mapping of the Benefit Payment Service is shown below in Figure 2-4. In essence BPS uses the DSS Service Architecture for back-end processing and the Transaction Management Service (TMS), the Office Platform Service (OPS), the EPOS Service (EPOSS) and BES elements of the POCL Service Architecture as its route to customers.

2.3.2.1 DSS SERVICE ARCHITECTURE

Payment authorisation and card traffic originates and terminates at DSS mainframe systems running the CAPS applications. These CAPS servers are located on four sites, Washington, Livingston, Norcross and Swindon.

The CAPS Access Service (CAS) is implemented in secure partitions within the DSS mainframes themselves. It handles transfers of payment authorisation and card management traffic in both directions between the CAPS application and the Pathway central servers located at two sites; Bootle and Wigan. Pathway assumes responsibility for the traffic from the CAPS-CAS interface.

The CAS performs basic checking and record and data compression functions.

Transfers over the high speed wide area network connections between DSS and Pathway are encrypted.

PAS and CMS are logically separable services implemented in ORACLE7 on Sequent Dynix platforms. At this level also are the linked Help Desk telephony platforms.

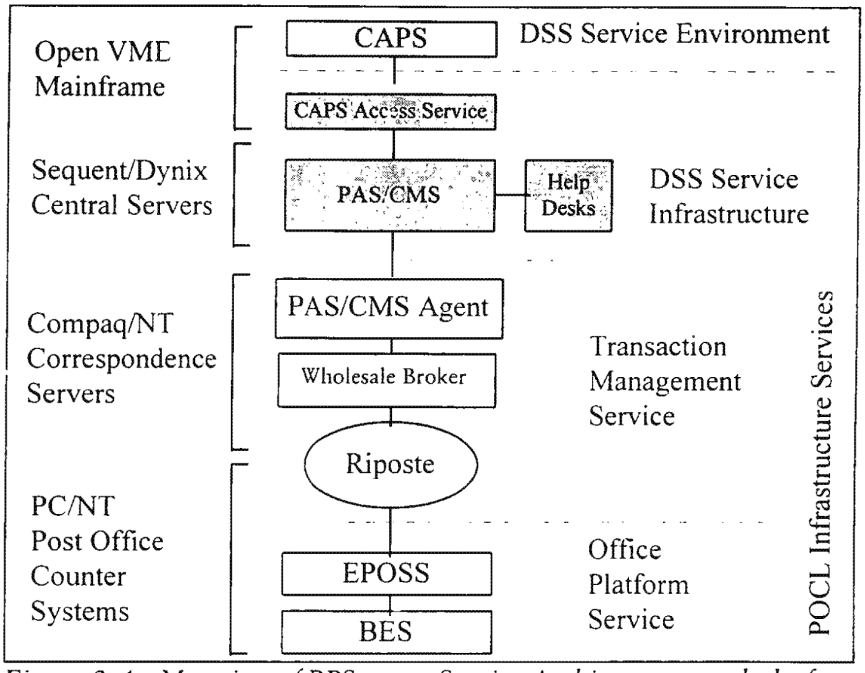

Figure 2-4: Mapping of BPS on to Service Architectures and platforms

2.3.2.2 POCL SERVICE ARCHITECTURE

The Correspondence Servers are implemented as four groups of large servers, two groups per Pathway central site with a number of servers per group. Interaction between the Central Services layer and the Correspondence Server layer is through a PAS/CMS Agent program which acts as a real file manager. This manages the transfer of data between the ORACLE7 and Riposte messaging system reformatting data as required.

The Wholesale Broker program allows Agent applications to treat the community of Correspondence Servers as a single entity by routing transactions to and from correspondence servers. Agent programs include those handling the traffic with POCL and POCL Client systems.

FUJ00119561

This level also supports post office to post office transactions, in particular those required for "foreign payment" processing.

The Riposte messaging system runs on both the Correspondence Server and Post Office layer platforms handling the communications traffic across the ISDN connections in co-operation with Windows NT. Riposte acts as a distributed database, maintaining replicas of records between the central correspondence servers and the post office counter systems.

Benefit authorisation transfers down to the counters are protected over this wide area connection by digital signature techniques.

Riposte supports application oriented interfaces to the EPOSS application, and in turn to the several counter service applications of which BES is one.

Sensitive benefit data stored on hard disk within the post office counters is protected by encryption.

2.4 PFI SECURITY ARCHITECTURE

2.4.1 SECURITY STRATEGY

Pathway will establish an infrastructure that will minimise and control liabilities to itself and DSS and POCL as specified in R698. Pathway's aim is to be compliant with BS7799.

Pathway's security infrastructure will cover:

- Agreement of a security policy
- Allocation of security responsibilities
- Security education and training
- Security incident reporting
- Physical security control
- Virus control
- Business continuity
- Control of proprietary software
- Safeguarding DSS and POCL records
- Information classification
- Compliance with Data Protection and other legislation
- Information exchange control
- External contractors and Pathway's sub contractors and suppliers
- Compliance with security policy

FUJ00119561

- Management of fraud and risk during service operation

Three of these elements

- Business Continuity
- Fraud Risk Management
- Data Protection legislation compliance

are of particular importance at this level of revision and are discussed in more detail below.

2.4.2 SECURITY DOCUMENTATION

Pathway will develop full operational documentation in accordance with its Quality Management System (QMS). The QMS system will be submitted for ISO9001 accreditation:

- Security Policy
- Standards
- Audit
- Procedures

2.5 BUSINESS CONTINUITY

2.5.1 CONTINGENCY

Pathway will develop and agree with DSS and POCL the contingency arrangements that will be used to ensure continuity of service, as described in R830:

1. Pathway will ensure that all services are supported by Contingency Plans including Fallback Transactions that will minimise or negate the impact of failure in any part of the services.

2. Pathway will ensure that the Contingency Plans for each service are compatible with an overall Service Continuity framework.

   The Contingency Plans will be based on Impact and Risk Assessments agreed between Pathway and DSS and POCL

3. Ownership of all contingency actions will be identified.

4. The Contingency Plans will include activation procedures and time periods within which the contingency measures will be activated.

FUJ00119561

5. The Contingency Plans will include a testing strategy with two distinct parts:

   Initial testing on implementation and deployment
   Regular testing

6. The Contingency Plans will include the following:

   - Prevention measures
   - Preparedness measures
   - Contingency measures
   - Recovery of normal service
   - Change control procedures
   - Contact lists
   - Service levels - Pathway will be liable in accordance with schedule B03

7. The Contingency Plans will be subject to joint review by Pathway, DSS and POCL

2.6 FRAUD RISK MANAGEMENT

2.6.1 INTRODUCTION

The Fraud Risk Management (FRM) service will deal with the identification, monitoring and management of encashment fraud within the Benefit Payment Service and the POCL Strategic Infrastructure.

Pathway's policy is to identify and minimise the risk of fraud within the Pathway system. However, Pathway recognises that the threat of fraud incidents exists inside and outside Pathway's responsibility.

Pathway's strategy is to identify high risk situations and adapt systems as necessary to:

- Minimise fraud exposure within the Pathway solution
- Provide an information service to DSS and POCL to aid fraud investigation and to minimise fraud.

The information provided will be:

- Trend and pattern analysis for DSS to aid identification of fraud risk and appropriate mitigation actions
- Information to aid in the investigation of actual fraud incidents

FUJ00119561

- Certification relevant to operation of the system as required by PACE Act, 1984 and equivalent legislation as required by the territory of operation
- Information for the investigation of system boundary related incidents and trends; for example, counter staff-related fraud with the aim of developing improved procedures
- Analysis of incidents and trends within Pathway's immediate control, to improve its systems

2.6.2 FRAUD RISK MANAGEMENT SERVICE ELEMENTS

The FRM service will comprise two core elements:

- A management information system, to analyse trends, fraud losses and to profile data patterns. This is part of Pathway's own MIS systems.
- A fraud monitoring system, to profile abnormal or irregular encashment patterns and identify potential fraud incidents, as required by R895, see below

2.6.2.1 MANAGEMENT INFORMATION SYSTEM

The MIS will provide both standard and ad hoc reports. Key areas of information which will be captured and analysed include:

- transaction volumes, values
- location
- verification procedures
- timing of encashment
- customer details

Standard key reports will be provided at regular intervals, to be agreed, for review within Pathway and with DSS and POCL.

2.6.2.2 IRREGULAR ENCASHMENT PATTERNS

R895 requires that the PFI service will be capable of monitoring irregular encashments and reporting on irregular encashments to DSS. Information will be shared with POCL audit/Security/Operations when it relates to a post office.

Ad hoc analysis and reports will be provided and will include specific fraud analyses and encashment monitoring, in order to monitor the movement and use of cards to detect exception conditions and possible fraudulent use for example :

FUJ00119561

- Post offices with high levels of fraud incidents or losses, foreign transactions, manual keying, casual agents
- Customers with high levels of lost/stolen cards, non-received PUNS, changes of nominated offices

Specific irregular encashment patterns for reporting are to be agreed with DSS and POCL, to include for example:

1. Non encashment of a means tested benefit for a period of (4 weeks)
2. Non encashment of a non means tested benefit for a period of (6 weeks)
3. Change of nominated post office and encashments for a period of (6 weeks), where there is no notification of change of address being received by CMS from CAPS

   [DN: This may need to distinguish cases where the change of nominated post office is not accompanied by change of address.]

4. High Risk transactions indicating a potential exposure to fraud, for example:
   - Foreign encashments
   - Casual agent encashment
   - Regular casual agent encashment (4 consecutive weeks)
   - Multiple encashments (will depend on period of validity - to be defined)
   - Any combination of the above
5. Any encashment made or attempted where a stop is in operation
6. Any encashment of a payment where a subsequent loss report is received
7. Presentation of a non genuine card
8. Apparent presentation of a duplicate card (both to be cancelled immediately)
9. Any attempted keyed transactions out of specified service hours
   [DN: This may need to distinguish legitimate counter activity undertaken outside of the hours of service cover.]

10. Multiple keyed or telephone authorised transactions by clerk and outlet, where there is no report of service or equipment failure (contingency transactions at a level anything above the agreed service efficiency levels)
11. Any transactions at a non-live post office i.e. one reported as temporarily out of commission
12. Usage of duplicate clerk identification devices or numbers (note that both must be cancelled immediately)

FUJ00119561

2.6.3 DATA PROTECTION ACT, 1984

R938 states that:

- Pathway is responsible for ensuring that any information supplied under the Data Protection Act 1984 is accurate and that assurances can be given as to the integrity of that information.
- Pathway is responsible for delivering any information requested under the Data Protection Act 1984 to the requesting body, Person or DSS as appropriate.

The Data Protection Act 1984 became law from 11/11/87, Pathway will ensure that all subsequent alterations and reviews to this law are integrated and adhered to.

Pathway will record all written requests for a data protection print from a Customer, representative or DSS within forty (40) days of receipt of the request, and deal with queries raised within a timescale to be agreed with the DSS and POCL.

All information provided under the Data Protection Act 1984 will be made available to facilitate inspection.

Details of a request and response made under the Data Protection Act 1984 will be retained consistent with the Data Protection Act 1984 requirements.

FUJ00119561

3. DSS SERVICE ARCHITECTURE

3.1 DSS STEADY STATE SERVICE

3.1.1 CARD MANAGEMENT SERVICE

3.1.1.1 INTRODUCTION

This section describes the processes within the Card Management Service (CMS) and how BA, BA Customers and POCL will use the service as part of the end-to-end Benefit Payment Service (BPS). The CMS is required to be available 24 hours a day every day of the year.

The CMS is a central computer service that will store details of all BA customers who are entitled to a benefit payment card. It will maintain a cardholder record for each customer, with an agreed amount of historical information regarding card activity, accessible for reporting and enquiries.

The CMS manages the production, automatic renewal, issue and distribution of magnetic cards, Pick Up Notices (PUNs) and Temporary Tokens. CMS also manages enquiries from the CMS Help Desk for reports of lost, stolen and damaged cards.

Cards and Temporary Tokens remain the property of the Secretary of State and can only be used for benefit payment unless otherwise authorised by the Secretary of State.

Pathway's strategy for the migration from magnetic cards to integrated circuit cards is not described at this level of specification.

CMS provides the Pathway Payment Authorisation System (PAS) with cardholder details required for payment processing including cardholder verification details.

Within this document each major aspect of the service is presented from the view point of BA, POCL and the Customer.

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3.1.1.1.1 OVERVIEW DIAGRAM OF THE CARD MANAGEMENT SERVICE

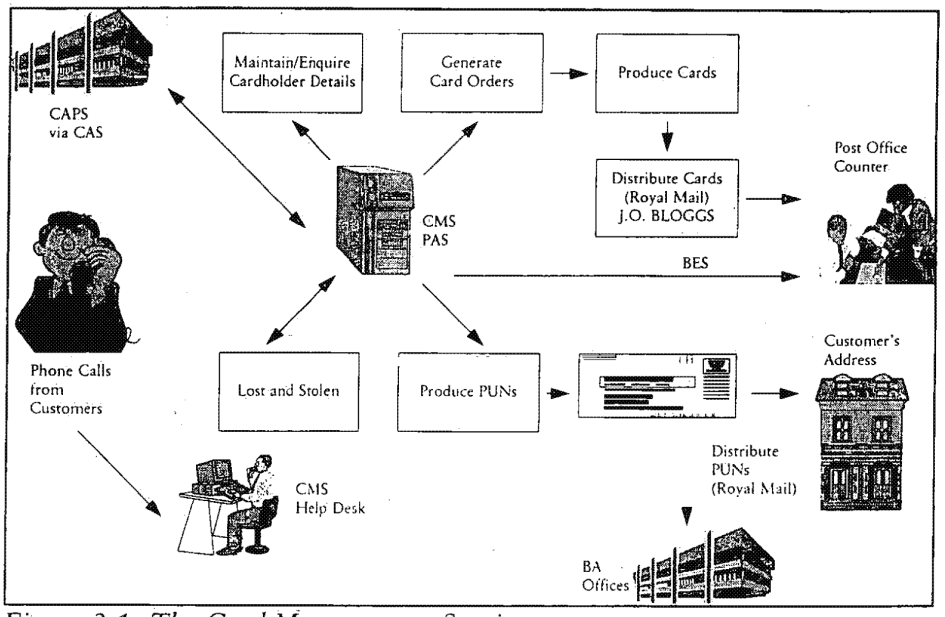

Figure 3-1: The Card Management Service

3.1.1.2 INTRODUCE NEW CARD HOLDER

On receipt of instructions from the BA, via the CAPS Access Service (CAS), CMS will add new cardholders to the system. The BA will ensure that correct postal addresses including post codes are used.

The system will validate the new cardholder details received from BA for format in line with the BA/POCL Service Interface Definition. All valid records will be added to the CMS. Cardholder records that fail validation will be returned to BA via CAPS for resolution.

3.1.1.3 MAINTAIN CARDHOLDER DETAILS

On receipt of instruction from the BA via CAS, CMS will apply amendments to personal details. As a result of these changes it may be necessary to issue a new card.

A new card will automatically be issued where a cardholder has a change of name, for example, the change from maiden name to married name, change of nominated post office, or English to Welsh and vice-versa.

CMS will forward changes to PAS for use during payment processing.

FUJ00119561

3.1.1.4 MAINTAIN CARD STATUS

During the life of a card its status will change. CMS will maintain an audit trail to show the lifecycle of the current and previous card including:

- card ordered
- card received at post office
- card activated
- card suspended, carried over for a card reissue
- card unsuspended
- card terminated and reason:
  - card reported lost
  - card reported stolen
  - card reported damaged
  - card reported found
  - card reported destroyed
  - card uncollected
  - card expired
  - card returned
  - card not received at the post office within due time
  - card verification failure at counter
- card impounded

3.1.1.5 RECORD CARD HOLDER NO LONGER ELIGIBLE FOR BENEFITS

The objective of this process is to record that a card holder is no longer eligible for benefit and will not require a card in the future.

On receipt of an instruction from CAPS, CMS will validate notifications and return failures to CAPS.

Accepted notifications will be applied within CMS. Where a current card exists and is not expired CMS will prevent its use for future encashment. The card will be designated 'dormant' and stopped on the nominal expiry date unless new personal details are received beforehand. In this case the card will be reactivated.

3.1.1.6 THE CARD

The card design will be subject to approval from the Secretary of State. The design will allow for different liveries, will conform to financial standards and include a number of security features, e.g. hologram and indent printing. The card will include a signature stripe and will be embossed with the following information:

FUJ00119561

- a 16 digit unique Primary Account Number (PAN) incorporating the NINO, in a 19 digit field with three spaces
- surname and initials of the cardholder
- cardholder's full NINO
- card expiry date - three years from issue
- card issue number

Excluding the signature, the above items will also be held within the magnetic stripe of the card together with a security value which is validated against system held data during usage.

The card will include pre-printed information:

- a freepost address for return of cards under exceptional circumstances; for example, card found by a member of the public
- a message in accordance with R962

Where the customer's nominated post office is a Welsh postal address, information printed on the card will be in both English and Welsh.

3.1.1.7 CIRCUMSTANCES WHEN A CARD ORDER WILL BE GENERATED

Pathway will automatically generate a benefit payment card under the following circumstances:

- new cardholder added to the system
- card reported lost or stolen
- card reported as damaged
- change of cardholder name (ex CAPS)
- card due to expire
- cardholder reinstated on system and has no active card
- changed nominated post office from England to Wales and vice versa.

[DN. will Welsh / English changes take place on change of office or when current card expires?]

3.1.1.8 CATERING FOR SPECIAL NEEDS GROUPS

The card will carry a tactile mark to allow the blind to distinguish it readily.

3.1.1.8.1 BA VIEWPOINT.

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In order for Pathway to manufacture cards selectively for the blind, BA will be need to identify such customers via CAPS.

[DN: Will all cards carry the blind tactile marker?]

3.1.1.9 CARD PRODUCTION

Pathway will operate an 'Urgent' and 'Non Urgent' timetable for card production and distribution which is:

- Urgent orders:
    - * new cardholder
    - * replace lost or stolen card
    - * replace damaged card
    - * change in personal details
    - * reinstated customer, no active card
- Non-urgent orders:
    - * reissue card on expiry

3.1.1.10 CARD PERSONALISATION AND DELIVERY TO NOMINATED POST OFFICE.

Pathway will generate personalised magnetic cards to the appropriate design as specified by BA. On completion of the card production process, cards will be batched by customer name within post office. Royal Mail will ensure secure delivery into post offices where their receipt is recorded on CMS and validated against expected arrival.

In the event that the Royal Mail service is disrupted by a postal dispute or other unforseen circumstances, Pathway will employ alternative carriers.

For the majority of cards, Pathway propose to use sealed cardboard trays with lids for the delivery of cards to post offices. However, where a batch for a post office contains fewer than ten cards, the cards will be delivered in a secure envelope.

Each batch will contain the post office address, the batch ID and number of cards in bar code format. This format will be recognised by CMS when booked on to the system at the post office.

FUJ00119561

Pathway will maintain within CMS an audit trail of all cards produced from initial request via CAPS, or the help desk, through to delivery and pick up by the customer at the post office counter.

3.1.1.10.1 CARD LIVERIES/ LOGOS

The Pathway solution will allow for multiple card liveries within the system. However, a customer will have only one active card type at any one time.

3.1.1.10.2 POCL VIEW POINT

Cards will be delivered to the post office by Royal Mail. The post office will be responsible for the receipt, recording within CMS and secure storage of cards prior to issuing the card to the customer on pick up.

The supporting clerical activity and sequence of events is fully described in the Counter Procedures.

3.1.1.11 THE PUN

The PUN will contain the cardholder's name and nominated address. The PUN will contain a bar code which includes a Card Activation Number (CAN) which is matched against system held information during card activation.

The PUN will contain pre printed information for the customer in English, Welsh and a number of other languages agreed with the BA.

[DN: Agreement on PUN languages required.]

The PUN communication may also contain information notices and the like.

[DN: Discussion and organisation of such collateral material is required from time to time]

Pathway will produce a PUN under the following circumstances:

- all new cardholders
- collection of a replacement card having reported to the CMS help desk that his existing card is lost or, stolen, damaged or his personal details have changed.
- on the third consecutive keyed entry of a damaged card's details

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- reinstated cardholder, no active card

In all circumstances where a PUN is produced the card cannot be collected without the PUN being presented.

Where a customer fails to collect the card within 40 days a second reminder PUN will be sent.

Where a customer has lost, not received, or reported his PUN stolen and the card is available for collection, there are two scenarios to be considered:

The PUN in question is the first PUN. In this case the customer will receive a PUN reminder which can be used to collect the card. The reminder will have a new CAN.

The PUN in question is the second, the customer not having received the first one either. In this case the customer should call the CMS help desk which will reorder a third PUN, with a new CAN. On production of a second PUN reminder, Pathway proposes that details of the transaction are sent to BA via CAPS.

[DN: Process to be agreed.]

3.1.1.12 DELIVERY OF PUN TO CARDHOLDER'S NOMINATED ADDRESS

Pathway will inform the authorised person that the card is available for collection by issuing a PUN to the cardholder's nominated address via the Royal Mail. In the event of disruption, a similar contingency to that described above will be invoked.

The delivery of the PUN will be synchronised with the delivery of the card to the cardholder's nominated post office, to ensure that the card is available at the post office for collection by the customer.

The PUN will be accompanied by a mandate form to allow a customer to use an agent without having to collect one from the post office

3.1.1.12.1 BA VIEWPOINT

Where a cardholder has no fixed abode, the cardholder's PUN can be delivered to the person's local Benefit Office as per information provided by BA to Pathway via CAPS.

Each BA office will be required locally to:

FUJ00119561

- maintain a record of all customers who require this service,
- operate and maintain procedures for the issuing of PUNs to such cardholders.

[DN: DSS to allocate a nominated post office for cardholders of no fixed abode. Procedures for subsequent changes to be agreed with Pathway]

3.1.1.12.2 CUSTOMER'S VIEW POINT

The customer will collect his card from his nominated post office. In order to collect his card, the customer will present either the PUN or his old card (when current card expires), together with an independent means of identification.

Pathway will produce a PUN for the following Pick Up types:

- all new cardholders
- collection of a replacement card having reported to the CMS help desk that his existing card is lost or, stolen, damaged or his personal details have changed.
- on the third consecutive keyed entry of a damaged cards details
- reinstated cardholder, no active card

The PUN will contain personal details including, name, NINO, address and security information which will be matched on the system during the card activation process.

In addition to the personal details contained on the PUN, Pathway will pre-print supporting information in English, Welsh and an agreed number of other languages.

[DN: Agreement on PUN collateral languages required.]

Where a PUN is produced as defined above, the customer will not be allowed to collect his card without its presentation at the post office. If for any reason the customer loses his PUN, he will need to request a replacement via the CMS Help desk.

3.1.1.13 CIRCUMSTANCES WHEN PUN WILL BE GENERATED

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The PUN will contain the cardholder's name, nominated address and NINO. To improve security and minimise the risk of fraud, the PUN will be encoded with a Card Activation Number (CAN). This CAN will be matched against system held data during card activation. The PUN will contain pre-printed information in English, English and Welsh, and English and other minority languages.

Pathway will generate a PUN under the following circumstances:

- all new cardholders,
- card reported lost or stolen to the CMS Help Desk, or his personal details have changed.
- on the third consecutive keyed entry of a damaged card's details
- reinstated cardholder, no active card

3.1.1.14 COLLECT AND ACTIVATE CARD

The object of this process is to record authorised collection of the card and to activate that card to enable subsequent collection of payments. The process also ensures that outstanding payments are allocated to the newly-issued card and no longer collectable by presentation of the old card. This is to ensure continuity of payment collection.

Customers will present the PUN at their nominated post office with an independent means of identification during card pick up.

The supporting clerical activity and sequence of events is described in the Counter Procedures in Section 4.

3.1.1.15 CUSTOMER UNABLE TO COLLECT CARD

Pathway will handle this eventuality according to whether the customer:

- is replacing a card routinely
- is replacing a card following card loss or damage
- is newly enrolled into the benefit system

3.1.1.16 REPLACEMENT OF EXISTING CARD ON CARD EXPIRY

When a card is within six weeks of its expiry date, Pathway will automatically generate a replacement card which will be available for pick up at the cardholder's nominated post office on the presentation of the card which is due to expire.

FUJ00119561

3.1.1.17 AUTOMATICALLY REPLACE DAMAGED CARD

The CMS will automatically record and analyse the number of consecutive keyed entries of card details when the card is being used to encash benefits at the post office.

On the third consecutive manual keying of card details, the system will automatically generate a replacement card and PUN for the customer. The card will be delivered to the customer's nominated post office ready for collection on the presentation of a PUN

The damaged card will continue to be used until the replacement card is available.

3.1.1.18 REPLACE DAMAGED CARD

When a card has been reported damaged to the CMS help desk by the customer, a replacement card and PUN will be generated. The card will be delivered to the customer's nominated post office, ready for collection on the presentation of his PUN.

The damaged card will continue to be used until the replacement card is available. The damaged card will be required to be presented with the PUN when the new card is collected.

3.1.1.19 REPLACE LOST OR STOLEN CARD

When a card has been reported lost or stolen to the CMS help desk, an urgent card order and PUN will be produced The card will be delivered to the customer's nominated post office, whilst the PUN will be delivered to the customer's address supplied by BA.

3.1.1.20 REPORT NON-ARRIVAL OF BATCH OF CARDS AT POST OFFICE

The object of this process is to detect non-arrival of a batch of cards at the post office within the designated time period (based upon anticipated production and delivery schedules) and to instigate action.

Whenever a card order is placed within the CMS, the card production and delivery status is monitored through to recorded receipt at the post office.

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The system will automatically and immediately suspend any card not received at the nominated post office within three working days after expected arrival.

CMS will create an exception record for presentation to the CMS Help Desk so that the late delivery can be investigated. The exception event reporting will be repeated each day until the batch is booked in, the batch is cancelled, or the allowed margin for delivery has expired.

The CMS Help Desk will investigate and either extend the margin or cancel the batch of cards. Cancelling the batch will automatically include the setting of each individual card status to lost. The help desk may reorder the batch of cards after investigation.

3.1.1.21 INHIBIT CARD ON FAILURE TO COLLECT

The purpose of this process is to inhibit cards not collected by the customer within a predetermined number of days (currently 56) from the date of issue.

BA will define the period within which a customer must collect a card. Failure to collect will lead to cancellation of the card and an exception report to BA.

The supporting clerical process is described in the Counter Procedures.

CMS card status will be available to PAS for use in payment processing such as enrichment.

CMS will report non-collection to BA via CAPS.

3.1.2 CARD MANAGEMENT SERVICE HELP DESK

3.1.2.1 INTRODUCTION

The CMS help desk will provide a single point of contact for all enquiries relating to benefit cards and PUNs. It provides separate telephone numbers for BA, POCL staff and for BA customers. In accordance with the Welsh Language Act 1993 a service (including separate telephone line) will be provided to Welsh speaking customers.

The majority of calls to the CMS help desk will be from members of the public reporting lost, stolen or damaged benefit cards and PUNs, although authorised BA and POCL staff will also require access to the

FUJ00119561

help desk in certain situations. See Appendix B for a full list of enquiry types

As an integral part of the authentication process for the validation of callers, BA and POCL staff calling the help desk will be asked to answer verification question(s). This security measure will ensure that only those members of staff nominated by the authorities will have access to the help desk services.

Although the NINO provided by the customer will be the key by which the help desk will access the card and payment management systems, the caller will be asked a further verification question, to ensure he is the authorised cardholder.

Pathway's internal access to the Card Management Service via the help desk will be strictly controlled. Only staff with the appropriate security level will have access to, and have the authority to amend the status of card and PUN details. All status changes will be subject to a complete audit trail.

3.1.2.1.1 OVERVIEW DIAGRAM OF THE CMS HELP DESK

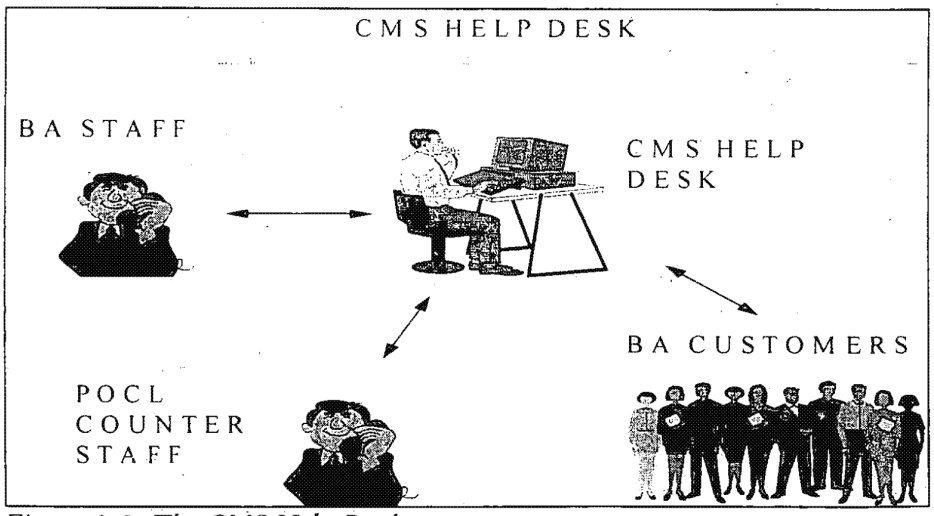

Figure 3-2: The CMS Help Desk

All calls will be answered to agreed SLA timescales and attract local call rates. For contingency purposes the help desk will be provided at two sites.

The CMS help desk will be manned to deal with calls 24 hours a day every day of the year.

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The CMS help desk will also deal with calls from members of the public who wish to report finding a card or PUN.

[DN: The location to which found cards are to be returned is to be agreed.]

In the majority of circumstances a new card and PUN will be ordered for the customer. Details of cards returned to the help desk will be recorded and forwarded to the appropriate BA office.

[DN: This process to be agreed.]

3.1.2.2 BENEFIT AGENCY CUSTOMER'S VIEWPOINT

The CMS help desk will provide BA customers with single point of contact for reporting lost, stolen or damaged benefit payment cards and PUNs. Contact with the help desk will be via the telephone.

3.1.2.2.1 CALLER VERIFICATION

On contacting the help desk the customer will be asked to provide his National Insurance Number (NINO) or Primary Account Number (PAN). This will enable the help desk operator to access the customer's details. To verify the caller is genuine, the help desk will ask the customer verification question(s) from information contained within his personal details. Only on successful clearance of this validation process the help desk will act on instructions from the customer.

If the customer cannot provide either the NINO or PAN, the help desk will have a search facility to access customer details using surname and date of birth, or surname and first line of address and post code.

If when the customer details are accessed, the National Sensitivity Indicator is displayed, the call will be dealt with at the appropriate level.

[DN need to confirm procedures. Removal of NSI from CAPS records is pending.]

3.1.2.2.2 REPORT LOST/STOLEN CARD

When a customer reports a lost or stolen card, the help desk will update the status of the card to reflect lost/stolen, immediately triggering a number of events which lead to the update of the system preventing any

FUJ00119561

further benefit encashments against that card. At the same time, the CMS help desk arranges the issue of a replacement card and PUN.

There may be a reason why an automatic reorder of a card may not be desirable at the time the loss/theft is recorded. The order may need to be delayed pending the outcome of investigations by BA and the replacement card and PUN ordered at a later date.

[DN: Process for such supervision of reorder to be discussed and agreed.]

3.1.2.2.3 REPORT DAMAGED CARD

The help desk will register the card as damaged on the system. There is no requirement to inhibit use of the card, pending collection of its replacement.

The help desk will order a replacement card for collection when the customer next attends his nominated post office. The damaged card will be handed in on collection of the new card.

3.1.2.2.4 REPORT NON RECEIPT OF PUN

Where the customer cannot present his PUN at the counter to collect his benefit card because of non receipt or loss he will be referred to his benefit office.

3.1.2.2.5 REPORT CARD NOT AVAILABLE AT NOMINATED POST OFFICE

Where the customer reports his card was not available for collection at the post office on presentation of his PUN, the help desk will check the card status on CMS and where necessary cancel the original card and order a new card and PUN for the customer. If the customer has payments due, he will be referred to his benefit office for a temporary token.

3.1.2.2.6 REPORT CARD/PUN FOUND PREVIOUSLY REPORTED LOST

The help desk will record the call, but once the status of a card or PUN is updated to reflect 'lost' they cannot be re-activated. A new card/PUN will have previously been ordered for the customer as the result of the loss report.

[DN: confirm customer to be advised to post card back to the Freepost address on the reverse of the card.]

FUJ00119561

3.1.2.2.7 ENQUIRE UPON CARD/PUN STATUS

The help desk will provide information to customers on the current and amended status of cards and PUNs; for example, card/PUN ordered, card/PUN issued, card reported lost.

3.1.2.2.8 EXCEPTIONS:

There are a number of situations where the help desk cannot provide information to callers. These include:

- customer not known on the system
- caller cannot provide NINO, PAN, date of birth, or first line of address and post code
- caller fails verification question(s)
- the caller disconnects the call

[DN: Number and type of questions and success criteria to be agreed.]

3.1.2.3 BENEFITS AGENCY'S STAFF VIEWPOINT

Contact by authorised BA staff to the CMS help desk will be via the telephone. BA staff will be required to provide each individual customer's NINO or PAN. This will enable the help desk to access the customer's personal details. Any changes to card and PUN status records will be subject to a full audit trail.

[DN: Operation of process required at R731 (stop direct from a BA office) as distinct from CAPS stops, to be discussed and agreed.]

3.1.2.3.1 CALLER VERIFICATION

To ensure that only those members of staff authorised by BA can use the help desk services, all callers will be required to complete a verification process. This will involve the help desk asking the caller security questions; for example, office identification number.

*[DN: Is the callers identity to be recorded on the system?
How and how often will the verification process change?]*

3.1.2.3.2 CAPS/CAPS ACCESS FACILITY NOT AVAILABLE

If the CAPS/CAPS Access facility is not available to convey urgent status changes to cards and PUNs, the CMS help desk will take instructions by telephone from authorised BA staff and make the necessary changes.

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For a full description of each status change see section 3.1.1, Card Management Service.

[DN: Is this process required?]

3.1.2.3.3 SUSPEND A CARD

Suspending a card will prevent the customer encashing further payments using their card until the suspension is removed. (PUNs cannot be suspended.)

3.1.2.3.4 UNSUSPEND A CARD

Removing a card suspension will allow the customer to collect benefit payments using their card.

3.1.2.3.5 TERMINATE A CARD

Terminating the card for whatever reason will prevent any further encashments using that card, from the specified termination date and time.

[DN: Is there a requirement to terminate a card at a point in time in the near future?]

3.1.2.3.6 ENQUIRE UPON CARD/PUN STATUS

The help desk will respond to enquiries on current and previous card and PUN status from authorised BA staff. For a full description of the status help on the system See section 3.1.1, Card Management Service.

Enquiry responses will include the following details:

- PAN
- NINO
- card status
- previous card/PUN status
- previous card/PUN date status changed

3.1.2.3.7 CALLS ON BEHALF OF BA CUSTOMERS

BA staff can report the following situations on behalf of their customers:

- lost, stolen or damaged cards and PUNs
- non-received PUN
- card not available at the post office

FUJ00119561

- report card/PUN found previously reported lost

Descriptions of these processes are included in Section 4, BA Customer's Viewpoint

3.1.2.3.8 EMERGENCY ORDER BATCH OF TEMPORARY TOKENS

BA can order one or more batches of Temporary Tokens via the CMS help desk in an emergency situation where an office is running low unexpectedly. (Normal steady state ordering of temporary token batches will be via the CAPS program interface.)

The help desk will verify the caller, take the order and send it to the token producer. All orders will be event logged and subject to a full audit trail. All instances of non receipt of orders within the predetermined timescale should be reported to the help desk.

[DN: Secure process for such telephone orders to be agreed. Process to be restricted to CAPS personnel.]

3.1.2.3.9 TERMINATE TEMPORARY TOKEN(S)

This process will allow authorised BA staff to terminate use of a temporary token via the help desk. The temporary token ID number will be required to process the termination. Where a report of a non receipt of a batch of temporary tokens is received by the help desk the termination process has the capability to issue bulk stops of temporary tokens; for example, whole batches, or tokens within a specific range.

3.1.2.3.10 EXCEPTIONS

There are a number of situations where the help desk cannot provide information to callers. These include:

- the caller fails the authentication check
- caller cannot provide NINO, PAN, date of birth, or first line of address and post code
- the customer is not known to the system

3.1.2.4 POCL COUNTER CLERK'S VIEWPOINT

The Post Office counter clerk contact to the help desk will be via the telephone.

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3.1.2.4.1 CALLER VERIFICATION

In order to authenticate the caller, the help desk will ask the clerk to answer verification questions.

3.1.2.4.2 NON ARRIVAL OF BATCH OF CARDS

CMS will detect the non-arrival of a batch of cards at the post office within the designated time period, based upon anticipated production and delivery schedules.

CMS will suspend the cards in a batch that has not arrived within a predetermined time according to the class.pending the outcome of investigations. The help desk will act as the focal point for contact with the post office. Should the batch arrive late the suspension can be removed (the help desk may extend the margin if required). However, the help desk can cancel and reorder the batch of cards if necessary.

3.1.2.4.3 ACTIVATE A NEW CARD

Where a single counter post office encounters a system failure, the post office will contact the CMS help desk to activate new cards.

[DN: Possible process for activation via help desk to be agreed.]

3.1.2.4.4 EXCEPTIONS

There are a number of situations where the help desk cannot provide information to callers. These include:

- the caller fails the verification check
- caller cannot provide NINO, PAN, date of birth, or first line of address and post code
- the customer is not known to the system

3.1.2.5 MISCELLANEOUS CALLS

Calls received by the help desk which are not card- or PUN-specific will either be transferred to the appropriate help desk within Pathway, or the caller advised to contact his local BA office. A percentage of all calls, including miscellaneous, will be subject to call cause analysis, for MIS purposes.

FUJ00119561

3.1.2.6 AUDIT AND CONTROLS

For audits and controls see Section 3.1.7, Common CMS & PAS elements.

3.1.3 TEMPORARY TOKEN PRODUCTION AND ISSUE

3.1.3.1 INTRODUCTION

As part of the BPS, there is a requirement to provide a means whereby a customer without a valid card can still collect his benefits at the post office counter.

Pathway will use a Temporary Token, to allow the beneficiary to make a single encashment at a particular post office. This token will be a 'one stop token', retained and filed locally by the post office for later despatch to a secure storage location.

This section of the document describes how Pathway propose to manage the production, distribution, allocation and usage of temporary tokens.

[DN: Confirm the need for Welsh/English tokens.]

FUJ00119561

3.1.3.2 THE TEMPORARY TOKEN

Pathway will produce books of one stop paper tokens (number of tokens per book to be defined). Each token within the book will be of the same size as the encashment receipt as the two items are associated, this will ease storage and retrieval should this be required at a later date.

Each token will have a unique identification number within each BA office printed during the production process on the face of the token. Each token will include pre printed declaration statement.

[DN: Declaration texts to be agreed.]

3.1.3.3 ORDER A BATCH OF TEMPORARY TOKENS.

Each BA Office will maintain a stock of Temporary Tokens. Pathway will accept orders for stocks of Temporary Tokens from a CAPS program interface or exceptionally via CAPS personnel contacting the CMS Help Desk.

Pathway will ensure the delivery of a batch of tokens within seven working days from the order being placed.

3.1.3.3.1 MAINTAIN REFERENCE DATA

CMS will hold details of each Benefit Office as a 'customer' requiring an on-going supply of temporary tokens. Pathway will establish and maintain:

- Benefits Agency address (for delivery of tokens)
- Benefit Office token number range
- Token order status:
  - ordered
  - produced
  - despatched
  - received

CMS will maintain the status of the tokens, including:

- unassigned
- assigned
- encashed
- stopped

FUJ00119561

- expired

3.1.3.4 PRODUCE AND DESPATCH TEMPORARY TOKENS

Pathway will produce and deliver token orders as received by the CMS help desk to the appropriate BA office. Each token will have a unique ID which will be incremented from the last number used in the allocated range for a given BA office.

Token orders will be distributed via the Royal Mail to each BA office. Tokens not reported at being received in the office within the agreed period (3 days) will be investigated and invalidated if appropriate.

Pathway will employ alternative carriers in the event of Royal Mail service disruption, as above.

3.1.3.4.1 BA VIEW POINT

Each BA office will need to maintain a stock of temporary tokens. The BA office will be responsible for placing orders via CAPS to replenish stocks.

BA will need to:

- maintain a minimum of seven days stock of temporary tokens
- place request via CAPS for replenishment orders ensuring adequate stocks exist to ensure customer service is maintained
- sign for the receipt of a batch of tokens from Pathway, ensuring 'next book' carries on from 'last received'
- reconcile the number received with the number ordered
- resolve any anomalies via CMS help desk
- advise CMS of receipt via CAPS
- allocate temporary tokens to customers via CAPS (to PAS)

3.1.3.5 TOKEN ASSIGNMENT

Temporary Tokens will be assigned only by the local BA office to customers known to CMS. This can occur where payments are outstanding within PAS but the customer has no card for benefit encashment (card in production).

3.1.3.5.1 BA VIEW POINT

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The allocation of a temporary token to a customer will be carried out by BA staff in local BA offices. On assignment to a customer, BA will provide CMS with the following information:

- unique token ID assigned,
- customer's NINO
- particular post office for encashment

3.1.3.5.2 CUSTOMER VIEW POINT

The customer will be required to:

- sign the token upon receipt
- encash the payment at the particular post office within seven days of assignment
- hand in the token on collection of payment(s)
- provide additional identification at the post office counter

3.1.3.6 PAYMENT PROCESSING

Pathway will ensure that the payment or payments associated with the token are available for collection within 30 minutes of notice of assignment.

[DN: Confirm that the requirement is 30 minutes, 90 minutes in some references.]

Pathway will also associate all subsequent payments with the token until:

- the token is used,
- token expires,
- token is stopped,
- a new card is activated.

CMS will treat the token as a card issue against the given card holder.

CMS will advise PAS of token assignment as a cardholder amendment so that outstanding or future payments can be assigned to the token.

A token expiry date will be calculated as date of assignment plus the value of a system parameter, initial value seven days.

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PAS will notify CMS when the token is used for encashment purposes. The temporary token will only be usable for a single encashment at a nominated post office.

CMS will maintain a token status whilst the token is valid and will place a token status 'stopped - used for encashment' on notification of encashment.

3.1.3.7 ISSUE TEMPORARY TOKEN PAYMENT

This process handles emergency authorised payments from CAPS for customers without a valid card. Valid authorisations are logged and distributed to the particular post office to await collection and CMS is notified of issue of the token.

[DN: Emergency payments using a temporary token will need to be distinguished within the payment authorisation record provided by CAPS.]

(The payment authorisation will be accessed via the temporary token ID. Other payments besides the emergency payment will be accessed via the associated NINO. An emergency payment may be not be present in the record: in this case the temporary token method is being used to effect encashment of pre-existing ordinary payments only.)

A temporary token will be issued only to a beneficiary or appointee. A customer must have a temporary token as his current form of card and it must be active and available.

3.1.3.8 INVALIDATE TOKEN ON EXPIRY

CMS will identify temporary tokens where there has been no encashment and the expiry date has been reached. The token status will be updated to 'stopped - expired'. The token will no longer be valid for payment encashment.

3.1.3.9 CANCEL A TOKEN/ BATCH OF TOKENS

CMS will stop a batch of tokens .

FUJ00119561

3.1.3.9.1 BA VIEW POINT

Authorised BA staff can contact Pathway via the CMS help desk to cancel token / batch by quoting:

- BA office ID
- token number/range
- reason for cancellation

3.1.4 PAYMENT AUTHORISATION SERVICE

3.1.4.1 INTRODUCTION

This section describes the services provided by the Payment Authorisation System (PAS) and how BA and BA Customers and POCL counter staff will use the service as part of the end to end Benefit Payment Service (BPS).

PAS is required to be normally available for bulk data transfer to and from CAS/CAPS for 24 hours a day every day of the year. The on-line services supported by the help desk will be available to support the BA and POCL normal business hours (0800 to 1800 Monday-Friday, 0800 to 1300 Saturday, Bank Holidays excepted.)

PAS provides facilities for the management of beneficiaries and payments authorised for collection by beneficiaries or their representatives. The key interfaces for PAS are:

- CAPS Access Service (CAS) to PAS for adding, modifying or cancelling beneficiary and payment details
- PAS to CAS for notification of payment collection, operational reporting including exception reporting and management information
- PAS to POCL Infrastructure Services to distribute payments and collect encashment details
- PAS to PAS help desk to provide interactive information to Benefits Agency and post office counter staff
- PAS to the Card Management System (CMS) for ensuring payments to be collected are available to the appropriate cardholders and their cards.

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3.1.4.2 OVERVIEW OF THE PAYMENT AUTHORISATION SERVICE

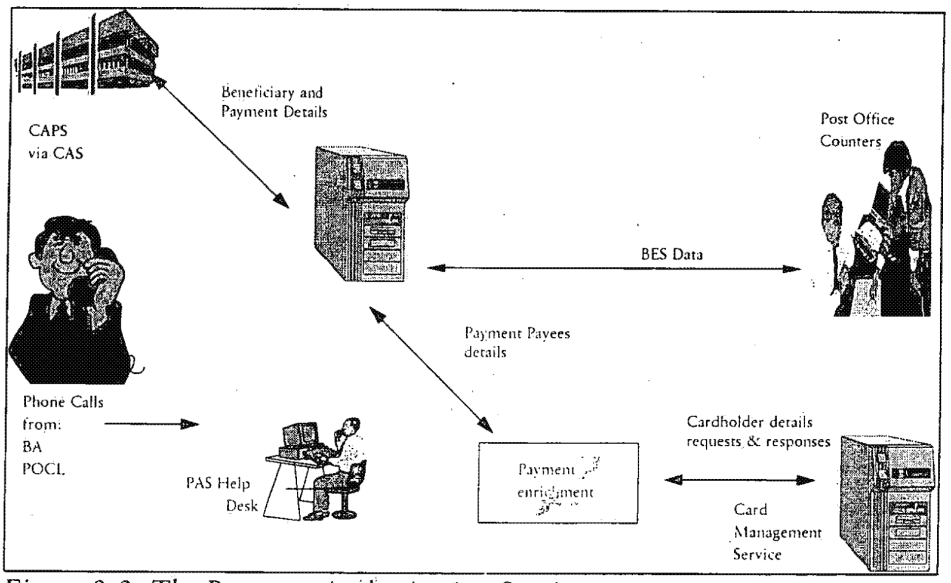

Figure 3-3: The Payment Authorisation Service

3.1.4.3 BENEFICIARY PROCESSES

3.1.4.3.1 NEW BENEFICIARY

New beneficiaries will have additional validation on:

- beneficiary NINO to ensure the beneficiary is previously unknown or is flagged 'end of interest';
- beneficiary nominated post office to ensure a match against post office reference.

Valid beneficiary advices will result in the addition of the beneficiary to the beneficiary database. This includes the reactivating of a beneficiary with a status previously marked as end of interest.

[DN: Reinstatement of 'dormant' beneficiary to be agreed.]

3.1.4.3.2 AMENDMENT TO BENEFICIARY DETAILS

Amendment to beneficiaries will have additional validation on:

FUJ00119561

- beneficiary NINO to ensure the beneficiary is known and is flagged 'currently of interest';
- beneficiary nominated post office to ensure a match against post office reference

[DN: Confirmation needed that amendment to beneficiary will provide a complete replacement for all data items.]

Valid beneficiary change advices will result in the replacement of existing beneficiary details by the values from the CAPS record. Beneficiary data will be copied directly from the CAPS record.

[DN: Discussion and agreement required on the archive treatment of superseded data.]

The foreign payment details for the beneficiary will not be modified. Beneficiary amendment details will be applied to any outstanding authorised payments as well as being applicable to new authorised payments.

3.1.4.3.3 BENEFICIARY NO LONGER ENTITLED TO BENEFIT

A beneficiary no longer entitled to benefit will be validated to ensure he is currently a known beneficiary and currently of interest.

The beneficiary may have uncollected payments. These can still be collected or expire as normal.

In the event the beneficiary becomes 'of interest' again they will be deemed a new beneficiary.

Any card assigned to the beneficiary will not be collected as a result of a notification of end of interest

3.1.4.4 AMENDMENT TO CARDHOLDER DETAILS

PAS will ensure that any outstanding payments that may be collected by a cardholder will be aligned with the latest cardholder data. Cardholder changes which will be applicable for payment collection are:

- change of card Primary Account Number (PAN), this includes the allocation of a temporary token
- change of card issue number
- change of card expiry date

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- change of cardholder name
- change of cardholder nominated office
- change of cardholder address line 1
- change of cardholder post code
- change of cardholder national sensitivity status

3.1.4.5 ISSUE AUTHORISED PAYMENT

Authorised Payments will have additional validation on:

- beneficiary NINO to ensure the beneficiary is known and is flagged 'currently of interest'
- payment ID to ensure no duplication for the authorised payment
- the nominated post office indicated is known and is in service
- when the beneficiary is also a payee that the beneficiary NINO is a known, currently of interest cardholder
- when the beneficiary is not a payee that the first payee NINO is a known, currently of interest cardholder

Additional checks will be carried out:

- Other payee NINOs will be validated to ensure they are known, currently of interest cardholders. Any mismatch will generate warning exceptions for reporting via CAS showing that the authorised payment is accepted (subject to other validation) and the payee group rejected.

- To ensure at least one payee has a card which can be used to actually collect the payment. This includes payees with current usable cards, payees with cards in production and payees with suspended cards. Failure to meet this criteria will result in an exception reported to CAPS. The authorised payment is accepted (subject to other validation), collection will require a payee to have a card issued and/or unsuspended. The payment may be cash and/or tokens and only encashed once.

[DN -The rules for administering signing agents/permanent group agents, and their agents, are to be agreed.]

3.1.4.6 PENDING PAYMENT STOPS

Valid authorised payments are checked against outstanding payment stops. Where a matching payment ID is found CAS is notified for onward routing to CAPS. The advices generated and notified to CAS are:

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- cancellation of stop payment confirmation
- successful stop payment confirmation

The payment will be recorded in PAS with the payment status set to stopped.

3.1.4.7 PAYABLE AUTHORISED PAYMENTS

PAS will record payable authorised payments and forward the payment records enriched with payee details to the POCL Infrastructure Services.

3.1.4.8 RAPID PAYMENTS

The difference in the service for normal and rapid payments is in the timing for delivery of rapid payments. Rapid payments will be received from CAPS via CAS up to 2200 on the evening before the day they are encashable. Within PAS rapid payments will have no greater priority than normal payments encashable on the same day.

[DN: There is inconsistent use of the term "urgent", to be resolved.]

3.1.4.9 EMERGENCY PAYMENT

Emergency payments vary from a normal issue due to the time allowed for the payment being available for collection. Emergency payments will be received from CAPS via CAS on the day they are encashable. Emergency payments will be available for encashment within 30 minutes of receipt.

3.1.4.10 CONTINGENCY PAYMENT

As contingency against the loss of CAPS, PAS can automatically generate payments and provide details of encashments generated as exception reporting for BA to action.

BA will advise PAS to invoke contingency payment processing. This includes provision of start value payment, identifiers for generation of contingency payments and notification of the contingency date for payment.

The contingency payment will be based upon the last authorised payment details. A new authorised payment will be created, this will use

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the next payment predicted amount, cash and/or tokens, as the encashable amount for the contingency payment subject to the following checks:

- next payment earliest encashment date will match the contingency date for payment;
- beneficiary must have currently of interest status;
- payment status of previous payment must be encashed or unpaid.

Cardholders assigned in the authorised payee group for the original payment will be able to collect the contingency payment. This will be subject to scrutiny of the individual cardholder/card status.

- the cardholder status must be currently of interest.

A contingency payment advice will be passed to CAS (or contingency alternative) for exception reporting.

PAS will retain contingency payments with other authorised payments. Any complementary service functions including stops, enquiries and further contingency payment generation can be applied.

[DN: The process for both initiating this contingency activity and for reporting payment, expiry and stops, needs to be agreed.]

3.1.4.11 ENCASHED PAYMENT

3.1.4.11.1 CARD ALERTS ON MONITOR USAGE

Any usage or attempted usage of cards with monitor usage set for them, will have card alert reporting . This level of report is in addition to any other reporting generated by encashment of a payment.

3.1.4.11.2 ENCASHMENTS INFRINGEMENTS

Customers attempting to use their card at an office other than their nominated office will be checked to ensure this is permitted. If the customer is not allowed to use the office the attempted infringement is reported to CAPS, via CAS.

- attempted collection of a payment where that type of payment has a geographical restriction on collection, i.e. limited to Great Britain or Northern Ireland

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- attempted collection of a payment at an office other than that office specifically assigned for collection of the individual payment
- attempted collection of any payments for a beneficiary at an office other than that office specifically assigned to that beneficiary
- attempted collection of any payments for a beneficiary which would not comply with rules for foreign encashment of payments for a beneficiary
- attempted collection by a casual agent at a foreign office.

Supplementary infringements are also available from PAS:

- where the exclusion of payments results in no authorised payments being available for collection, an infringement record will be generated for advising PAS
- where the customer cancels encashment without collecting

3.1.4.11.3 ENCASHED PAYMENT REPORTING

An encashment record will be generated each time payments are collected for an individual beneficiary.

PAS will also provide supplementary validation of the encashment against the authorised payment instructions. Reconciliation will be based upon matching payment ID to confirm:

- all payments for this encashment exist and are not stopped, expired or previously encashed
- the encashment card exists and is active, that is not stopped, expired, suspended or in production
- the encashment amount is equal to the sum of the individual authorised payments. The sum includes both money and tokens

Individual reconciliation failures are reported to CAS.

3.1.4.11.4 EXPIRED PAYMENT

Where an uncollected payment will expire today and the post office has been out of action during the previous day the payment expiry date will be extended by one working day.

[DN: this will be a future date.]

Payments which are not collected by the payment expiry date will be reported to CAPS, via CAS.

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3.1.4.12 STOPPED PAYMENT

This handles stops for authorised payments provided by CAPS. Responses are generated by CMS as stop payments confirmation records.

- expired payments, previously stopped payments and payments already paid are reported to CAS as a failed stop payment confirmation
- unmatched payment stops are reported to the CAS as an unknown stop payment confirmation and held in suspense for matching against new issued authorised payments later in the business day
- unpaid payments are flagged with a payment stop and reported to CAS as a successful stop payment confirmation

3.1.4.13 ENQUIRY ON PAYMENT DETAILS

This process handles enquiries requiring access to payment information. Enquiries may originate from a variety of sources: CAPS, PAS Help Desk, or in the longer term, BA offices.

The enquiry facility is available to handle payment and encashment queries arising between the period when an authorised payment is provided from CAPS and the subsequent expiry, encashment or stop confirmation is notified back to CAPS.

- unpaid payments are reported to CAPS, via CAS.
- expired payments, previously stopped payments and payments already paid are reported to CAS
- unmatched payment stops are reported to CAS.

3.1.4.14 CUSTOMER NOTIFICATION OF CHANGE OF DETAILS

3.1.4.14.1 NOTIFICATION OF CHANGE OF NOMINATED POST OFFICE

The customer can request that payments and cards be collected at a post office other than the currently nominated office. This change will be actioned immediately against Pathway records and forwarded to CAPS for application to BA records (or denial).

Card Alert Reporting will apply for customer notifications at the Counter.

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3.1.4.14.2 INFRINGEMENTS

This process includes the presentation of a card for which there may be constraints on usage.

- change of office using a temporary token will not be allowed
- change of office by a casual agent will not be allowed.
- change of office when the beneficiary restricted post office indicator is set will not be allowed. The customer will not be allowed to make the change and the transaction will be reported to CAS as an infringement of restricted post office collection

[DN: CAPS may need to distinguish these from other infringements.]

3.1.4.14.3 VALID CHANGES

Where the customer changes the nominated office a single change record will be generated. PAS will automatically apply the change of nominated office to the beneficiary details where a beneficiary NINO has the same value as the cardholder NINO. Payments will automatically be assigned to the new office.

PAS will automatically inform CMS of the associated cardholder change. CMS will update the cardholder's nominated office.

3.1.4.14.4 NOTIFICATION OF CHANGE OF ADDRESS

The counter customer will notify BA of a change of address using modified P80MA procedures at the post office, and not via the Pathway systems. This may or may not be in conjunction with a change of nominated office.

CAPS will notify the address change via a personal details change.

[DN: Confirm customer statement request not supported]

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3.1.5 PAYMENT AUTHORISATION SERVICE (PAS) HELP DESK

3.1.5.1 INTRODUCTION

The Payment Authorisation Service (PAS) receives payment entitlement and related information from CAPS via CAS.

The PAS help desk, will provide BA/POCL with a single point of contact for dealing with all enquiries relating to the entitlement, status of automated benefit payments. The PAS help desk will provide separate telephone numbers for BA and POCL counter staff. The help desk will not deal with payment enquiries from BA customers. POCL counter staff calling the help desk to enquire upon payment entitlements will be asked to refer their customer to their local BA office. See Appendix B for a full list of enquiry types.

As an integral part of the authentication process for the validation of callers, BA and POCL staff calling the help desk will be asked to answer verification question(s). This security measure will ensure that only those members of staff nominated by the authorities will have access to the help desk services.

Pathway's internal access to PAS via the help desk will be strictly controlled. Only staff with the appropriate access level will have the authority to amend the status of payments.

The help desk staff will not be able to alter the amount of entitlement indicated on PAS.

All status changes will be subject to a complete audit trail.

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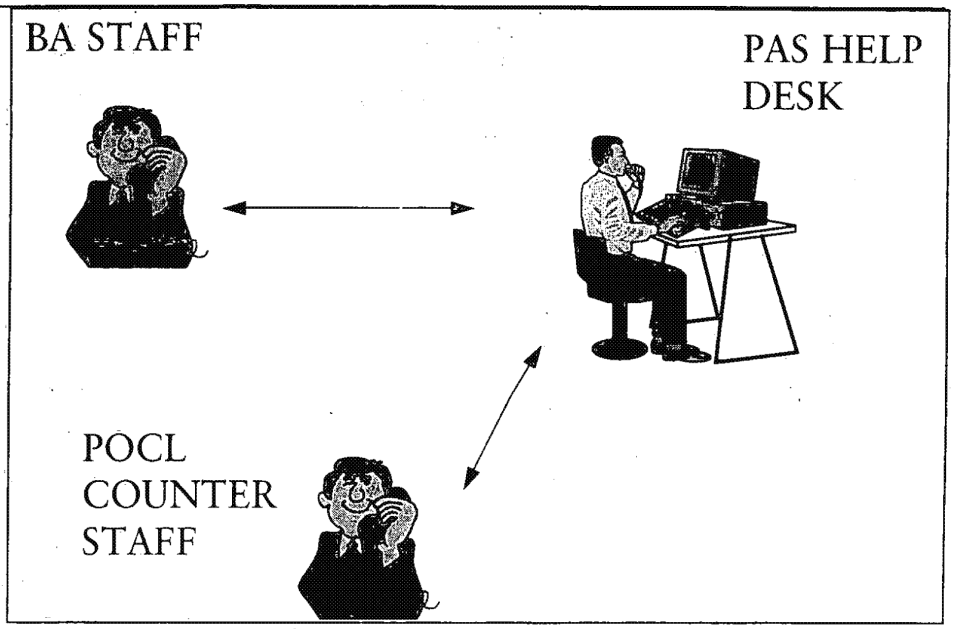

Figure 3-4: Overview diagram of PAS help desk

The PAS help desk will normally be available to take calls, Bank Holidays excepted:-

Monday to Friday	0800 - 1800
Saturday	0800 - 1300

However, a limited service will be available between the hours of 5 am and midnight Monday to Saturday to support payment information to single counter post offices open outside normal working hours.

All calls will be answered to agreed SLA timescales and charged at local call rate. For contingency purposes the help desk will be split across two sites.

3.1.5.2 BENEFITS AGENCY CUSTOMER'S VIEWPOINT

The PAS help desk will not deal with calls from BA customers enquiring on payment entitlements. Enquiries via POCL staff will be referred the local BA office.

3.1.5.3 BENEFITS AGENCY STAFF VIEWPOINT

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The PAS help desk will act as a focal point for authorised BA staff to enquire upon the status of payments held on the PAS. Contact to the help desk will be via the telephone.

3.1.5.3.1 CALLER VERIFICATION

To ensure that the caller is an authorised user of the help desk service, verification question(s) will be asked before any information is disclosed. In order to access the information held on PAS , BA staff will be required to provide the beneficiary's NINO for each customer's identity they wish to enquire upon.

Where BA staff wish to place a stop on a payment, the payment ID can be used to access the payment details.

3.1.5.3.2 CAPS/CAPS ACCESS FACILITY NOT AVAILABLE

If the CAPS/CAS facility is not available for BA staff to make enquiries on payments or place payment stops, the PAS help desk will take instructions by telephone from authorised BA staff and take the necessary action.

[DN: The process for returning confirmations is to be agreed.]

3.1.5.3.3 PAYMENT STOP

Payment stops can be applied via the help desk. Notification of stop failures at the counter will be detected by PAS and reported to the help desk, where exception reports will be produced.

3.1.5.3.4 ENQUIRE UPON PAYMENT STATUS

Authorised BA staff can make enquiries on payment status via the PAS help desk.

3.1.5.3.5 CALLS ON BEHALF OF BA CUSTOMERS

The PAS help desk will not deal with payment entitlement enquiries on behalf of BA customers.

3.1.5.3.6 EXCEPTIONS

There are a number of situations where the help desk cannot provide information to callers. These include:-

- the caller fails the authentication check

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- caller cannot provide beneficiary NINO
- the customer is not known to PAS

3.1.5.4 POCL COUNTER CLERK'S VIEWPOINT

The PAS help desk will act as a focal point for authorised POCL counter staff to enquire upon payment information and request additional personal information to confirm customers identity, where the Benefit Encashment Service (BES) is disrupted.

3.1.5.4.1 CALLER VERIFICATION

To ensure that the caller is an authorised user of the help desk service, verification question(s) will be asked before any information is disclosed.

In order to access the information held on PAS, counter staff will be asked to provide the customer's NINO for each payment they wish to enquire upon.

3.1.5.4.2 ENCASH PAYMENT VIA THE HELP DESK

Where a single counter post office encounters a system failure the post office will contact the help desk to encash payments. The help desk will update PAS, and PAS will update the post office counter when the system is recovered.

3.1.5.4.3 ENCASH FOREIGN PAYMENT VIA THE HELP DESK

The help desk will also authorise foreign encashments for a post office if its network connection is lost. On confirmation by the post office clerk that the payment has been made the help desk will cause the appropriate home post office's records to be updated, preventing any further encashments of that payment.

3.1.5.4.4 CHANGE NOMINATED POST OFFICE VIA THE HELP DESK

Changes to customers nominated post office can be made via the help desk, where the system is down at the post office. Prior to making any changes the help desk will ensure that there are no markers i.e. restricted post office shown on the customers personal details.

[DN: The requirement and process for this is to be discussed and agreed.]

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3.1.5.4.5 EXCEPTIONS

There are a number of situations where the help desk cannot provide information to callers. These include:-

- the caller fails the authentication check
- caller cannot provide card details
- the NINO is not known to PAS
- if payments are unavailable

3.1.5.5 MISCELLANEOUS CALLS

Calls received by the help desk which are not payment specific will be either transferred to the appropriate help desk within Pathway, or the caller advised to contact his local BA office. A percentage of all calls, including miscellaneous ones, will be subject to call cause analysis for MIS reporting.

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3.1.6 BPS GENERAL

3.1.6.1 OPERATIONAL STATUS

Operation of all system components of the Benefit Payment System (BPS) will allow certification in accordance with Police and Criminal Evidence Act (PACE) and equivalent legislation in other territories.

The operation of and data relating to CMS and PAS will support logical separation of the two components of the BPS. The individual PAS and CMS sections identify where data interfaces are required between the two.

Pathway will maintain the audit trail during all periods of operation including fallback and recovery. The audit trail will:

- record all transaction and data passing across service boundaries and all major processing actions
- be capable of tracking a DSS business transaction through the services for which it is responsible
- identify the source or sources of a transaction, its date and time and its outcome
- be available for inspection by DSS
- be retained for a period consistent with the requirements of the Companies Act

[DN: The application of the Companies Act to this data needs discussion and agreement.]

3.1.6.2 TECHNICAL SUPPORT

As an integral part of the service components for BPS, Pathway will provide a technical help desk. This help desk will respond to and resolve any enquiries raised by BA operational and technical support staff relating to the interfaces between BPS and DSS systems. Help desk staff will also raise enquiries with BA staff.

3.1.6.3 VALIDATION OF CAPS DETAIL RECORDS WITHIN CMS/PAS

PAS will validate individual items on the detail records provided by CAPS. Validation will be according to the semantics of the CAPS to PAS and CMS Data Interface Specification. Any supplementary validation for a specific record type is detailed within the CMS and PAS sections of this document according to the CAPS Interface assignment of the record.

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Validation failures will usually result in a rejection of the beneficiary detail record and exception reporting via CAS. The rejection will be logged within PAS. Where a particular record is not rejected a warning will be issued as part of exception reporting. Conditions which generate a warning are described within the sections for each specific record type.

3.1.6.4 AUDIT AND CONTROL

Access to BPS will be controlled as prescribed by the BPS Security system. Only authorised users will have access to BPS. All accesses and changes to the system will be date and time stamped. An audit trail of changes made to the system will be kept within BPS including:

- user ID of user who made the change,
- data and time of the change took place,
- event record of any enquiry,
- record content ' before' and 'after' the change.

The above information will be made available to the authorised staff for later analysis

Records which are nationally or locally sensitive will be handled in accordance with the latest version of DSS IT Security standards.

[DN: Confirmation of the use of NSI procedures is required.]

All aspects of CMS and PAS described here will be secure and auditable and will allow for the production of audit trails for all cards and collateral material, and changes for cardholders, beneficiaries and payments throughout their life cycles.

3.1.6.5 MAINTAIN POST OFFICE REFERENCES

PAS will accept notifications of additions/amendments/deletions for post offices from POCL Infrastructure Services. For any amendment and deletion of a Post Office:

- PAS will re-assign any outstanding authorised payments allocated to that office to the agreed alternative office. PAS will check for beneficiary use of the office. Where a match is found the beneficiary nominated office is amended to the new office. PAS will notify CAPS, via CAS, of change of nominated PO records.
- CMS will check for cardholder use of the office. Where a match is found the cardholder nominated office is changed to the new office. CMS will provide an exception for reporting to CAS.

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3.1.6.6 MAINTAIN BENEFIT PAYMENT REFERENCES

PAS will accept additions/amendments/deletions for benefit payment types, benefit payment offices and regions, benefit payment card types and benefit payment messages.

3.1.6.7 DATA HOUSEKEEPING

3.1.6.7.1 BENEFICIARIES

Beneficiary details for NINOs designated no longer of interest will be deleted from PAS after that status has been maintained for 90 calendar days.

3.1.6.7.2 CARDHOLDERS

Cardholder details for NINOs designated no longer of interest will deleted from CMS after that status has been maintained for 90 consecutive days.

[DN: Discussion and agreement on these periods.]

3.1.6.7.3 PAYMENTS/ENCASHMENTS

Payment details for encashed, expired and stopped payments will be deleted two days after notification to CAPS.

[DN: This can be extended to up to five days, discussion and agreement required.]

3.1.7 COMMON CMS & PAS ELEMENTS

3.1.7.1 BENEFITS AGENCY MANAGEMENT INFORMATION

3.1.7.1.1 MANAGEMENT INFORMATION (SUMMARIES)

The reports address contract management, audit, accounting and security and are based upon the Benefits Payment Service MIS Requirements Catalogue, version 2

Each report is described below and referenced back to the BPS Requirements Catalogue. In all cases, report details will be delivered by

FUJ00119561

BPS to CAS which manages the interface with the BA. This service will offer the flexibility of delivery of report content on a range of media.

[DN: Report formats will be discussed more fully at the next stage and will include the option of delivery in a format appropriate for processing by automated processes within the Benefits Agency.]

Management information will be made available to BA at least five working days before regular Service Review Meetings.

[DN: R743. Report preparation standards need to be agreed for ad hoc meetings.]

3.1.7.1.2 CONTRACT MANAGEMENT

3.1.7.1.2.1 REQUIREMENT 1: CARDS ISSUED

An analysis of the number of cards issued per month will be provided. The count will be broken down per card type to give number issued by reason.

- Card type:
  - BA
  - SSA
  - WPA
  - BA Welsh
  - WPA Welsh

- Reason for issue of card
  - new card holder
  - previous card lost
  - previous card stolen
  - previous card damaged
  - previous card expiring

The analysis will be provided by post office, POCL Region and by BA area.

3.1.7.1.2.2 REQUIREMENT 2: TYPES OF CALLS TO THE CMS HELP DESK

Pathway's call management will enable the classification of calls to the CMS Help Desk. Monthly and annual analysis of the number of calls

FUJ00119561

per type will be produced. The help desk has catalogued the type of calls expected from the three (or more) classes of customer: Post Office staff, Benefits Agency staff, customers and other.

3.1.7.1.2.3 *REQUIREMENT 3: REGIONAL ANALYSIS OF TYPES OF CALLS TO THE CMS HELP DESK*

The call analysis described above will also be produced by POCL region and BA area to enable detection of regional variations and will be further subdivided by customer group. This analysis will be based upon data gathered on the CMS/PAS Help Desk Automated Call Distribution (ACD) facility.

[The precise definition of the basis for assigning a region to a call needs to be discussed and agreed.]

3.1.7.1.2.4 *REQUIREMENT 4: CALLS LOST OR ABANDONED*

Pathway's call management will enable the counting of lost and abandoned calls. The number of such calls will be reported monthly and annually.

3.1.7.1.2.5 *REQUIREMENT 5: LENGTH OF CALLS.*

The length of each call to the CMS help desk will be measured for each customer group (as defined in requirement 2 above). The average length of call per customer group will be derived and reported monthly and annually.

3.1.7.1.2.6 *REQUIREMENT 6: QUALITY OF SERVICE OFFERED TO CALLERS*

Supervision of the CMS help desk will include assessment of the level of customer satisfaction on a sample of calls. This analysis will be input to Pathway's own appraisal of conduct of the help desk and forwarded quarterly to BA.

3.1.7.1.2.7 *REQUIREMENT 7: CARDS AND PUNs LOST IN TRANSIT*

The CMS help desk will keep a record of cards and PUNs lost in transit. This will be forwarded to the BA monthly.

3.1.7.1.2.8 *REQUIREMENT 8: TRANSACTIONS AUTHORISED*

FUJ00119561

An analysis of the number and value of transactions authorised per post office will be produced weekly, monthly and annually to highlight trends and to enable validation against data held within the bounds of the BA. The analysis will be subdivided to indicate the number value of payments to each class of payee - e.g. beneficiary, casual agent, permanent agent, appointee and alternative payee.

3.1.7.1.2.9 REQUIREMENT 9: FOREIGN ENCASHMENTS

An analysis of the number and value of foreign encashments will be provided weekly, monthly and annually to enable review of trends. The various classes of payee will be separately identified on this analysis (as per requirement 8)

3.1.7.1.2.10 REQUIREMENT 10: PHANTOM WITHDRAWALS

As a by-product of investigation of customer repudiations, a monthly analysis of alleged and actual phantom withdrawals will be delivered to enable trend analysis and assist in fraud detection. Fuller details of each instance will be available.

3.1.7.1.2.11 REQUIREMENT 11: PAYMENTS MADE UNDER FALLBACK PROCEDURES

The number and value of payments made per post office under fallback procedures will be reported weekly, monthly and annually so as to enable the identification of areas experiencing difficulty.

3.1.7.1.2.12 REQUIREMENT 12: RECORD OF CARD TRANSACTIONS

A count of card-based payment encashments will be provided weekly, monthly, quarterly and annually to support accounting and validation activity.

3.1.7.1.2.13 REQUIREMENT 13: TEMPORARY TOKENS ISSUED

The number of temporary tokens issued per month will be reported and will be summarised annually. Subject to establishing a mechanism for BA advising Pathway of reason for issue of the temporary token, the analysis will be provided by reason.

FUJ00119561

[DN: Confirmation is sought that this refers to issue to the customer not the BA office.]

3.1.7.1.2.14 REQUIREMENT 14: CARDS ACTIVATED

An analysis of cards activated each week will be provided weekly and rolled up to provide monthly, quarterly and annual activations.

3.1.7.1.2.15 REQUIREMENT 15. CARD IMPOUNDED AND INVALIDATED

There are a number of situations in which a card is impounded or its use invalidated. An analysis of such actions will be provided by reason and delivered weekly and monthly. This will be provided by post office within post code within town and will enable the identification of problem districts and the nature of the problem to potentially prompt corrective action. This analysis will also be provided for temporary tokens.

[DN: post code at the lowest level is typically a block of 30 dwellings. Further discussion is required as to the use of the post code for grouping.]

3.1.7.1.2.16 REQUIREMENT 16: CARDS PER POST OFFICE

The number of active cards per nominated post office will be reported weekly, monthly and annually to enable monitoring of any unusual trends.

3.1.7.1.3 AUDIT

3.1.7.1.3.1 REQUIREMENTS 17-20: RANDOM SELECTION OF DATA AND BESPOKE ANALYSES

A support team within Pathway will use standard ORACLE7 tools to interrogate the current PAS and CMS databases and produce reports on an ad hoc basis. These tools offer considerable flexibility in retrieval of data and presentation of results. Each instance will be subject to consideration of impact upon operation.

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3.1.7.1.4 ACCOUNTING

3.1.7.1.4.1 REQUIREMENT 21: PERIOD-END SUMMARY OF OUTSTANDING PAYMENTS

By consideration of newly authorised payments, encashments, expiring payments and any adjustments, a summary of payments outstanding will be produced at the end of each week and month for use in reconciliation.

3.1.7.1.4.2 REQUIREMENT 22: MISMATCHES

The Pathway solution offers a secure delivery mechanism for ensuring the authorised money is paid to the correct person and at a legitimate location. Some deviations are detectable automatically when, for instance, the data passed back from counters is compared with centrally held data.

Other deviations will only be found by detailed investigation as part of query resolution. Where a difference between intended and actual event is found, the mismatches will be reported daily and summarised by type to enable investigation and correction.

3.1.7.1.4.3 REQUIREMENT 23: UNCASHED TRANSACTIONS

A summary of uncashed payments will be reported daily as input to reconciliation processes.

3.1.7.1.4.4 REQUIREMENT 24: ATTEMPTED CARD AUTHORISATIONS

As input to the review of transaction times at the post office counter, an analysis of number of card swipes attempted in card authentication will be produced weekly and will present the data as a summary across all post offices. In the event that less than 95% of cards are read on a single swipe at a given post office, the analysis will be provided for that given office.

3.1.7.1.5 SECURITY

3.1.7.1.5.1 REQUIREMENT 25: IRREGULAR ENCASHMENTS

FUJ00119561

Instances of irregular behaviour will be reported weekly. This will encompass reporting of :

- number of means tested benefits uncashed after four weeks
- number of non means tested benefits uncashed after six weeks
- change of nominated office without change of address
- within six weeks
- excessive use of casual agents
- attempted encashment of a stopped payment

[DN: Clarification of what constitutes attempted access to a stopped payment is required.]

- payments with an associated loss report
- presentation of non-genuine cards or apparently duplicated card
- keyed transaction outside service hours

[DN: Clarification of which transactions may not be keyed out of hours is required.]

- keyed transactions or telephone authorisations, by clerk and outlet, where no report of system outage is reported.
- transactions from an office marked as temporarily out of commission

3.1.7.1.5.2 *REQUIREMENT 26: NUMBER OF FALSE ACCEPTANCES AND REJECTIONS*

Investigation into queried payments may result in marking of the payment as a false acceptance of an invalid card or false rejection of a valid card. A report of the number of such instances will be provided periodically to enable assessment of the extent to which customers are having problems obtaining their correct entitlement.

3.1.7.1.5.3 *REQUIREMENT 27: CARD AUTHENTICATION FAILURES*

The number of instances of erroneous authentication of a counterfeit card and failure to authenticate a valid card will also be reported weekly to enable monitoring of effectiveness of security measures.

3.1.7.1.5.4 *REQUIREMENT 28: INTERNAL FRAUD INCIDENTS*

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The number of incidents of internal fraud within Pathway's domain will be reported monthly by the Fraud Management Team, as input to the assessment of system security.

3.1.7.1.6 OTHER MANAGEMENT INFORMATION

The above reflects the catalogued management information needs. A considerable number of measures of performance against Service Level Agreement have also been defined by Pathway for use in measuring the attainment of Pathway in servicing the Contracting Parties and also the attainment of Pathway's suppliers with regard to service provision.

These measures are relevant to the establishing of under performance or over performance and to establishing the level of penalties or rewards.

It is anticipated that many of these measures will also be visible to the Contracting Parties and therefore could be considered at a later level of specification as an extension to the management information catalogued above.

3.1.8 CAPS ACCESS SYSTEM (CAS)

3.1.8.1 INTRODUCTION

The CAPS Access Service (CAS) handles the exchange of data between Pathway and the Benefits Agency's CAPS. It is envisaged that this exchange will initially be at file level but recognised that the exchange mechanism may evolve under change control to offer a messaging capability. CAS will be available 24 hours a day, every day of the year, subject to agreed service maintenance and availability of the common CAPS platform.

3.1.8.2 DATA DELIVERY

The delivery of data from CAPS to Pathway will be managed by introduction of a file transfer interface sited at the boundary of each CAPS site and associated routing and encryption software. This interface will ensure that the file is delivered across the link to the appropriate locations securely. CAS also provides the decryption and file transfer software at the receiving Pathway site.

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The scope of CAS encompasses the file transfer from the CAPS domain, management of the inter-site communication and the file transfer into the receiving Pathway system.

The delivery of data from Pathway to CAPS will exploit the same infrastructure.

3.1.8.3 MIS REPORTING

The CAS supports the delivery of CMS/PAS data such as exception reports and management information. Where there is a defined interface to CAPS, CAS will pass the data forward.

In the event there is no defined interface to CAPS, CAS will deliver to BA on whatever media is determined and agreed. Where the interface to CAPS or other BA user evolves, this will be managed by CAS without impact upon CMS and PAS.

[DN: Contingency reporting routes to be discussed and agreed.]

3.1.8.4 DATA EXCHANGE

The key exchanges of data will be between CAS and the Card and Payment Authorisation Services (CMS/PAS). The architecture will ensure that data forwarded to Pathway is within the Pathway domain before it leaves the BA site and that data forwarded to BA is on the BA site before BA need to take ownership. In other words, Pathway is accountable for the transfer into the inter-site communications network and the actual movement across the inter-site network.

CAS will act as a buffer between CAPS and PAS/CMS and will address data formatting so that each of the systems receives or despatches data in the optimum format. The positioning of CAS between the application systems also offers the opportunity to protect the application systems from unnecessary change by protecting defined interfaces wherever practical.

To ensure early detection of data integrity failures, CAS will perform some validation of files ex CAPS within the bounds of the BA. This validation will encompass :

- presence of a recognised file header defining type of data to follow
- file control data such as date/time is valid

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- additional file control, such as sequence number, is as expected (next in sequence)
- content limited to records of the type(s) associated with the given header
- where structured record groups are defined, valid group structure is presented as per the agreed CAPS interface definition
- presence of a file trailer
- control totals on file trailer are consistent with file content

3.1.8.5 DATA VALIDATION

CAS will not perform any validation which requires access to standing data within the interfacing applications, as this is more properly serviced by the supplying and receiving applications.

3.1.8.6 SYSTEM INTERFACE

CAS will service an interface to and from CAPS for all the file types for which a CAPS interface is defined in the CAPS to PAS/CMS Data Interface Definitions document (version 5, 22 January 1996). Namely:

File	From	To	File type
Authorised payments	CAPS	PAS	001
Stop payments	CAPS	PAS	002
Stop payments confirmation	PAS	CAPS	003
Payments expiry	PAS	CAPS	004
Payments encashment	PAS	CAPS	005
Card alert	PAS	CAPS	006
Restricted PO infringement	PAS	CAPS	007
Payments enquiry	CAPS	PAS	008
Payments enquiry response	PAS	CAPS	009
Change of nominated PO	PAS	CAPS	010
Customer statement request	PAS	CAPS	011
Customer details	CAPS	PAS	012
End of customer interest	CAPS	PAS	013
Customer details	CAPS	CMS	014
End of customer interest	CAPS	CMS	015

3.1.8.6.1 EXCEPTIONALLY

File	From	To	File type
Cancel stop payment	PAS	CAPS	050

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confirmation			
Cancel payment expiry	PAS	CAPS	051
Cancel payment encashment	PAS	CAPS	052

[DN: Status of change requests shown in interface specification to be resolved.]

Confirmation of acceptance of a file ex CAPS, or notification of validation failure on application of the above checks, will be issued to CAPS.

3.1.8.7 CMS & PAS INTERFACES

The CMS and PAS application data is held in ORACLE7 relational databases. To facilitate loading of data ex CAPS into the database tables, CAS will remove header and trailer information and will deliver the data records into a directory designated for use as a repository for the given interface.

The take on of data records into the CMS/PAS databases is based upon use of standard utilities which require parameters defining operational characteristics. A limit of 500,000 records is set on any given data record load execution.

In instances where there are defined groups of records (authorised payment instruction with an associated payee list and/or message, for example), CAS ensures that all records pertaining to a given payment are put in the same file.

Similarly, on the return interface from CMS/PAS to CAPS, CAS will extract information out of designated database tables and will add header and trailer records containing the appropriate control information and to satisfy the interface definition.

3.1.9 PAS RECONCILIATION REQUIREMENTS

The formal requirements in relation to PAS comprise:

- reconciliation at the individual payment authorisation level of the value as received from CAPS and the value of encashments as notified by BES via TMS

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- reconciliation at the individual payment authorisation level of encashments received from BES via TMS and the value as notified to BES via TMS
- provision of the Common Basis of Settlement as between BA, POCL (and Pathway)

Reconciliation of value includes tokens by type as well as of monetary amounts.

Clearly if the same datasets are used to represent the data received from CAPS and that notified to BES, then the solution to the first two requirements can be merged into one.

The role of BES is described in Section 4.

3.1.9.1 PAS-RELATED RECONCILIATION

The fundamental reconciliation task is the end to end checking of payment authorisations. This can be seen as reconciliation between the enriched payment authorisations sent to BES via TMS and the encashment and stop notifications and expiry confirmations received from BES via TMS, having relied on the logical correspondence between the raw authorisations and the enriched ones.

3.1.9.1.1 TIMING, LEGISLATIVE AND REPORTING CONSTRAINTS

As a matter of record, at the time of preparing this level of specification, the formal requirement is for encashments to be notified by 0400 on the day following encashment and for expiries to be confirmed by 0300 on the second day following expiry (Schedule B3, Section 2.1.4, as amended by the Invitation to Retender (ITR) subject to service level agreements).

A payment authorisation, strictly speaking, becomes effective at 0000 on its first day and expires at 2400 on its last day.

At present there are no post offices specified to be open between 0000 and 0500 and only three open after 2200 and before 0600. Nevertheless, if opening hours were extended, or indeed if a late opening post office remained open for a few minutes after midnight, such a payment would be legally encashable in precise accordance with its validity.

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3.1.9.1.2 ENCASHMENT AND EXPIRY REPORTING

These requirement and constraints taken together mean that encashment processing cannot be undertaken with finality until just after midnight, while systems have to be capable of reporting an encashment at 2400 to CAPS within four hours.

Expiries have to be confirmed during the payment's home office on line day following the midnight of expiry. Special "day of grace" processing will allow controlled late payment where an office has been down during a payment's last day of validity. (The precise definition of such downtime will defined at a later level of specification.)

It is assumed that encashment notifications and expiry confirmations will be trickle-fed from BES and TMS back to PAS during the on-line day and that they will be fed back to CAPS in files containing no more than 500,000 entries. This convention will limit nugatory processing in the event of file and record validation exceptions.

3.1.9.1.3 EXCEPTIONAL LATE REPORTING

As described, PAS may receive encashment notifications for immediate reporting right up to midnight (and a few seconds after). However, it is possible that an encashment notification may be prevented from reaching PAS on the day of encashment because BES was not available, for whatever reason: equipment or telecommunications outage, staff dispute and so on. In this case the encashment notification will reach PAS during the next or subsequent day.

A payment authorisation expires at midnight on its last day of validity. The fact that the nominated offices of the possible payees closed earlier that evening does not mean that the authorisation can be deemed to have expired at those earlier times. A payee could collect by way of a foreign encashment right up to midnight. PAS will therefore normally receive expiry confirmations during the on-line day following that of expiry. However, there is a situation in which such normal expiry confirmations will not be made; if BES was not available, again for whatever reason: equipment or telecommunications outage, staff dispute and so on, a beneficiary may not have been able to collect a payment on its last day of validity. In this case BES will provide for, and if possible notify PAS of, a one-day extension of the expiry date, and the payment will be permitted on the next working day (day of grace encashment), with either expiry or encashment being reported subsequently.

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3.1.9.1.4 PAYMENT STOPS

PAS and BES will handle payment authorisation stops in support of accurate reconciliation. (A stopped payment authorisation is sometimes referred to as cancelled, invalidated or voided.) There are two classes of stop specified: an immediate stop, received during the DSS on-line day; and a non-immediate stop received as part of the "next working day" transactions. On receipt of a stop notification PAS will establish if the payment has been encashed by reference to its own tables then, if necessary, by reference to TMS and by extension to BES. If the payment has been encashed then the definitive encashment notification will be returned at that point if not already returned. If the payment has not been encashed then TMS and BES will in effect mark the payment as stopped and CAPS will be notified definitively of the successful stop at that point. The payment authorisation and stop status will be retained for reconciliation and settlement reporting.

3.1.9.1.5 SCOPE OF RECONCILIATION

Thus PAS will take account of:

- ordinary encashment notifications executed up to midnight and notified up to midnight (or very shortly after)
- ordinary encashment notifications executed correctly after midnight (invalid ones attempted after midnight will be prevented by BES) for reporting by 0400 on the following day in respect of the calendar day in which they occurred
- validity date extensions for day of grace situations
- day of grace encashments
- expiries both ordinary and for day of grace situations
- stopped payments

Note that suspension of a payment authorisation is reversible, so it is possible that a suspended payment may be later stopped and reported as above, or may expire in the suspended state.[1]

3.1.9.1.6 TREATMENT OF PATHWAY ADJUSTMENTS

The formal requirement includes the reporting of differences between the authorisations and the encashments caused by Pathway's adjustments "to resolve errors or due to maintenance activities". None is defined at

[1] Payment suspensions may not be a formal requirement, but are included at this level of specification.

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this time, except for the day of grace process described above. However, a clear distinction will be made in data between a payment authorisation that has been raised by CAPS in the normal way and one that has been manufactured by Pathway according to the requirement to provide back-up to CAPS unavailability (R797, 963).

The means by which the results of this reconciliation process is conveyed is not specified. It is assumed that it will be included in the Common Basis of Settlement Report, q.v.

3.1.9.2 THE COMMON BASIS OF SETTLEMENT

The purpose of the Common Basis of Settlement (CBOS) is to facilitate financial settlement between BA and POCL and in turn between BA, POCL and Pathway.

The principle is to form a daily CBOS report using the results of the CAPS-to-BES reconciliation with additional information for stopped payments.

The periods of time for which reconciliation is performed are specified as calendar days, measured from 0000 to 2400.

There will be up to seven such reports a week: there are currently some 115 post offices open on Sundays and Bank Holidays, and this number will increase to 200 in the near term.

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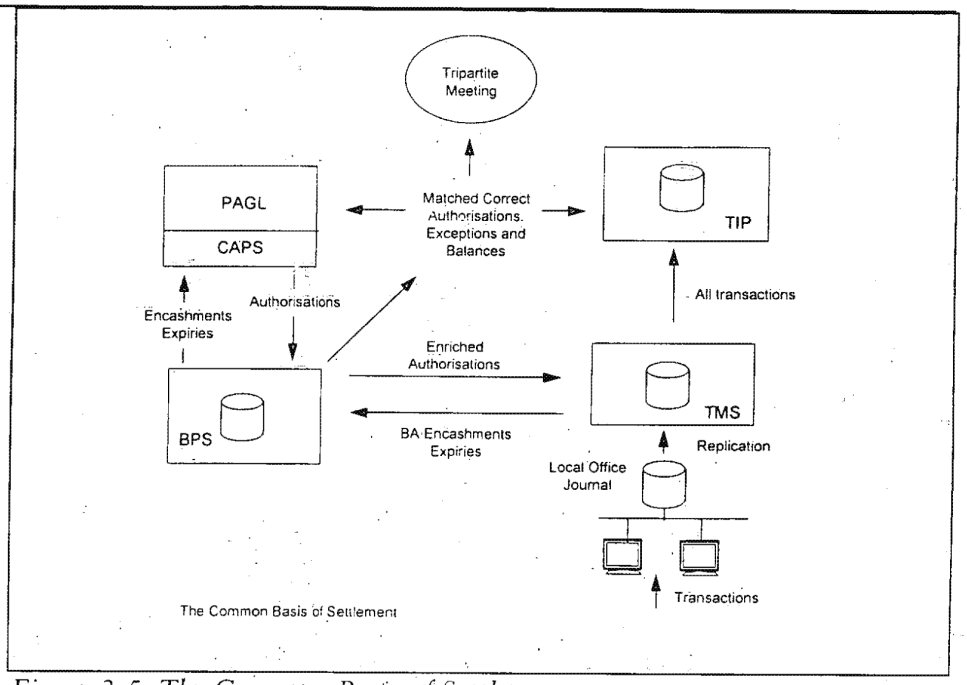

Figure 3-5: The Common Basis of Settlement

3.1.9.2.1 REQUIRED OUTPUTS

The required outputs are daily files of:

- matched authorisations
- reconciliation exceptions
- unencashed balances

It is intended that a primary financial settlement be made on the basis of agreement by BA and POCL to the matched authorisations element of the Pathway CBOS, and that all parties can then accrue the debits and credits.

It is further intended that a secondary and final financial settlement be made on the basis of the reconciliation exceptions when these are resolved by a tripartite meeting of the parties. This secondary settlement will produce its own audit trail outside of the automated system, that is there will be no retrospective adjustment to the TMS record.

Over time, as reconciliation exceptions are better understood, benign ones can be absorbed into the normal operating methods and taken as part of the primary financial settlement.

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Note that a stop or payment enquiry from CAPS for which PAS cannot find a matching payment authorisation is handled separately from the reconciliation process. In particular where a stop is in respect of a payment authorisation not yet received from CAPS, PAS will hold it in a state pending receipt of the authorisation which will then lead to a successful stop originated at the PAS level.

3.1.9.2.2 MATCHED AUTHORISATIONS

This output will be the explicit matching of a payment authorisation that has been paid, stopped or has expired with the evidence of payment, stop or expiry.

For each payment authorisation that was, in respect of the immediately preceding 0000-2400 period:

- notified to CAPS as encashed (including those definitively reported as having been encashed on stop request)
- notified to CAPS as stopped successfully
- confirmed to CAPS as having expired

a status to that effect, together with:

- the original payment authorisation[2], plus, as applicable:
  - a copy of the encashment notification record
  - a copy of the stop notification and associated definitive encashment notification (for unsuccessful stop requests where the encashment was notified with the stop response)
  - a copy of the stop notification and stop success notification (for successful stop requests)
  - a copy of the expiry confirmation

3.1.9.2.3 RECONCILIATION EXCEPTIONS

In the process of matching encashments, expiries and stops against payment authorisations PAS will discover exceptions. Although in ideal circumstances there should be no such exceptions, in practice there will be, and each will require individual explanation and resolution both in terms of system behaviour and financial responsibility.

[2] This is expected to be the denormalised version with rolled up token and message records

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Certain classes of reconciliation exception will be anticipated and will be so categorised:

- Salient data check. The salient data within payment authorisations should be checked for correspondence with that in the encashment or stop notification, or expiry confirmation[3]. Elements of the NINO, nominated post office, payment date, expiry date and of course value of cash and tokens will be checked. Matched records for which any salient data differs will indicate a data corruption, program fault or fraud. Records whose paid amount differs from the authorised amount will be a reconciliation failure since in all circumstances (defined thus far) all payment authorisations must be paid in full or not at all[4]. Records indicating late payment by reason of day of grace procedures will be so marked for visibility. Records indicating early or other late payment will indicate data corruption or fault in either BES, TMS or PAS, most probably initially a fault in BES. Day of grace encashments should be shown separately as these are predictably benign exceptions.

- An unmatched inbound record from BES/TMS (encashment, expiry) will indicate:

  - (encashment) an erroneous or fraudulent injection from the TMS side (that is paid without authorisation from CAPS) or a double payment or failure in PAS, all requiring immediate investigation. A double payment is possible if the policy adopted on foreign encashment authorisations is such that a payment is made on the basis of the TMS record when the nominated office is down and a two way telephone authorisation is not undertaken. However, only a single, that is one-off, double payment is possible and the beneficiary's benefits will be rescheduled to compensate

  - (expiry) either a failure in PAS or in TMS or BES requiring immediate investigation

- An unmatched resident PAS record awaiting payment or expiry notification after such a notification has become fundamentally

[3] Where a day of grace extension is in operation neither an encashment notification or expiry confirmation will have been received from BES/TMS. The payment authorisation will be held by PAS possibly marked as day of grace extended.

[4] There has been discussion of payment of a predefined amount in the event of collapse of the public infrastructure. If implemented this would be against a payment authorisation whose description from BES would indicate such a payment and PAS would carry the value as personal data. This extension is not defined at this level of specification. Note also that where the £1000 maximum rule or Post Office cash limit applies whole payment authorisations are still paid.

FUJ00119561

overdue, that is overdue even if a day of grace has been applied, would represent:

- an enduring PAS error indicating a duplicated payment authorisation within PAS
- an "orphaned" PAS record. Orphaned records could occur if a post office had been put out of action by some event and had not yet been either brought back into service or officially closed down. In the case of such a dormant period that is rectified by restart of the office, any blocked payment notifications, expiry confirmations or successful stops that did not make it to TMS before the event will then clear down the orphaned records. If the office is eventually closed down then the closedown process will be required to notify such valedictory notifications or confirmations on behalf of the now defunct office. Alternatively, orphaned records could occur if TMS had misdirected payment authorisations, payment notifications, expiry confirmations or successful stops.

It is proposed therefore that such unmatched records are retained on the reconciliations exception report for visibility and investigation.

3.1.9.2.4 UNENCASHED BALANCES

The thrust of this requirement is to supply to BA, by Agency code (NI Pension, War Pension, Child Benefit, Income Support...), volume and value data for benefit authorisations that are available for encashment but which have not yet been encashed in order that track can be kept of the contingent liability. The data will also be of value to POCL for contingency cash planning and to Pathway for understanding periodic variations in resource utilisations.

Care will needed in handling certain classes of work in progress and in accumulating values within the right totals.

The requirement is to show the effect of encashments, expiries and stops, and exceptional items.

In the following description the assumption is that this processing takes place at about 0430 in respect of an unencashed balance as at the preceding 0000.

The unencashed balance will automatically take account of regular payments which will have been received by 0800 two days previously, "next day" payments which will have been received by 2200 the previous day and urgent payments which will have been received by the close of

FUJ00119561

the last DSS on-line day (0800-1800 Monday to Saturday inclusive excluding Bank Holidays, Schedule A1).

- Volume and value of payments brought forward not having been notified to CAPS as encashed, stopped or expired as at 0000.

  This will be equal to the corresponding volume and value of payments brought forward a day earlier:

  - PLUS new payment authorisations notified during the previous day for immediate validity
  - LESS expiries confirmed in respect of the previous day
  - LESS encashments notified in respect of the previous day
  - LESS immediate stops successfully applied during the previous DSS on-line day (up to 1800) (including stops that were held in suspense for payment authorisations awaited and which were notified for immediate validity)
  - LESS any new stops successfully applied during the batch day (up to 2200) (including stops that were held in suspense for payment authorisations awaited and which were notified for immediate validity)

- PLUS new payment authorisations which became valid at the 0000 just passed

These control totals will be verified by column addition. During the column addition process volume and value totals will be accumulated for payments which have not yet been notified as paid, expired or stopped, that is are still live within PAS, but which had nominally expired at 0000 one day earlier. These will represent potential day of grace situations and unmatched resident records. The nominal expiry date will be readily variable to two or more days earlier: experience may indicate that late expiry confirmations, especially during periods of industrial dispute, should be filtered to manageable levels.

Payment authorisations which become valid on subsequent days will need to be added into counters for future reference. It is unlikely that payment authorisations will be notified more than seven days in advance. Stops which apply to payment authorisations which are not yet valid will need to cause their removal from such counts.

Counters will be maintained for volume and value, and within value distinguishing between money and types of token.

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[DN The accuracy of these methods is believed to be limited only by late notifications generally and specifically late notifications of the nominally overdue.]

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3.1.10 CMS RECONCILIATION

The formal requirements are to reconcile the card and temporary token actions against instructions received from BA, recognising that this is solution-dependent and, in the Pathway solution, involves POCL as a subcontractor handling card management at the counter.

The near term steady state relationships differ somewhat from those of PAS: in the case of temporary tokens the primary BA input is not from CAPS but from the BA offices via the CMS Help Desk.

The CMS card actions are specified in Section 1 of the BPS functional specification, Section 2 of the BES functional specification and a Memorandum of Understanding from Post Office Counters concerning card receipt and issue. In addition the BPS MIS lists a number of reports in this area, although not the specific ones detailed below.

3.1.10.1 CMS-RELATED RECONCILIATION

The purpose of this reconciliation is for the parties to be assured that:

- for every customer for whom a card is required a suitable one is available or in course of preparation for the purpose of payment encashments, and contrariwise, that for every customer for whom access to a card is explicitly not required that none is available

- for every BA office order for temporary tokens one is available or in course of preparation

Some of the specifications referenced and certain responses to requirements anticipate more operations being required on cards and temporary tokens than is explicit in others. For example the SID does not include card suspension or card stop at the behest of the DSS. This level of specification includes such functions even though they may not be formally required at this time.

3.1.10.1.1 CARD-RELATED RECONCILIATIONS

At the time of preparing this level of specification there are only two programmatic transactions initiated by CAPS:

- new or revised personal details notification
- end of interest

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For the purposes of reconciliation these act broadly as a simple on/off switch. Revised personal details may, or may not, require the card to replaced. While a card is in course of such replacement the current card remains available.

The process of reconciliation therefore reduces to keeping a track at CMS which reflects the various statuses which a card can have. These are shown in the table below. The full range of statuses which should be provided for is given. Changes to requirements in this area can be anticipated.

Statuses of suspended or non-suspended cards		
Inactive	Uncollected	Yet to be activated, in production, transit, or at post office
	Lost	Did not arrive at post office by due time
	Stolen	Stolen from post office
	Damaged	Could not be activated
	Returned/ disabled	Was not activated by due date and was hole punched and returned
Active	In use	Activated, the normal state
		Subject to alert monitoring
	Stopped	Reported lost (or found)
		Reported stolen (or impounded)
		Reported damaged
		Customer denied use by DSS
	Dormant	Notified no further interest
Expired		Past expiry date
Cancelled		Dormant card not replaced when otherwise due[5]

The requirement does not specify how reconciliation reports are to be communicated. It is therefore assumed that a report should be produced monthly covering:

- those specific customers for whom a card is required and for whom no card is available or in preparation

[5] *[DN: During stream meetings a scheme was worked out whereby a card notified as being of no further interest would not take any further part in payments unless a renewed personal details transaction was received, when it would be revived. If it expired before such revival it would be cancelled on expiry. This allowed people to move in and out of benefit without card replacement. The SID, however, requires that a card be cancelled on no further interest.]*

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- those specific customers for whom an end of interest is shown as having been received and not superseded and for whom the card status is not invalidated. This should be an empty report provided it is taken immediately after a card/PUN production order sequence.
- counts of customer by card status

3.1.10.1.2 TEMPORARY TOKEN-RELATED RECONCILIATIONS

During the near term steady state BA offices will order temporary tokens to replenish their stocks by calls upon the CMS Help Desk who will update a temporary tokens order file. CMS will scan the order file and produce an order on the temporary token supplier for the numbers requested and the destination addresses, numbering the temporary tokens in each individual order incrementing from the last number used in the allocated range. It is not expected that the BA office will ring up to say they have arrived so reliance on paper methods of recording delivery and calls from the CMS help desk to establish arrival will be required.

In the medium term such orders are expected to be made via a CAPS application available to BA offices and at that time the application should also facilitate the confirmation of arrival.

The process of reconciliation therefore is to show that there is a correspondence of replenishment orders with orders placed on production.

Statuses of suspended or non-suspended temporary tokens		
Inactive	Unissued	Yet to be issued by benefit office, in production, transit, or at benefit office
	Lost	Did not arrive at benefit office by due time
	Stolen	Stolen from benefit office
	Damaged	Could not be issued
Active	In use	Activated, the normal state
	Stopped	Reported lost (or found)
		Reported stolen (or impounded)
		Reported damaged
		Customer denied use by DSS
	Shot	Used temporary token
Expired		Past expiry date (issue date + seven days)

The requirement does not specify how reconciliation reports are to be communicated. It is therefore assumed that a report should be produced monthly covering:

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- those specific offices for which an order has been received but for which no order has been placed on the temporary token producer. This should be an empty report.
- for each benefit office, counts of temporary token by status.

3.1.11 DSS CONTINGENCY SERVICES

To be added following Pathway DSS consultations.

3.1.12 RELEVANT OPTIONAL DSS SERVICES

To be added following Pathway/DSS consultations.

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3.2 DSS SERVICE INFRASTRUCTURE

This section is provided to give a context to services' operation.

Figure 3-6 provides an overview of the DSS Service Infrastructure in each of the two Pathway datacentres.

The Service Infrastructure will be configured with sufficient capacity to recover from a failure in CAPS of a maximum duration to be agreed.

[DN: discussion and agreement on the handling of potential CAPS failures is required]

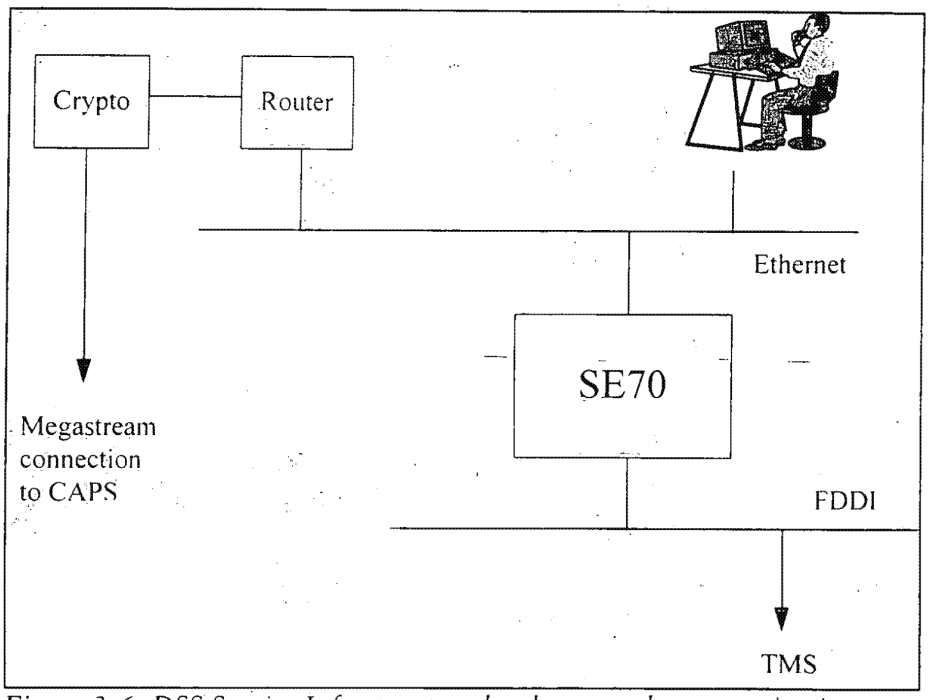

Figure 3-6: DSS Service Infrastructure hardware and communications

3.2.1 HARDWARE

The heart of the CMS/PAS systems will be a Sequent SE70 multiprocessor machine.

All operational files will be mirrored across independent controllers.

The configuration includes a number of Spectralogic tape subsytems. These are used primarily to hold database archives. The number of tape

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sub-systems to be configured will be determined following agreement on archiving and retention periods.

[DN: Agreements required on archiving and retention periods.]

Each CMS and PAS help desk position is based around a PC that is connected to the LAN. The connection to the Sequent processor will be on the same logical LAN.

3.2.2 SOFTWARE

The Sequent operating system will be Dynix. This is an implementation of UNIX developed by Sequent to exploit their multiprocessor architecture.

The database will be implemented using ORACLE version 7.3. Most of the application code will interface with the Oracle database. Normally code will be written in Pro*C which is Oracle's extension to the standard 'C' language to enable the support of SQL.

The transfers of data from CAPS will be received using File Transfer Facility (FTF). This is an ICL file transfer protocol implemented within the Sonnet suite that supports ICL communications to Sequent.

Specialised packages will be used for database archiving and retrieval, work scheduling and automated monitoring, alerting and control of the platforms and databases.

The CMS and PAS help desk application will be an ORACLE7 Client that runs on a Windows NT platform.

3.2.3 OTHER COMPUTER & TELECOMMS EQUIPMENT

This will be described in more detail than that shown in the figure above at a later level of specification following resolution of encryption equipment and its connections.

Communications from each of the four ACCs to Pathway will be concurrent file transfers of compressed data to both the Pathway operational centres (Bootle and Wigan) via high speed WAN links. These are expected to be 2Mbits/sec Megastream links. Each ACC will have 2 routers/encryptors for resilience purposes. SMDS may be used in preference to Megastream, but this is dependent upon the approved encryptors being able to support the higher speeds of SMDS.

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For security purposes, all data sent across the WAN will be encrypted using the Rambutan mechanism, or other CESG approved method.

3.3 DSS SERVICE ENVIRONMENT

3.3.1 DSS COMPUTERS

The DSS operates a number of systems supporting the assessment and calculation of the different benefit payments (in this context these are taken to include the Social Security Agency (Northern Ireland) benefit payments and the Employment Service payments for Income Support and Unemployment Benefit).

The DSS has four Area Computer Centres (ACCs) which together cover the UK interconnecting DSS offices and computer systems. Each ACC has a number of computer systems supported on Ethernet segments. Each ACC will have a CAPS system, holding benefit details by claimant's NINO, providing a consolidated service of benefit payment authorisations and encashments across the UK. The ACCs are interconnected via a national network (GDN) such that, in the event of a failure, payment requests may be collected from the source systems in all four ACCs and payment authorisations produced centrally at a single CAPS system.

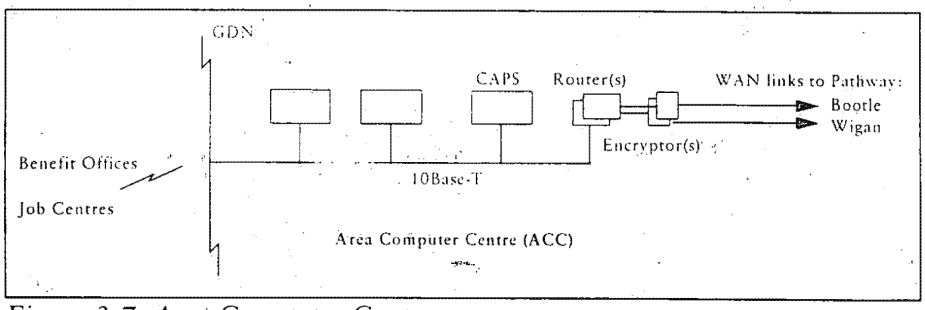

Figure 3-7: Area Computer Centre

Each CAPS system operates on a large ICL VME mainframe running OpenVME with the High Security Option. The schematic configuration shown is replicated at each of the four ACCs - Livingston, Norcross (near Blackpool), Swindon and Washington.

The DSS issues benefit payment instructions (including payments stops) from CAPS for action by the Pathway PAS, and Customer Details (e.g. changed address) by the Pathway CMS. Pathway returns details of

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benefit encashments, payment expiries, alerts and changes of Nominated Post Office to the DSS.

The DSS has contracted EDS to operate their IT services at the DSS Area Computer Centres. Pathway will establish clear contractual agreements with EDS as system manager for the CAPS service, as well as the DSS for the provision of CAPS data.

3.3.2 BUSINESS OPERATING SYSTEMS AND SERVICES

3.3.2.1 BUSINESS SYSTEMS

CAPS Release 1 supports a batch interface. An on-line interface is a stated future requirement. Pathway will implement a secure batch Interface between CAPS and the PAS/CMS systems which has a number of components:

- a secure partition within the CAPS VME processor to pick up/deliver named files from/to CAPS and which runs a file transfer program to control the transfer of CAPS files to and from the Pathway PAS and CMS Oracle systems;
- high speed WAN over which the File Transfer product operates;
- processes in the Pathway Central Services processors to carry out the necessary record validation, logging, record formatting and delivery of files to and from the PAS and CMS systems.

The processes at the CAPS end, and the file transfer product will be capable of managing a range of file types. The processes within the Central Services processors will be specific to the types of data transferred.

The CAPS functions supported through the batch interface are as follows:

- Send files of authorised payments and associated records to the Pathway PAS/CMS systems
- Receive Confirmations (post validation in PAS/CMS) that files of authorised payments etc. have been accepted (or rejected plus individual record error reports)
- Receive files of encashment notifications and other records back from PAS/CMS
- Maintain a log file which records every file transfer event, plus reporting facilities

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CAPS will place files ready for processing by PAS/CMS in "Out-Trays" on their side of the partition and inform Pathway that these files are ready for collection. The reverse process will take place for files and messages from PAS/CMS to CAPS.

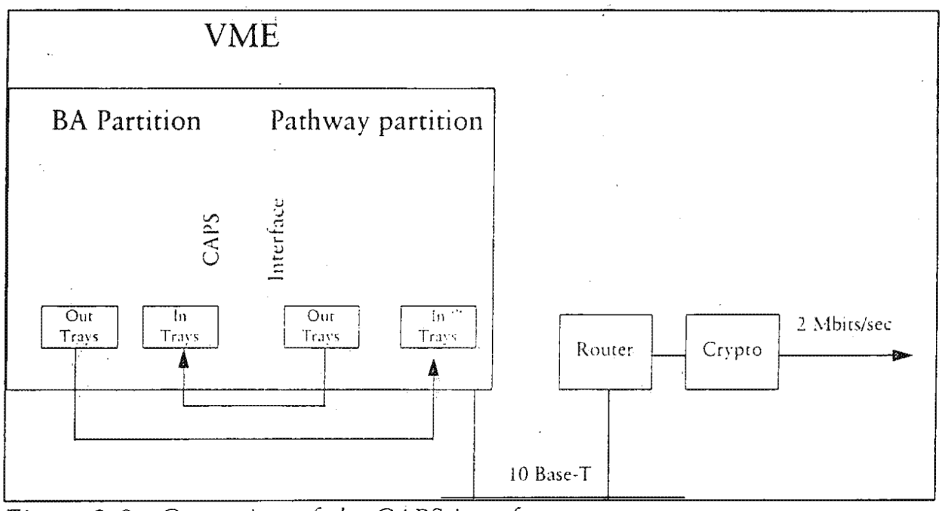

Figure 3-8: Operation of the CAPS interface

[DN: The mechanism for CAPS and Pathway informing the other that files are available needs to be defined.]

3.3.2.1.1 PROCESSES WITHIN CAPS COMPUTER

There will be a "CAPS Outbound Process" to handle files being transferred from CAPS to PAS/CMS, and a "CAPS Inbound Process" to handle files and messages received over the WAN which are placed in the appropriate In-Trays on the CAPS side of the partition.

The CAPS file formats follow the simple structure:

- a standard Header record defining generic properties of the file;
- a series of detail records;
- a file specific Trailer record which contains all control items to ensure functional integrity of the data.

3.3.2.1.2 FILE TRANSFER PRODUCT

This will be a proven, commercial product which in conjunction with other components will support the following:

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- file transfer management
  - user program hooks
  - transfer scheduling
  - concurrent file transfers
  - data compression
  - data conversion

- security and integrity
  - checkpoint/restart feature
  - detect and report security violations

- auditability and control
  - inbuilt statistics and audit trails
  - remote management over network
  - automatic reporting of successful/unsuccessful transfers

3.3.2.1.3 PROCESSES WITHIN CENTRAL SERVICES PROCESSORS RUNNING PAS/CMS

The "PAS/CMS Inbound" process will receive files sent from CAPS, carry out the necessary pre-processing for PAS/CMS, and load them into the filestore in the Central Services processors.

The "PAS/CMS Outbound" process will take records/files from the filestore in the Central Services processors, reformat them into the required structure for CAPS and dispatch these to CAPS via the File Transfer product.

3.3.2.2 BUSINESS SERVICES

The data transmitted between CAPS and the Pathway PAS/CMS systems are defined in the DSS document "CAPS to PAS / CMS Data Interface Definitions" (Version 5). There will be are up to 6,000,000 payment authorisations per day.

3.3.2.2.1 FILES RECEIVED FROM CAPS - CAPS OUTBOUND PROCESS

CAPS files ready for processing will be held as named files in "Out-trays" on the CAPS side of the secure partition in the VME mainframe.

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[DN: Pathway will be informed that a file is available, through a mechanism which is yet to be defined, but is assumed to include a message.]

1 The message is copied to a "file transfer log" with date and time.

2 The file characteristics are logged (file sequential number, file type, priority and number of records).

3 File level validation is carried out:

(a) Header Record checks:
The file characteristics are checked.
[DN: Detailed rules to be agreed.]

(b) Trailer Record checks:
- total record counts in files match trailer records
- sub-totals for each type of data group within each record within the file match trailer values
- total financial value held within the file matches
- sub-totals for each amount field within each record type matches

(c) If the check fails, the DSS is informed by returning a message giving the reason for failure (and the event logged)

4 Accepted files are passed to the file transfer product and scheduled for transfer. This event is logged.

Where possible, this file validation will be carried out in line with the transfer over the WAN.

3.3.2.2.2 FILE TRANSFER OVER WAN

The facilities listed in "File Transfer Product" will be used to ensure error free transmission. Data compression will be used, and a log file will record file transfer events for audit trail and network statistics purposes. Data sent across the WAN will be encrypted as advised by CESG.

Scheduling transfers according to priorities, and file transfer procedures in fall-back scenarios, will be automated.

The file transfer mechanism will be visible and controllable at the central network management centre.

3.3.2.2.3 FILES RECEIVED FROM CAPS - PAS/CMS INBOUND PROCESS

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Files received within the Central Services processors will be validated by PAS/CMS.

The results of the validation will be recorded in the log file, and a copy sent to CAPS. Where all records submitted in the file from CAPS are successfully validated, a single message giving the file sequence number, time and date will be provided. Where individual records fail validation, the failure reasons for the individual records, and their identifiers, will be returned to CAPS.

The records will be re-formatted, e.g. the headers and trailer records removed, to optimise the process of loading the records into the PAS database. There is no requirement to sort the Payment file.

3.3.2.2.4 FILES SENT TO CAPS - PAS/CMS OUTBOUND PROCESS

Files which have been produced by the PAS/CMS database for onward transmission to CAPS will be re-formatted into CAPS file formats (e.g. insertion of headers and trailer records).

3.3.2.2.5 FILES SENT TO CAPS - CAPS INBOUND PROCESS

Files sent to CAPS will be placed in the appropriate CAPS In-Tray, and a message sent to CAPS (mechanism to be agreed).

The message, appropriately time and date stamped, and identifying the file, will be entered in the log file.

3.3.2.3 HOUSEKEEPING

3.3.2.3.1 LOG FILE

A log file will be maintained, with consistent copies on each server. This log file will be used to record file transfer events, and provide simple, selective reports. It will be accessible from the central systems management centre and will be used to analyse Pathway's performance and consistency with Service Level Agreements.

A means of selective archiving is required. A means of exporting the log file to the Oracle database in the Pathway Warehouse is required.

3.3.2.3.2 VME DISK FILES

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VME filestore with the capacity to retain 48 hours of data is required in case re-runs are necessary. There is a requirement for Pathway to have access to appropriate housekeeping tools (file maps, file deletes etc.) unless such file copies are to be kept by the CAPS team.

Appropriate access by Pathway systems administration staff to the VME partition is required to delete files as required.

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4. POCL SERVICE ARCHITECTURE

4.1 POCL STEADY STATE SERVICES

4.1.1 BENEFIT ENCASHMENT SERVICE

4.1.1.1 INTRODUCTION

This section refers to all BES transactions handled at the Post Office counter.

The BES application provides support for all counter functions necessary to support the distribution, issue and use of magnetic stripe based benefit cards. BES will interact with the central CMS/PAS components of BPS through the TMS and CMS/PAS agent(s) subsystems.

BES makes use of the Office Platform Service (OPS) and runs within the general architecture of the POCL Service Infrastructure (PSI), using the EPOS Service (EPOSS) for common underlying customer service functions. Other counter applications will coexist alongside BES. In particular, the Order Book Control Service (OBCS) and transaction recording for paper based benefit payments will co-exist alongside BES until the roll-out of the benefit card as the sole payment mechanism is complete.

A function or product shown in capitals, for example, 'CARD RECEIPT' refers to a menu button displayed on the screen. The required function or product can then be selected by either touching the screen or using the keyboard.

4.1.1.2 RECEIPT OF BATCH OF CARDS IN POST OFFICE

On receipt of the batch of cards at the post office, the manager will check that the batch is correct to the post office and, if so, sign for receipt of the batch from the card carrier.

4.1.1.2.1 TRANSACTION SELECTION

The clerk will be required to read the bar-code on the batch of cards with the bar-code reader in order to access the 'Batch Receipt' screen.

Exceptions:
1. Bar-code cannot be read:

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Clerk will select the 'BATCH RECEIPT' option from the 'Desktop' menu and will then be prompted to key the bar-code information in order to access the 'Batch Receipt' screen.

2. Keyed bar-code is not recognised:
   Clerk will be prompted to check details have been keyed correctly and, this being the case, to contact the CMS Help Desk.

4.1.1.2.2 STEADY STATE SERVICE PROVISION

Counter Activities

The 'Card Receipt' screen will display:

- FAD code
- Batch number
- Number of cards within the batch

The clerk will be prompted to confirm the FAD code and batch number details are correct. This must be done immediately the batch is received at the post office.

On indicating that the FAD code and batch number details are correct, the clerk may either select the 'CARD RECONCILIATION' option to reconcile the cards received against the batch details or return to the 'Desktop' menu.

Reconciliation of cards against batch details must be performed immediately for urgent deliveries. Non-urgent deliveries must be reconciled by 12 noon on day of receipt or, if received after 12 noon, by end of day.

Exceptions:

1. Details on 'Batch Receipt' screen are incorrect:
   Clerk will indicate that the FAD code and/or batch number are incorrect and will be prompted to contact the CMS Help Desk.

Outputs

Acceptance of data on the 'Batch Receipt' screen will enable confirmation of batch receipt to be passed to CMS.

4.1.1.3 RECONCILIATION OF CARDS AGAINST BATCH DETAILS

The card reconciliation function may be invoked following receipt of the batch, for audit purposes or after a contingency event of some kind (suspected card loss or destruction) at the post office.

4.1.1.3.1 TRANSACTION SELECTION

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For a batch for which receipt has been confirmed, the clerk will be required to read the bar-code on the batch of cards with the bar-code reader in order to access the 'Card Reconciliation' screen.

Exceptions:

1. Bar-code cannot be read:
   Clerk will select the 'CARD RECONCILIATION' option from the 'Desktop' menu and will then be prompted to key the bar-code information in order to access the 'Card Reconciliation' screen.
2. Keyed bar-code is not recognised:
   Clerk will be prompted to check details have been keyed correctly and, this being the case, to contact the CMS Help Desk.

4.1.1.3.2 STEADY STATE SERVICE PROVISION

Counter Activities

The 'Card Reconciliation' screen will prompt the clerk to swipe each card within the batch. On indicating that the last card has been swiped a message will be displayed confirming that all cards are present and correct to the batch and the clerk will be returned to the 'Desktop' menu.

Exceptions:

1. Card fails to read when swiped:
   Clerk will key the Primary Account Number (PAN) from the card.
2. Cards are not all present and/or correct to batch:
   Clerk will be prompted to take the required action; for example, to destroy card.

Outputs

Swiping of cards using the 'Card Reconciliation' screen will enable details of present, missing and excess cards within the batch to be passed to CMS.

4.1.1.4 COLLECTION OF CARD BY CUSTOMER

The customer will present the Pick-Up Notice (PUN) or an existing card which is due to expire in order to collect the benefit card.

4.1.1.4.1 TRANSACTION SELECTION

The clerk will be required to read the bar-code on the PUN or swipe the existing card, for which a replacement card is available in the post office, in order to access the 'Card Activation' screen.

Exceptions:

1. Customer advises that no PUN has been received:
   Clerk will refer customer to CMS Help Desk.

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2. Customer has attended other than the nominated post office:
   Clerk will be prompted to refer the customer to nominated post office (Details of the customer's nominated post office will not be displayed on either the PUN or the screen).
3. Bar-code cannot be read:
   Clerk will select the 'CARD ACTIVATION' option from the 'Serve Customer' menu and will then be prompted to key the bar-code information in order to access the 'Card Activation' screen.
4. Keyed bar-code is not recognised:
   Clerk will be prompted to check details have been keyed correctly and, this being the case, to impound the PUN and refer customer to BA office.
5. Card withdrawn or expired prior to collection:
   Clerk will be prompted to refer customer to the BA office.

4.1.1.4.2 STEADY STATE SERVICE PROVISION

Counter Activities

The 'Card Activation' screen will display:

- Customer's name
- Customer's NINO
- Card batch number

The clerk will locate the customer's card and check the name and NINO on the card match those displayed on the PUN, or expired card, and screen.

The clerk will be prompted to:

a) Verify the customer's identity using the extended verification procedure - see next section
b) Request proof of identity and record type of identity provided (not required when an existing card is being replaced)

Where an existing card is being replaced, the clerk will be prompted to retain and destroy the previous card.

[DN: The proof of identity required will be same as currently required to collect first issue of order book and could be stated on the PUN.]

On entering the appropriate verification information, the clerk will be prompted to request signatures on the card and, where provided, the PUN and then swipe the card. The clerk will swipe the card and will be advised that the card has been successfully activated. After a short time delay allowing the clerk to read the message, either the 'Benefit Encashment' screen (if payments are due) or the 'Serve Customer' menu (if no payments are due) will be accessed.

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The activated card will be issued to the customer. Where a PUN has been provided, the clerk will detach the guidance notes from the signed portion of the PUN and return the guidance notes and proof of identity to the customer. The signed portion of the PUN will be retained by the clerk.

Exceptions:

1. Card cannot be located within post office:
   Clerk will cancel transaction and refer customer to BA office.
2. Details on card do not match those on PUN/expired card and/or screen:
   Clerk will impound card and PUN/expired card and refer customer to BA office.
3. Expired card not provided:
   Clerk will be unable to activate replacement card without expired card. Customer will therefore be requested to return with expired card. Should this be lost, customer will need to report card lost to CMS Help Desk and PUN will be issued to enable collection of new card.
4. No or insufficient proof of identity provided:
   Clerk will advise customer to return with necessary documentation and cancel the transaction.
5. No proof of identity recorded:
   Clerk will be prompted to request and record proof of identity.
6. Clerk suspicious of proof of identity provided:
   Clerk will impound card and PUN and refer customer to BA office.
7. Card fails to read when swiped:
   Clerk will key PAN, issue number and expiry date from the card. Should card fail to be successfully read on three consecutive occasions, a new card will be ordered automatically.
8. Card not successfully activated due to failed matching of PAN, Card Activation Number or Sherman number:
   Clerk will be prompted to check correct card has been selected and, this being the case, impound card and PUN and refer customer to BA office.

Outputs

Swiping of the card using the 'Card Activation' screen will enable details of the successful or unsuccessful collection and activation of cards to be passed to CMS.

4.1.1.4.3 CUSTOMER'S VIEWPOINT

The customer will present the PUN or expired card to the clerk. The customer will be required to provide answers to verification questions and, if PUN is presented, provide suitable proof of identity. The customer will be requested to sign the PUN, if presented, and the card

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and will then be issued with an activated card which may be used for benefit encashment. Expired cards will be retained by the clerk.

[DN: Discussion is required to determine whether a means of issuing an unactivated card to a proxy for subsequent activation will be allowed.]

4.1.1.5 EXTENDED VERIFICATION PROCEDURE

The extended verification procedure will be invoked for payments that are determined by DSS to be at risk of fraud. Such payments may include, for example, foreign encashments, temporary tokens and card read failures.

4.1.1.5.1 TRANSACTION SELECTION

At the appropriate time within the procedure the 'Extended Verification' screen will be accessed automatically or at the request of the clerk.

4.1.1.5.2 STEADY STATE SERVICE PROVISION

Counter Activities

The 'Extended Verification' screen will display one or more verification questions. The clerk will ask the customer each question and key the answers provided to the questions. On entering satisfactorily correct answers to the questions, the clerk will be prompted to pay the benefit.

Pathway proposes that a single verification question is first asked. If this is answered correctly then the transaction can continue. If the question is answered incorrectly then two further questions will be displayed for answer together in the same operation. If both of these are correctly answered then the transaction can continue. If either or both of these questions are incorrectly answered then the transaction is terminated.

[DN: Pathway assumes that verification questions may comprise all elements of address (including postcode) and date of birth as provided by CAPS. Final details of available questions to be agreed with Contracting Authorities.]

[DN: A number of options are available. Discussion and agreement is required.]

Exceptions:

1. Verification question(s) answered incorrectly:
   Clerk will be prompted to suspend card/token and refer customer to the BA office.

   [DN: Suspension of card by clerk is not part of Contracting Authorities' requirements and requires agreement.]

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2. Clerk realises that answer to question has been incorrectly keyed: Clerk will select 'MIS-KEY' option on screen and a further verification question will be provided for customer to answer.
3. Customer is unable to answer verification questions due to communication difficulties:

[DN: Whilst a number of options are available, agreement is required with Contracting Authorities regarding such instances.]

4.1.1.5.3 CUSTOMER'S VIEWPOINT

The customer will provide answers to one or three verification questions asked by the clerk.

4.1.1.6 IMPOUNDMENT OF CARD/TEMPORARY TOKEN/PUN

4.1.1.6.1 TRANSACTION SELECTION

The clerk will be required to select one of the following options from the screen currently in use:
'IMPOUND PUN'
'IMPOUND CARD AND PUN'
'IMPOUND CARD/TEMPORARY TOKEN'
This may be in response to a system prompt or at the clerk's discretion.

A card, PUN or temporary token will not be impounded by reason of it having expired.

4.1.1.6.2 STEADY STATE SERVICE PROVISION

Counter Activities
Following the selection of the option to impound PUN and/or card/temporary token, a receipt will be produced which the clerk will sign and issue to the customer. The receipt will contain the following details:

- Customer's name
- Card details (PAN, issue number and expiry date), PUN details (bar-code number) or temporary token details (token number)
- Date and time
- FAD code
- Space for clerk signature

If a receipt for benefit encashment has been produced, the clerk will be prompted to insert the receipt for overprinting as void and to retain it. The clerk will refer the customer to the BA office.

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If the impoundment is in response to a system prompt, for example, if a stop has been placed on the card, the reason for the impoundment will be automatically captured. If the impoundment has taken place at the clerk's discretion, the 'Reason For Impoundment' screen will be accessed and the clerk will be prompted to indicate one of the following reasons for the impoundment:

- Card defaced/altered
- Counterfeit card suspected
- Card does not match PUN/screen details
- Suspicious mandate
- Suspicious proof of identity
- Poor signature match
- Customer left post office during transaction
- Other

The clerk will then be returned to the 'Serve Customer' menu.

The clerk will mark "Impounded" across an impounded PUN and temporary token and holepunch the magnetic stripe on an impounded card which will then be placed in a plastic bag. Impounded PUNs, cards and temporary tokens will be retained by the clerk.

Outputs

Selecting the impound option following a system prompt, or indicating why the card/temporary token was impounded on the 'Reason For Impoundment' screen, will enable details of the impoundment to be passed to CMS.

4.1.1.6.3 CUSTOMER'S VIEWPOINT

The customer will be advised that the PUN and/or card/temporary token is to be impounded and a receipt will be issued. The customer will then be referred to the BA office by the clerk.

4.1.1.7 FORWARDING/DISPOSAL OF PUNS, CARDS AND TEMPORARY TOKENS

4.1.1.7.1 TRANSACTION SELECTION

The clerk will be required to select the 'SUMMARY OF CARDS/TOKENS' or 'SUMMARY OF PUNS' option from the 'Desktop' menu.

4.1.1.7.2 STEADY STATE SERVICE PROVISION

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Counter Activities

The clerk will select from the 'Summary Of Cards/Tokens' screen the reports which are required. Lists may be produced for the following categories of cards/tokens:

a) Impounded cards/tokens; Counterfeit suspected
b) Impounded cards/tokens; Fraud (other than counterfeit suspected)
c) All impounded cards/tokens
d) Withdrawn/expired cards

The relevant impounded cards/tokens will be associated with the first two lists and forwarded to the appropriate fraud departments. The third list will be held in the post office for audit purposes. Should the clerk have retained cards which do not need to be forwarded to other departments (for example, expired card retained on collection of replacement card) these will be destroyed. The fourth list will provide details of the batch number, customer name, PAN and issue number of cards which have been withdrawn or expired prior to collection. Using this list, the clerk will locate the cards and destroy them.

[DN: The appropriate fraud departments, to which impounded cards/tokens are forwarded to, require agreement with Contracting Authorities.]

The clerk will select from the 'Summary Of PUNs' screen the reports which are required. Lists may be produced for the following categories of PUNs:

a) PUNs retained for activated cards
b) Impounded PUNs

Retained PUNs will be associated with the list and forwarded to the PUN/receipt storage location. Impounded PUNs will be destroyed.

The screens will remind the clerk of where reports and associated items should be forwarded to. Following the selection of the reports required, the clerk will be returned to the 'Desktop' menu.

Exceptions:

1. Card on list cannot be located within post office:
   Clerk will contact CMS Help Desk.

Outputs

Selecting the reports required will activate the printing of the reports.

4.1.1.8 BENEFIT ENCASHMENT - STANDARD ENCASHMENT

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The customer will present own benefit card or temporary token at nominated post office in order to encash benefit.

4.1.1.8.1 TRANSACTION SELECTION

The clerk will be required to swipe the card through the card reader or read bar-code on the temporary token with the bar-code reader in order to access the 'Benefit Encashment' screen.

Exceptions:

1. Card/temporary token cannot be read:
   Clerk will swipe card or read token again. If still not read, clerk will select the 'BENEFIT ENCASHMENT(CARD)' or 'BENEFIT ENCASHMENT (TEMPORARY TOKEN)' option from the 'Serve Customer' menu in order to access the 'Capture Of Card/Temporary Token Details' screen. The screen will prompt the clerk to key the PAN, issue number and expiry date from the card or key the number from the temporary token. Should card fail to be successfully read on three consecutive occasions, a new card will be ordered automatically.
2. Keyed details not accepted:
   Clerk will be prompted to check details have been keyed correctly and, this being the case, to impound the card/token.

4.1.1.8.2 STEADY STATE SERVICE PROVISION

Counter Activities

Having swiped/read the card/token, the clerk will place the receipt in the printer. The 'Benefit Encashment' screen will display:

- Customer's name
- Customer's NINO
- Details of outstanding benefit payments in chronological order, including milk tokens as well as cash, together with the total amount due
- Messages for clerk, if applicable

The receipt will be printed, which will be in English (English and Welsh in Welsh speaking areas), and will contain the following details:

- Beneficiary's name and abbreviated NINO
- Date and time
- PO code and clerk indicator
- Benefit payment description and amount(s)
- Total amount encashed
- Milk token type and number
- Predicted due date of next payment

FUJ00119561

- Allowed date for next allowable foreign payment (where limit in accordance with the set parameters has been reached)
- Message (where present)
- Unique encashment transaction identifier
- Unique clerk transaction identifier
- Space for customer signature
- Declaration of entitlement
- Description of benefit types against type codes

[DN: Pathway requests confirmation that the requirement to state
- *Predicted due date of next payment*
- *Allowed date for next allowable foreign payment*

on the receipt remains valid.]

The clerk will check that:
- Card/token is authentic
- Customer name on system matches card/token

The clerk will provide the receipt to the customer for signature. The screen will prompt the clerk to:
- Check signature on receipt matches that on card/token
- Issue bottom copy of receipt to the customer
- Retain top copy of receipt and, in the case of temporary tokens, token

The clerk will then:
- Check the signature on the receipt matches that on the card/token
- Pay customer, return card and issue bottom copy of receipt
- Commit the transaction and be returned to the 'Serve Customer' menu
- Place receipt and, in the case of temporary tokens, token in drawer

Exceptions:

1. Card/token is invalid (for example, stop placed on card, card suspended, token time expired):
   Clerk will be prompted to impound card/token and/or refer customer to BA office.
2. No local match found for token:
   Clerk will be prompted to check with customer that sufficient time has elapsed since issue of temporary token for payment details to have been received by the post office and, this being the case, to refer customer to BA office.
3. Outstanding benefits amount to more than the limit set by BA and held as a reference value (currently £1,000):
   Clerk will be prompted to ask whether the customer requires the full amount or the amount at which the next payment, with payments in chronological order, would take the encashment value over the

FUJ00119561

reference limit. The screen will display the cut-off amount to assist the clerk who will then select the amount for payment.
These rules do not apply to collection of Social Fund payments (which must be collected in their entirety) or benefits for which customer is alternative payee (which customer may choose not to collect).

4. Receipt not printed or spoilt in printing:
   Clerk will request re-printing of receipt or, if printer is not working, prepare manual receipt.
5. No payment due:
   Clerk will be prompted to advise customer that payment is not due and return card to customer. In the event of dispute or enquiry, clerk will refer customer to BA office. Should customer request receipt, clerk will select 'NIL RECEIPT' option on screen in order to produce receipt. The receipt will contain the following details:
   - Header - Nil Receipt
   - Beneficiary's name and abbreviated NINO
   - Date and time
   - FAD code and clerk indicator
   - Predicted due date of next payment
   - Allowed date for next foreign encashment (where limit has been reached)
6. Customer decides does not want payment:
   Clerk will cancel transaction and will be prompted to insert the receipt for overprinting as void and to retain it. Clerk will then be returned to 'Serve Customer' menu.
7. Clerk suspicious:
   This may be an instance where extended verification procedure is invoked. If suspicion is not alleviated, clerk will impound card/token and refer customer to BA office.
8. Customer unable to sign receipt:
   This may be an instance where extended verification procedure is invoked. If clerk is suspicious, card/token will be impounded and customer referred to BA office.
9. All or part of benefit is required as cheque payment:
   Clerk will select 'CHEQUE PAYMENT' option and input amount of payment required by cheque.
10. Number of lines generated for encashment receipt exceeds number of possible printable lines on receipt:
    Clerk will be prompted to insert a second receipt slip for printing the details it was not possible to print on first receipt. Slips will be numbered 1, 2, etc. and a single customer signature will be applied to the final slip.

Outputs

Committing transaction will record transaction details in the journal record (forming part of audit trail), post details to EPOSS for cash account and stock management purposes and enable details (including

FUJ00119561

any flags; for example, keyed input. monitored card usage) to be passed to PAS.

4.1.1.8.3 CUSTOMER'S VIEWPOINT

The customer will present own benefit card/token to the clerk at nominated post office. The customer will be required to check and sign a receipt for the benefit encashment and will receive payment and a copy of the signed receipt.

4.1.1.9 BENEFIT ENCASHMENT - FOREIGN ENCASHMENT

The customer will present own benefit card at foreign post office in order to encash benefit.

It is possible DSS may specify that an encashment may take place only in either Great Britain or Northern Ireland. If the foreign encashment is attempted in the wrong territory a further exception will be generated.

4.1.1.9.1 TRANSACTION SELECTION

The clerk will be required to swipe the card through the card reader in order to access the 'Benefit Encashment' screen.

Exceptions:
As for Standard Encashment, where applicable.

4.1.1.9.2 STEADY STATE SERVICE PROVISION

Counter Activities
Having swiped the card, the clerk will place the receipt in the printer. The 'Benefit Encashment' screen will be activated and the receipt will be printed. The clerk will check that:

- Card is authentic
- Customer name on system matches card

The clerk will provide the receipt to the customer for signature. In addition to the prompts regarding the receipt, the screen will display a message that the transaction is being authenticated at the nominated post office. The clerk will not make payment until this authentication has taken place and, in response to the prompts on the screen, will:

- Check the signature on the receipt matches that on the card
- Pay customer, return card and issue bottom copy of receipt
- Commit the transaction and be returned to the 'Serve Customer' menu
- Place receipt in drawer

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Exceptions:
As for Standard Encashment, where applicable, with the addition of the following:

1. Restricted post office indicator applied:
   Clerk will be prompted to refer customer to nominated post office (Details of the customer's nominated post office will not be displayed on the screen).
2. Customer has reached limit of allowable foreign payments:
   Clerk will be prompted to advise the customer that further foreign payments are not available unless change of nominated post office takes place.
3. Payment will take customer up to the limit of allowable foreign payments:
   Clerk will be prompted to advise the customer that this foreign payment is last one allowed at present and provide date of next allowable foreign payment.
4. Foreign encashment attempted in wrong territory:
   Clerk will be prompted to advise the customer to encash the benefit in the correct territory.
5. Failure within customer's nominated post office:
   Clerk will make payment in accordance with details received from TMS. Depending on the nature of the failure, there may be a risk of double-payment i.e. communications failure may result in nominated post office making payments using local authorisation data without updating TMS. In the event of double payment, future benefit payments will be re-scheduled in order to recover the over-payment.

Outputs
Committing transaction will record transaction details in the journal record (forming part of audit trail), post details to EPOSS for cash account and stock management purposes and enable details (including any flags; for example, keyed input, monitored card usage) to be passed to PAS and to the nominated post office.

4.1.1.9.3 CUSTOMER'S VIEWPOINT

The customer will present own benefit card to the clerk at foreign post office. The customer will be required to check and sign a receipt for the benefit encashment and will receive payment and a copy of the signed receipt.

4.1.1.10 BENEFIT ENCASHMENT - CASUAL AGENT

The casual agent will present the beneficiary's benefit card, own benefit card and completed mandate at beneficiary's nominated post office in order to encash benefit. In the event that the casual agent does not have own benefit card, proof of identity must be presented.

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4.1.1.10.1 TRANSACTION SELECTION

The clerk will be required to swipe the beneficiary's card through the card reader in order to access the 'Benefit Encashment' screen.

Exceptions:
As for Standard Encashment, where applicable.

4.1.1.10.2 STEADY STATE SERVICE PROVISION

Counter Activities
The clerk will check the beneficiary's card, completed mandate and the casual agent's card/proof of identity. The mandate will contain the beneficiary's signature, which will be checked against the signature on the beneficiary's card, and the name of the casual agent, which will be checked against the name on the casual agent's card/proof of identity.

[DN: It is assumed that proof of identity required will be same as currently required for casual agent to encash benefit and could be stated on the mandate.]

Having swiped the beneficiary's card, the clerk will place the mandate, which forms the receipt, in the printer. The 'Benefit Encashment' screen will be activated and the receipt will be printed. The clerk will check that:

- Card is authentic
- Customer name on the system matches the card.

The clerk will then select the 'CASUAL AGENT' option which will access the 'Casual Agent' screen. The 'Casual Agent' screen will prompt the clerk to either swipe the casual agent's card or request proof of identity from casual agent and record the type of evidence provided.

On swiping the casual agent's card or entering the type of evidence presented, the 'Benefit Encashment' screen will be re-activated and the clerk will provide the receipt to the casual agent for signature. The clerk will then respond to the prompts on the screen and will:

- Pay casual agent, return beneficiary's card and casual agent's card/proof of identity, and issue bottom copy of receipt
- Prompt the customer to collect a blank mandate for future use
- Commit the transaction and be returned to the 'Serve Customer' menu
- Place receipt in drawer

Exceptions:
As for Standard Encashment, where applicable, with the addition of the following:

FUJ00119561

1. No or insufficient proof of identity provided:
   Clerk will refuse payment and request that casual agent returns with appropriate proof of identity.
2. Clerk suspicious of proof of identity provided:
   Clerk will suspend card and refer casual agent to BA office.

Outputs

Committing transaction will record transaction details in the journal record (forming part of audit trail), post details to EPOSS for cash account and stock management purposes and enable details (including any flags; for example, keyed input, monitored card usage, casual agent) to be passed to PAS.

4.1.1.10.3 CUSTOMER'S VIEWPOINT

The casual agent will present the beneficiary's card, completed mandate and proof of identity to the clerk at the nominated post office. The customer will be required to check and sign a receipt for the benefit encashment and will receive payment and a copy of the signed receipt.

4.1.1.11 BENEFIT ENCASHMENT - PERMANENT AGENT / ALTERNATIVE PAYEE

The permanent agent/alternative payee will present own benefit card at nominated/foreign post office in order to encash benefit. In the case of a permanent agent, completed mandate(s) for each beneficiary on whose behalf the agent is collecting will also be presented.

4.1.1.11.1 TRANSACTION SELECTION

The clerk will be required to swipe the card through the card reader in order to access the 'Permanent Agent/Alternative Payee' screen.

Exceptions:
As for Standard Encashment, where applicable.

4.1.1.11.2 STEADY STATE SERVICE PROVISION

Counter Activities

The clerk will check the card and, in the case of the permanent agent, the completed mandate(s). Having swiped the card, the clerk will place the receipt in the printer; in the case of the permanent agent, the mandate will form the receipt. The 'Permanent Agent/Alternative Payee' screen will display:

- Customer's name
- Customer's NINO

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- Selection of beneficiary's payment(s) available for collection, which may include own benefit payment
- Prompt to select beneficiary's payment(s) to be collected and to check any associated mandate(s)

The clerk will check that:
- Card is authentic
- Customer name on system matches card

and select the beneficiary's payment(s) for collection. The selection of payment(s) will activate the 'Benefit Encashment' screen for the selected beneficiary and the receipt will be printed. The cardholder's name and abbreviated NINO will appear on the receipt.

The clerk will provide the receipt to the customer for signature. In response to the prompts on the screen, the clerk will:
- Check the signature on the receipt matches that on the card
- Pay customer, return card and issue bottom copy of receipt
- Prompt the customer to collect a blank mandate for future use
- Commit the transaction
- Place receipt in drawer

If payments for further beneficiaries have been selected for collection by the permanent agent, the 'Benefit Encashment' screen for the next beneficiary will be activated; otherwise, the clerk will be returned to the 'Serve Customer' menu.

[DN: The principle of Group Permanent and Signing Agents - with the provision of a single mandate for a number of beneficiaries and the production of a single receipt - requires further discussion with the Contracting Authorities.]

Exceptions:
As for Standard Encashment, where applicable.

Outputs
Committing transaction will record transaction details in the journal record (forming part of audit trail), post details to EPOSS for cash account and stock management purposes and enable details (including any flags; for example, keyed input, monitored card usage) to be passed to PAS and, if necessary, to the nominated post office.

4.1.1.11.3 CUSTOMER'S VIEWPOINT

The customer will present own benefit card and, where appropriate, completed mandate(s). The customer will be required to select payment(s) for encashment, check and sign receipt(s) for the benefit

FUJ00119561

encashment and will receive payment(s) and a copy of the signed receipt(s).

4.1.1.12 FORWARDING OF BENEFIT ENCASHMENT RECEIPTS

[DN: This section is provided as a starting point for discussions on meeting the requirements of the DSS receipt storage and retrieval facility.]

4.1.1.12.1 TRANSACTION SELECTION

The clerk will be required to select the 'SUMMARY OF ENCASHMENT RECEIPTS' option from the 'Desktop' menu.

4.1.1.12.2 STEADY STATE SERVICE PROVISION

Counter Activities

The clerk will select from the 'Summary Of Encashment Receipts' screen whether a daily listing or weekly summary report is required and will then be returned to the 'Desktop' menu.

The daily listing report will contain:

- FAD code
- Date and time (start and end of batch of receipts)
- Counter position(s) to which the batch relates
- Individual receipt details - NINO, encashment transaction identifier, payment amount
- Total number of receipts of each type (for example, standard, nil, void, associated temporary tokens) produced during the day

The weekly summary report will contain:

- FAD code
- Individual daily listing report details: date, counter position(s), total number of receipts
- Total number of receipts produced during the week

The clerk will collect together the receipts and temporary tokens for the day's transactions, which will have been stored in chronological order, and check they are all present against the daily listing report. The receipts and tokens will then be secured together with the report and passed to the manager. The manager will place all the bundles in an envelope which is marked clearly with the FAD code and date.

At the end of the week, the weekly summary will be produced. The manager will place the summary report in a large envelope with the enveloped receipts and daily listings. The large envelope is marked

FUJ00119561

clearly with the FAD code and dates of receipts included and forwarded to the receipt storage location.

Exceptions:
1. Receipts missing when checked against daily listing:
   Clerk will locate missing receipts.
2. All daily listings not produced when weekly summary requested:
   Clerk will be prompted to arrange completion of daily listings.

Outputs
Selecting the reports required will activate the printing of the reports.

4.1.1.13 DUPLICATE RECEIPT REQUEST

The customer will present own benefit card and request duplicate receipt for last benefit encashed at attended post office.

4.1.1.13.1 TRANSACTION SELECTION

The clerk will be required to select the 'DUPLICATE RECEIPT' option from the 'Serve Customer' menu and will then be prompted to swipe the card which will access the 'Duplicate Receipt' screen.

Exceptions:
As for Standard Encashment, where applicable.

4.1.1.13.2 STEADY STATE SERVICE PROVISION

Counter Activities
Having swiped the card, the clerk will place the receipt, in the printer. The 'Duplicate Receipt' screen will display:
- Customer's name
- Customer's NINO

and the receipt will be printed.

[DN: The wording, and period of time following encashment, for a duplicate receipt require agreement with the Contracting Authorities.]

The clerk will check that:
- Card is authentic
- Customer name on system matches card

The clerk will provide the receipt to the customer for signature. In response to the prompts on the screen, the clerk will:
- Check the signature on the receipt matches that on the card
- Return card and issue bottom copy of receipt

FUJ00119561

- Commit the transaction and be returned to the 'Serve Customer' menu
- Place receipt in drawer

Exceptions:
As for Standard Encashment, where applicable.

Outputs
Committing transaction will record transaction details in the journal record and enable details to be passed to PAS.

4.1.1.13.3 CUSTOMER'S VIEWPOINT

The customer will present own benefit card and request duplicate receipt for last benefit encashed at attended post office. The customer will be required to check and sign the receipt and will receive a copy of the signed receipt which will be marked "duplicate".

4.1.1.14 CHANGE OF NOMINATED POST OFFICE

The customer will present own benefit card at new nominated post office together with completed Change of nominated post office/address form (P80MA).

4.1.1.14.1 TRANSACTION SELECTION

The clerk will be required to select the 'CHANGE OF NOMINATED POST OFFICE' option from the 'Serve Customer' menu and will then be prompted to collect form and swipe the card which will access the 'Change Of Nominated Post Office' screen.

Exceptions:
As for Standard Encashment, where applicable, with the addition of the following:
1. Restricted post office indicator applied:
   Clerk will be prompted to refer customer to BA office.

4.1.1.14.2 STEADY STATE SERVICE PROVISION

Counter Activities
The clerk will check the completed Change of nominated post office/address form (P80MA).

The 'Change Of Nominated Post Office' screen will display:
- Customer's name
- Customer's NINO
- Messages for clerk, if applicable

FUJ00119561

The clerk will check that:

- Card is authentic
- Customer name on system matches card

The clerk will commit the transaction and will be advised that the nominated post office has been changed. Any outstanding payments will be re-located to the new office. After a short time delay allowing the clerk to read the message, either the 'Benefit Encashment' screen (if payments are due) or the 'Serve Customer' menu (if no payments are due) will be accessed.

The clerk will forward completed forms to BA. Changes to address details will be processed by BA using the forms.

Exceptions:
As for Standard Encashment, where applicable.

Outputs
Committing transaction record transaction details in the journal record and enable details to be passed to PAS.

4.1.1.14.3 CUSTOMER'S VIEWPOINT

The customer will present own benefit card to the clerk at new office and request change of nominated post office.

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4.1.2 AUTOMATED PAYMENT SERVICE

4.1.2.1 INTRODUCTION

The Automated Payments Service (APS) is a service which 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 or smart tokens (cards or keys) which are presented by customers at the counter either in support of payments or prepayments to their account. APS transactions conform to the *POCL APS Generic Rules*, the *Token Technology specifications* and the *Automated Payments Client Specification*. APS counter transactions conform to the client specific processing rules contained in these documents and utilise client reference data which will specify details such as minimum payment amount, card interpretation rules, specific receipt wording etc.

4.1.2.2 STEADY STATE SERVICE

Support for transactions for the following POCL Clients are included in the Steady State APS. The supported customer token is shown, and all APS transactions will produce a customer receipt.

Client	Transaction	Mag Stripe	Smart Card	Smart Key	Receipt Printer
BBC	Easy Entry Scheme	✓			✓
BT	Payment Plan	✓			✓
Cable companies	Cable TV Receipts	✓			✓
Electricity Companies	Payment Plans	✓			✓
	Saving Schemes	✓			✓
	Smart Card schemes		✓		✓
	Smart Key schemes			✓	✓
Gas	Gas Meter tokens	✓			✓
	Saving schemes	✓			✓
	Quantum schemes		✓		✓
	Payment plans	✓			✓

FUJ00119561

Client	Transaction	Mag. Stripe	Smart Card	Smart Key	Receipt Printer
Local authority	Various	✓			✓
Water companies	Water savings schemes	✓			✓
	Payment plan	✓			✓
	Smart card schemes		✓		✓
	Smart key schemes			✓	✓

4.1.2.3 FUTURE OPTIONAL SERVICES

Pathway recognise that future growth may occur for this service with the addition of new POCL Clients and the introduction of additional forms of data capture, most notably the use by various utility companies of bar-coded paper bills. Potential areas of service extension are shown as * below:

Client	Transaction	Bar Code	OCR or bar-code	OCR	Mag. Stripe	Smart Card	Smart Key	Receipt Printer
BT	*Telephone receipts*		*					*
Cable Companies	*Cable TV Receipts*		*					*
Electricity Companies	*Bill payment*	*		*				*
Giro	*Transcash (i.e. bill payment)*		*					*
Local Authorities	*Various*		*					*

Any extension of APS beyond the Steady State Service will be subject to discussion and agreement between POCL and Pathway.

OCR support is an optional facility which must be selected in time to be included in the equipment rollout.

4.1.2.4 APS FUNCTIONS

APS can be considered as comprising two groups of functions :

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APS Host Functions

These are functions that relate to the receipt of Client data (reference data updates, for example) and the storage/processing/dispatch of APS transactions to the various Client systems.

APS Counter Functions

These are functions that relate to the tasks performed at the post office counter that are specific to the processing of AP transactions. These transactions, in common with all counter activity will use a set of generic facilities (peripheral handling and initial data identification, for example) together with a set of APS specific and Client specific processing.

Reference data files will be used to determine how to interpret an APS transaction and to supply any limits on processing (e.g. minimum payment value).These functions are contained in the processing routines and reference data files used by the Pathway counter system when carrying out APS transactions.

Certain APS transactions are based around smart cards and keys. In order to protect the integrity of data on these tokens the ability to read and write requires the use of token specific code libraries.

Pathway requires that these will be supplied by POCL as executable code.

4.1.2.4.1 APS HOST FUNCTIONS

The APS Host Functions will be provided on Pathway central systems and will provide specific data storage and transaction handing functions as required by POCL and POCL Clients. The operational characteristics and technical requirements for these will be described in the set of *Automated Payments Client Specifications.*

The generic functions are as follows:

Receive Client Reference Data

Steady State Service

This will comprise a batch dataflow from the POCL AP Host System and /or a POCL Client system and will contain details of amendments and

FUJ00119561

additions to Client reference data. Such data will typically comprise smart card tariff lists and /or stop lists.

A single daily dataflow will be supported from POCL and / or a POCL Client. File-level validation and the recording of date / time for operational control and service-level use will take place.

The complete operational characteristics, including the procedures for success and error handling, and the technical interfaces for these links will be specified in the relevant *AP Client Specification*.

Future Optional Services

If new APS counter services are required, the nature of the AP transaction may develop to include real time connections to support authorisation requests and confirmations.

Receive TIP Reference Data

Steady State Service

When the POCL TIP system is established, the APS Host system will support a single daily dataflow of reference data additions or amendments covering :

- Reference data about outlets for service management
- Reference data about AP tokens
- Reference data about AP clients

The record structures, technical interface and operational characteristics is described in the *POCL Interface Specification*.

Interim Service

An alternative interface specification and technical implementation of the APS Host system will need to be planned for should the TIP system not be available in time.

Dispatch Client Data

Steady State Service

A daily batch dataflow will be provided to POCL and / or POCL Clients which will comprise the transaction details of all AP transactions conducted at the post office counter.

FUJ00119561

The content of the transaction record will be Client specific and may include some preprocessing (e.g. sorting, record layout, summary records etc.).

The record structures, technical interface and operational characteristics will be described in the relevant *AP Client Specification.*

Interim Service

The steady state service for dispatch of POCL data will operate to the TIP system. An alternative interface specification and technical implementation of the APS Host system will need to be planned for should the TIP system not be available in time.

Future Optional Services

If new APS counter services are required, the nature of the AP transaction may develop to include real time connections to support authorisation requests and confirmations.

4.1.2.4.2 APS COUNTER FUNCTIONS

All Steady State AP transactions will be invoked using either a Magnetic card or a Smart Card or Key. Certain transactions may also be invoked via the touch screen & keyboard in the event of magnetic card or card reader failure.

All steady state transactions are associated with crediting a customer account, typically a traditional bill payment.

Using a magnetic card

The customer is supplied with a magnetic stripe card by the utility or company to whom the bill is payable. The magnetic stripe contains details of the customers account or reference number with the company. This information is also embossed on the front of the card which may also include a suggestion of the amount payable each month. The card is swiped through the magnetic card reader and the account / customer information on the card is read by the system and processed according to the relevant Client reference data.

The value of the payment is keyed by the clerk and forwarded, with the account / reference number to TMS for onward distribution to the client, via POCL central systems. In addition to crediting the customers account

FUJ00119561

in respect of any credit tariff agreed with the utility or company, 'tokens' may be purchased to be used in the customers gas / electric meter etc., if required.

Tokens are value stock items. Stock records will be adjusted by the system following every sale.

Using a Smart Card or Smart Key

Smart Cards or Smart Keys are 'charged' with a monetary value to enable them to be used to credit utility meters (e.g. electricity or gas). The card or key contains details of the customers account / reference number with the utility or company. Following insertion into the card / key reader, this information is read by the system, the amount payable is keyed by the clerk and the card / key is then 'charged' with the value paid. The value paid together with the customers account / reference number is forwarded to TMS for onward distribution to the client via POCL central systems.

Transaction Selection

- As the transaction selection is 'Event driven' i.e., the appropriate screens are displayed following the swipe of a magnetic card or the insertion of a Smart card / key into the reader.
- In the event that the magnetic card cannot be read due to a fault with either the card or the reader, select 'AP TRANSACTION' 'Serve Customer' screen.
- If the smart card/key or its reader fails then the transaction cannot take place.

4.1.2.5 STEADY STATE SERVICE

4.1.2.5.1 COUNTER ACTIVITIES

To complete the transaction the clerk is required to:

Magnetic Card

- Swipe the card through the magnetic card reader.
- If card does not read, select the 'AP' application as above, and key customers account / reference number in the required field
- Accept payment from customer
- Key the amount payable as instructed by the customer
- Select Method of Payment (MoP)
- Print transaction details on cheques using counter printer

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- Issue any tokens to the customer as required
- Print receipt
- Hand card, tokens and receipt to customer
- Select 'COMPLETE' to return to 'Serve Customer' menu

Smart Card or Key

- Insert the card or key into the reader
- Accept payment from customer
- Key the amount payable as instructed by the customer
- Select MoP
- Print transaction details on cheques using counter printer
- Print receipt
- Hand card and receipt to customer
- Select 'COMPLETE' to return to 'Serve Customer' menu

4.1.2.5.2 OUTPUTS

The service will provide the following:

- Customer receipts
- Endorsed MoP (i.e. cheques)
- Cash Account postings
- Stock management of tokens
- Transaction details dispatched to POCL and/or POCL Client central systems
- Recharged Smart card or Smart key
- POCL summaries

APS Receipts

A customer copy and an office copy receipt will be produced for every APS transaction. The office copy receipt will be used to facilitate transaction recovery in certain rare failure scenarios. Agreement will be required on the layout of APS receipts, the fixed and variable parts of the layout, and the method of updating any Client specific information.

During the working day, and certainly by the close of business, all APS transactions will have been replicated to the central servers. There will no longer be need based on contingency to retain APS receipts. POCL may wish to retain receipts for reasons of customer service and a policy will be required on this.

4.1.2.5.3 TRANSACTION RECOVERY

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In a small number of cases it will be necessary for a post office to enter transaction details that have occurred during a period of failure. This will typically occur when magnetic card APS transactions have been recorded manually, due to a PC failure. When the system returns the clerk will be able to enter these transaction details, using the office copy receipt, to ensure that client transaction data is captured and the stock-unit cash position is correct.

4.1.2.5.4 TRANSACTION REVERSALS

APS transaction reversals will be allowed for those transactions where this facility is allowed within the reference data.

4.1.2.6 FUTURE OPTIONAL SERVICES

Optional services provided by Pathway in agreement with POCL will include:

- Possible direct links with the client systems
- Support for additional transactions and data capture methods at the counter

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4.1.3 EPOSS COUNTER TRANSACTIONS

4.1.3.1 INTRODUCTION

This section describes how all non BA or non APS transactions are handled at the post office counter. Following reconciliation at the counter they are posted to the journal and routed to POCL central systems via TMS.
BA and APS transactions, whether automated or not link into EPOSS for reconciliation and accounting purposes.

This section also describes the:

- Customer Session

This allows the counter clerk to serve customers with any of the products and services available, and gives a detailed description of the serving process and system outputs required.

- Administration Functions

Including the Counter Administration and Office Administration functions.

4.1.3.1.1 STOCK ITEMS

All value stock sales are transacted along the same principle. If more than one item is required, the number required is keyed prior to selecting the product. If the product is selected first, the system defaults to show only one item having been selected.

4.1.3.1.2 PRODUCT / SERVICE DISTRIBUTION AND AVAILABILITY

Not all post offices transact all products and services, e.g., DVLA licences are restricted generally to Branch Offices and Local Schemes are geographically limited to particular areas.
Product and service distribution and availability is controlled centrally. Any attempt by an office to select a disallowed transaction will result in the system displaying a warning notice with any further continuation of the transaction being prevented.

4.1.3.1.3 TERMINOLOGY

Method of Payment - MoP

The MoP may be selected either:

- During the course of the transaction, when a specific transaction related MoP requires this, e.g., Redeemed Stamps.
- At the end of the customer session when one MoP may be used to pay for a number of transactions.

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To illustrate a MoP has been chosen, this document shows MoP selection during the processing of the transaction and not at the close of the customer session.

A function or product shown in capitals, e.g. 'GIROBANK DEPOSIT' refers to a menu button displayed on the system screen. The required function or product can then be selected by either touching the screen or using the keyboard.

4.1.3.2 STANDARD PROCEDURES

4.1.3.2.1 COMPLETING POCL SUMMARIES

Where cheques, (including travellers cheques and Banker's drafts), Giro transfers, DNS warrants, postal orders and savings stamps have been accepted as a MoP, the following summaries are printed by the OPS back office printer:

P4630 : Cheques
P884MA : Inward Remittances (Giro transfers)
DNS53MA : DNS Warrants
P492MA : Paid postal orders
P3731MA : Redeemed stamps

4.1.3.2.2 MOP

All transactions will assume cash to be the preferred MoP. The text identifies that the clerk must 'Select MoP' only if cash is not tendered. In addition to cash, cheques (including travellers cheques and bankers drafts), Giro Transfers, DNS Warrants, Postal Orders, Savings Stamps and EFTPOS can be accepted for payment. Certain transactions though, have a pre-defined allowable MoP and this information will be held centrally within the reference data.

4.1.3.3 CUSTOMER PERCEPTION

The customer will initially notice that the transaction is handled with an increased level of efficiency and automation although the documentation will remain largely unchanged. As the service develops , many of the clerically completed forms may well be replaced with system printed documents, e.g., the DVLA licence disk. Arrival at this level of automation is dependent upon agreement being reached between Pathway, POCL and the Client at a future date.

4.1.3.4 THE CUSTOMER SESSION

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Transactions are services or products provided by the counter clerk to the customer. The products range from simple fixed price items, such as stamps, to complex open value transactions like the payment of benefits.

4.1.3.4.1 STOCK UNIT

The clerk must have a stock unit attached in order to serve a customer. The facility to select and attach a stock unit to a user is contained within

the Counter Administration function. The customer session will clearly display whether or not a user has a stock unit attached.

4.1.3.4.2 READY STATE

Before the start of a customer session the system will be in 'ready state'. It will return to 'ready state' at the end of each session.

4.1.3.4.3 CUSTOMER SESSION LOG

The customer session comprises a set of transactions undertaken for the same customer at one visit to the counter. In addition to 'Serve Customer' selection options, the desktop will display an on-screen Customer Session log and a running balance for settlement. This log will show all of the transactions within the customer session. The information displayed will include the name, quantity, unit price and total value as well as any indicators to show linked transactions. The clerk, having arrived at this point will then have the option to complete the session or select another transaction.
Upon completion of the session, the final settlement is calculated, and following input of the total cash amount tendered by the customer, any change due is displayed.

4.1.3.4.4 STOCK UNIT STATUS

The desktop will display an on-screen stock unit status which will include the stock unit ID and the total value of stock and cash held. The stock unit contents will be maintained up-to-date during the serving process. The display will show whether the stock unit is being 'shared' with other users. (This identifies any team balancing).

4.1.3.4.5 DESKTOP TRANSACTIONS

The 16 most frequently used transactions will be made available on the main desktop for rapid selection by the counter clerk.

4.1.3.4.6 OTHER TRANSACTIONS

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Those transactions not on the main desktop will either be automatically invoked by the occurrence of an appropriate event such as a magnetic card swipe, or by navigation through a menu comprising a hierarchy of desktops.

4.1.3.4.7 MODIFY A TRANSACTION

It will be possible to modify a transaction within a customer session that has not been committed. The counter clerk will select the transaction from the session log.

4.1.3.4.8 VOID A TRANSACTION

It will be possible to cancel a transaction within a customer session that has not been committed. The counter clerk will select the transaction from the session log.

4.1.3.4.9 SETTLE AND COMMIT A TRANSACTION

The system will determine whether or not a transaction must be settled in it's own right, e.g., Benefit Encashments.

4.1.3.4.10 ABANDON A CUSTOMER SESSION

It will be possible to abandon a customer session before settlement is reached. Transactions which have already been settled cannot be abandoned although they may be reversed, (if they are reversible). When a transaction is abandoned the system will return to 'ready state'.

4.1.3.4.11 SESSION SETTLEMENT

The session settlement in the form of a running balance to be paid in or paid out will always be displayed. The allowable methods of payment for each session will be dependent upon the actual transactions contained within the session. The system will enforce a set of rules for a transaction which will determine what method of payment is allowable for that transaction.

4.1.3.4.12 END CUSTOMER SESSION

The end of the current customer session will return the system to 'ready state'. It will be possible to end a session only when the balance is set at zero, following the settlement process.

4.1.3.4.13 COMMIT TRANSACTIONS

Transactions will generally be committed once the session has been completed, this action will result in the transaction information being

FUJ00119561

posted to the journal thereby providing a full audit trail. However, certain transactions, e.g., BA, will mandate settlement and committing in their own right within the session to allow encashment details to be transmitted to PAS preventing further encashment.

4.1.3.4.14 CONTINUE A CUSTOMER SESSION

A customer session may be continued following the end of the session.

4.1.3.4.15 START A NEW CUSTOMER SESSION

A new customer session is started when the first transaction for the new customer is invoked.

4.1.3.4.16 SUSPEND AND RESUME CUSTOMER SESSION

More than one customer session may be kept going at any one time on the same terminal by the same counter clerk. One or more customer sessions may be suspended whilst other customers are being served.

4.1.3.4.17 PRINT A SESSION RECEIPT

An optional session receipt may be printed at the end of the customer session prior to the start of the next session. Certain transactions, APS and BA, will require receipting in their own right and the system will force the production of such a receipt, either in mid-session if other transactions are also required, or at the end of the session if these transactions are in isolation.

4.1.3.4.18 PRINT A DUPLICATE RECEIPT

The clerk will be able to re-print any number of duplicate receipts for the last customer session after the end of the session and prior to the start of the new customer session. These receipts will be marked as 'Duplicate'.

4.1.3.5 INPAY - DNS DEPOSIT

This application allows the following transactions:

- Open new Ordinary account
- Open new Investment account
- Deposit to existing Ordinary account
- Deposit to existing Investment account
- Purchase Capital Bonds
- Purchase Children's Bonus Bonds

FUJ00119561

4.1.3.5.1 TRANSACTION SELECTION

The clerk will be required to select:

- 'DNS DEPOSIT' from 'Serve Customer' menu.
- Selecting the transaction type.

4.1.3.5.2 STEADY STATE SERVICE PROVISION

Counter Activities

To complete the transaction the clerk will be required to:

- Accept and check documentation and payment
- Key DNS account number
- Key surname of investor
- Key Value of transaction
- Select MoP
- Print transaction details on cheques and warrants using counter printer
- Clerically endorse cheques and warrants with non-system data as applicable to transaction type
- Select 'COMPLETE' to return to 'Serve Customer' menu
- Manually update passbook (if required)

Outputs

The service will provide the following:

- Cash Account postings
- DNS53MA summary
- DNS56MA summary
- DNS54MA summary
- POCL summaries

4.1.3.5.3 FUTURE OPTIONAL SERVICES

Optional services to be provided by Pathway in agreement with POCL will include:

- Subject to an on-line link to DNS, the updating of passbooks using the counter printer
- Code-line swipe of transaction detail from deposit documents

4.1.3.6 INPAY - GIROBANK DEPOSIT

This application allows the following transactions :

- A&L Giro personal account deposit
- A&L / SWINDON building society deposits
- Girobank cash handling deposit

FUJ00119561

- Girobank Transcash bill payment
- Girobank merchant voucher deposits
- Girobank corporate / A&L Giro cheque deposit envelopes
- Premium bond purchases
- National Savings certificate purchases

4.1.3.6.1 TRANSACTION SELECTION

The clerk will be required to select:

- 'GIROBANK DEPOSIT' from 'Serve Customer' menu
- Transaction type, e.g., 'TRANSCASH' from the 'Girobank Deposit' screen (This is necessary to ensure the correct PIVOT code is applied for remuneration and charging purposes.)

4.1.3.6.2 STEADY STATE SERVICE PROVISION

Counter Activities

The clerk will be required to:

- Accept and check documentation and payment
- Key Account number
- Key Value
- Key Fee (if applicable)
- Key reference number (if required)
- Select 'MoP'
- Print transaction details on cheques, transfers and warrants using counter printer
- Select 'COMPLETE' to return to 'Serve Customer' menu

Outputs

The service will provide the following:

- Cash Account postings
- G4631 summary
- G4633 summary
- POCL summaries

4.1.3.6.3 FUTURE OPTIONAL SERVICES

Optional services provided by Pathway in agreement with POCL will include:

- Automatic calculation of fee - linked to account number
- Account number directory - linked to various POCL 'schemes'
- Code-line swipe of transaction details

4.1.3.7 INPAY / STOCK SALE NON RETAIL - DVLA

FUJ00119561

This application allows the renewal of MVL licences using the V10 or V11 documentation and the purchase of Temporary First Licences. The V11 form is received by the customer direct from DVLA and can be used at qualifying Post Offices to obtain a new licence disk, providing details regarding the vehicle and the customer are current. V10 renewals are actioned when a V11 has not been received or details regarding the vehicle or the customer have changed.

Licence disks are value stock items recorded by serial number, not value. Stock records will be adjusted by the system following every sale.

4.1.3.7.1 TRANSACTION SELECTION

The clerk will be required to select:

- 'LICENCES' from 'Serve Customer' menu
- 'DVLA' from 'Licences' menu

4.1.3.7.2 STEADY STATE SERVICE PROVISION

Counter Activities

To complete the transaction the clerk is required to:

- Accept and check documentation, (MOT etc.) and payment
- Key the licence disk serial number
- Key the prefix number (to select the licence period)
- Key the taxation class of the vehicle, (along with the prefix number above, this will select the appropriate duty payable)
- Select MoP
- Print transaction details on cheques and transfers using counter printer
- Cancel redeemed DVLA stamps if offered as MoP
- Select 'COMPLETE' to return to 'Serve Customer' menu
- Manually endorse the licence disk with the vehicle registration (including the validation character), taxation class, make of vehicle, period of taxation, rate of duty payable, and weight, cc, seats, and trailer weight if required. Spoilt licences are recorded on the system by Selecting 'SPOILT'.
- Complete the required sections within the V10 and V11 forms

Outputs

The service will provide the following:

- Cash Account postings
- Stock management
- V10 schedule (V594)
- V11 schedule (V595)
- V570 summary
- POCL summaries

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4.1.3.7.3 FUTURE OPTIONAL SERVICES

Optional services provided by Pathway in agreement with POCL will include:

- Extended data input to include all information required on the licence disk enabling the printing of the licence disk using the counter printer.

4.1.3.8 INPAY / STOCK SALE NON RETAIL - TV LICENCE RENEWAL

There are 3 ways in which to renew a TV licence:

- A standard renewal with the renewal form received by the customer direct from NTVLRO
- A renewal using an 'application' form obtained at the Post Office, this can also be used for the initial purchase of a TV licence
- A renewal by exchanging an existing black and white licence for a colour licence

The standard renewal and the renewal using the application form are essentially the same in the detail required by the TV licence application. The main differences lie within the clerical procedures required to complete the documentation.

TV licence stamps are value stock items. Stock records will be adjusted following every renewal.

4.1.3.8.1 TRANSACTION SELECTION

The clerk will be required to select:

- 'LICENCES' from 'Serve Customer' menu
- 'TV' from 'Licences' menu

4.1.3.8.2 STEADY STATE SERVICE PROVISION

Counter Activities

To complete the transaction the clerk will be required to:

- Accept and check documentation and payment
- Select 'COLOUR' or 'MONO' for licence type
- Select MoP
- Print transaction details on cheques and transfers using counter printer
- Cancel redeemed stamps if offered as MoP
- If refund of black and white licence, select 'REFUND' and key value of refund.
- If a reduction is required for a blind person, select 'BLIND'
- Select 'COMPLETE' to return to 'Serve Customer' menu

FUJ00119561

- Attach TV licence stamp to licence form
- Complete relevant sections of licence form

Outputs

The service will provide the following:

- Cash Account postings
- Stock management
- POCL summaries

4.1.3.8.3 FUTURE OPTIONAL SERVICES

Optional services provided by Pathway in agreement with POCL will include:

- Provision of a refund table within the system - accessed by input of the expiry date of the surrendered black and white licence. This would calculate the refund due

4.1.3.9 INPAY - OTHER LICENCES - ROD & GAME

Licences may be purchased at the Post Office for:

- To deal in game
- Gamekeeper
- To kill game - Red, Green, Blue, Occasional
- Rod - Salmon or Trout

Although licences are not classed as value stock, spoilt licences must be recorded on the Cash Account.

4.1.3.9.1 TRANSACTION SELECTION

The clerk will be required to select:

- 'LICENCES' from 'Serve Customer' menu
- 'GAME' or 'ROD' from 'Licences' menu

4.1.3.9.2 STEADY STATE SERVICE PROVISION

Counter Activities

To complete the transaction the clerk will be required to:

Game licence

- Accept and check documentation and payment
- Select type of licence required from menu
- Complete licence
- Select MoP

FUJ00119561

- Print transaction details on cheques and transfers using counter printer
- Select 'COMPLETE' to return to 'Serve Customer' menu
- Issue licence to customer
- Hold counterfoil then forward to Local Council Game Officer
- Select 'SPOILT' if licence is damaged

Rod Licence

- Accept and check documentation and payment
- Select type of licence required from menu
- Select 'CONCESSION' if required
- Complete licence
- Select MoP
- Print transaction details on cheques and transfers using counter printer
- Select 'COMPLETE' to return to 'Serve Customer' menu
- Issue licence to customer
- Enter details of licence on the weekly sales summary
- Complete weekly reconciliation of licences
- Select 'SPOILT' if licence is damaged

Outputs

The service will provide the following:

- Cash Account postings
- POCL summaries

4.1.3.9.3 FUTURE OPTIONAL SERVICES

Optional services provided by Pathway in agreement with POCL will include:

- Print weekly sales summaries

4.1.3.10 INPAY / OUTPAY - WESTERN UNION

The money transfer service via Western Union can be used to either send or receive money to or from abroad.

4.1.3.10.1 TRANSACTION SELECTION

The clerk will be required to select:

- 'OTHER PRODUCTS' from 'Serve Customer' menu
- 'WESTERN UNION' from 'Other Products' menu
- 'SEND' or 'RECEIVE' as applicable.

All relevant telephone numbers will be displayed on the screen to assist the clerk when telephoning the Western Union Control Centre to authorise transactions.

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4.1.3.10.2 STEADY STATE SERVICE PROVISION

Counter Activities

To complete the transaction the clerk will be required to:

Sending Money Abroad

- Accept payment from customer
- Check the customer has completed all relevant sections of the 'Send Money' form - if the value is over £350 a description of the payee must be obtained
- Select additional services and calculate the handling charge
- Select MoP
- Print transaction details on cheques using counter printer
- Telephone Western Union control centre (obtain number from directory) and verify ID
- Give customer details, obtain authorisation code from control centre
- Clerically endorse cheque with guarantee card number and authorisation code
- Complete sections within 'Send Money' form
- Select 'COMPLETE' to return to 'Serve Customer' menu

Receiving Money from Abroad

- Ensure customer has completed the relevant sections of the 'Receive Money' form
- Check customer's ID - and enter on form
- Telephone control centre and verify ID
- Give customer details and obtain authorisation code from control centre
- Enter authorisation code on 'Receive Money' form
- Select 'COMPLETE' to return to 'Serve Customer' menu
- Complete relevant sections of 'Receive Money' form, hand one copy to customer and retain bottom copy
- Pay customer

Outputs

The service will provide the following:

- Cash Account postings
- POCL summaries

4.1.3.10.3 FUTURE OPTIONAL SERVICES

Optional future services to be provided by Pathway and agreed with POCL will include:

- Possible direct link to Western Union to avoid the need for verbal telephone authorisation
- Full data entry of customer and transaction detail

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- Data entry of guarantee card details
- Guarantee card details printed on cheques and transfers

4.1.3.11 INPAY - INSURANCE PRODUCTS

Two types of travel insurance policies are offered by POCL in conjunction with General Accident, the 'Single Trip' and 'Annual' policies.
Customers must either complete an application form or verbally give details to the clerk to enable the 3 part policy document to be completed.

4.1.3.11.1 TRANSACTION SELECTION

The clerk will be required to select:

- 'OTHER PRODUCTS' from 'Serve Customer'
- 'INSURANCE PRODUCTS' from 'Other Products' menu

4.1.3.11.2 STEADY STATE SERVICE PROVISION

Counter Activities

To complete the transaction the clerk is required to:

- Accept payment from customer
- Complete the policy document
- Key amount
- Select MoP
- Print transaction details on reverse of cheques using counter printer
- Select 'COMPLETE' to return to 'Serve Customer' screen
- Record office details, teller ID, MoP and Cash Account week on policy document
- Request customer checks details on document, if correct:
  - give white copy to customer
  - forward yellow copy to Chesterfield
  - retain pink copy in office
- Staple customer application form to pink copy

Outputs

The service will provide the following:

- Cash Account postings
- POCL summaries

4.1.3.11.3 FUTURE OPTIONAL SERVICES

Optional services to be provided by Pathway and agreed with POCL will include:

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- Possible data entry of customers details to provide automatic production of the policy document

4.1.3.12 INPAY - RENT PAYMENTS

This application allows rent payments using either rent cards or rent vouchers at post offices nominated by the local authority or housing association.

4.1.3.12.1 TRANSACTION SELECTION

The clerk will be required to select:

- 'OTHER PRODUCTS ' from 'Serve Customer' menu
- 'RENT PAYMENTS' from 'Other Products' menu

4.1.3.12.2 STEADY STATE SERVICE PROVISION

Counter Activities

To complete the transaction the clerk will be required to:

- Check PO is nominated to accept payments
- Accept and check documentation and payment
- Key amount
- Select 'CARD PAYMENT' or 'VOUCHER PAYMENT'
- Select 'MoP'
- Print transaction details on cheques and transfers using counter printer
- Select 'COMPLETE' to return to 'Serve Customer' menu
- Initial customer's payment card (card payments only)
- Date stamp voucher and counterfoil (voucher payments only)
- Return card or voucher counterfoil to customer
- Complete rent collection schedule
- Complete Transcash deposit slips (end of period)

Outputs

The service will provide the following:

- Cash Account postings

4.1.3.12.3 FUTURE OPTIONAL SERVICES

Optional services provided by Pathway in agreement with POCL will include:

- System printing of the Rent collection schedules for card payments and voucher payments for each Girobank account
- System printing of Transcash deposit slips for each Girobank account
- Girobank account number directory and selection
- Transaction acceptance at PO - linked to Girobank account number

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- MoP acceptance - linked to Girobank account number
- Code-line swipe of transaction details from rent card/voucher

4.1.3.13 INPAY - BUNCHES - FLOWERS BY POST

This application allows bunches of flowers to be ordered for despatch within 48 hours by first class post.

4.1.3.13.1 TRANSACTION SELECTION

The clerk will be required to select:

- 'OTHER PRODUCTS ' from 'Serve Customer' menu
- 'FURTHER OTHER PRODUCTS' from 'Other Products' menu
- 'BUNCHES - FLOWERS BY POST' from 'Further Other Products' menu

4.1.3.13.2 STEADY STATE SERVICE PROVISION

Counter Activities

To complete the transaction the clerk will be required to:

- Accept and check documentation and payment
- Select products required
- Select 'TODAY' or 'NEXT DAY' to determine client summary which will include the transaction (depends on when order may be placed with Bunches)
- Key amount
- Select 'MoP'
- Print transaction details on cheques and transfers using counter printer
- Select 'COMPLETE' to return to 'Serve Customer' menu
- Date stamp order form and counterfoil
- Return counterfoil to customer
- Telephone order to Bunches
- Enter reference number allocated by Bunches on order form

Outputs

The service will provide the following:

- Cash Account posting (as Girobank Transcash payment)
- Girobank Summary completion (as Girobank Transcash deposit)
- POCL summaries

4.1.3.13.3 FUTURE OPTIONAL SERVICES

Optional services provided by Pathway in agreement with POCL will include:

- Code-line swipe of transaction selection from order form

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4.1.3.14 INPAY - BRITISH TELECOM BILL PAYMENT

This application is designed specifically for the payment of British Telecom bills which differ from all other paper bill payments because:

- They do not require a PIVOT code
- British Telecom is not a customer of Girobank and therefore does not use Transcash documentation

The application is capable of accommodating similar transactions should any new business be won by the Post Office in the future.

4.1.3.14.1 TRANSACTION SELECTION

The clerk will be required to select:

- Event driven form code-line swipe of bill payment counterfoil.
- 'BT BILL PAYMENT' from 'Serve Customer' menu.

4.1.3.14.2 STEADY STATE SERVICE PROVISION

Counter Activities

To complete the transaction the clerk is required to:

- Accept and check documentation and payment
- Key Value
- Key account number if code-line swipe fails
- Select MoP
- Print transaction details on cheque and transfers using counter printer
- Cancel redeemed stamps if offered as MoP
- Select 'COMPLETE' to return to 'Serve Customer' menu

Outputs

The service will provide the following:

- Cash Account postings
- Telephone Accounts Paid summary
- POCL summaries

4.1.3.14.3 FUTURE OPTIONAL SERVICES

Optional services provided by Pathway in agreement with POCL will include:

- Extension of service to other clients

4.1.3.15 OUTPAY - DNS WITHDRAWALS

This application allows the following transactions:

FUJ00119561

- Cash withdrawals from Ordinary accounts
- Warrant withdrawals from Ordinary accounts
- Warrant withdrawals from Investment accounts
- Special withdrawals
- Deposit Bond warrants
- Savings Certificate warrants
- Save As You Earn warrants
- Yearly Plan warrants
- Children's Bonus Bond warrants
- Premium Savings Bond warrants
- Capital Bond warrants
- Income Bond warrants

4.1.3.15.1 TRANSACTION SELECTION

The clerk will be required to select:

- 'DNS WITHDRAWAL' from 'Serve Customer' menu.

With the exception of a direct cash withdrawal from an Ordinary account, all other 'withdrawals' are cash payments made against DNS warrants issued direct to the customer. The different transactions are identified by a 2 or 3 digit warrant code.

4.1.3.15.2 STEADY STATE SERVICE PROVISION

Counter Activities

To complete the transaction the clerk is required to:

- Accept and check documentation
- Check value limits for Ordinary account cash withdrawals
- Key surname of investor
- Key warrant code (if applicable)
- Key Value
- Select 'COMPLETE' to return to 'Serve Customer' menu
- Update passbook for Ordinary account withdrawals
- Pay customer

Outputs

The service will provide the following:

- Cash Account postings
- DNS53MA summary
- DNS56MA summary
- DNS54MA summary
- POCL summaries

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4.1.3.15.3 FUTURE OPTIONAL SERVICES

Optional services provided by Pathway in agreement with POCL will include:

- Subject to an on-line link with DNS, the update of the Ordinary account passbook using the counter printer
- Code-line swipe of transaction detail from withdrawal documentation or warrant

4.1.3.16 OUTPAY - GIROBANK WITHDRAWAL

This application allows the following transactions:

- A&L Giro personal account withdrawal
- A&L Giro Linksave account withdrawal
- A&L / SWINDON building society withdrawal
- Girobank business cash withdrawal
- Girobank Cashcheque withdrawal
- Postcheque encashment
- West German savings bank withdrawal
- Withdrawals without cheques
- Cashing other banks cheques (not a Girobank transaction but uses this application)

4.1.3.16.1 TRANSACTION SELECTION

The clerk will be required to select:

- 'GIROBANK WITHDRAWAL' from 'Serve Customer' menu.
- Transaction type, e.g.,. 'A&L GIRO' from the 'Girobank Withdrawal' screen. (This is necessary to ensure the correct PIVOT code is applied for remuneration and charging purposes.)

4.1.3.16.2 STEADY STATE SERVICE PROVISION

Counter Activities

To complete the transaction the clerk will be required to:,

- Accept and check documentation
- Telephone A&L Giro and request authorisation code for payment
- Key account number
- Key Value
- Key Fee (cashing other banks cheques only)
- Key Authorisation code (for Linksave & withdrawals without cheques)
- Select 'COMPLETE' to return to 'Serve Customer' menu
- Pay customer

FUJ00119561

- Endorse withdrawal documentation with guarantee card / postal authority card details if required by transaction

Outputs

The service will provide the following:

- Cash Account postings
- G4632 summary
- POCL summaries

4.1.3.16.3 FUTURE OPTIONAL SERVICES

Optional services provided by Pathway in agreement with POCL will include:

- Data entry of guarantee card details
- Withdrawal document endorsement with guarantee card details
- Standard fee calculation (COBC)
- Code-line swipe of transaction detail from withdrawal documents

4.1.3.17 OUTPAY - BENEFIT ENCASHMENT USING FOIL (NON-OBCS)

The customer will present order book at post office without OBCS, or order book without bar-code at post office with OBCS, in order to encash benefit.

4.1.3.17.1 TRANSACTION SELECTION

The clerk will select 'BENEFIT ENCASHMENT (FOIL)' option from the 'Serve Customer' menu order to access the 'Benefit Encashment (Foil)' screen.

4.1.3.17.2 STEADY STATE SERVICE PROVISION

Counter Activities

The 'Benefit Encashment (Foil)' screen will prompt the clerk to check the payment stop-list and, provided customer is not listed, pay the customer and enter payment details.

To complete the transaction the clerk will be required to:

- Check order book and foil(s)
- Check manual stop-list
- Date stamp foil(s) and counterfoil(s)
- Remove foil(s) from order book
- Return book to customer
- Key payment details: Benefit group, foil amount, number of foils (default of one) and number of milk tokens
- Select 'COMPLETE' to return to 'Serve Customer' menu

FUJ00119561

- Pay customer

Exceptions:

- Stop placed on order book:

Clerk will select 'IMPOUND' option, key NINO from order book, hole-punch book and return it to BA.

- Matured recall notice placed on order book:

Clerk will encash allowed payments, select 'IMPOUND' option, key NINO from order book, hole-punch book and return it to BA.

- Clerk suspicious:

Clerk will impound book. Clerk will select 'IMPOUND' option, key NINO from order book, hole-punch book and return it to BA.

- All or part of payment is required as cheque payment:

Clerk will select 'CHEQUE PAYMENT' option and input amount of payment required by cheque.

Outputs

- Cash Account postings
- Daily Pensions & Allowances list
- Weekly Pensions & Allowances summary
- Number of foils encashed

Note

Other exceptions, in addition to those listed and which arise at present, will continue to be handled in the same way.

4.1.3.18 OUTPAY - BENEFIT ENCASHMENT USING GIROCHEQUE

The customer will present Girocheque(s) at post office in order to encash benefit.

4.1.3.18.1 TRANSACTION SELECTION

The clerk will select 'BENEFIT ENCASHMENT (GIROCHEQUE)' option from the 'Serve Customer' menu order to access the 'Benefit Encashment (Girocheque)' screen.

4.1.3.18.2 STEADY STATE SERVICE PROVISION

Counter Activities

The 'Benefit Encashment (Girocheque)' screen will prompt the clerk to check the payment stop-list and, provided customer is not listed, pay the customer and enter payment details.

To complete the transaction the clerk will be required to:

- Check Girocheque(s)

FUJ00119561

- Check stop-list
- Date stamp Girocheque(s)
- Key payment details: Girocheque amount, number of cheques (default of one) and number of milk tokens
- Select 'COMPLETE' to return to 'Serve Customer' menu
- Pay customer

Exceptions:

- Violet Girocheque(s) presented:

Clerk will select 'NI' option prior to committing transaction.

Outputs

- Cash Account postings
- Girocheque summary

Note

Other exceptions, in addition to those listed and which arise at present, will continue to be handled in the same way.

4.1.3.19 MISCELLANEOUS TRANSACTIONS

This relates to simple transactions where there is only a requirement to identify the transaction and the MoP for Cash Account and reconciliation purposes. The screen presented identifies each transaction by Icon / Button. If the transaction relates to an INPAY, the screen allows the input of the appropriate MoP.

Transactions included in this application:

INPAY

- Lottery sales
- Scratch card sales
- Bus Permits
- Local Schemes
- Passport Applications
- E111
- Telemessages
- Active Life Renewals
- Mobile Phone Handset Sales
- Commemorative Coins
- Scratch Card Sales
- Meal Voucher Receipts

OUTPAY

- Prescription Refunds
- Co-op Cheque Encashment
- ATM withdrawals

FUJ00119561

- Lottery Pay-outs
- Scratch card Pay-outs
- MOD pensions

Financial & Reconciliation Administration

- Error notices
- Pre paid mail
- Franking Machine Re-setting
- Unpaid Cheques
- Unclaimed Payments
- Uncharged Receipts

4.1.3.19.1 TRANSACTION SELECTION

The clerk will be required to select:

- 'OTHER PRODUCTS' from 'Serve Customer' menu
- 'OTHER' from the 'Other Products' menu

4.1.3.19.2 STEADY STATE SERVICE PROVISION

Counter Activities

To complete the transaction the clerk will be required to:

- Select transaction type
- Accept documentation
- If INPAY - Accept payment
- If INPAY - Select MoP
- Print transaction details on cheques and transfers using counter printer
- If OUTPAY - Pay customer
- Select 'COMPLETE' to return to 'Serve Customer' menu

Outputs

The service will provide the following:

- Cash Account postings
- POCL summaries

4.1.3.19.3 FUTURE OPTIONAL SERVICES

Optional services provided by Pathway in agreement with POCL will include:

- Extension of data capture as necessary

4.1.3.20 STOCK NON RETAIL - 1ST & 2ND CLASS POSTAGE STAMP SALES

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1st & 2nd class postage stamps have been given their own product button within the 'Serve Customer' screen as they are understood to be common transactions which need to be completed quickly.

Postage stamps are value stock items. Stock records will be adjusted by the system following every sale.

Uprating & Downrating

Postage stamp values may be changed by the Post Office at the close of business of the current Cash Account week. New values should be charged at the commencement of the new Cash Account week. If this occurs the stock unit values will be amended by the system and the appropriate value posted to the Cash Account as 'Uprating' or ' Down rating'.

4.1.3.20.1 TRANSACTION SELECTION

The clerk will be required to select:

- '1ST CLASS POSTAGE STAMP' or '2ND CLASS POSTAGE STAMP' from 'Serve Customer' menu.

4.1.3.20.2 STEADY STATE SERVICE PROVISION

Counter Activities

To complete the transaction the clerk will be required to:

- Accept payment from customer
- If a single stamp is required of either denomination - Select the appropriate value
- If more than one stamp is required of either denomination - Key the number required and then select the appropriate value
- Select MoP
- Print transaction details on cheque and transfers using counter printer
- Clerically endorse cheques and transfers with guarantee card / postal authority card details
- Select 'COMPLETE' to return to 'Serve Customer' menu

Outputs

The service will provide the following:

- Cash Account postings
- Stock management
- POCL summaries

4.1.3.20.3 FUTURE OPTIONAL SERVICES

Optional services provided by Pathway in agreement with POCL will include:

FUJ00119561

- Data entry of guarantee card / postal authority card details
- Guarantee card / postal authority card details printed on cheques and transfers

4.1.3.21 STOCK NON RETAIL / INPAY - OTHER MAILS

This application allows the purchase of:

- Postage stamp books
- Postage stamp rolls
- Postage stamp discount books
- Single or multiple postage stamps of denominations other than 1st or 2nd class
- Royal Mail / Parcelforce Inland mail services
- Royal Mail / Parcelforce International mail services

Postage stamps are value stock items. Stock records will be adjusted following every sale.

Uprating & Downrating

Discount Stamp values may be changed by the Post Office at the close of business of the current Cash Account week. New values should be charged at the commencement of the new Cash Account week. If this occurs the stock unit values will be amended by the system and the appropriate value posted to the Cash Account as 'Uprating' or 'Downrating'.

4.1.3.21.1 TRANSACTION SELECTION

The clerk will be required to select 'OTHER MAILS' from 'Serve Customer' menu, allowing a selection of:

- Book of 4 1st class stamps
- Book of 10 1st class stamps
- Book of 4 2nd class stamps
- Book of 10 2nd class stamps
- Roll of 100 1st class stamps
- Roll of 200 1st class stamps
- Roll of 100 2nd class stamps
- Roll of 200 2nd class stamps
- Discount Books - 25 1st class
- Discount Books - 50 1st class
- Discount Books - 25 2nd class
- Discount books - 50 2nd class
- Other Postage Stamps - leading to a sub menu of denominations
- Inland Mail - leading to a sub menu of services

FUJ00119561

- International Mail - leading to a sub menu of services

4.1.3.21.2 STEADY STATE SERVICE PROVISION

Counter Activities

To complete the transaction the clerk will be required to:

Postage stamp books, rolls or discount stamp books:

- Accept payment from customer
- If a single item is required - Select the appropriate item
- If more than one item is required - Key the number required and select the appropriate item
- Select MoP
- Print transaction details on cheques and transfers using counter printer
- Clerically endorse cheques and transfers with guarantee card / postal authority card details
- Select 'COMPLETE' to return to 'Serve Customer' menu

Other Postage Stamps

On selecting this product, the screen will display all available denominations plus the currently available commemorative issues.

- Accept payment from customer
- If a single stamp is required - Select the appropriate denomination
- If more than one stamp is required - Key the number required and then select the appropriate denomination
- Select MoP
- Print transaction details on cheques and transfers using counter printer
- Clerically endorse cheques and transfers with guarantee card / postal authority card details
- Select 'COMPLETE' to return to 'Serve Customer' menu

Inland Mail / International Mail

On selecting either product, the screen will display all available and associated services.

- Weigh package
- Select Service
- Accept payment from customer
- Affix priority service label (if applicable to package)
- Complete all relevant details on priority label
- Select Postage, (if payable) - this will take the clerk into a window allowing the selection of postage stamps
- Select 'COMPLETE' to return to 'Mails' screen
- Select MoP
- Print transaction details on cheques and transfers using counter printer
- Clerically endorse cheques and transfers with guarantee card / postal authority card details
- Select 'COMPLETE' to return to 'Serve Customer' menu

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Outputs

The service will provide the following:

- Cash Account postings
- Stock management of postage stamps
- POCL summaries

4.1.3.21.3 FUTURE OPTIONAL SERVICES

Optional services provided by Pathway in agreement with POCL will include:

- Data entry of guarantee card / postal authority card details
- Guarantee card / postal authority card details printed on cheques and transfers
- A comprehensive data base of tariffs for both Inland and International mails

4.1.3.22 STOCK NON RETAIL - BT TELEPHONE CARD SALES

There are 5 types of BT Telephone card which may be purchased at the Post Office:

- 20 units £2
- 50 units £5
- 100 units £10
- 200 units £20
- Collectors packs

BT Telephone cards are value stock items. Stock records will be adjusted by the system following every sale.

4.1.3.22.1 TRANSACTION SELECTION

The clerk will be required to select:

- 'BT TELEPHONE CARDS' from 'Serve Customer' menu

4.1.3.22.2 STEADY STATE SERVICE PROVISION

Counter Activities

To complete the transaction the clerk will be required to:

- Accept payment from customer
- If a single card is required of any denomination - Select the appropriate value
- If more than one card is required of any denomination - Key the number required and then select the appropriate value

FUJ00119561

- Select MoP
- Print transaction details on cheques and transfers using counter printer
- Clerically endorse cheques and transfers with guarantee card / postal authority card details
- Select 'COMPLETE' to return to 'Serve Customer' menu

Outputs

The service will provide the following:

- Cash Account postings
- Stock management
- POCL summaries

4.1.3.22.3 OPTIONAL FUTURE SERVICES

Optional services provided by Pathway in agreement with POCL will include:

- Data entry of guarantee card / postal authority card details
- Guarantee card / postal authority card details printed on cheques and transfers

4.1.3.23 STOCK NON RETAIL - SAVINGS STAMP SALES

Savings stamps can be purchased for:

- Gas
- Electricity
- Water
- Telephone
- Home Help
- Active Life
- TV Licence
- DVLA Licence renewal

Savings stamps are value stock items. Stock records will be adjusted by the system following every sale.

4.1.3.23.1 TRANSACTION SELECTION

The clerk will be required to select:

- 'SAVINGS STAMPS' from 'Serve Customer' menu

4.1.3.23.2 STEADY STATE SERVICE PROVISION

Counter Activities

To complete the transaction the clerk will be required to:

FUJ00119561

- Accept payment from customer
- If a single stamp is required of any type - Select the appropriate stamp type
- If more than one stamp is required of any type - Key the number required and then Select the appropriate type
- Select MoP
- Print transaction details on cheques and transfers using counter printer
- Clerically endorse cheques and transfers with guarantee card / postal authority card details
- Select 'COMPLETE' to return to 'Serve Customer' menu

Outputs

The service will provide the following:

- Cash Account postings
- Stock management
- POCL summaries

4.1.3.23.3 FUTURE OPTIONAL SERVICES

Optional future services provided by Pathway in agreement with POCL will include:

- Data entry of guarantee card / postal authority card details
- Guarantee card / postal authority card details printed on cheques and transfers

4.1.3.24 STOCK NON RETAIL - POSTAL AND MONEY ORDERS

Postal Orders are available in the following denominations - 50p, £1, £2, £3, £4, £5, £6, £7, £8, £9, £10, £15, £20. Each postal order can be increased in value up to 49p by affixing up to 2 postage stamps. A fee is payable for each postal order depending upon the value.

Redemption

Postal Orders must always be redeemed, if not attached to the purchase of any product or service e.g., DVLA licences, for cash. If they are used to purchase a product or service, although physical cash will not be exchanged with the customer, their value is treated as cash for the purposes of reconciliation.

Fees

Postal orders and their fees are classed as value stock items and are linked together, therefore when a postal order is sold the system will apply the appropriate fee. Upon completion of the transaction, the system will update the stock records to reflect the sale.

If more than one postal order is purchased, the appropriate fees must be charged. If a single postal order is required but cannot be supplied due to

FUJ00119561

unavailability of stock, and more than one postal order is therefore supplied, only one fee is charged. The clerk can therefore overwrite the fees calculated by the system.

If the counter clerk spoils a Postal Order during preparation, e.g., tears the order, this must be accounted for within the Postal Order stock unit. In addition to cancelling the spoilt order, the associated fee must be cancelled. Spoilt orders should be entered on the Inward Rems summary as 'Spoilt stock'

Uprating

Postal Order fees may be changed by the Post Office at the close of business of the current Cash Account week. New fees should be charged at the commencement of the new Cash Account week. If this occurs the stock unit values will be amended by the system and the appropriate value posted the Cash Account as 'Uprating'.

Money Order Redemption

There is no facility to purchase International Money orders, although Canadian and USA money orders can be encashed at any Post Office.

4.1.3.24.1 TRANSACTION SELECTION

The clerk is required to select:

- 'POSTAL/MONEY ORDERS' from 'Serve Customer' menu
- 'POSTAL ORDER PURCHASE', 'POSTAL ORDER REDEMPTION', or 'INTERNATIONAL MONEY ORDER REDEMPTION' from
- 'Postal / Money Orders' menu.

4.1.3.24.2 STEADY STATE SERVICE PROVISION

Counter Activities

To complete the transaction, the clerk will be required to:

Postal Order Purchase

- Accept payment from customer
- Select Value of Postal Order(s) required
- Select 'POSTAGE'
- Key Value of stamps required if intermediate value
- Key Value of fee charged - (if fee needs amendment due to unavailability of P.O. denomination requested)
- Select MoP
- Print transaction details on cheques and transfers using counter printer
- Clerically endorse cheques and transfers with guarantee card / postal authority card details
- Issue Postal Orders

FUJ00119561

- If Postal Orders spoilt - select 'SPOILT' and re-commence transaction
- Select 'COMPLETE' to return to 'Serve Customer' menu

Postal Order Redemption

- Key the Value of Postal Orders redeemed
- Key the Value of postage stamps
- Pay customer

International Money Order Redemption

- Key the value of the Money order redeemed
- Select the country of origin - USA / CANADA
- Pay customer
- Enter Canadian orders on the Canadian money order claim form

Outputs

The service will provide the following:

- Cash Account postings
- Stock management
- POCL summaries

4.1.3.24.3 FUTURE OPTIONAL SERVICES

Optional services provided by Pathway in agreement with POCL will include:

- Data entry of guarantee card / postal authority card details
- Guarantee card / postal authority card details printed on cheques and transfers
- Print the Canadian money order claim form

4.1.3.25 STOCK NON RETAIL - PHILATELIC PRODUCTS

A simple application allowing the sale of philatelic products - first day covers, special edition stamps etc.

Philatelic products are classed as value stock. Stock records will be adjusted following every sale.

4.1.3.25.1 TRANSACTION SELECTION

The clerk will be required to select:

- 'OTHER PRODUCTS' from 'Serve Customer' menu
- 'PHILATELIC' from the 'Other Products' menu

4.1.3.25.2 STEADY STATE SERVICE PROVISION

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Counter Activities

To complete the transaction the clerk is required to:

- Accept payment from customer
- If a single philatelic product is required - Select the appropriate product
- If more than one unit of a particular product is required - Key the number required and then select the appropriate product
- Select MoP
- Print transaction details on cheques and transfers using counter printer
- Clerically endorse cheques and transfers with guarantee card / postal authority card details
- Select 'COMPLETE' to return to 'Serve Customer' menu

Outputs

The service will provide the following:

- Cash Account postings
- Stock management
- POCL summaries

4.1.3.25.3 FUTURE OPTIONAL SERVICES

Optional future services provided by Pathway in agreement with POCL will include:

- Data entry of guarantee card / postal authority card details
- Guarantee card / postal authority card details printed on cheques and transfers

4.1.3.26 STOCK NON RETAIL - BUREAU DE CHANGE

The Bureau de change service is available at selected Post Offices and offer, (up to certain pre-defined limits) the facility to:

- Exchange foreign currency for £ sterling
- Exchange £ sterling travellers cheques for £ sterling
- Exchange foreign travellers cheques for £ sterling
- Purchase foreign currency
- Purchase £ sterling travellers cheques

4.1.3.26.1 TRANSACTION SELECTION

The clerk will be required to select:

- 'OTHER PRODUCTS' from 'Serve Customer' menu
- 'BUREAU DE CHANGE' from 'Other Products' menu

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4.1.3.26.2 STEADY STATE SERVICE PROVISION

Counter Activities

To complete the transaction the clerk will be required to:

- If purchase, accept payment from customer
- Complete transaction on 'Forde' machine
- Key £ sterling value of the transaction
- Select transaction type - 'Purchase £ sterling travellers cheque' etc.
- Select MoP
- Print transaction details on cheques and transfers using counter printer
- Clerically endorse cheques and transfers with guarantee card details
- Select 'COMPLETE' to return to 'Serve Customer' menu
- If exchange for £ sterling, pay customer

Outputs

The service will provide the following:

- Cash Account postings
- POCL summaries

4.1.3.26.3 FUTURE OPTIONAL SERVICES

Optional future services to be provided by Pathway and agreed with POCL will include:

- Migration of the 'Forde' system onto the counter system
- On-line links to currency conversion information
- Data capture of cheque guarantee card details
- Guarantee card details printed on cheques and transfers

4.1.3.27 STOCK - NON RETAIL: FIRST RATE CURRENCY

Customers wishing to order foreign currency from Post Offices not offering the full Bureau de Change service. A buy back service is also available up to £100.

4.1.3.27.1 TRANSACTION SELECTION

The clerk will be required to select:

- 'OTHER PRODUCTS' from the 'Serve Customer' menu
- 'FIRST RATE' from the 'Other Products' menu

4.1.3.27.2 STEADY STATE SERVICE PROVISION

Counter Activities

To complete the transaction the clerk will be required to:

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Pre-Order

- Accept and check documentation and payment
- Select 'PRE-ORDER'
- Work out commission - (include express handling charge if required)
- Telephone order if express delivery is required
- Select MoP
- Print transaction details on cheques and transfers using counter printer
- Clerically endorse cheques and transfers with guarantee card details
- Select 'COMPLETE' to return to 'Serve Customer' menu
- Complete 'Receipt of Order' form
- Pass top copy of receipt to customer
- Despatch order to First Rate

Complete customer collection procedures when customer arrives to collect order. No system operations required.

Buy Back

- Accept documentation and currency/cheques from customer
- Select 'BUY BACK'
- Calculate buy back
- Complete 'Foreign Exchange Buy Back' form
- Pay customer
- Place cheques or currency in envelope

Outputs

The service will provide the following:

- Cash Account postings
- POCL summaries

4.1.3.27.3 FUTURE OPTIONAL SERVICES

Optional services to be provided by Pathway in agreement with POCL will include:

- Data capture of guarantee card details
- Guarantee card details printed on cheques and transfers

4.1.3.28 STOCK RETAIL - POST SHOP PRODUCTS

Items for sale in the Post shop can also be purchased over the counter at the same time as any other products and services. Post shop items are treated the same as receipts for accounting purposes, however they are physical stock items which are 'managed' separately from the main counter stock included within the clerks stock unit.

Any Post Shop purchase over the counter will have the effect of increasing the Cash or other MoP. To ensure correct accounting a

FUJ00119561

separate line has been included within the Receipts table of the Cash Account, giving the total value of all Post Shop classified items sold.

4.1.3.28.1 TRANSACTION SELECTION

The clerk will be required to select:

- The selection will be event driven following the scanning of the bar code on or applicable to the item sold. This bar code will be recognised as applying to a Post Shop product and the system will access the Post shop screen.
- Failure to read the bar code will require selection of 'OTHER PRODUCTS' from 'Serve Customer' menu
- 'POST SHOP' from 'Other Products' menu

4.1.3.28.2 STEADY STATE SERVICE PROVISION

Counter Activities

To action the transaction the clerk is required to:

- Accept payment from customer
- If a single item of a particular type is required - Swipe bar-code or Select Post Shop product, as above and key bar code number
- If more than one item of a particular type is required - Key number required then swipe bar code or Select Post Shop product, as above, key number required then key bar code number
- Select MoP
- Print transaction details on cheques and transfers using counter printer
- Clerically endorse cheques and transfers with guarantee card details
- Select 'COMPLETE' to return to 'Serve Customer' screen

Outputs

The service will provide the following:

- Cash Account postings
- Data transfer to Post Shop stock management system
- POCL summaries

4.1.3.28.3 FUTURE OPTIONAL SERVICES

Optional services provided by Pathway in agreement with POCL will include:

- Data entry of guarantee card details
- Guarantee card details printed on cheques and transfers

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4.1.3 ADMINISTRATION FUNCTIONS

4.1.3.1 LOG ON

All users will be given a level of access to the system as determined by their position within the office. For example, counter clerks will be limited to serve customer and simple balance and reconciliation applications, whilst managers will be given access to the whole range of counter and office administration functions.

All users will be allocated a password which will require changing at pre-determined periods. This action will be prompted by the system although a lower level password may be changed by the office manager if necessary, e.g., when a password has been forgotten by the user. A facility will be provided to enable a sole user who has forgotten his password to gnerate a unique key which is telephoned through to the OPS Help Desk. A corresponding key is given to the office manager, which when entered into the system, will allow access to the administration screen from where the password can be re-set. Office managers will require their passwords to be changed by the appropriate Local Security Officer.

A similar mechanism to the above will be used for POCL auditors, with the result giving access to the Audit screen.

Successful and unsuccessful attempts to log on will be recorded by the system. This information will be recorded along side the FAD code, counter position and the date & time.

An external visitor, such as the RETAIL: Network Manager could be given access to the system by the office manger.

[DN: Discussion and agreement is required on the possible use of smart card for user sign-on.]

4.1.3.1.1 FUNCTION SELECTION

The log on screen will be displayed following switch on of the terminal.

Counter Activities

The clerk will be required to:

- Key unique ID
- Key Password

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System Response

- The system will identify the current stock unit, if any, that is attached to the user.
- The system will clean up or recover any information processed prior to any abnormal termination of the user's previous session possibly due to failure.

The user will be presented with the main desktop showing:

Help and Messages
First level functions provided by Riposte.

Serve Customer Functions
Allowing all transactions to be completed at the counter.

Counter Administration
Allowing stock unit attachment, balancing, transfers and remittances in and out.

Office Administration
Allowing stock unit administration, cash account production, report generation and remuneration.

Log Out
Log out will end the user's session at the counter.

Temporary Lock
This will allow the user to secure and leave the counter position temporarily. The lock will prevent unauthorised use of the absent user's terminal. It will be removed by entering the user's password.

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4.1.3.2 COUNTER ADMINISTRATION

This section describes the counter administration facilities.

4.1.3.2.1 SHARING A STOCK UNIT

Sharing a stock unit results when a stock unit is attached to more than one user at one time. When sharing a stock unit a number of users will be able to divide the administrative functions between themselves, e.g., the declaration of cash and stock on hand may be carried out by each user
and each declaration will represent that user's proportion of the total for the stock unit which will be used for balancing purposes.

4.1.3.2.2 ATTACH A STOCK UNIT

This will allow the user to select a stock unit for their use with the following constraints:

- The stock unit must exist
- The user must not have a stock unit already assigned
- If it is not sharable - the unit must not be attached to another user
- If it is not sharable - the stock unit must be in a balanced state

4.1.3.2.3 START A NEW STOCK UNIT BALANCE PERIOD

After attaching a stock unit to a user a new balance period is opened and started. All operations involving the stock unit are included within this balance period until the stock unit is balanced again.

4.1.3.2.4 DETACH A STOCK UNIT

This will allow the user to relinquish responsibility for the stock unit under the following conditions:

- The stock unit is attached to a user
- If the stock unit is not being shared it must be in a balanced state

4.1.3.2.5 STOCK TRANSFERS

Stock can be transferred between stock units in the following way:

- The requesting user, the user receiving the stock, will verbally agree with a sending user on the quantity and value of the stock required
- The requester will make the transfer request
- The sender will respond with a 'Transfer Out' confirmation
- The sender gives the requester the agreed items
- The requester responds with a 'Transfer In' confirmation

Transfer Request

The transfer request will be made using the system

Transfer Out

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The sender will use the 'TRANSFER OUT' function to view and confirm the quantity and value for each stock item. When completed a 'Transfer

Out' slip is printed by the sender using the counter printer. This process generates transfer out transactions and decreases the stock unit's levels.

Transfer In

The requester will use the 'TRANSFER IN' function to view and confirm the quantity and value for each stock item to be taken in. When this is completed a 'Transfer In' information slip is printed by the requester using the counter printer. This process generates transfer in transactions and increases the stock unit's levels.

Transfer Completion

The physical exchange of stock is accompanied by the signing of the 'Transfer Out' receipt by the requester. The sender keeps the signed receipt as proof of the transaction.

4.1.3.2.6 REMITTANCES IN / OUT

Stock remittances occur:

- Between two outlets, when one outlet requests a replenishment of stock from another nearby
- When an outlet orders stock from the CRU
- When an outlet returns stock to the CRU

Remittance In / Out

The requesting outlet, the outlet receiving the stock, will verbally agree with the sending outlet or CRU on the quantity and value of stock required.
The requesting outlet will make the remittance request
The sending outlet or CRU will respond with a 'Remittance Out' confirmation
The sending outlet or CRU gives the requesting outlet the agreed items
The requesting outlet responds with a 'Remittance In' confirmation
Remittance Request
The remittance request will be made using the system

Remittance Out

The sending outlet or CRU will use the 'REMITTANCE OUT' function to view the quantity and value for each stock item. When completed a 'Remittance Out' slip is printed by the sending outlet or CRU. This process generates remittance out transactions and decreases the stock unit at the outlet, or the CRU stock levels.

Remittance In

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The requesting outlet will use the 'REMITTANCE IN' function to view and confirm the quantity and value for each stock item to be taken in. When this is completed a 'Remittance In' slip is printed by the requesting outlet. This process generates remittance in transactions and increases the stock unit's levels.

Remittance Completion
The physical exchange of stock is accompanied by the signing of the 'Remittance Out' receipt by the requesting outlet. The sending outlet or CRU keeps the signed receipt as proof of the transaction.

4.1.3.2.7 STOCK UNIT BALANCING

Stock unit balancing is the process of reconciling the user's current stock unit contents against the transactions completed and the opening stock unit contents. Each stock unit must be balanced at the end of the Cash Account week. At this point the stock unit is 'rolled over' to the next Cash Account week.

In addition to this compulsory balancing, a stock unit may be balanced at any time during the Cash Account week. Specifically the user will balance the stock unit at the end of the duty period. A shared stock unit cannot be balanced whilst it is still being used for sharing.

The system will produce a 'Stock Unit Balance' form consisting of approximately 4 A4 size pages providing a summary of the clerk's activity
during the balance period. A copy of this form is also used as the office balance form and this is the amalgamation of all counter balance forms in a Cash Account week.

The Balancing Process
Although balancing will be a largely automatic process, the counter clerk must perform the following activities:

- Confirm all the stock and cash movements (transfers and remittances)
- Declare actual cash in hand
- Declare actual stock in hand

Declare Stock in Hand
The clerk will verify the actual physical stock unit contents for each stock item. If there is any difference between the actual stock held and the stock as maintained by the system, this will be an indication that errors have occurred.

Print Stock in Hand Report

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This facility will produce a printed report of all stock items within the stock unit.

Declare Cash in Hand
The clerk will verify the actual physical cash in hand in the stock unit by denomination, (including coins). If there is a difference between the total maintained by the system, this will be an indication that errors have occurred.

Daily Cash Locked Up
The system will ensure that the 'Declare Cash in Hand' function is used at the end of every day for all stock units. The end of day function will not be possible until this action is completed.

Produce Trial Balance
The clerk will complete a trial balance before completing a final balance, enabling the rectification of errors prior to the stock unit balance period being closed.

Produce Final Balance
This is the irreversible confirmation that the trial balance has been accepted. It will close the stock unit balance period and allow the detachment of the stock unit.

Declare Losses and Gains
The clerk will declare any loss or gain transactions manually during the service process.

Clear Losses and Gains
The clerk may clear losses and gains to remove them from the office balance upon resolution of any queries.

4.1.3.2.8 PRINT REPORTS AND CLIENT SUMMARIES

The office manager will print reports and client summaries required using data extracted from the stock unit and user as well as by day, time and date. The following set of reports and summaries is representative of the output which is currently produced.

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DAILY REPORTS	WEEKLY REPORTS	OTHER REPORTS
• DNS Deposits • DNS Withdrawals • DNS Daily Summary (DNS 56) • Girobank Deposits • Girobank Withdrawals • Telephone Accounts Paid • Pensions and Allowances Add List • Local Schemes • Cheques • P884	• DNS Weekly Summary (DNS 54) • MVLs - V10 • MVLs - V11 • MVLs - V570 Summary • Pensions and Allowances • DSS Girocheques Paid • Redeemed Savings Stamps • Postal Orders Paid	• Milk Tokens Reconciliation • MVLs Reconciliation

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4.1.3.2.9 REVERSE A TRANSACTION

The clerk may reverse transactions that are reversible. Any reversal will not result in transaction information being declared in the journal and will insert additional compensating and correcting transactions.
All reversible transactions may be reversed at any time during the Cash Account week unless specifically prohibited, e.g., APS transactions already notified to the client.

4.1.3.2.10 CLIENT TRANSACTION CUT-OFFS

The clerk may declare by transaction type, on a client by client basis a cut-off time. This will control client summary reporting.

4.1.3.2.11 END OF DAY

The end of day function will indicate a cut-off for all activities that occur on a daily basis.

4.1.3.2.12 ROLL OVER

The final balance period for a stock unit in the Cash Account week will be identified through the 'roll-over' function. The last set of balance information for each stock unit at roll-over is used for producing the office balance and the Cash Account.

4.1.3.3 OFFICE ADMINISTRATION

This section describes the office administration functions generally completed by the office manager or deputy.

4.1.3.3.1 USER MAINTENANCE

Add User
This allows new users to be included within the system. The information appertaining to each user will include the Name, ID and privilege level.

Remove User
This allows the user to be removed from the system.

Modify User Details
This allows existing user's details to be changed. The user will be disabled whilst details are being modified.

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4.1.3.3.2 STOCK UNIT MAINTENANCE

Add Stock Unit
This allows new stock units to be introduced into the system. Each stock unit has a unique ID, and / or name and an access level.

Remove Stock Unit
This allows stock units to be removed or deleted from the system. A stock unit cannot be removed if it is in use.

Modify Stock Unit
This allows a stock unit's details, such as access levels, to be changed. It can be suspended without deleting it from the system.

4.1.3.3.3 ATTACH/DETACH A STOCK UNIT

This allows a selected stock unit to be attached to a selected user at the counter. This is similar to the counter administration function and is provided here for convenience.

In the event of the unavailability of the counter clerk, e.g., due to illness, the facility will be available to allow an authorised user to detach the stock unit and reattach it to another user.

4.1.3.3.4 OFFICE CASH ACCOUNT

The Cash Account is a definitive summary of all of the business transacted at the Post Office during the Cash Account week.
The production of the Cash Account can only happen after all activities in that Cash Account week have been completed.

The Cash Account production process can therefore be carried out on the data collected for one Cash Account week following balancing of the stock units, whilst they are being used to serve customers in the next Cash Account week.

4.1.3.4 OFFICE BALANCE (WEEKLY CASH BOOK)

The office balance is analogous to the weekly cash book used in sub-post offices. For the purposes of this document the office balance and the weekly cash book will be considered to be the same and will be referred to as the office balance.

The production of the office balance is a precursor to the production of the Cash Account. In simple terms, the office balance is an amalgamation

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of all of the individual stock unit balances within the cash account week. In order to produce the office balance all stock units must have been balanced and "rolled-over" to the next cash account week.

4.1.3.4.1 INSTANT OFFICE SNAPSHOT

The system will provide an office level snapshot, at any time, of transactions, cash and stock levels across all stock units. The same facility will be available to provide an instant snapshot of the transactions and contents of any single stock unit.

4.1.3.5 CASH ACCOUNT

The production of the Cash Account will be an automatic process following the successful completion of the office balance. Unclaimed Payments, Uncharged Receipts and Error Notices will be derived and added.

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4.1.3.6 END OF WEEK

The successful completion of the Cash Account report will allow the selection of an "end of week" function. This will "roll-over" the office to next Cash Account week and make figures available to subsequent processes such as Remuneration.

4.1.3.7 ACCOUNTING ADJUSTMENTS

This function will allow an authorised user to apply adjustment transactions as required for the office balance process.

4.1.3.7.1 TRANSACTION REVERSALS

A facility will be provided to allow the reversal of transactions from a balanced or rolled-over stock unit balance period. The transaction should not have been despatched (i.e. client cut-off) from the office. The reversal must be carried out by the office manager. He will select the stock unit balance period and browse the transaction journal in order to find and select the transaction for reversal. A loss or gain transaction may need to be generated to account for any cash (or other MoP) involved in the transaction. The stock unit balance report and any client summary will need to be re-printed to reflect the reversal.

If the transaction has already been despatched (i.e. client cut-off) from the office then it is not reversible. The error will probably result in the receipt of an error notice from the client.

Note
There is a distinction between a reversal for accounting corrections, such as the loss of a foil or stub, and a reversal due to a transaction refund (e.g. when a customer changes his mind).

4.1.3.8 OFFICE REPORTS

This allows the printing of office daily and weekly reports.

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4.1.3.9 MAINTAIN REFERENCE DATA

This facility will allow controlled modifications to be made to the reference data to account for price changes, local products and so on. Please note, these types of modifications are normally made centrally.

4.1.3.10 STOCK PRODUCT DATA

This function allows changes to be made to existing stock products. It will be possible to:

- Modify stock product data such as the unit price. (Adjustment transactions may be generated to account for revaluation's of stock)
- Disable a stock product so that it is not available for sale.
- Enable a new version of a stock product and "freezing" the previous version.

4.1.3.11 OTHER PRODUCT DATA

This function allows changes to be made to existing products. It will be possible to:

- Modify product data such as the default price.
- Disable a product so that it is not available for sale.
- Enable a new version of a product and "freezing" the previous version.

4.1.3.12 CASH ACCOUNT TEMPORARY LINES

This function is used to "enable" those lines on the cash account which are marked as temporary. This function will only be used when directed by FAD Chesterfield. When a temporary line is enabled a corresponding product will be available for "selling" at the counter.

4.1.3.13 LOCAL SCHEMES

Products for local schemes are transacted at the counter. Daily and weekly client reports must be generated for each local scheme. Local schemes are reported in the payments, receipts, uncharged, or unclaimed tables on the cash account.

This function will allow local schemes to be added, modified and deleted.

4.1.3.14 AUTOMATED PRODUCTS

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Automated products are reported in the cash account receipts and payments tables. This function allows automated products to be added, modified and deleted.

4.1.3.15 MAINTAIN OFFICE DATA

This facility will allow controlled modifications to be made to the office data for administrative purposes.

4.1.3.15.1 SET TIME AND DATE

The time and date, (DD/MM/YY) will be maintained centrally and will be transmitted to post offices by Riposte thus ensuring that they are synchronised.

4.1.3.15.2 OFFICE DETAILS

This function will allow the modification of some office specific information including office name and address.

4.1.3.15.3 CASH TARGETS

This function allows the specification of office targets for the daily cash locked up. This is the equivalent of the existing ONCH form except that the information is available by denomination.

4.1.3.15.4 BALANCE/DAILY CASH BOOK PRINTING OPTIONS

This function allows the user to select which tables will be printed as part of the office balance.

4.1.3.15.5 CASH ACCOUNT DATES

The cash account calendar, including the cash account week numbers, is published by The Post Office. However, it is necessary to allow some flexibility such as a multi-week cash account for when the sub postmaster goes on holiday and cannot balance his office until he returns.

4.1.3.15.6 PREFERENCES

The preferences function will be used to allow some minor "tailoring" of the system to suit individual requirements.

4.1.3.16 TRAINING MODE

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For training purposes, EPOSS will provide a built-in training mode which:

- Allows the serving of (imaginary) customers for all customer transactions.
- Allows all operations used in accounting and balancing of a stock unit.
- Is functionally indistinguishable from normal operation, except that clear indication is permanently provided that training mode is in use.
- Records all counter operations and transactions.
- Can be used at any time by any user (including a live post office environment).
- Excludes training transactions from the office accounting and balancing process.

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- Allows the production of receipts and reports

The EPOSS application will provide an effective training mode through the implementation of "training" stock units.

4.1.3.16.1 TRAINING STOCK UNIT

All stock units have a *Type* attribute. A normal stock unit has its Type attribute set to "Normal", but a training stock unit is one which whose Type attribute is set to "Training".

4.1.3.16.2 WORKING IN TRAINING MODE

To activate training mode, the user simply has to attach to a training stock unit instead of a normal one. When this is done the system is automatically in training mode.

4.1.3.16.3 EXITING TRAINING MODE

To deactivate training mode, the user just detaches from the training stock unit.

4.1.3.16.4 CREATING TRAINING STOCK UNITS

The system will have a default set of training stock units on installation. The number and contents of each training stock can be tailored to suit the individual office environment using the office administration functions.

4.1.3.16.5 INDICATING TRAINING MODE IS ACTIVE

Since the training mode operation is functionally identical to normal operation a clear, permanent and unmissable indication will be provided to ensure that the user is aware that training mode is active.

In training mode the screen background will be a different colour from normal operation. For example, if normally the background is blue then in training mode the background will be red. Also, the word "TRAINING" will be permanently displayed in LARGE type inset in to the background and any stock unit level reports will be marked "TRAINING".

4.1.3.16.6 TRAINING MODE COUNTER OPERATION

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All counter functionality which involves the use of a stock unit will continue to operate in the same way for a training stock. Exceptions to this are those operations which involve other stock units, such as stock transfers. Such functions will only operate between training stock units.

4.1.3.16.7 AND EXCLUDING TRAINING MODE TRANSACTIONS FROM THE OFFICE ACCOUNTING BALANCING PROCESS

The office accounting, balancing and reporting process will automatically detect and exclude training mode transactions.

Such data can be analysed to provide information about the use of training mode within a post office.

4.1.3.16.8 USING TRAINING DATA

Some transactions involve the use of centrally distributed data. For example, BES uses payment authorisation data distributed by PAS via TMS.

The use of centrally distributed test data for these transactions is useful for testing and training. This data can be used in combination with a training stock unit to provide a very effective training environment.

4.1.3.16.9 HOW TMS HANDLES TRAINING TRANSACTION DATA

Transaction data recorded during training mode will be marked as such so that TMS can isolate it and handle it effectively. This data can be analysed at TMS level to provide information about the use of training mode within the post offices.

4.1.4 POCL INFRASTRUCTURE SERVICES

4.1.4.1 OFFICE PLATFORM SERVICE

This section describes the counter hardware infrastructure that will be supplied by Pathway to meet the requirements of OPS and the required application services (BES, APS, EPOSS and OBCS).

Each post office will have installed a set of PC based equipment comprising a counter configuration per active counter and a back office printer.

Two types of configuration will be provided :

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- A standard configuration which will be suitable for the majority of post offices.
- A mobile configuration which will be required in approximately 100 outlets.

Opportunities may arise in the period up to roll out to make changes to the specific products proposed. There may be commercial or operational advantages associated with a new product or model. Further dialogue with BA/POCL may refine the requirements of OPS or the associated applications services which will result in a change.

Pathway will carefully consider any such changes and ensure that functionally and risk are not adversely affected. Any changes will be discussed with BA/POCL.

4.1.4.1.1 STANDARD CONFIGURATION

The standard configuration will comprise a PC mounted underneath the counter together with a range of peripherals positioned on the counter top. Each counter position will have its own set of data and power cables which will be installed as unobtrusively as local conditions allow. One counter PC will be nominated the gateway PC and will support the ISDN card for connection to the BT installed ISDN outlet.

The back office printer will connect via a parallel cable to the most convenient PC. A local area network will be installed in every post office with three or more counters using CAT-5 UTP Ethernet and unmanaged hubs.

All single counter post offices will have an exchangeable hard disk fitted to facilitate the rapid exchange of system and application data if the PC fails.

A separate back office configuration will be installed in those post offices where there is an appropriate physical environment and the business activities and workload require this additional IT infrastructure. It is expected that this will be limited to Crown post offices. The list of outlets is subject to agreement with POCL, together with any variation in counter peripherals (e.g. fewer peripherals, larger monitor etc.).

4.1.4.1.2 OPS BASELINE DEFINITION

R560 recognised that technological change will occur during this procurement and that DSS, POCL and Pathway would wish to take advantage of any advances within the bounds of operational and commercial obligations. In particular PC technology will change during

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the period from contract award to the start of roll-out in the areas of processor speed and disc capacity.

In order that the OPS configuration at roll-out can be based on the most suitable technology, Pathway will manage the introduction of a small number of changes to the PC specification during the various integration and testing phases which lead up to roll-out. These changes to the OPS baseline prior to roll-out will be fully tested to ensure the operational and functional obligations of Pathway are not compromised.

The target roll-out counter configuration will comprise :

- Pentium 166Mhz PC running Windows NT client
- Serial card
- ISDN card (gateway PC only)
- Colour Touch Screen (10 inch)
- Keyboard
- Magnetic Card Reader and Smart Card Reader
- Barcode Reader
- Counter Receipt and Slip printer
- Smart Key reader (provided by APPU as required)

4.1.4.1.3 EQUIPMENT SUBSTITUTION

There will be a number of situations where OPS equipment will be substituted from the baseline already declared to POCL or from the above target roll-out configuration. This may result from new functionality required by POCL, advantageous technological advances or mutually agreed changes due to particular outlet circumstances.

Optional POCL requirements

One or more alternative data capture peripherals will be substituted for the barcode reader if either or both of the optional data capture methods required by POCL are confirmed. The optional methods requested by POCL are :

- OCR / Barcode reading
- 2D barcode reading

[DN: It will be necessary for a final decision to be taken on the Release 1 counter configuration by the date of agreement of this functional specification.]

Alternative products

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Following submission of the *Counter Hardware Specification* in January 1996 to the POCL Infrastructure team, Pathway have continued to assess the benefits that alternative products would bring to BA/POCL. The current Pathway proposal has been enhanced as shown below :

Mandatory Item	Original Proposal	Target roll-out configuration	Benefits
Counter PC	100Mhz Counter PC with 540Mb Hard Disc	166Mhz Counter PC with 1Gb Hard Disc	• To take advantage of latest PC technology • To improve the operational efficiency of OPS.
Monitor	9.5" colour touch monitor	10" colour touch monitor	• To increase the viewable screen area
Counter Printer	Epson TM-U375 counter printer	Ithaca Series 94 printer	• Faster printer will assist counter transaction times • Internal power supply minimises equipment space requirements
Keyboard	LIFT-Key	See keyboard section	• Space considerations may result in change to keyboard
Optional Item			
OCR/Barcode reader	Optoline 3140	Caere 840	• Controller on PC card minimises equipment space requirements

Space Constraints

Pathway believes that there may be some outlets where the physical counter space is so limited that a reduced footprint solution is required. It is recognised that the full range of services will still be required but some alternative methods of operation may be necessary. An approach to address this may be to use a smaller compact keyboard and separate card reader providing a reduced counter footprint and more options for equipment placement.

4.1.4.1.4 MOBILE CONFIGURATION

A mobile configuration will be supplied to those outlets where physical conditions or the nature of the service is not suitable for a standard, fixed counter infrastructure. These will typically be satellite offices, community offices and mobile offices. There will be less than 100 such configurations.

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A mobile configuration will be supplied where actual mobility is required (e.g. the same equipment moving from site to site) or where mobility within an outlet is regularly required.

Further discussion and agreement is required with POCL to define the precise numbers and circumstances of each mobile configuration, and to agree the services that will be required. This specification will have direct bearing on the final configuration, although the principle of mobility is understood and will be supported.

Target Mobile Configuration

Subject to a final specification, the target mobile configuration will be based around :

- Laptop PC
- Slip printer (also used for receipting as required)
- Magnetic stripe reader (with smart card reader if required)
- Barcode reader (if required)
- Housed in a robust carry-case

Network connection will either be made to a permanent ISDN line installed in the outlet or via a GSM mobile phone. There are some areas of the country where GSM coverage is not currently available. This will need to be considered when agreeing the specification for any affected outlets.

4.1.4.1.5 KEYBOARD

Pathway recognises the importance of providing a consistent and ergonomically acceptable counter infrastructure, which meets the operational needs of the user and is consistent with the physical limitations of most post offices. The keyboard represents a key element of this infrastructure, acting as a supporting device to the touch screen and event activated counter system.

[Discussion and agreement is required on the selection of the keyboard, on the use of colour, legend engravings and key positions.]

1. Proposed Keyboard

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Pathway recognises that for some outlets, principally the single counter offices, the limited counter space will have an important influence on final OPS equipment selection. Pathway also strongly supports the need for a consistent OPS configuration in order that equipment support, spares and logistics processes are kept to a minimum.

Accordingly Pathway now propose that the following small-footprint keyboard should be used for all outlets :

Cherry ML4100

Dimensions (mm)	281.5 (l) x 131.5 (w) x 23.5 (h)
Number of keys	83 keys

[DN: If the oabove option is selected a separate card reader/encoder will be provided as detailed below.]

Separate Magnetic/Smart Card reader encoder

ICL FCR20S

Dimensions	40mm (H) x 195mm (W) x 60mm (D)
Standards	MCR - ISO 7810, 7811 1-4, 7813, 4909 SCR - ISO/IEC 7816 (T=0,T=1), GFM2K, GFM4K
Programming Voltages	5v, 12.5v, 15v, 21v.

2. Alternative keyboard

Pathway's original proposal was for the LIFT-Key keyboard which provides an ergonomically attractive key layout with distinct alpha, numeric and function/control key areas. Also included is an integrated magnetic card and smart card reader.

LIFT-Key keyboard

A compact keyboard which provides the full functionality of a standard 101-key PC keyboard while occupying half the counter space. The keys are laid out in four distinct areas covering alpha keys, a centrally placed numeric block, a set of function keys and a set of cursor control and general keys.

Dimensions (mm)	280(width) x 240(depth) x 48(height)
Number of keys	96
Key size	Alpha = 15.4mm x 15.4mm

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Numeric/Other = 18.3mm x 18.3mm

LIFT-Key Keyboard with Integral Magnetic Card reader / Smart Card reader Encoder

The Magnetic Card reader and Smart Card reader are integrated into the keyboard. The MCR is positioned across the top of the keyboard providing a long swipe path for left or right handed users. The SCR is positioned on the left hand side and uses a Zero Insertion Force connector to minimise friction on the card contacts.

4.1.4.1.6 FINAL OPS CONFIGURATION

There are important and largely fixed milestones and lead times associated with the procurement of the volume of equipment required for OPS roll-out. Some product enhancements may also be necessary to ensure the optimum OPS configuration is available meet the POCL requirements.

Pathway seeks to expedite this process by reaching agreement particularly concerning the optional functionality specified by POCL (mainly OCR and 2D document reading), and in the equipment proposals outlined above.

[DN: It will be necessary for a final decision to be taken on the Release 1 counter configuration by the target date of agreement of this functional specification.]

[DN: It will be necessary for a final decision to be taken on the colour, and any cosmetic aspects of the counter top peripherals, together with keyboard layout and key engravings. These should be agreed by the target date of agreement of this functional specification.]

4.1.4.2 TMS

4.1.4.2.1 INTRODUCTION

The Transaction Management Service[1] (TMS) occupies a central position in the Pathway solution providing the interworking between the post

[1] Requirement 869 expands TMS to Transaction Monitoring System, but it is believed that no difference in scope and purpose is intended.

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offices and Pathway's central processing sites. The software which TMS comprises runs on both the post office and the correspondence server equipment, presenting interfaces to central services systems such as PAS, CMS, IM, TIP, POCL HQ systems and the OPS, providing linkage and message store and forward between them.

The fundamental role of the TMS is that of a reliable distributed database for the OPS and the central processing systems.

4.1.4.3 COMMERCIAL ATTRIBUTES

Before detailing the functional capabilities that the TMS will provide, it is necessary to recognise several required commercial level attributes which impinge on design and implementation:

4.1.4.3.1 DISCRETENESS

DSS/POCL require that TMS will be kept logically discrete from other services such that, "in extremis", the service could be separately procured.

In particular there will be a clear and documented interface between the central services and OPS program functions. These interfaces will include:

- specification of any programming interface that exists
- specification of any shared data and data standards
- specification of any other protocols that exist to allow communication between functions within the services
- specification of any other constraint that enables the interoperability between services

4.1.4.3.2 SCALEABILITY

TMS will be scaleable to meet POCL's business needs.

POCL are looking to re-engineer current client transactions and develop new capabilities. This may involve considerable volumes of transactions needing authorisation from a POCL Client system or a central point in POCL.

Pathway expects to meet this requirement by expanding the TMS infrastructure and underlying network to bring in more resources to meet any workload growth beyond that currently projected. Pathway expects

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to monitor traffic patterns and resource usage during operational trials and early live use to adapt TMS resource deployment.

The general method of configuring in new POCL or POCL Client host based systems is to use an Agent program to provide the linkage and translation between the host and TMS Host API.

4.1.4.3.3 EXCLUSIVITY

DSS/POCL require that services which connect to and utilise TMS (or the OPS) will only be provided subject to the express agreement of DSS/POCL. At one or more levels there will be a list of those computer systems which are authorised to access TMS.

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4.1.5.4 FUNCTIONS TO BE SUPPORTED

4.1.5.4.1 BASIC TMS FACILITIES

4.1.5.4.1.1 CONNECTION

TMS will link into each instance of OPS to allow the efficient transfer, in both directions, of authorised data. Post office counter configurations in multi-counter offices will be linked with Local Area Networks (LANs) within the post office. Each post office configuration will be linked to an ISDN Wide Area Network (WAN) using a basic rate card in the first or only counter PC.

TMS will link to the post offices from the correspondence layer via ISDN IP routers supporting primary rate connections.

A small minority of single counter post offices of a mobile variety will use cellular telephony instead of ISDN.

TMS will provide links into other computer systems as required to support DSS/POCL. These systems will include:

- systems operated on behalf of POCL's Clients including PAS and CMS
- other POCL systems, for example TIP, IM and POCL HQ systems
- Pathway systems

These links will be through Agent programs interfacing to TMS through multiple correspondence servers .

TMS will authenticate the identity of any computer system with which a switched link is to be established (CHAP) and select and maintain connection routes (OSPF, RIP).

TMS will produce reports detailing any attempt to establish a link which is rejected. These reports will be available to DSS/POCL on request.

4.1.5.4.1.2 COMMUNICATIONS ACCESS SUPPORT

TMS will support ISDN communications between the Correspondence layer and the post offices.

ISDN channel use will be optimised by facilities to force call termination, explicitly open a call, vary transfer increments and flow control and retry alternative destination addresses on final failure.

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Between TMS nodes it is expected that UDP will be used. Multiple frame transfers will be presented at the destination in original sequence.

Multicast local area addressing will be supported.

There will be measures to avoid flooding gateways on call establishment.

4.1.5.4.1.3 INTERFACE SUPPORT

4.1.5.4.1.3.1 DSS INTERFACES

TMS will support interfaces:

- with PAS/CMS to/from outlets (via Agent programs)
- with OBCS Host to/from outlets
- between outlets for "foreign office" processing

4.1.5.4.1.3.2 POCL INTERFACES

TMS will support interfaces:

- with IM to/from outlets
- with TIP to/from outlets
- with POCL Clients
- with POCL HQ (Farnborough Data Polling Centre)
- between outlets (potentially for messaging)
- with the OPS

4.1.5.4.1.3.3 PATHWAY INTERFACES

- Pathway MIS
- Help Desks
- Systems Management
- Network Management

4.1.5.4.1.4 DATA TRANSFER ATTRIBUTES

TMS will ensure that any data transfer can be shown to be complete, secure accurate and robust.

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TMS will use data replication and synchronisation techniques based on marker exchange, Cyclic Redundancy Checks (CRCs), Digital Signatures and Encryption as applicable to ensure that data is complete, secure, accurate and robust.

4.1.5.4.1.4.1 RUGGEDNESS OF DISTRIBUTED DATABASE

When a session of transactions, or a transaction requiring transaction level commitment, is settled at a counter position details will be written to the OPS journal.

This information will be reliably replicated to all other counter position PCs in that post office, to a remote server within TMS and from that server to at least two other servers, of which one will be geographically removed from the other two.

Data transfers may originate from an individual counter PC (e.g. a bill payment) and will be replicated through TMS, or from a Central Services system (e.g. PAS) and be replicated through TMS to transfer data to OPS in a like manner.

Techniques will be used to maintain these replicas in step both in normal operation and in recovery situations:

- grouping of post office and correspondence server nodes
- message numbering
- marker (message high and low water marks) exchange
- message transfers to equalise water marks

4.1.5.4.1.4.2 DATA INTEGRITY

Three techniques will be used to ensure data integrity within the OPS and as part of data/message transfer across TMS:

- CRCs will be calculated for all journal records, including software and reference data
- Digital Signatures will be used for all data where assurance of content and source are required (e.g. benefit payment authorisation records)
- Access to the journal only in read and append methods

All journal records will have a CRC calculated and applied when they are initially written to the journal and this CRC will be recomputed and checked whenever the record is read. Any failure of a CRC check will cause the journal to be recovered in an efficient manner.

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When authentication of the origin and content of data is important (e.g. for benefit payment authorisations), a digital signature will be applied to the data prior to transmission and then checked upon receipt. Digital signature techniques will be available for use both outbound to the OPS and inbound.

Detection of tampering or corruption through CRC or Digital Signature failure, will be logged for subsequent investigation.

All transfers to the journal either at the correspondence layer or in OPS will be written by appending a record (often a modified version of one read from the journal). These journal messages will include all the data required to identify the transfer uniquely. Data, once written to the journal, will never be altered (except through the secure processes of the archive).

4.1.5.4.1.4.3 DATA PRIVACY

Selective symmetric "codebook" encryption of data stored on disk will be used to provide privacy for certain data items when stored on disk in the post office.

Failure of the codebook logic self-test or subsequent access failure of an apparently mis-deciphered record will be detected and logged for subsequent investigation.

4.1.5.4.1.4.4 DATA CURRENCY

- Application message transfers

As seen from a counter application or a TMS Agent application, it will be possible to be certain, at some level, that data has been positively acknowledged as received by TMS. In addition it will be possible, at some level, to be certain that data has been positively acknowledged as received by a peer application also attached to TMS.

These assured outcome transfers will be used to support foreign payment, agent and systems management record access.

- Message store

TMS and OPS will automatically replicate the transaction data which is created at the OPS from the post offices to the correspondence layer.

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The data will then be available for processing by the relevant client system which may include Pathway, DSS/POCL or POCL client systems. The "keep awake" replication period between OPS and TMS will be configurable as required by the urgency of the transaction data and the general levels of traffic from the post office. Data replication will also take advantage of connections that are established between TMS and OPS for other purposes, e.g. a card or payment stop message, foreign payment.

A particular limiting case is the single counter office where replication will be facilitated periodically. The single counter office will be equipped with a removable hard disk so that if the counter fails, unreplicated data will be both preserved and capable of transfer to a new system unit. In addition TMS will cache such data accumulated since the last replication in main store so that, in the event the removable hard disk fails, the cached data will be replicated to the correspondence layer before halting the OPS.

It is a key applications requirement that end-of-day procedures are supported by ensuring that end of day markers are conveyed to the correspondence layer to enable POCL Client processing to proceed on consistent datasets.

EPOSS will initiate a connection to replicate the final POCL end-of-day balances and this process will also force the replication of any outstanding transactions that have not previously been sent to TMS.

Data transfers will be capable of being despatched as:

- Immediate
- Background/trickle feed
- Time deferred

4.1.5.4.1.5 *DATA TRANSFER OPERATIONS*

TMS will provide data file collection and data file delivery services, where a data file is defined as any set of electronic data. It should be noted that the data aggregate paradigm used for transfer within Riposte is the message and it is this that is used to map data aggregates of the size required.

4.1.5.4.1.5.1 FILES AND RECORDS

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TMS will support the distribution and collection of both file and record level data to and from the OPS. This will be achieved by both by automatic replication of records extracted from files from the OPS in a post office to a TMS server and the reverse, and by explicit file level transfers. Large data transfers spanning transmission frames will be capable of being delivered in the same order as sent.

4.1.5.4.1.5.2 DEFINITION OF SOURCES AND SINKS

This will be implemented by defining the group and node structure and by the operation of TMS interfaces that allow the calling program to see the correspondence servers as a single virtual correspondence server. (The "wholesale broker"). Agent programs will transfer data to and from groups in a group scatter-gather manner. Data transfers to/from attached computer systems will be controlled by Pathway operations and by the facilities provided by the Agents.

At the same program level there will be an API which will allow Agent programs to address one or more specified groups , for the purpose of transfers in both directions, enabling full concurrency in both directions.

It will be possible to for Agents to transfer data to all the groups specified in a call, with the data being held once per correspondence server (not once per group).

TMS will provide a facility to allow programs at the counter to make logical access to other "foreign" office counters for the purpose of retrieving payment authorisation records from those counters. (Whether this access is achieved by physical access to the TMS replicas of those counter journals or to the foreign office replicas is not specified provided required updates are reflected in all replicas in a timely manner.)

4.1.5.4.1.5.3 FILE OPERATIONS

TMS will support the transfer of file level aggregates between two or more computer systems attached to TMS.

- A file distribution function will be responsible for transfer, monitoring and retry of file level aggregates, typically at nights and weekends
- TMS will support this function in relation to

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* triggering of transfers
* reporting of failures and retry of transfers
* identifying the population of systems connected to TMS

- TMS will include the file processing capabilities described below.

4.1.5.4.1.5.4 FILE PROCESSING

Data file processing will be provided by the TMS Agents. These will perform specific functions in association with individual host systems. Agents will be built using generic modules for:

- File acquisition from client systems and file or record creation for distribution to TMS (such acquisition may also be in the form of transactional transfers)
- Client processing of data to/from host systems

The TMS Agents will be customised for each specific host system link and will provide the required conventional file processing facilities:

* validation of data files
* concatenation and merging of files
* generating many data files from one data file
* reformatting the contents of a data file
* generating control totals
* reconciliation of control totals
* producing reports, financial and other summaries

4.1.5.4.1.5.5 DATA TRANSFER INITIATION

Data transfers will be initiated by:

- Operator action - This will be the normal operational activity in managing the data transfer from Pathway host systems to TMS using workload scheduling, or the normal actions of the counter clerk in carrying out transactions on OPS. Once a datafile has been passed to TMS or a counter transaction has been committed within OPS the collection/delivery of this data will be automatic.

- Time - The OPS applications will have access to interfaces that support real and delayed time initiation of activities. The TMS Agents will also

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use similar techniques. The "keep awake" time interval for data replications between OPS and TMS will be handled as described above.

- External message - The requirement for an attached computer system to initiate a data file collection or delivery will be met by the functionality specified within the relevant TMS Agent in conjunction with that of the file distribution function.

4.1.5.4.1.5.6 DATA TRANSFER RETRY

TMS will effect a form of retry through marker exchange and replica maintenance.

The end to end recovery facilities available for data transfer between TMS and an attached computer system will depend on the method of connection and the protocols and file transfer standards that are used between it and the file distribution function or TMS Agent concerned and are fundamentally the responsibility of these, not of TMS. These will be agreed between Pathway and DSS/POCL and POCL clients as part of the specifications for connecting attached computer systems.

4.1.5.4.1.5.7 BROADCAST AND MESSAGING OPERATIONS

Using TMS and OPS it will be possible to broadcast short messages to all or a subset of outlets. A message length of up to 2Kb will be supported. The message should be brought to the attention of staff working in the outlet at the earliest practical opportunity. It should be possible to produce a hard copy of the message within the outlet.

The message will be input into an application running at the correspondence layer and will be replicated to post offices as required. At the local post office each counter position will access these messages and selectively open and view the message. Reading a message will be recorded in the journal.

The user will be prompted that a message is outstanding by an indicator on the top of their screen. On selecting the appropriate icon the user will be presented with a list of messages with an indicator showing their status (read or unread). The message will be capable of being printed on the back office printer.

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[DN: The process by which such broadcast messages are to be prepared, authorised and admitted to the system is to be agreed.]

[DN: The means by which messages might be transferred between two attached computer systems, including any two instances of the OPS, beyond normal messages which carry transactions and foreign encashment exchanges, requires discussion and agreement.]

4.1.5.4.1.5 LIBRARY TYPE FILE ACCESS

Using TMS and OPS it should be possible for staff working in the outlets to gain access to electronically held information such as is currently published in 'Counter News' and the operations manuals.

A general facility which will enable these and other documents to be viewed locally will be provided. Documents will be supplied in an agreed format (e.g. HTML, RTF/Microsoft Word). They will be distributed together with an updated index of current documents using Systems Management facilities. Access to these documents will be via an application from the user's desktop.

[DN: Pathway would like to discuss alternative techniques for accessing these documents.]

4.1.5.4.1.6 REMOTE OPERATION SUPPORT

TMS will support remote access to OPS restricting access to specifically authorised users.

Users in post offices may log-on only to the OPS in their local post office. Any access to data or services outside of the local post office will be through the relevant counter application.

4.1.5.4.1.7 AUDIT FACILITIES

A full audit trail of all TMS activity will be maintained.

The audit trail comprises the correspondence server level journal records accessed through an Audit Agent.

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The journal records will be archived by removing replicas at the correspondence layer (and removing all replicas of old records at the post office layer) and transferring the archive journal records to exchangeable optical media. These volumes will be accessible by the Audit Agent in the normal manner although retrieval will take account of accessing records on off-line media.

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4.1.5.5 DELIVERABLES

4.1.5.5.1 DOCUMENTATION

4.1.5.5.1.1 TECHNICAL DOCUMENTATION

Pathway will provide technical documentation for TMS suitable to allow DSS/POCL to procure applications which will utilise TMS. These procurements will not necessarily be from Pathway. All changes to the documentation will be passed to DSS/POCL for agreement.

This documentation will include TMS architectural and subsystem descriptions including the interfaces used by Agent programs and equipment technical specifications.

4.1.5.5.1.2 INTERFACE DOCUMENTATION

Detailed technical documentation of the interfaces including APIs from TMS to PAS, CMS, OPS and all attachable computer systems will be produced and maintained. In the event of changes to any interface to TMS, this will be notified to and passed to DSS/POCL for agreement in advance, with updates to the technical documentation being provided within ten working days of the change being implemented.

4.1.5.5.1.3 PERFORMANCE REQUIREMENTS

Internal performance requirements of any subsystem will be provided if it is re-tendered. The requirements in respect of TMS will be in terms of:

- Hours of operation of TMS
- Response time required between TMS and
    - OPS
    - Agents (including those for PAS and CMS)
- Number of outages of TMS, identifying types of outage monitored
- Availability of TMS.

4.1.5.5.1.4 REPORTS

TMS will maintain measurements of actual performance and fault tolerance in relation to interfaces with subsystems.

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- hours of operation of TMS
- response times at the interface with:
  - * OPS
  - * Agents (including those for PAS and CMS)

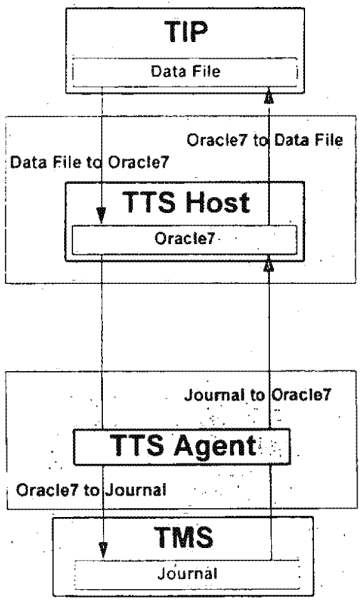
- Number of outages identifying types of outage to include classes of transfer which have failed
- Availability of TMS

4.1.5.6 TIP

4.1.5.6.1 OVERVIEW

This section describes the interface between TMS and TIP in terms of an intermediate system known as the TTS host (TIP to TMS System) and the TTS agent. The general function of TTS is to receive files of data from TIP and return files of data to TIP. The initial format and contents of the files has been derived from the PIRBPS.

The following diagram shows the placement of TTS within the overall architecture:



TTS Host
TTS receives data from TMS via the TTS agent, processes it and passes it on to TIP. Similarly, TTS receives data directly from TIP, processes it and passes it on to TMS via the TTS agent.

TTS Agent
The TTS agent is used to move data between TMS and TTS. One component of it extracts TIP-bound data out of TMS into TTS. Another component of the agent imports TIP-derived data from TTS into TMS.

4.1.5.6.2 TIP DATA

TIP data bound for TMS will be transferred on a daily basis, although in some circumstances there will be more frequent transmissions. The data is categorised as:

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- Reference data about outlets
- Reference data for TMS, IM, APS and EPOSS operation
- Error Notices
- Messages and/or files for outlets

TMS data bound for TIP will be transmitted daily. The data is broadly categorised as:

- Outlet transaction, accounting and other summary data for POCL. This will include the individual bill payment data associated with POCL Clients

  [DN: Pathway believes there is an urgent need to deal with the competitive threat from Cashstop. This could addressed by providing automated support to all paper bill payments and extending TIP to these Clients.]

- Outlet transaction and summary data passed to clients
- Authorisations and exceptions bound for clients

4.1.5.6.3 TTS HOST OPERATION

Data from TIP	Data for TIP
The TTS host will receive data from TIP in the form of files of data records on a daily basis. The physical format of this file will be agreed with POCL. The TTS Import application is an Oracle7 application which will read, process and transform the TIP data files into Oracle7 database tables.	The TTS host will receive data from TMS in the form of Oracle7 database tables on a daily basis. The TTS Export application is an Oracle7 application which will read the Oracle7 tables and will transform these into data files in the form expected by TIP.

4.1.5.6.4 TTS AGENT OPERATION

Data from TIP	Data for TIP
The TTS agent will read the TIP data held in Oracle7 database records and write this into journal data records in the format expected by TMS.	The TTS agent will read the TMS journal data into Oracle7 database tables as expected by the TTS Export application.

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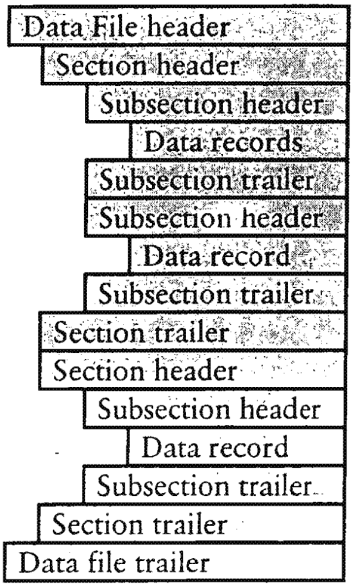
4.1.5.6.5 GENERAL FILE FORMAT

The structure of files sent and received by TIP is generalised as follows:



Note: There can be multiple sections within the file, multiple subsections within a section, and multiple data records.

The actual structure of each type of file transferred is derived from information contained in PIRBPS and is subject to change. As reflected by PIRBPS, TIP is not sufficiently progressed in its implementation to allow a definitive specification of the data it sends and receives. Similarly, the content of the data files is equally dependent on the implementation of EPOSS and the outlet applications.

Given this interdependency, the data file definitions will be derived using an iterative process which takes into account the ongoing specification of TIP, TMS and EPOSS.

4.1.5.7 INVENTORY MANAGEMENT

[DN: This section should be seen as indicative of facilities that might be offered if support for IM interfaces is reintroduced into R831.]

4.1.5.7.1 OVERVIEW

This section describes the interface between TMS and IMS in terms of an intermediate system known as the ITS host (IMS to TMS System) and the ITS agent. The general function of ITS is to handle purchase orders and confirmations, consignment enquiries and responses in an online fashion

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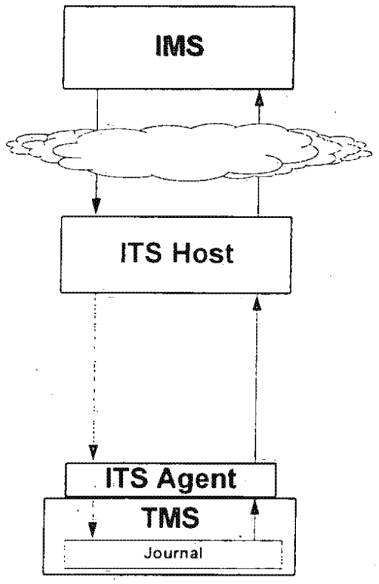
to IMS. In addition to online operation, ITS will transfer files of data (eg outlets stock takes) between IMS and TMS. The initial format and contents of the data transferred has been derived from the POCL Interfaces Requirements BA/POCL System document.

The following diagram shows the placement of ITS within the overall architecture:



ITS Host
ITS receives data from TMS via the ITS agent, processes it and passes it on to IMS. Similarly, ITS receives data directly from IMS, processes it and passes it on to TMS via the ITS agent.

ITS Agent
The ITS agent is used to move data between TMS and ITS. One component of it extracts IMS-bound data out of TMS into ITS. Another component of the agent imports IMS-derived data from ITS into TMS.

4.1.5.7.2 IMS DATA

4.1.5.7.3 TMS DATA BOUND FOR IMS

Outlet purchase order	Online request for inventory items originating at the outlet. Results in a purchase order confirmation.
Order/consignment enquiry	Online enquiry about a purchase order or consignment.
Consignment receipt	Notification of a consignment received at outlet. This is transmitted by the outlet on receipt.
Consignment return	Notification of a consignment returned from outlet. This is transmitted by the outlet on dispatch.
Inventory Count	Originates at the outlet as a stock and cash

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declaration process.

4.1.5.7.4 IMS DATA BOUND FOR TMS

Purchase order confirmation	Online response to the outlet's purchase order.
Order/consignment enquiry response	Online response to an enquiry about an existing order/consignment.
Inventory Adjustments	Information supplied by IMS to the outlet for correction purposes.
Consignment advice	Information supplied by IMS to the outlet about the status of a consignment

4.1.5.7.5 ITS HOST OPERATION

Data for IMS	Data from IMS
The ITS host will receive data from TMS in the form of Oracle7 database tables. The ITS Export application (an Oracle7 application) will read the Oracle7 tables and will transform these into the data format expected by IMS.	The ITS host will receive data from IMS in the form of files of data records. The physical format of these files will be agreed with POCL. The ITS Import application (an Oracle7 application) will read, process and transform the IMS data files into Oracle7 database tables.

4.1.5.7.6 ITS AGENT OPERATION

Data for IMS	Data from IMS
The ITS agent will read the TMS journal data into Oracle7 database tables as expected by the ITS Export application.	It will read the IMS data held in Oracle7 database records and write this into journal data records in the format expected by TMS.

[DN: Autonomous stock management by the ITS Agent to handle stock reorder may be considered.]

4.1.5.7.7 ONLINE OPERATION

The diagram below shows the general data flows for online operations.

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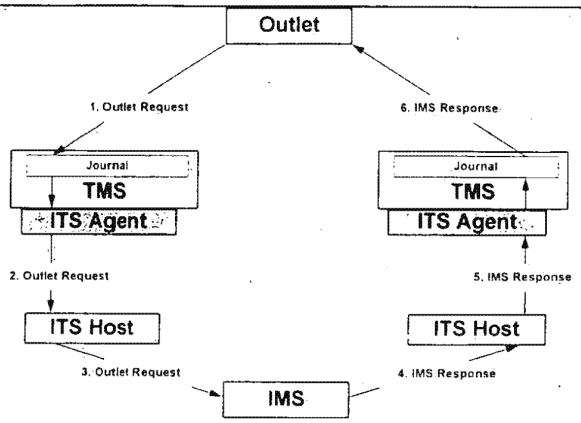

Purchase Order and Confirmation

1. The outlet transmits a purchase order (a set of records) to TMS.
2. The ITS agent picks up the records and sends them to the ITS host.
3. The ITS host sends the records to IMS.
4. IMS responds by sending an order confirmation to the ITS host.
5. The ITS host sends the confirmation to the TMS agent.
6. TMS transmits the confirmation to the outlet.

Consignment Enquiry and Response

1. The outlet transmits a consignment enquiry record to TMS.
2. The ITS agent picks up the record and sends it to the ITS host.
3. The ITS host sends the request to IMS.
4. IMS responds by sending an enquiry response to the ITS host.
5. The ITS host sends the response to the TMS agent.
6. TMS transmits the response to the outlet.

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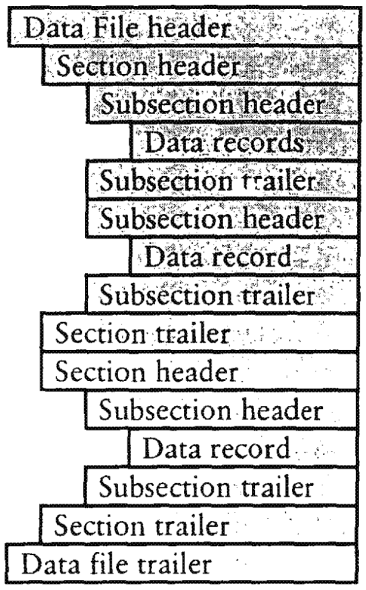
4.1.5.7.8 GENERAL DATA FILE STRUCTURE

The structure of files sent and received by IMS can be generalised as follows:



Note: There can be multiple sections within the file, multiple subsections within a section, and multiple data records.

The actual structure of each type of file transferred is derived from information contained in PIRBPS and is subject to change. As reflected by PIRBPS, IMS is not sufficiently progressed in its implementation to allow a definitive specification of the data it sends and receives. Similarly, the content of the data files is equally dependent on the implementation of EPOSS and the outlet applications.

Given this interdependency, the data file definitions will be derived using an iterative process which takes into account the ongoing specification of IMS, TMS and EPOSS.

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4.2 POCL CONTINGENCY SERVICE

4.2.1 INTRODUCTION

This section outlines the contingency arrangements in place for all BES, OBCS (if selected) EPOSS and APS transactions handled at the post office counter.

The following failures may affect the post office counter:

- Magnetic card reader failure
- Bar-code reader failure (or OCR reader failure as appropriate if this option is selected)
- Counter printer failure
- Weigh scale failure
- Back Office printer failure
- Keyboard failure
- Touch screen failure
- PC failure - single counter office
- PC failure - multi-counter office
- Network failure - ISDN connection
- Site-related failure

In addition, where failure affects communication from TMS to the post office, contingency arrangements are in place to effect changes to the current transaction data held by the office.

Prior to notifying the SIS Help Desk of any system failure, the clerk will be required to consult a simple 'check list' which will be provided, highlighting all of the obvious faults which can be corrected by the clerk, for example; cables attached.

Failure to resolve the problem within the post office will be reported to the OPS Help Desk immediately by the clerk. In all instances, contingency arrangements will be invoked at the discretion of the post office manager or the nominated deputy.

The following text assumes all checks have been completed by the clerk, the cards and documentation are in good repair and the hardware is genuinely at fault.

Where contingency has been invoked, e.g., manual keying of account or NINO detail, or the manual completion of a receipt, this will be recorded by the system for audit purposes.

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4.2.2 MAGNETIC CARD READER FAILURE

4.2.2.1 BES

Card reader failure may arise when 'swiping' benefit cards in respect of:

- Receipt of batches of cards into the post office (See also Bar-code reader failure)
- Collection and activation of card by customer
- Benefit encashments using cards
- Duplicate receipt requests
- Change of nominated post office

4.2.2.1.1 CONTINGENCY ARRANGEMENTS

Receipt Of Batches Of Cards Into The Post Office

The clerk will key details of the PAN for all cards received within the batch. However, whenever possible, the card reconciliation function should be left until the failure has been rectified.

Collection And Activation Of Card By Customer

The clerk will key details of the PAN and card issue number in order to activate the card.

Benefit Encashment Using Card

- Multi Counter Office

If possible, refer the customer to another counter position, or proceed as for -

- Single Counter Office

The clerk will key details of the PAN and the card issue number.

Duplicate Receipt Request / Change Of Nominated Post Office

The clerk will key the PAN and card issue number in order to access the screen required to complete the transaction.

4.2.2.2 OBCS

OBCS is unaffected by card reader failure.

4.2.2.3 EPOSS

Card reader failure may arise when magnetic cards are 'swiped' in respect of:

- The capture of guarantee card details
- The acceptance of Credit / Debit cards as MoP

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4.2.2.3.1 CONTINGENCY ARRANGEMENTS

The clerk will key the card details into the system and continue the transaction.

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4.2.2.4 APS

Card read failure may arise when magnetic cards and smart cards / keys are presented.

4.2.2.4.1 CONTINGENCY ARRANGEMENTS

- Multi Counter Office

If possible, refer the customer to another counter position, or proceed as for-

- Single Counter Office

Automated Payment Using Magnetic Card

The clerk will select the 'AUTOMATED PAYMENT (MAGNETIC CARD)' option from the 'Serve Customer' menu and key details of the card number in order to access the screen required to complete the transaction. The client identity displayed on the screen will provide a check that the card details have been correctly keyed. The suggested amount payable will not be displayed but the card will be embossed with this information providing a guideline to the clerk.

Automated Payment Using Smart Card / Key

There are no contingency arrangements available for failure of smart cards / keys or their readers. Hence, during periods of failure, such transactions cannot be completed.

4.2.3 BAR-CODE / OCR READER FAILURE

4.2.3.1 BES

Bar-code / OCR reader failure may arise when reading bar-code information from:

- Batch details of cards received into the post office (see also Magnetic card reader failure)
- PUN details

4.2.3.1.1 CONTINGENCY ARRANGEMENTS

Batch Details Of Cards Received Into The Post Office

The clerk will key bar-code details from the batch. However, wherever possible, the card reconciliation function should be left until the failure has been rectified.

PUN Details

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The clerk will key bar-code details from the PUN.

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4.2.3.2 OBCS

Bar-code reader failure may arise when reading bar-codes during:
- Receipt of order books in post office
- Collection of order book by customer
- Benefit encashment using foil

4.2.3.2.1 CONTINGENCY ARRANGEMENTS

Receipt Of Order Books Into The Post Office
The clerk will key bar-code details for all order books received within the batch. However, wherever possible, the order book receipt function should be left until the failure has been rectified.

Collection Of Order Book By Customer / Benefit Encashment Using Foil
- Multi Counter Office

If possible, refer the customer to another counter position, or proceed as for -
- Single Counter Office

The clerk will key bar-code details from the order book in order to access the screen required to complete the transaction.

4.2.3.3 EPOSS

EPOSS is unaffected by bar-code reader failure.

4.2.3.4 APS

APS transactions involving the reading of bar-code / OCR information, for example; telephone bills and Transcash documentation, may result in bar-code reader failure.

4.2.3.4.1 CONTINGENCY ARRANGEMENTS

The clerk will key details of the bar-code / OCR information in order that the appropriate screen may be accessed to complete a customer transaction, or to capture the information for reporting purposes.

4.2.4 COUNTER PRINTER FAILURE

4.2.4.1 BES

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The counter printer may fail to print either 'tally roll' receipts or individual 'slip' receipts. BES transactions require the printing of individual 'slip' receipts for:

- Home and foreign encashments made by the beneficiary or an alternative payee requiring the provision of a standard receipt
- Casual or permanent agent encashments requiring the printing of detail onto the mandate presented by the customer

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- Duplicate receipts requested for any encashment
- Card Impounds

4.2.4.1.1 CONTINGENCY ARRANGEMENTS

- Multi Counter Office

If possible, refer the customer to another counter position, or proceed as for -

- Single Counter Office

The clerk will clerically prepare a manual receipt (pre-printed with standard legal statements provided on the printer receipt) with all encashment details, or card details if impounded, together with the encashment reference. If a mandate is presented in respect of casual / permanent agent encashments, this is completed clerically by the clerk. The information could be taken from the card using an imprinter if held in the post office.

4.2.4.2 OBCS

OBCS is unaffected by counter printer failure.

4.2.4.3 EPOSS / APS

The counter printer may fail to print either 'tally roll' receipts or individual 'slip' receipts. EPOSS / APS transactions require the printing of 'tally roll' receipts.

4.2.4.3.1 CONTINGENCY ARRANGEMENTS

The clerk will prepare a receipt using the card and an imprinter with the clerical addition of payment details and the transaction reference displayed on the screen.

4.2.5 ELECTRONIC WEIGH SCALE FAILURE

4.2.5.1 BES, OBCS, APS

These services are unaffected by electronic weigh scale failure.

4.2.5.2 EPOSS

Electronic weigh scale failure will only affect Inward / International Mail transactions within the EPOSS service.

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4.2.5.2.1 CONTINGENCY ARRANGEMENTS

- Multi Counter Office

If possible, refer the customer to another counter position, or proceed as for-

- Single Counter Office

The clerk will obtain the weight of the package using mechanical weigh scales and input this weight intc the system.

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4.2.5.3 BACK OFFICE PRINTER FAILURE

The failure of the Back Office printer does not affect transactions handled at the counter. All counter services will proceed as normal.

4.2.5.3.1 CONTINGENCY ARRANGEMENTS

End of day / week / month activities requiring the printing of reports, e.g., client summaries, balance reports and the Cash Account, will be suspended until the printer is repaired.

4.2.6 KEYBOARD FAILURE

The keyboard is used to enter account numbers, reference numbers or value where this information cannot be collected using the card or bar-code readers. All transaction selections and system operations are replicated on the touch screen.

4.2.6.1 BES, OBCS, EPOSS, APS

The following transactions are affected by keyboard failure:

- BES transactions requiring the manual keying of card detail
- OBCS transactions requiring the manual keying of order book / foil detail
- EPOSS / APS transactions requiring the manual keying of account / reference number or value

4.2.6.1.1 CONTINGENCY ARRANGEMENTS

- Multi Counter Offices

If possible, refer the customer to another counter position, or proceed as for:

- Single Counter Offices

Transactions requiring the manual entry of account numbers, references or values cannot proceed.

4.2.7 TOUCH SCREEN FAILURE

All touch screen functions are replicated on the keyboard. All counter transactions can therefore proceed using the keyboard to select functions and services.

4.2.8 PC FAILURE - SINGLE COUNTER OFFICE

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('PC' refers to the PC itself plus the internal cards and monitor)

4.2.8.1 BES

The following transactions are affected by PC failure in a single counter office:

- Receipt of batch of cards in post office
- Collection and Activation of card by customer
- Benefit encashment using card

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- Duplicate receipt request
- Change of nominated post office

4.2.8.1.1 CONTINGENCY ARRANGEMENTS

Receipt Of Batch Of Cards In Post Office
The card receipt and reconciliation functions will be left until the failure has been rectified.

Collection And Activation Of Card By Customer
The customer will be requested to return when the fault has been rectified.

Benefit Encashment Using Card
The clerk will telephone the PAS Help Desk and advise the customer's NINO and the card issue number. The PAS Help Desk acts as a 'stand in' post office with access to the payment data held within TMS. If the identity of the customer needs to be verified, the PAS Help Desk will provide verification questions for the clerk to ask the customer and advise the reply.

If payment appears in order, the PAS Help Desk will advise the payment details, provide an encashment reference and update the payment record. The clerk will complete a manual receipt using details displayed on the card and the payment information provided by the PAS Help Desk.

When the failure is rectified the PC filestore will be re-synchronised from TMS which has transiently become the holder of the more current dataset. Following the failure, the clerk will select the 'BENEFIT ENCASHMENT (CARD)' option from the 'Contingency Mode' menu in order to access the 'Contingency Mode - Benefit Encashment (Card)' screen.

The 'Contingency Mode - Benefit Encashment (Card)' screen will provide the PAN, customer name, NINO, encashment reference and amount for all payments recorded by the PAS Help Desk during the failure period. The clerk will check the receipts against the payment details displayed on the screen and, if correct, select the 'CONFIRM CORRECT' option. If incorrect, the clerk will contact the PAS Help Desk in order to resolve the discrepancy.

Duplicate Receipt Request
The clerk will telephone the PAS Help Desk and advise the customer's NINO and the card issue number. The PAS Help Desk will advise details of the last benefit encashed at the attended post office. If the identity of

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the customer needs to be verified, the PAS Help Desk will provide verification questions for the clerk to ask the customer and advise the reply. The clerk will complete a manual duplicate receipt using details displayed on the card and provided by the PAS Help Desk.

When the failure is rectified the PC filestore will be re-synchronised from TMS which has transiently become the holder of the more current dataset.

Change Of Nominated Post Office

The clerk will telephone the PAS Help Desk and advise the customer's NINO and the card issue number. The help desk will, if so determined by DSS, verify the identity of the customer by providing verification questions for the clerk to ask the customer and advise the reply. Providing it is in order for the customer's nominated office to be changed, the PAS Help Desk will update the customer's record and the clerk will advise that the change has taken place.

When the failure is rectified the PC filestore will be re-synchronised from TMS which has transiently become the holder of the more current dataset.

4.2.8.2 OBCS

The following transactions are affected by PC failure in a single counter office:

- Receipt of order books in post office
- Collection of order book by customer
- Benefit encashment using foil

4.2.8.2.1 CONTINGENCY ARRANGEMENTS

Receipt Of Order Books In Post Office

The card order book receipt function will be left until the failure has been rectified.

Collection Of Order Book By Customer

The clerk will request the customer to return when the failure has been rectified.

Benefit Encashment Using Foil

The clerk will telephone the PAS Help Desk and advise the customer's NINO. The PAS Help Desk will provide details of any stops placed and a reference number. If allowable, the clerk will then encash the foil.

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Following the failure, the clerk will select the 'BENEFIT ENCASHMENT (FOIL) - OBCS' option from the 'System Failure' menu in order to access the 'Contingency Mode - Benefit Encashment (Foil) - OBCS' screen.

The 'Contingency Mode - Benefit Encashment (Foil) - OBCS' screen will prompt the clerk to key the following payment details for each order book encashment made during the failure period:

- Benefit group
- Foil amount
- Number of foils
- Number of milk tokens
- PAS Help Desk reference

This will enable details for cash account and stock management purposes to be posted to EPOSS and payment volume details to be passed to TMS. In the event that the order book required impoundment, this will have been recorded by the PAS Help Desk.

4.2.8.3 EPOSS

4.2.8.3.1 CONTINGENCY ARRANGEMENTS

The clerk will complete all EPOSS transactions using current manual procedures. Receipts for these transactions will be manually produced where required, as for printer failure occurrences.

When the failure is rectified, the transactions completed during the period of failure will need to captured. In order to do this, the clerk will select the various transaction options from the 'Contingency Mode' menu. The 'Contingency Input' screen for each transaction will prompt the clerk to key required information, either from documents or receipts, to record transaction details in the journal record and post details to EPOSS for cash account and stock management purposes.

4.2.8.4 APS

Magnetic and Smart card / key transactions are affected by PC failure in a single counter office.

4.2.8.4.1 CONTINGENCY ARRANGEMENTS

Magnetic Card Transactions

Both card and payment details are recorded by completing a manual receipt with card details using an 'imprinter'.

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When the failure is rectified, the transactions completed during the period of failure will need to captured. In order to do this, the clerk will select the various transaction options from the 'Contingency Mode' menu. The 'Contingency Input' screen for each transaction will prompt the clerk to key required information, from the receipts, to record transaction details in the journal record and post details to EPOSS for cash account and stock management purposes.

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Smart Card / Key Transactions

There are no contingency arrangements available for Smart Card / Key transactions. During periods of PC failure these transactions will not be completed.

4.2.9 PC FAILURE - MULTI-COUNTER OFFICE

4.2.9.1 BES (GATEWAY PC)

In the event of a failure involving the PC supporting the ISDN gateway in a multi-counter office, the office may continue with BA card transactions which involve local authorisation data and the local NINO list. However, data relating to these transactions will be passed to central systems until the fault is rectified.

4.2.9.1.1 CONTINGENCY ARRANGEMENTS

In the event of encashments using cards for which local authorisation data is not available, for example, foreign and emergency encashments, the clerk will contact the PAS Help Desk as detailed for PC failure in a single counter office. In these cases, however, the system will prompt the clerk to contact the PAS Help Desk and will display the 'Manual Authorisation' screen. The 'Manual Authorisation' screen will prompt the clerk to key the following details:

- Cardholder's name
- Cardholder's NINO
- Beneficiary's name and NINO (if different)
- Payee role (if required)
- Total amount encashed
- Milk token type and number
- Unique encashment transaction identifier

The clerk will key the necessary details from the card and the payment information provided by the PAS Help Desk and the receipt will be produced automatically by the system.

In the event of permanent agent and alternative payee encashments, although local authorisation data is available, there is the risk that payment has been made elsewhere and the local record has not been updated. In these cases, the system will prompt the clerk to contact the PAS Help Desk to confirm the local payment.

When the network connection is resumed, the post office, which is the holder of the more current dataset, will re-synchronise with TMS.

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Transactions which were recorded locally after contacting the PAS Help Desk will be automatically compared to the centrally held encashment records and any inconsistencies will be flagged for investigation and rectification.

In circumstances where the remaining counter positions are unable to handle the volume of EPOSS customers, contingency arrangements as detailed for PC failure in a single counter office will be envoked.

4.2.9.2 BES (NON-GATEWAY PC)

4.2.9.2.1 CONTINGENCY ARRANGEMENTS

The failed PC may not be used and, wherever possible, BA customers will be directed to other counter positions on which BA transactions will form the priority transaction. In extreme circumstances where the remaining counter positions are unable to handle the volume of customers,
contingency arrangements as detailed for PC failure in a single counter office will be invoked.

4.2.9.3 OBCS

4.2.9.3.1 CONTINGENCY ARRANGEMENTS

The failed PC may not be used and, wherever possible, BA customers will be directed to other counter positions on which BA transactions will form the priority transaction. In extreme circumstances where the remaining counter positions are unable to handle the volume of customers, contingency arrangements as detailed for PC failure in a single counter office will be invoked.

In the event of foreign OBCS encashments, the clerk will need to contact the PAS Help Desk to ensure that there are no stops on the payment and will then encash the foil in the normal manner.

4.2.9.4 EPOSS / APS

4.2.9.4.1 CONTINGENCY ARRANGEMENTS

The failed PC will not be used and, wherever possible, EPOSS / APS customers will be directed to other counter positions. However, BA transactions will form the priority transaction on the other counter positions in the office.

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In circumstances where the remaining counter positions are unable to handle the volumes of EPOSS transactions, contingency arrangements as detailed for PC failure in a single counter office will be invoked.

4.2.9.5 PC FAILURE IN MID CUSTOMER SESSION

If a PC is subject to failure mid way through a customer session, all transactions not committed will be lost. BA transactions, although transacted as part of a customer session, which due to their nature are committed in their own right, are not affected provided they have been committed prior to system failure.

4.2.10 NETWORK FAILURE - ISDN CONNECTION

4.2.10.1 BES / OBCS

4.2.10.1.1 CONTINGENCY ARRANGEMENTS

The situation regarding an ISDN failure in any post office is the same as a failure involving the PC supporting the ISDN gateway in a multi-counter office and the same contingency arrangements will apply.

4.2.10.2 EPOSS / APS

4.2.10.2.1 CONTINGENCY ARRANGEMENTS

The clerk may continue normal operations in the event of an ISDN failure in the post office. However, whilst transaction details will be recorded in the journal record and details posted to EPOSS, it will not be possible for data to be transmitted to TMS and, in the event of automated payments, to the client.

4.2.11 SITE RELATED FAILURE

The following are examples of site-related failures which may arise:

- Whole areas with many adjacent post offices fully or partially disabled through widespread loss of power due to storm, flood, terrorism, war or civil commotion
- Individual offices incommunicado
- Individual offices with no power
- Individual offices with fabric affected but having power
- Individual offices completely destroyed

4.2.11.1 BES / OBCS

4.2.11.1.1 CONTINGENCY ARRANGEMENTS

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The contingency arrangements invoked will depend on the nature and extent of the site-related failure. The following are examples of the options that may be available to sustain BA transactions:

- Invoke contingency arrangements as detailed for PC failure in a single counter office
- Temporary transfer of payment / OBCS data to another post office in close proximity
- Mobile post office established
- Emergency power source brought to site

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4.2.11.2 EPOSS / APS

4.2.11.2.1 CONTINGENCY ARRANGEMENTS

The contingency arrangements invoked will depend on the nature and extent of the site-related failure. The following are examples of the options that may be available:

- Invoke contingency arrangements as detailed for PC failure in a single counter office
- Mobile post office established
- Emergency power source brought to site

4.3 RELEVANT OPTIONAL POCL SERVICES

4.3.1 BES

To be agreed with following consultation with POCL.

4.3.2 APS

To be agreed with following consultation with POCL.

4.3.3 EPOSS

To be agreed with following consultation with POCL.

4.3.4 POCL INFRASTRUCTURE SERVICES

To be agreed with following consultation with POCL.

4.3.5 ORDER BOOK CONTROL SERVICE

4.3.5.1 INTRODUCTION

The Order Book Control Service (OBCS) is an optional service which provides various functions associated with the use of bar-coded Order Books by BA customers in post offices who are in receipt of various, typically long-term benefits (e.g. Child Benefit, Retirement Pension). These functions centre around the receipt and use of stop notices which direct the post office clerk to stop, recall or otherwise restrict the

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payment of order book based benefits when deemed necessary by the DSS.

Stop Notice data records are received from the DSS ESNCS computer system and processed by the OBCS Host system. This information is then made available to post offices where the OBCS counter application uses the stop notices to determine whether a payment request should be made or restricted in some form.

The OBCS counter application also enables the post office to verify that Order Books received, and about to be issued, have not been subsequently stopped.

The results of all OBCS transactions from all post offices are accumulated during the day and made available to the OBCS Host system via TMS. The OBCS host system will then collate these transactions and dispatch them in an agreed format to the DSS ESNCS system.

4.3.5.2 OBCS FUNCTIONS

OBCS can be considered as comprising two groups of functions :-

(a) OBCS Host functions

These are functions that relate to the receipt and dispatch of data to/from the DSS ESNCS system and to/from TMS together with all associated processing. This will include the management of stop list data, data reformatting prior to transfer to ESNCS or TMS and any transaction collation as required by ESNCS.

(b) OBCS Counter Functions

Those functions that relate to the tasks performed at the post office, either in the back office or at the counter. The back office functions will include the checking of Order Books against a stop list upon receipt and prior to issue to the BA customer. The counter functions will include the checking of the order book against the stop list whenever one is presented for payment and the enactment of the BA business rules associated with any stop notice that may be present.

All OBCS transactions will be recorded using the generic facilities provided by OPS and replicated to TMS.

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4.3.5.3 OBCS HOST FUNCTIONS

The OBCS Host Functions will be provided on servers operating within the Pathway datacentres. They will link to the central TMS servers and will provide the interface to the DSS ESNCS computer system. The operational characteristics, data and interface requirements for these functions will be described in *DSS Client Interface Specification - OBCS*[1].

The OBCS Host functions are :-

Process OBCS Stop Notice Update

This process manages the receipt of the daily Stop List update file from the DSS ESNCS computer systems and the subsequent dispatch of stop list records to certain post offices.

The operational characteristics and technical interface to the ESNCS computer systems is described in the *DSS Client Interface Specification-OBCS*[1] together with the procedures for dealing with success and failure conditions (e.g. transfer failure, corruption or non-arrival). Details of the file status, date/time etc. are recorded as part of the OBCS Host log for operational control and service-level use.

Validation of the data file will comprise a check for a sequentially increasing file number and a check of the record count within the file against the trailer record value. The Stop list is then processed according to the validation criteria specified in the *OBCS Processing Rules*[1] . The Master stop list is updated and the individual stop records are then distributed to the relevant post office. Any reject records are returned to DSS.

This distribution process uses the nominated post office details contained in every OBCS stop record.

Process OBCS Transactions

[1] Pathway expects this document to be produced by DSS. The content and ongoing management of the document have yet to be agreed.

[1] Pathway expects this document to be produced by DSS. The content and ongoing management of the document have yet to be agreed.

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This process manages the accumulation of OBCS transaction records from TMS during the day and appends these records to the daily ESNCS transaction file.

As part of the end of day process in each outlet, the number of non-barcoded vouchers encashed will be recorded and transmitted via TMS. These records are processed, stored and dispatched to DSS as separate file.

The non-arrival of these end-of-day OBCS records will monitored and used for service level management.

At the agreed time all OBCS transactions are transmitted to DSS as a single daily batch file.

Request Full Stop List

This is an occasional process which may be initiated by DSS or Pathway and will operate as a batch file transfer. Following receipt of the full stop list an exception report will be produced highlighting any differences between the new and the current stop list.

4.3.5.4 STOP LIST PROCESSING

4.3.5.4.1 LOCAL STOP LIST

OBCS uses a local stop list to minimise the requirements for a UK-wide stop list to be processed in every post office. The stop list records received from the ESNCS system will contain the nominated post office of the DSS customer. Each stop notice record is then only distributed to the specific nominated post office. This process will create a local stop list for each post office. The local stop list will be maintained in the outlet by following the action code contained in each record received :-

Action Code	Action
Stop	Add to list
Recall	Add to list
Purge	Remove from list

[DN: Pathway anticipate that the ESNCS stop record can be enhanced to include the nominated post office of the DSS customer]

[DN: DSS to supply details for calculation of date of recall]

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4.3.5.4.2 LOCAL NINO FILE SYSTEM

OBCS is supported by the Local NINO File System (LNFS) which produces a local NINO list in every post office. This is to enable OBCS to determine whether a customer is in his nominated office. The local NINO list will be established in every post office from information provided by DSS.

[DN: The implementation and early operation of OBCS can be simplified if a beneficiary/nominated office list is provided by DSS.]

OBCS will check the bar-code details against the local NINO list and if a match is found then a check is made against the local stop list. If no entry is found on the local NINO list the OBCS counter application will request a search against a centrally held stop list.

The local NINO list will be maintained in the outlet by following the action code contained in an LNFS change record. These records will be created by the LNFS Host system following receipt of details from CMS.

CMS will routinely receive changes to customer personal details. CMS will additionally forward relevant details to the LNFS Host system where these changes relate to :-

- New Customer
- Customer no longer of interest
- Change of nominated post office

The LNFS Host system will then create LNFS change records with action code of "add" or "delete" as required and then distribute these change records to the relevant post office.

The local NINO file may also be updated in the outlet when a valid order book has been presented, the NINO is not present on the local file, yet the address on the book cover is that of the post office where the transaction is taking place.

[DN: this process to be agreed with DSS. The alternative is that the payment may proceed and an exception record be produced.]

4.3.5.5 OBCS COUNTER FUNCTIONS

The OBCS Counter functions relate to the tasks associated with the initial receipt and issue of Order Books and the subsequent payment of one or more foils upon presentation by BA customers.

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OBCS operates on a negative stop basis, whereby the presence of a stop notice will result in some form of restricted counter transaction. The absence of a stop notice will allow book receipt, book issue or payment to proceed.

The OBCS counter functions are :-

4.3.5.5.1 RECEIPT OF ORDER BOOKS IN POST OFFICE (OBCS)

Order books received in a post office are recorded in OBCS.

Transaction Selection

The clerk will be required to select the 'ORDER BOOK RECEIPT' option from the 'Desktop' menu in order to access the 'Order Book Receipt' screen.

4.3.5.5.2 STEADY STATE SERVICE PROVISION

Counter Activities

The 'Order Book Receipt' screen will prompt the clerk to read the bar-code of each order book received. The clerk will select the 'LAST BOOK' option when all books have been swiped. The order books will then be stored in a secure location.

Exceptions

1. Bar-code cannot be read:

   Following three unsuccessful attempts to read an Order Book the clerk will be prompted to key the bar-code information and impound book. Clerk will key bar-code, select 'IMPOUND' option, hole-punch book and return it to BA. An audible warning will denote an unsuccessful read.

2. Bar-code is not held on local NINO list:

   The Clerk will be prompted to check printed address on order book. If printed address corresponds with PO address, clerk will select 'CORRECT' option and local NINO list will be updated. If printed address does not correspond with PO address, clerk will select 'INCORRECT' option, key PO code of correct PO and re-direct order book.

Additional procedures will be required to support the valid issue of a re-directed Order Book whose address does not match that of the issuing post office.

3. Stop or matured recall notice present on stop list:

   Clerk will be prompted to impound book. Clerk will select 'IMPOUND' option, hole-punch book and return it to BA.

4. Instruction already placed to re-direct order book to another post office[1] :

   Clerk will be prompted to re-direct order book to another PO[2] for which PO code will be provided. Clerk will select 'RE-DIRECT' option and forward order book to correct PO.

5. Instruction already placed to return order book to BA[1] :

   Clerk will be prompted to return order book to BA. Clerk will select 'RETURN TO BA' option and return order book.

6. PO subsequently receives instruction to forward order book to another PO or return it to BA after receipt has been confirmed:

   The process by which the postmaster is alerted to the receipt of this instruction will need to be agreed with DSS/POCL.

   Clerk will locate order book from secure location; swipe bar-code, select appropriate option and forward order book to correct location.

4.3.5.5.3 OUTPUTS

Reading of bar-codes on order books using the 'Order Book Receipt' screen and selection of 'IMPOUND', 'RE-DIRECT' and 'RETURN TO BA' options will enable details of order books received, accepted, impounded, re-directed and returned to be passed to TMS.

Notes:

[1] Discussions and agreement are required between BA and Pathway to define how re-direction instructions are to be placed.
[2] OBCS support for the subsequent operational procedures, and a method of discriminating between re-directed and incorrectly delivered Order Books is required.

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Other exceptions, in addition to those listed and which arise at present, will continue to be handled in the same way.

Post offices without OBCS will handle receipt of order books as at present.

4.3.5.5.4 COLLECTION OF ORDER BOOK BY CUSTOMER (OBCS)

The customer will present the DSS Form of Authority (for first book) or the current expired order book at a post office running OBCS in order to collect the new order book. OBCS will not record any details contained on the Form of Authority or the expired book.

TRANSACTION SELECTION

The clerk will be required to select the 'ORDER BOOK ISSUE' option from the 'Serve Customer' menu in order to access the 'Order Book Issue' screen.

4.3.5.5.5 STEADY STATE SERVICE PROVISION

Counter Activities

To complete the transaction the clerk will be required to:

- Check Form of Authority or current expired order book
- Request proof of identity (if Form of Authority presented)
- Obtain order book from storage location
- Check details on order book agree with details on Form of Authority
- Read bar-code on order book
- Date stamp order book
- Hand order book to customer
- Place Form of Authority in drawer or destroy expired order book

Exceptions

1. Bar-code cannot be read:

   Having swiped the book three times unsuccessfully, clerk will be prompted to key the bar-code information and impound book. Clerk will key bar-code, select 'IMPOUND' option, hole-punch book and return it to BA.

2. Stop or matured recall notice placed on order book:

FUJ00119561

Clerk will be prompted to impound book. Clerk will select 'IMPOUND' option, hole-punch book and return it to BA.

4.3.5.5.6 OUTPUTS

Reading of bar-codes on order books using the 'Order Book Issue' screen and selection of 'IMPOUND' option will enable details of order books issued and impounded to be passed to TMS.

Notes:
Other exceptions, in addition to those listed and which arise at present, will continue to be handled in the same way.

Post offices without OBCS will handle issue of order books as at present.

4.3.5.5.7 CUSTOMER'S VIEWPOINT

The customer will present the PUN or current expired order book to the clerk. If PUN is presented, the customer will be required to provide suitable proof of identity. The customer will be presented with a new order book which may be used for benefit encashment.

4.3.5.5.8 BENEFIT ENCASHMENT USING FOIL (OBCS)

The customer will present order book at post office with OBCS in order to encash benefit.

TRANSACTION SELECTION

The clerk will read the bar-code on the order book in order to access the 'Benefit Encashment (Foil) - OBCS' screen.

4.3.5.5.9 STEADY STATE SERVICE PROVISION

Counter Activities

The 'Benefit Encashment (Foil) - OBCS' screen will display the order book bar-code details. The screen will prompt the clerk to pay the customer and enter payment details.

To complete the transaction the clerk will be required to:
- Check order book and foil(s)
- Date stamp foil(s) and counterfoil(s)
- Remove foil(s) from order book

FUJ00119561

- Return book to customer
- Key payment details: Benefit group, foil amount, number of foils (default of one) and number of milk tokens
- Pay customer - in accordance with total amount shown
- Commit the transaction and be returned to the 'Serve Customer' menu
- Place foil(s) in drawer

Exceptions

1. Bar-code cannot be read:

   Having swiped the book three times unsuccessfully, clerk will be prompted to key the bar-code information, encash one foil and impound book. Clerk will key bar-code and details of one foil payment, select 'IMPOUND' option, hole-punch book and return it to BA.

2. Stop placed on order book:

   Clerk will be prompted to impound book. Clerk will select 'IMPOUND' option, hole-punch book and return it to BA.

3. Matured recall notice placed on order book:

   Clerk will be prompted to encash foils up to date of recall and impound book. Clerk will encash allowed payments, select 'IMPOUND' option, hole-punch book and return it to BA.

4. Clerk suspicious:

   Clerk will impound book. Clerk will select 'IMPOUND' option, hole-punch book and return it to BA.

5. All or part of payment is required as cheque payment:

   Clerk will select 'CHEQUE PAYMENT' option and input amount of payment required by cheque.

4.3.5.5.10 OUTPUTS

Committing transaction will record transaction details in the journal record, post details to EPOSS for cash account and stock management purposes and enable payment and impoundment details to be passed to TMS.

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4.3.5.5.11 CUSTOMER'S VIEWPOINT

The customer will sign the foils to be encashed and present the order book to the clerk. The order book will be returned with the counterfoils of the removed foils date stamped and the customer will receive payment.

Notes:
Other exceptions, in addition to those listed and which arise at present, will continue to be handled in the same way.
An optional future output would be the production of the Pensions and Allowances Summary.

4.4 POCL SERVICE INFRASTRUCTURE

This section describes the third element of the POCL Service Architecture, namely the central IT and network infrastructure.

The central services layer for the PSI comprises the IT infrastructure required to support the Transaction Management Service (TMS), the network infrastructure required to support WAN links to OPS and links to Host systems, and the support environment required for help desks.

4.4.1 HARDWARE

The following diagram shows the complete Pathway central services layer.

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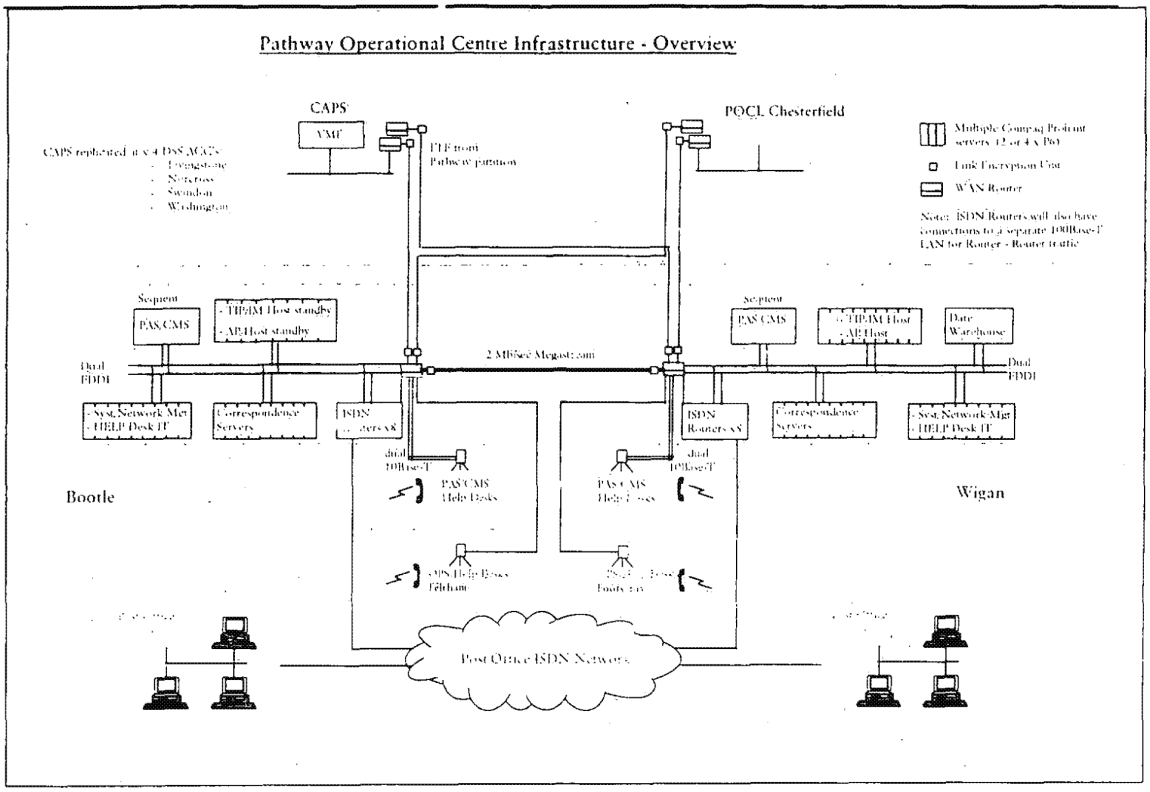

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4.4.1.1.1 EQUIPMENT DETAILS

The equipment and services shown above that relate to the POCL Service Infrastructure are as follows :-

Item	Description
Correspondence Server	Multi-processor servers housed in a rack system and located in each datacentre.
Host Servers	Multiple servers supporting the receipt, storage, processing and dispatch of POCL or POCL Client transactions and reference data.
System Management servers	Duplex servers running in each datacentre.
Network Management servers	A server running in each datacentre.
FDDI	Duplex FDDI 100Mb/s in each datacentre.
WAN Router	High speed resilient router located at each datacentre and supporting encrypted inter-site links and links to CAPS service.
ISDN Primary rate router	Resilient primary rate ISDN routers located in each datacentre

4.4.1.1.2 CORRESPONDENCE SERVERS

A configuration of Correspondence Servers will be established in the two datacentres. Each will operate under Windows NTand will run Riposte together with a number of TMS Agent processes which collectively provide the functionality required for TMS.

The Correspondence Servers will use a rack mounted system which enables two processor/disc configurations to be physically housed in a

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single rack together with a monitor and keyboard. Each Operational centre will contain half the Correspondence Server configuration.

Final load balancing and performance optimisation will take place during the integration and test phases, which may require some adjustments to be made to the above configuration (e.g. disc capacity and layout, memory size etc.)

Each Correspondence Server will connect to two independent FDDI 100Mb/sec LANs. The first providing connection to the PAS and CMS servers, and the second providing connection to the primary rate ISDN routers.

An archive system will be established in each datacentre for the correspondence servers. Data will be archived after 90 days and will be written to a long term optical storage device.

4.4.1.1.3 HOST SERVERS

A variety of servers will be established to provide support for Client Host processing and communication. These will typically be separate Windows-NT servers each providing the host processing support for one or more of POCL or POCL Clients. This will entail extraction of appropriate TMS records, in-flight reformatting and temporary storage, followed by end of day consolidation and file dispatch.

The final configuration for each Host server will be determined following agreement of each Client Interface specification. This will include any interim and final requirements for POCL involving initially the AP-Hosts system and eventually the TIP system.

4.4.1.1.4 PATHWAY OPERATIONAL MANAGEMENT

The operational management of the Pathway systems will use servers located in both Operational Centres to support the Network management and Systems management facilities.

4.4.1.1.5 NETWORK INFRASTRUCTURE

The local area network within each datacentre is based on dual FDDI providing separate network topologies for the Pathway central systems (PAS/CMS) and the Host servers and separation from the Wide Area Network and links to post offices. The physical and logical link from

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the post office/WAN domain to the Central Systems/Client Host domain is provided by the Correspondence Servers (TMS).

4.4.2 SOFTWARE

4.4.2.1 SYSTEMS MANAGEMENT

A central Systems Management Service will be deployed, based on a central service delivery capability able to interact with the outlets through the PSI network infrastructure based upon IP addressing/protocol structure and ISDN communications connections. The following Systems Management services are provided:

4.4.2.1.1 REMOTE OPERATIONS

Facilities are provided for authorised inwards access to the OPS for the purposes of remote control. This will enable central staff to undertake specific fault analysis or diagnostic activities or to update underlying software parameter data at the counter PC. The facility will be restricted to central operations and help desk staff and will normally operate as the result of a call from POCL staff or agents for assistance. This facility is implemented in conjunction with the standard Microsoft NT workstation capability and operates via the standard ISDN network infrastructure.

4.4.2.1.2 STATISTICS

EPOSS will provide as part of its local reference data a histogram (table) of transaction component timings for each application's core transaction types. At the end of a customer serve transaction the relevant application will pass to EPOSS the current values for incremental addition into the histogram for that transaction type.

These times will include:

a) System Component Time - This is the running total of time within the transaction consumed by system resource usage
b) Transaction Elapsed Time - This is the elapsed time for the transaction measured from the earliest practical point (e.g. selection of menu button or peripherally induced event) to the last practical recording point (normally the completion of the transaction with the final journal message written).

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Periodically the EPOSS function will log the table to persistent store as a checkpoint; end of day routines at counter level will write these tables to the message store for replication to the central TMS, where a statistics agent application will read and consolidate the records from the outlets for transfer to the Pathway data warehouse for storage and analysis.

4.4.2.1.3 INVENTORY MANAGEMENT

A central database within the systems management function maintains details of the hardware, software and applications asset base within the installed OPS (Apart from hardware dependent components such as Ethernet MAC addresses or processor serial number these will normally be identical on all PCs at a particular outlet.)

This database will be available for enquiries by help desk staff as necessary in responding to queries and calls from the outlets and will be used by other components within the system such as the software distribution service. It will be updated automatically when any new equipment is installed in an outlet or when new or updated software is distributed and installed.

The database will be hierarchically structured, will employ SQL technology and will be extensible to cope with any new hardware/software objects/attributes deployed in response to future services or applications needs.

4.4.2.1.4 SOFTWARE DISTRIBUTION

Software distribution facilities enable software files and installation scripts to be distributed to a specific outlet, all outlets or a group of outlets selected according one or more particular attributes.

Software distribution is normally done in two stages:

a) distribution across the ISDN network from the central to the gateway PC
b) local replication from the gateway PC to other PCs in the outlet (where present)
The distribution process separates the transfer of the software to the target device(s) and its subsequent installation, which is controlled from the installation script associated with the software package. This enables the installation process to take effect at a particular date or time.

Distribution to a specific PC within an outlet may be required under specific circumstances but will not be the normal mode of operation.

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4.4.2.1.5 CONFIGURATION MANAGEMENT FOR OUTLETS

The configuration details to be installed in each outlet will be maintained on a central service; during roll-out this service will be accessed to down-load the precise configuration (specific software and reference data) applicable to each particular outlet and install the file set on all PCs within the outlet. (This function will operate in conjunction with the Key Management Service, which provides equivalent facilities for the management and distribution of cryptographic keys.)

This service will also be available during steady state to support equipment replacement at an outlet in situations where configuration details cannot be loaded from a local PC (typically at single counter post offices).

A specific aspect of configuration management is reference data management applicable to each outlet. This will support the management of outlet reference data, including that transferred from POCL via TIP (or other means), and its transfer to each outlet. This facility will include the ability to date/time stamp the point of applicability of reference data changes.

4.4.2.1.6 EVENT MANAGEMENT AND ALERTS

Events occurring on equipment at the outlet will be trapped through the Windows NT event system. This permits the consolidation of hardware, software and application events; a filter mechanism is provides to classify events into those requiring immediate action (alerts) and those deferred for subsequent reporting (normally consolidated into end of day activity).

Alerts will be transferred through the network, causing ISDN sessions to be established where required, and will be subsequently processed by the central Alert management facility. The precise resultant action will depend upon the nature of the alert but will normally result in a displayed status and warning message to the Pathway system management staff.

4.4.2.2 NETWORK MANAGEMENT

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Network management will be run from a central service providing facilities for reporting and diagnosing network events, consolidation and interrogation of statistics and controlling the configuration and parameter settings on network devices.

The global system will be divided into three levels for network management purposes:

a) The backbone network, comprising the LAN hubs and LAN attachments at the Pathway central sites, the megastream links between the Pathway sites, and to BA and POCL, with associated routers.
b) The branch ISDN network, terminated at the central routers and at the gateway PC at each outlet. Management of the underlying switched circuit network will be provided by BT, operating as part of the Pathway consortium.
c) The office LAN at each outlet, comprising the PC LAN attachments and local Ethernet hub (present where 3 or more PCs are installed). This will include a proxy agent able to operate locally and, via ISDN, in conjunction with the central network management service.

The network management facilities will be based primarily upon the use of SNMP mechanisms, with additional facilities provided across the ISDN network at platform level via the Microsoft NT event system and associated middleware.

Security Services

The POCL service infrastructure includes security services to provide data integrity, data privacy, authentication, access controls and audit. Within the solution overall there is a separation between the central domain, operating in a relatively secure environment, and the local post offices domain, operating in a relatively untrusted environment and interconnected by public switched network infrastructure.

The description below reflects discussions between Pathway and CESG and may be modified.

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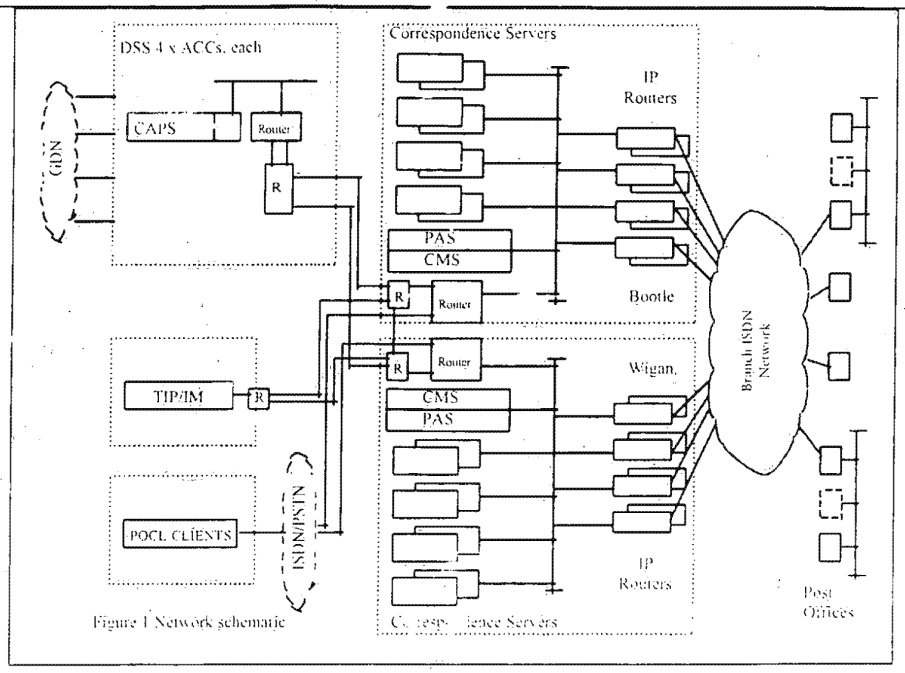

Figure 1 Network schematic

A summary of services provided within each level of the system is provided below:

Central Domain

The central domain, comprising the two Pathway sites and data links between them and to/from BA and POCL sites, is regarded as a trusted base. Data will be stored in clear, although link level encryption will be employed for data transferred between the two Pathway sites and to and from BA and POCL sites.
Data processing platforms will provide security infrastructure based on C2 level functionality with strict access controls and role based privilege. Audit facilities will be provided on data flows to and from this domain and also on staff access to central services within this domain. Physically, equipment will be housed in secure accommodation.

ISDN branch network

The branch network provides facilities for authentication between called and calling parties, using CLI at ISDN network level and CHAP within the PPP link level protocol. Digital signature technology based on SHA/DSA will be applied to sensitive data passing across the ISDN network between this central domain and the post office outlets. This includes outbound benefit authorisations and inbound AP smartcard/key transactions. Data encryption facilities to provide data content

FUJ00119561

confidentiality are not required on data passing across the branch network for the current transaction set (BES, AP, OBCS and EPOSS).

Local Office Environment

This is regarded as an untrusted domain and security facilities will be provided to enable data confidentiality and integrity provisions to be applied to sensitive data stored within the outlet. These will be based on Red Pike and SHA/DSA cryptographic mechanisms respectively. Red Pike encryption will be applied to BA data stored on disc at the outlet; BA payment data will be verified at encashment using DSA and AP smart transactions will be sealed using SHA/DSA when written to the journal at the outlet.

The traffic across the post office LAN comprises replica transfers from an originating PC to all other PCs in the LAN in the course of journal replication. Most of this traffic will be Unclassified, or Restricted not requiring cryptographic protection, and will be transferred in clear, although some will be simple-compressed.

The local office platform will be based upon a secure (C2 equivalent) version of Windows NT, providing object based labelling, user authentication, access controls and audit facilities. Riposte will operate in conjunction with the Windows NT security subsystem to police user log-in and time-out of unattended workstations.

[DN - Consideration will be given to utilising the CESG-specified Thunderflash one-way encryption algorithm for password privacy in place of the native Windows NT one.]

The counter application data will be accessible only to the authorised application set. User access to native operating system facilities will be inhibited.

The data management of the journal within the post office (and extending to the correspondence servers), corresponds to a replicated database of sequential files accessed only by read or append methods. There is no normal logical update access (except for archiving middleware). Transactions give rise to one or more journal record appends each with a unique message sequence reference number for which the middleware maintains monotonic sets.

Key Distribution

FUJ00119561

It is intended that all key material will be originated from CESG and held securely in a central Key Management Server from which it will be distributed. Key values themselves will be supplied by CESG in bulk to Pathway[2]. Pathway will store these keys on a secure, resilient platform, using Red Pike disk encryption. Renewal of keys will be required after not more than six months

Key distribution within the 2 central sites will be handled in clear; Rambutan provides link level encryption of key material transported between the two central sites during distribution operations. Keys distributed within the central domain are the DSA key for PAS payment sealing and Red Pike keys for encryption of the DSA key during its local storage on PAS agent platforms.

Key distribution to the individual post office outlets will be organised as a rolling programme involving the update of approximately 800 outlets per week during steady state operations. This will be done during periods of natural operational quiescence, typically at weekends. Keys distributed to each outlet are the Red Pike key for local disc encryption, the DSA key for AP payment sealing and the CHAP key for authentication during ISDN link establishment

Key distribution will use the Diffie-Hellman key exchange algorithm between the KMS and the gateway PC at an outlet to generate a shared session key which will then be used to encrypt the 3 keys during their transfer from the KMS to the outlet. Diffie-Hellman will be used at a second level to a generate session keys during the subsequent distribution of keys to other PCs within the outlet across the local LAN.

Red Pike will be used to encrypt the DSA and CHAP keys during storage at the outlet. Encryption of the Red Pike key is possible via a master key, although this generates problems of installation and subsequent update. Consideration will be given to using secure surface mail of a memory card for input by the postmaster using a Pathway supplied utility operating under specific role protection. Alternatively, consideration will be given to the use of a secure 2 way hashing algorithm for local storage of the Red Pike keys.

For the purposes of symmetric encryption of data stored on disk, the current session key will be common across the LAN-connected PCs within a post office. A common DSA and (where applicable) CHAP key will also be used across the PC community at an outlet.

[2] Pathway could alternatively seek accreditation to generate its own key stock.

FUJ00119561

Steps will be taken to ensure that the right session key is available to decrypt a particular journal entry and that older session keys are held for long enough to be available for decrypting the oldest journal entries.

Note that some journal entries, of a so-called persistent type, will be unchanged for an undefined period of time and may also not be accessed for an undefined period of time. Non-persistent journal entries will be discarded (in the post office layer) after not less than about four weeks, although this period is a function of available disk storage not of time: in a low-volume, rural office the disk store occupancy may not force discard for a year or so.

It will therefore necessary to re-encrypt such ageing records with the current session key at, say, annual intervals so that the old session key(s) with which they were originally encrypted can be discarded, and the keylist tidied.

Distribution of keys to the Rambutan devices will be based on proprietary key management systems provided by the chosen supplier. Investigations will be made to ascertain whether this function can be consolidated with the wider KMS functions described above; the aim is to at least share a common secure platform

4.4.3 OTHER COMPUTER & TELECOMMS EQUIPMENT

This section gives a brief description of those computer systems used within Pathway for Help Desk and internal operations management (specifically service level monitoring). It also sets out the telecommunications equipment used for WAN data traffic, and the telephone links for Help Desk communications.

The diagram in the section "POCL Service Infrastructure" gives an overview of the network components.

4.4.3.1 OPS HELP DESK IT SYSTEMS

The OPS help desk IT systems will run on servers in two locations for resilience. These will support the call management system requirements, for incident logging and fault reporting to other help desks: the call management system is integrated with other Sorbus systems (such as spares logistics and engineer assignment) to provide a comprehensive service.

FUJ00119561

4.4.3.2 PATHWAY MIS

Large servers at Pathway operational centres will be used to run an Oracle system which will support:

- service level agreement monitoring
- an alert management system
- asset/configuration management
- contract management
- invoicing
- ledgers
- fraud risk management analysis and reporting
- auditing
- ad hoc reports for policy development, and monitoring, Parliamentary and Ministerial Questions

4.4.3.3 WAN INFRASTRUCTURE

The WAN infrastructure for bulk data transfers between the DSS, POCL and Pathway computer centres will be based on Megastream services. These will be diversely routed for resilience, with data sent over the WAN encrypted for security, using the Rambutan mechanism or other CESG approved method. Encryption units will be outboard of the high specification Routers, which will be configured to provide resilience for all links.

SMDS may be used in place of Megastream services when the encryption chipset can support the higher speeds.

ISDN services will provide the basis for WAN communications where the level of data transfers is lower, specifically between the post offices and the Pathway operational centres, and for automated payments between the Pathway operational centres and the individual client centres. A degree of resilience will be provided through the nature of the public ISDN network, by over-configuring router connections at the Pathway operational centres, and through the ISDN call management software in supporting alternative addressing.

4.4.3.3.1 CAPS / PATHWAY LINKS

Diversely routed WAN links of minimum 2Mb/sec will be implemented for each of the 4 DSS Area Computer Centres where a CAPS link to Pathway is required each having a link to each Pathway operational centre.

FUJ00119561

4.4.3.3.2 POCL / PATHWAY LINKS

A diversely routed WAN link of minimum 2Mb/sec will be implemented between POCL (Chesterfield) and each Pathway operational centre.

4.4.3.3.3 PATHWAY INTER-SITE LINKS

A diversely routed WAN link between the two Pathway operational centres will be established with sufficient capacity to meet peak traffic loads in all foreseeable circumstances. This will be a minimum of 2 x 2Mb/sec lines, rising as required to meet the projected growth in traffic.

4.4.3.3.4 ISDN LINKS BETWEEN POST OFFICES AND PATHWAY

Basic rate ISDN2 services will be established at each post office, with the computer system at each post office having a set of preferred numbers to automatically call when a circuit needs to be established between a post office and an operational centre. The set of numbers will be arranged to optimise load balancing of traffic between post offices and the appropriate Correspondence Servers, and to provide high levels of resilience. Call management software will optimise the processes of call set up, holding the call open, call disconnect.

Primary rate ISDN30 services will be established at the Pathway operational centres (Euro ISDN standard 1421), configured such that either centre can support the projected traffic from all post offices.

The ISDN traffic will be managed by resilient Router configurations at each Pathway operational centre.

4.4.3.3.5 ON-LINE LINKS

The on-line links considered here include automated payments and EFTPOS transactions.

Pathway will transfer automated payment details to individual clients on a daily basis, normally overnight. The volumes involved indicate that the ISDN infrastructure will be appropriate.

ISDN or a permanent on-line link will be used for EFTPOS payment authorisations, depending on the Merchant Acquirer requirements.

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4.4.3.4 TELEPHONE CALLS TO HELP DESKS

All phone calls to the help desks will use standard 0345 "Lo-Call" numbers.
Calls will be loggedand re-routed if necessary to the appropriate help desk.

4.5 POCL SERVICE ENVIRONMENT

4.5.1 POCL COMPUTERS

Details to be supplied following consultation between POCL and Pathway.

4.5.2 TELECOMMUNICATIONS

Details to be supplied following consultation between POCL and Pathway.

4.5.3 BUSINESS OPERATING SYSTEMS & SERVICES

Details to be supplied following consultation between POCL and Pathway.

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A. DATA FLOW DIAGRAMS

This section contains a set of data flow diagrams that represents functionality described elsewhere within this document.

The captions of the diagrams should be sufficient to relate the diagrams back to the relevant text.

There are two sets of diagrams: those that support an overview of the system and those that describe the lower level detailed flows that support each major function.

A.1 OVERVIEW

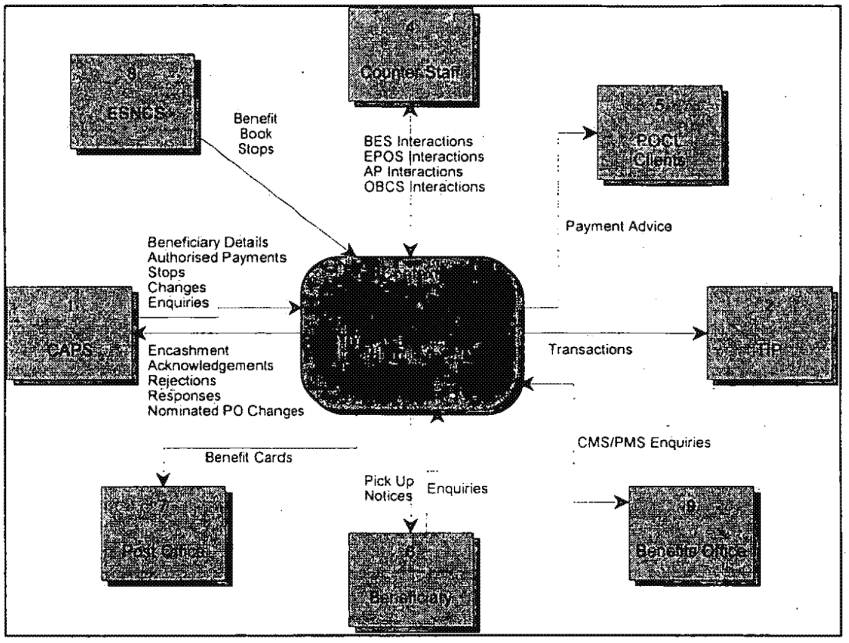

Figure A-1: Context Diagram

This diagram shows how Pathway fits within the overall Benefits Agency and Post Office Counters solution.

The round cornered box in the middle represents the whole of Pathway. The square boxes surrounding it represent 'External Entities' - i.e., external to Pathway. The lines represent data flows between Pathway and these External Entities. The annotation next to the lines identify the data that flows.

This diagram is intended to be an illustration rather than a formal definition - hence the data names are generalised.

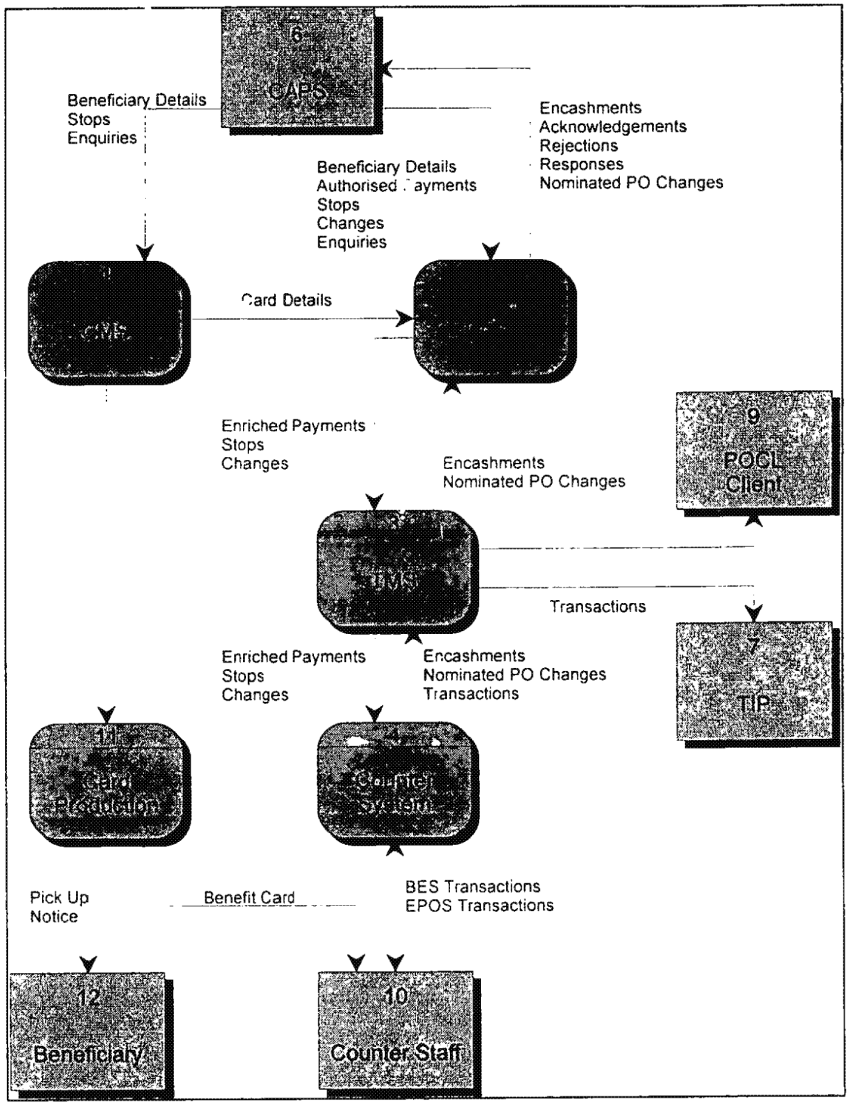

Figure A-2: Level 1 Diagram

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A.2 DETAILED DIAGRAMS.

A.2.1 KEY TO DIAGRAMS

The diagram below is a key to the following diagrams. Each shaped box has a different meaning. The name within the box in this key identifies what that style of box represents.

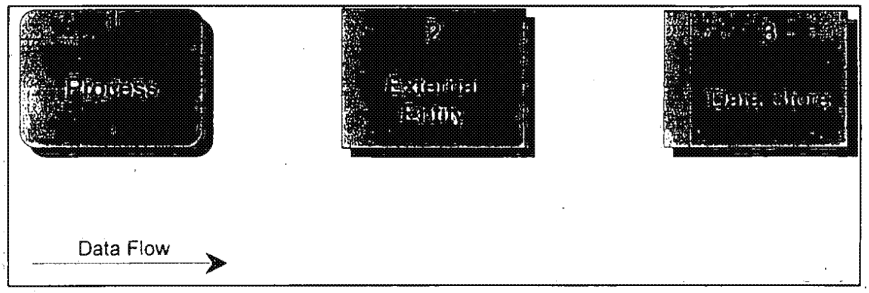

Figure A-3: Key to Data Flow Diagram Conventions

A process represents an IT component that manipulates the information in some way.

An external entity represents some component that sits outside the scope of the diagram and communicates with an internal process.

Conventionally flows between external entities are not shown, but in this case they are shown where they add to the overall understanding of the diagram.

A data store is a mechanism by which data is held in a persistent manner for a significant amount of time. Significant in this context means longer than the processing time of the processes to which it connects - in other words transient data is not held within a data store.

The data flow arrow is self explanatory.

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A.2.2 AP

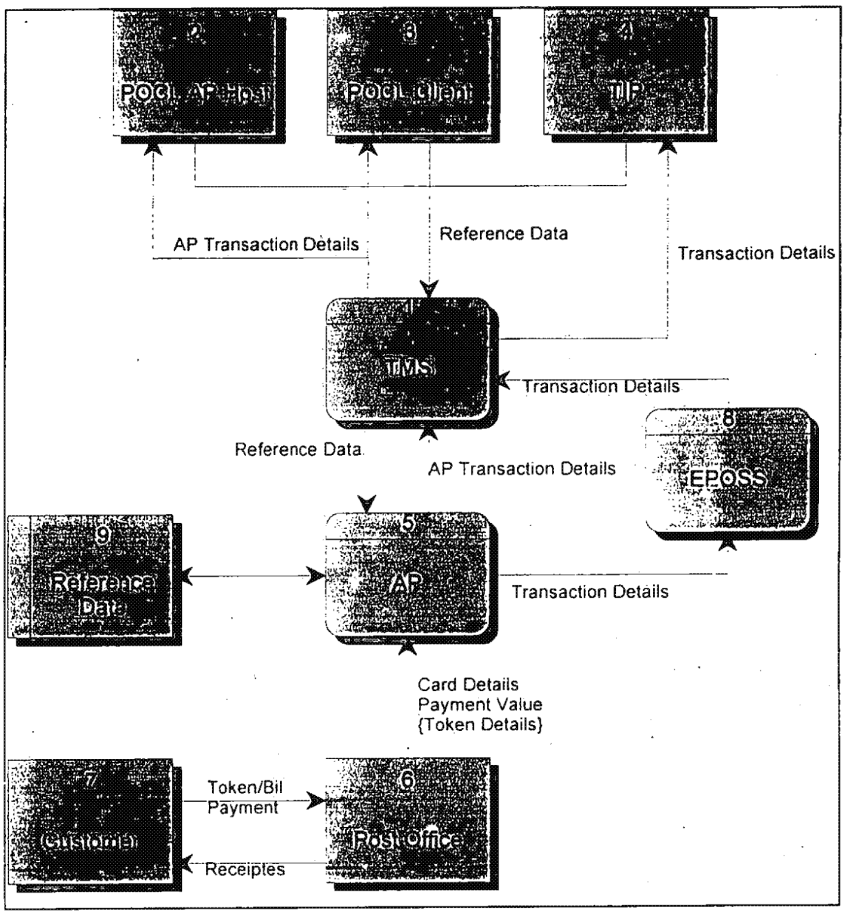

Figure A-4: Automated Payment Service

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A.2.3 BPS

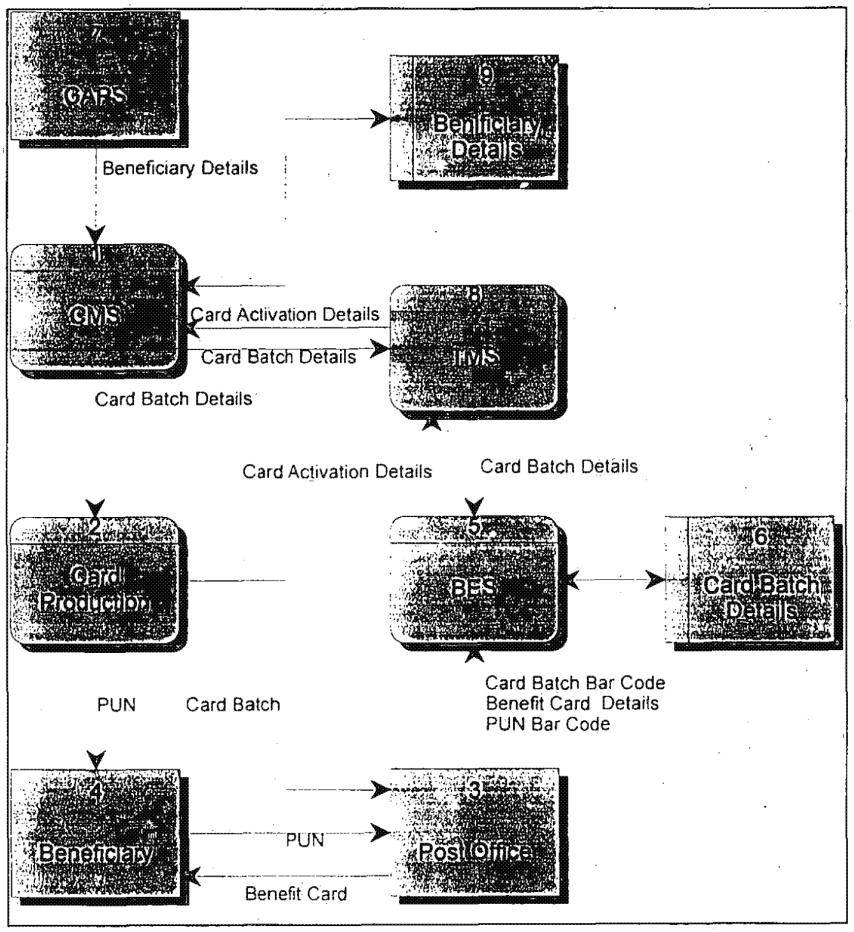

Figure A-5: BPS, Card Management

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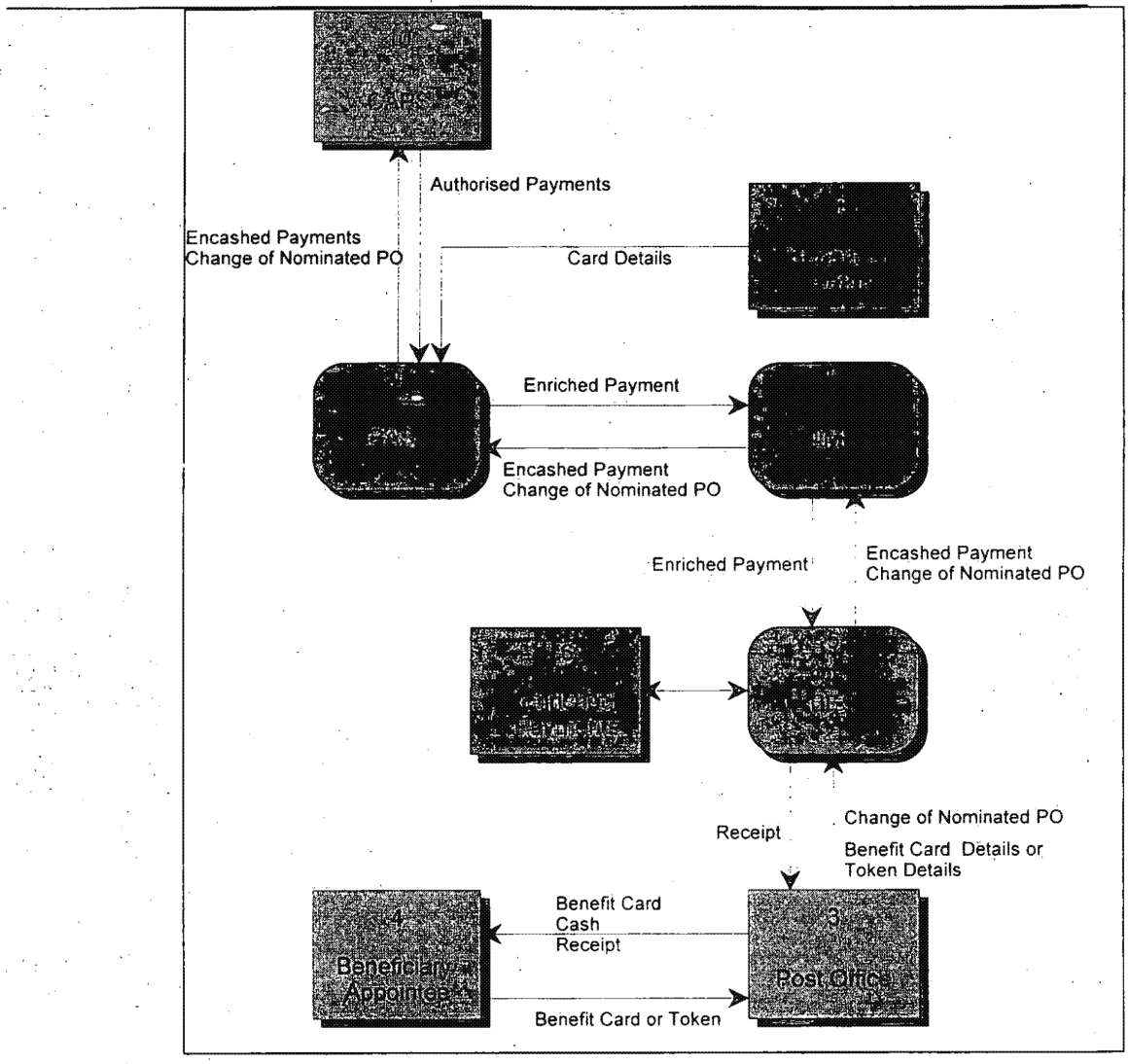

Figure A-6: BPS, Normal Encashment using Card or Token

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A.2.4 EPOSS

Note that within this section that describes the EPOSS processing frequent use is made of 'Reference Data' within its own Data Store. This data is populated by the Reference Data Management System, which is not illustrated here.

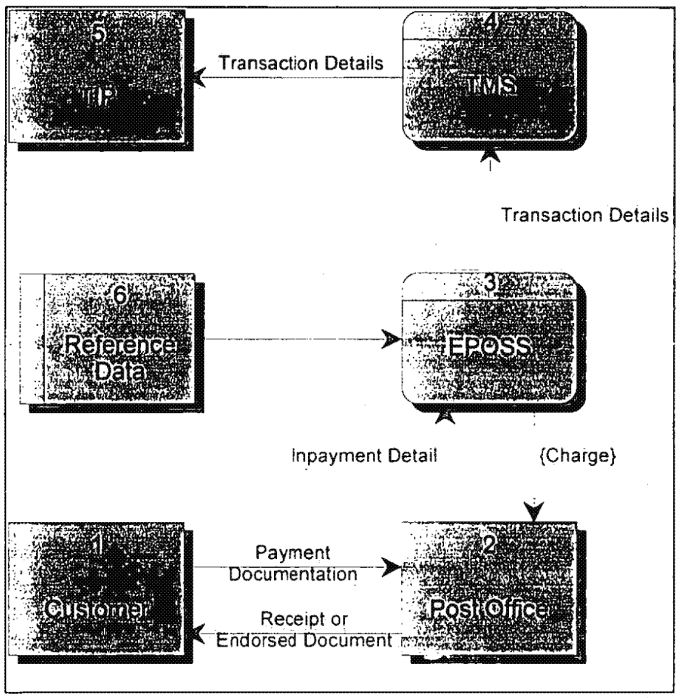

Figure A-7: EPOSS, Inpayment

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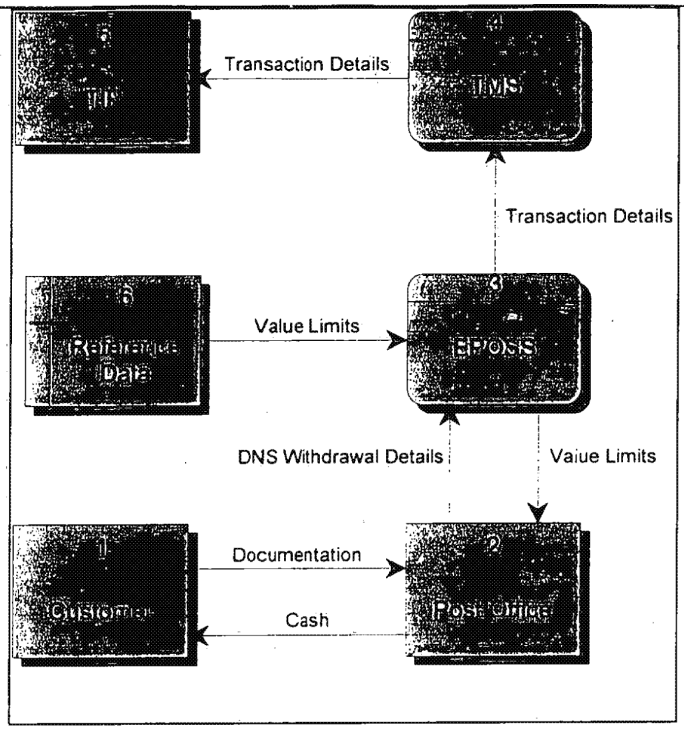

Figure A-8: EPOSS, DNS Withdrawal

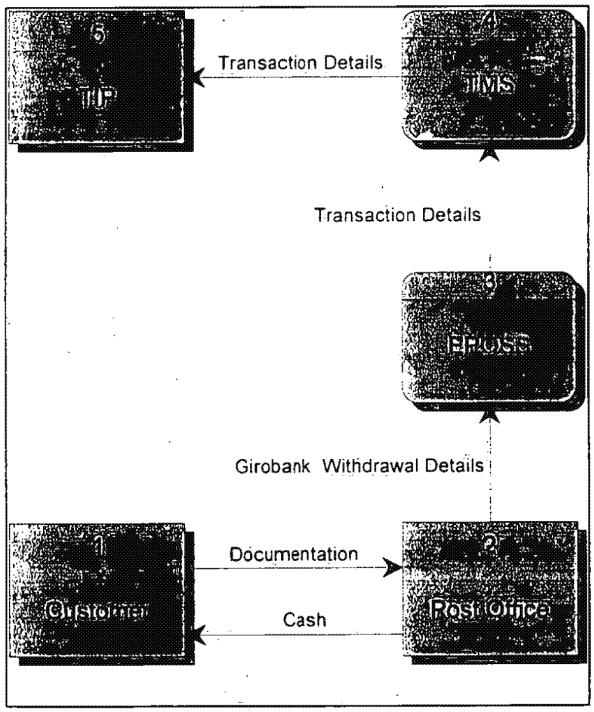

Figure A-9: EPOSS, Girobank Withdrawal

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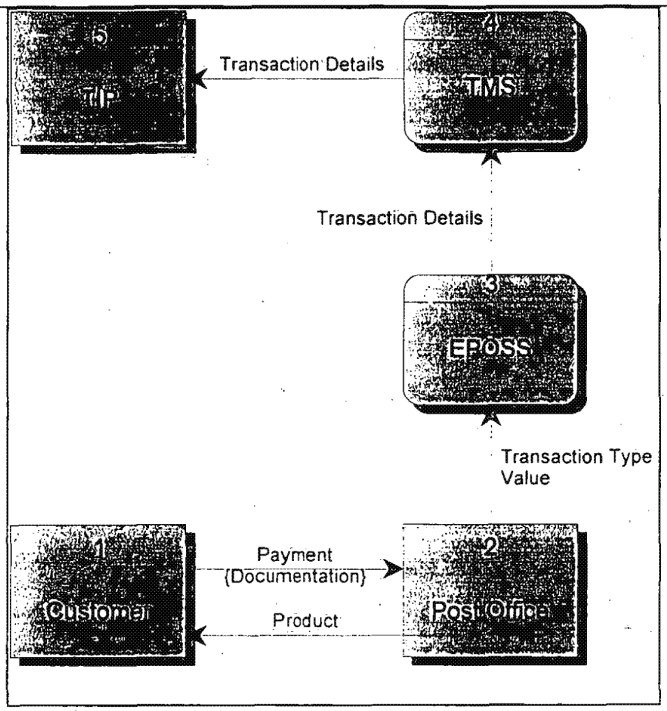

Figure A-10: EPOSS, Miscellaneous Inpayments

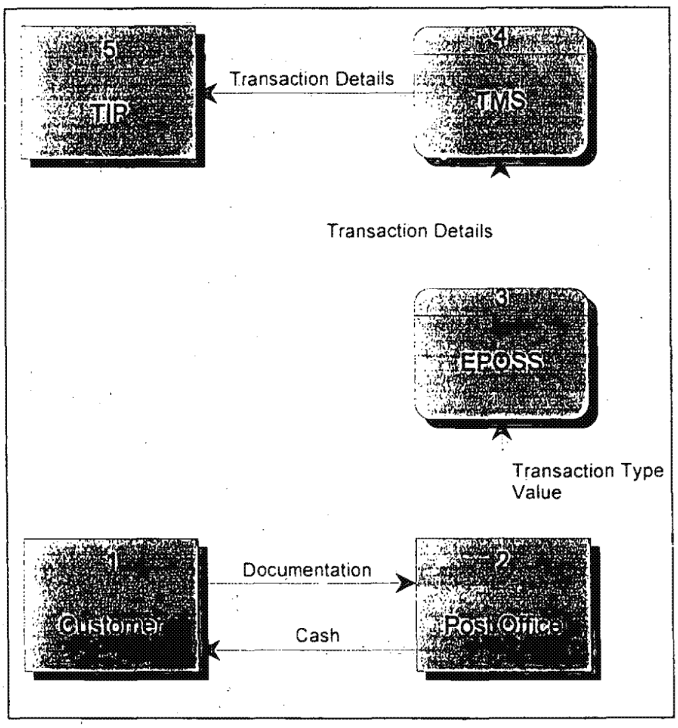

Figure A-11: EPOSS, Miscellaneous Outpayments

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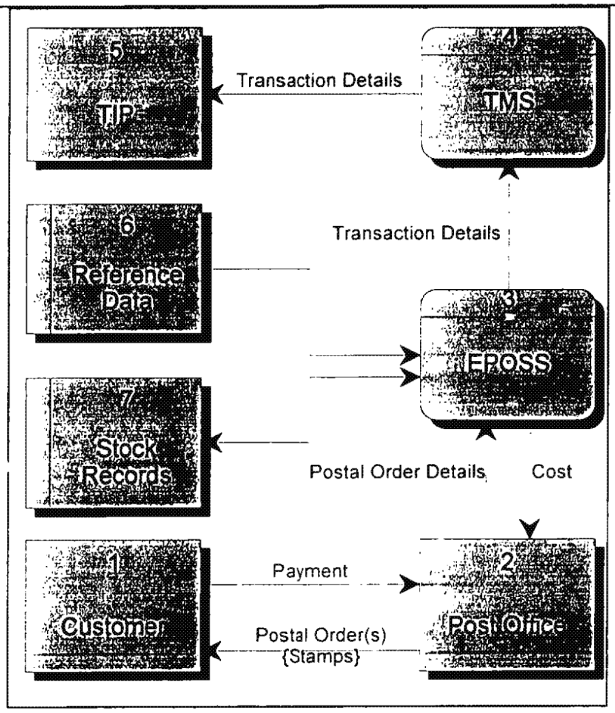

Figure A-12: EPOSS, Postal Order Sales

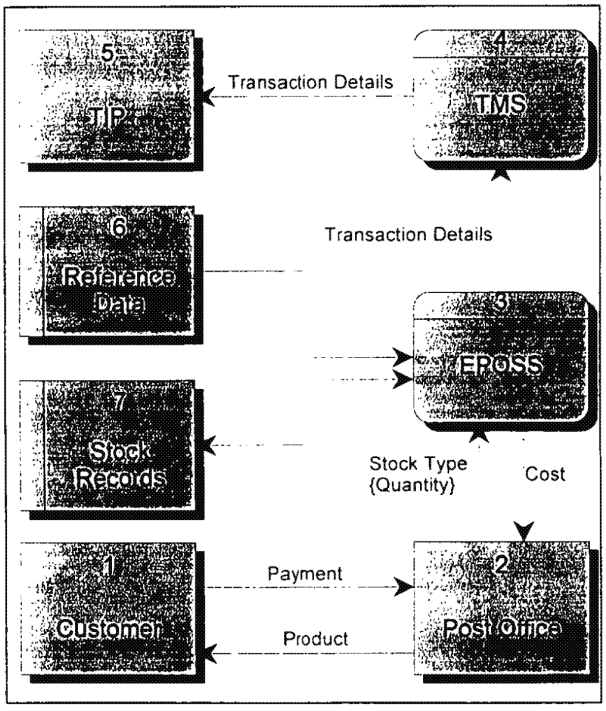

Figure A-13: EPOSS, Stock Sales (General)

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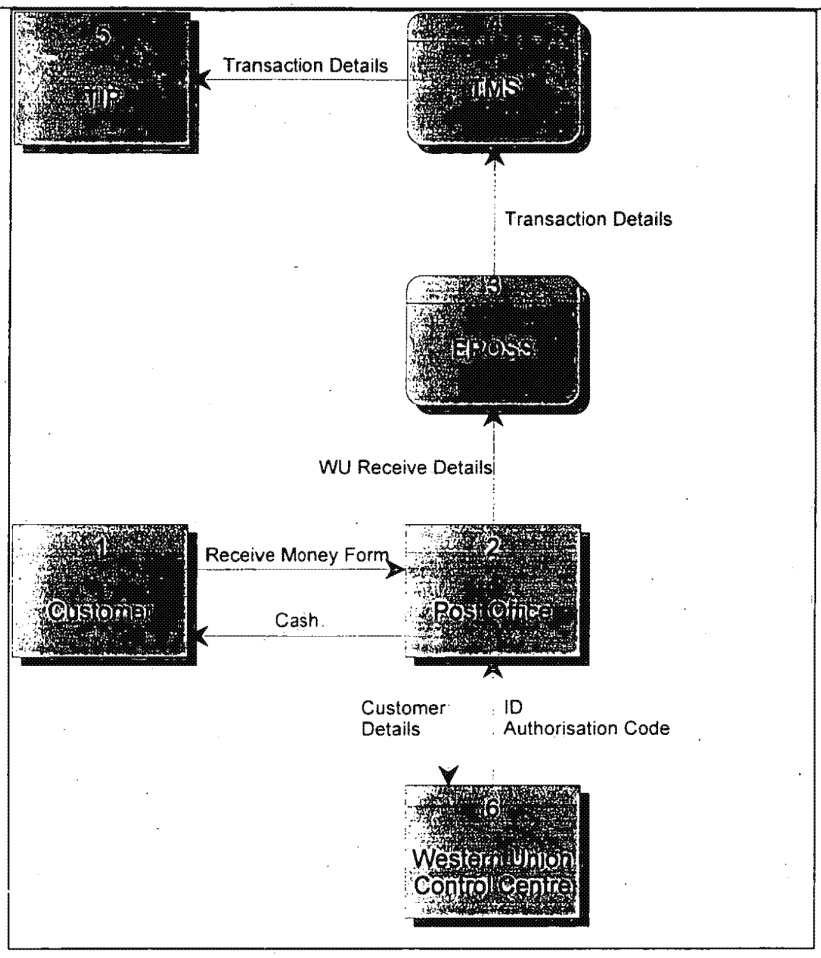

Figure A-14: EPOSS, Western Union Money Transfer (Receiving)

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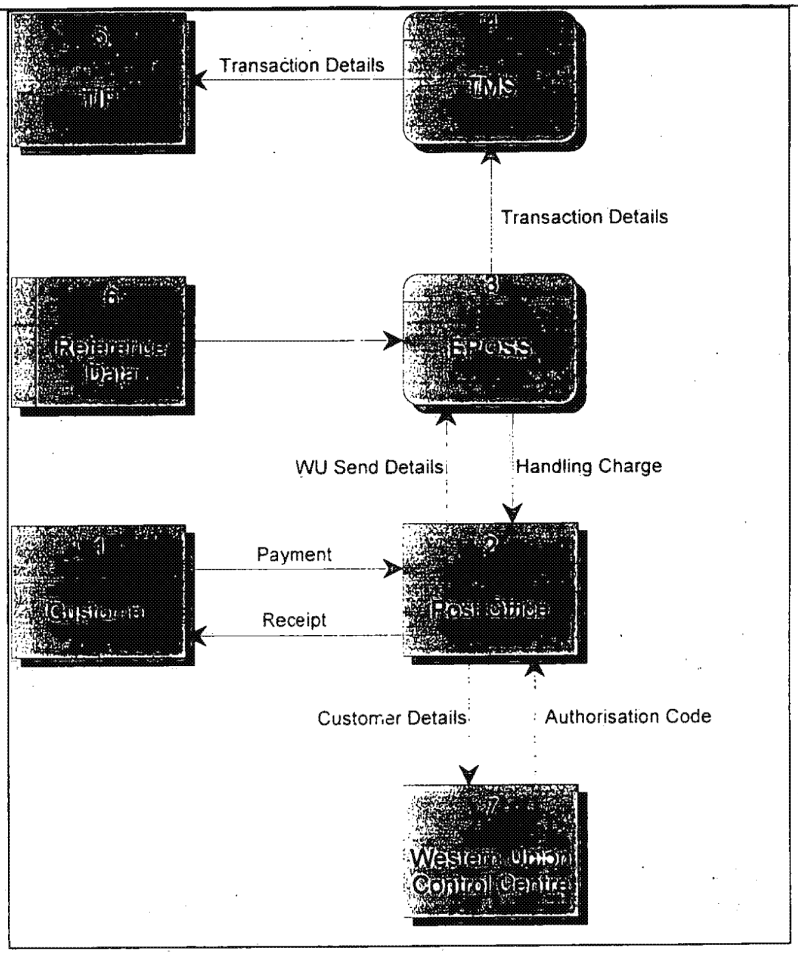

Figure A-15: EPOSS, Western Union Money Transfer (Sending)

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A.2.5 LOCAL NINO LIST

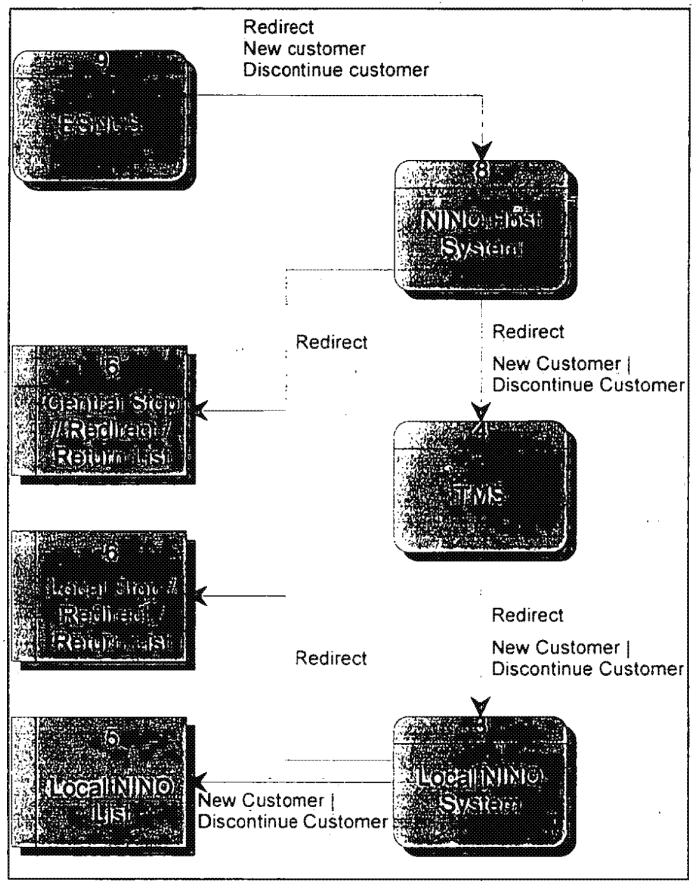

Figure A-16: Local NINO List, Control Processing

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A.2.6 OBCS

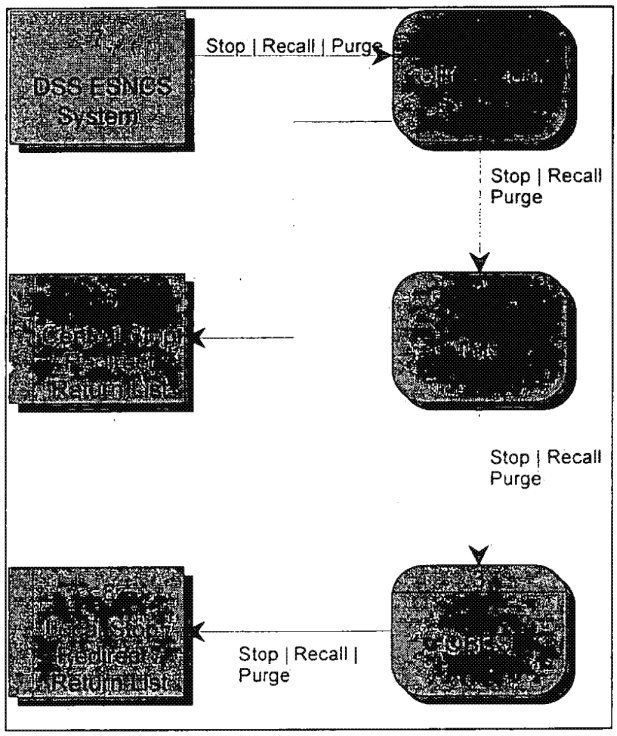

Figure A-17: OBCS, Control Processing

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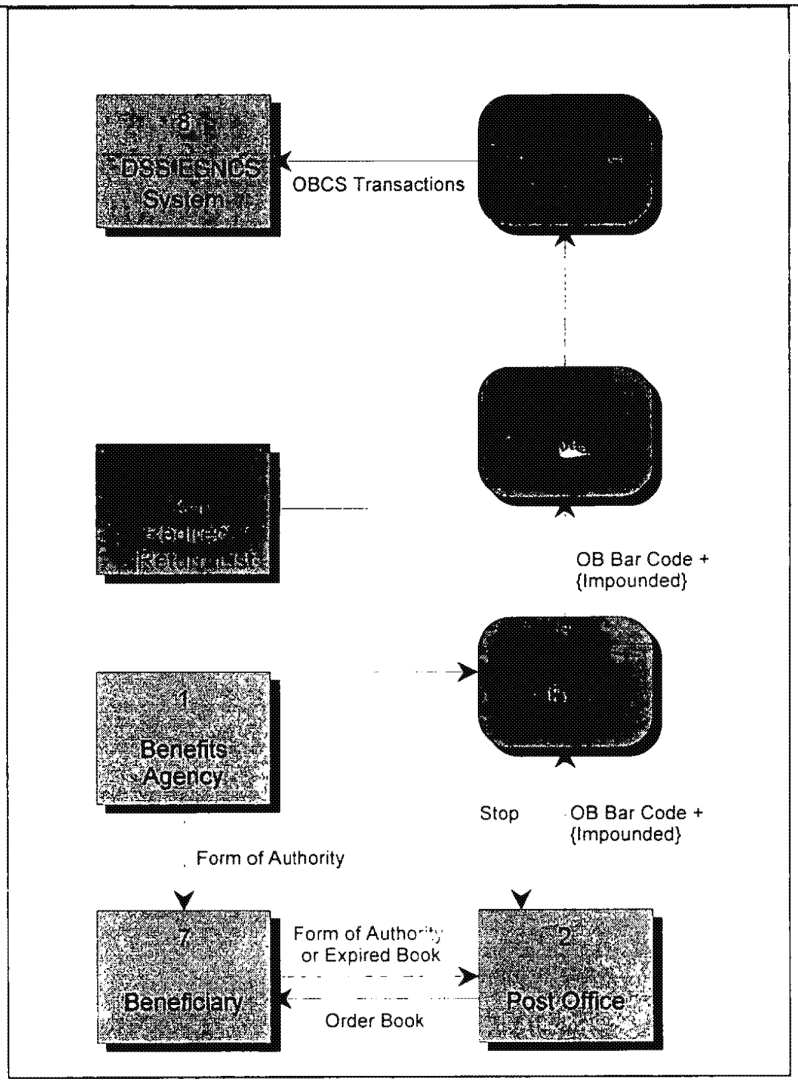

Figure A-18: OBCS, Benefit Book Collection

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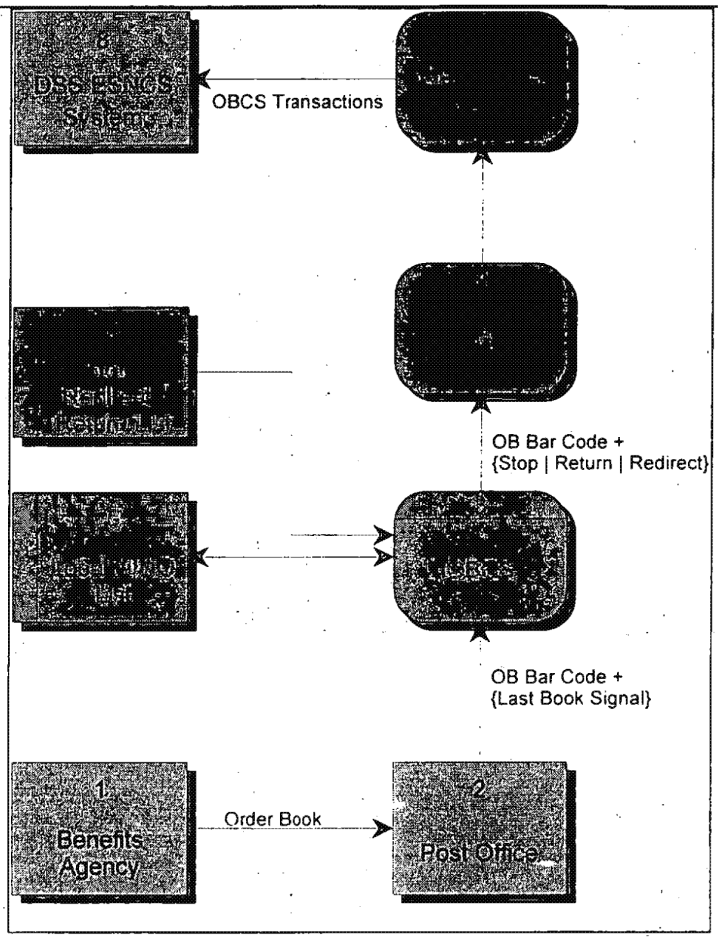

Figure A-19: OBCS, Benefit Book Receipt

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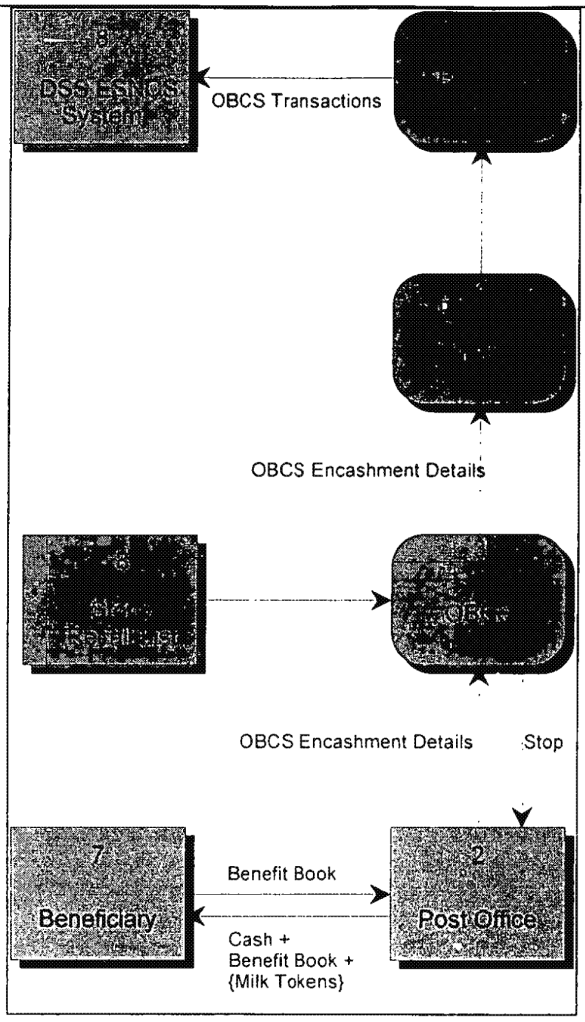

Figure A-20: OBCS, Benefit Encashment

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A.2.7 RECONCILIATION

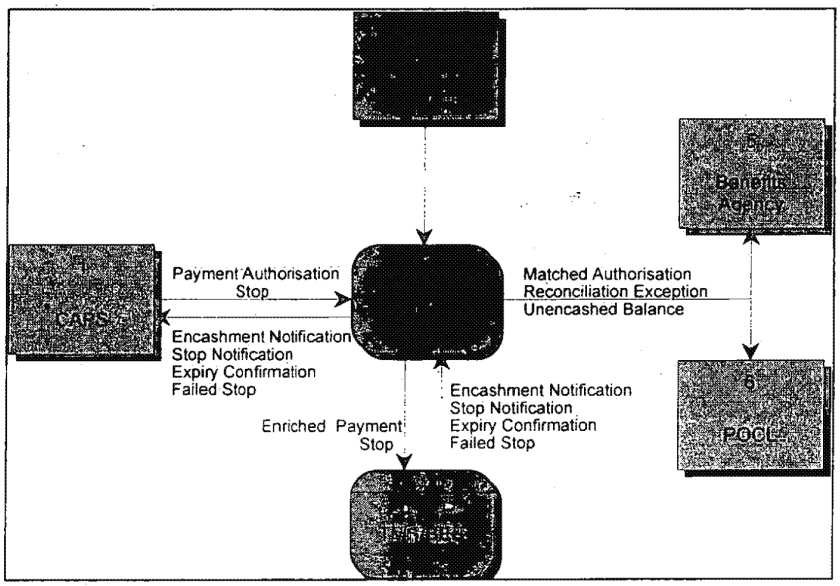

Figure A-21:PAS Reconciliation

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A.3 DATA DICTIONARY

This data dictionary is not intended to cover the whole scope of Pathway. Its purpose is to support the preceding data flow diagrams. In a number of cases potential complexity within a diagram caused by too many data flows has been rationalised by using a more general data flow that is then defined in the following dictionary. Not all names used in the diagrams are held within this dictionary - only those that are non-trivial.

Item Name	Content	Notes
Payment	Cash | Cheque | Girobank Transfer | DNS Warrant | Postal Order | Redeemed Stamps	Payment made by a Post Office customer to the Post Office
Inpayment Details	DNS Deposit Details | Girobank Deposit Details | DVLA Licence Details | TV Licence Details | Other Licence Details | Insurance Product Details | Rent Payment Details | Bunches Details | BT Bill Payment Details	
DNS Deposit Details	Type DNS Deposit + Account Number + Value	
Girobank Deposit Details	Type Girobank Deposit + Account Number + Value +{Fee} + {Reference Number}	
DVLA Licence Details	Type DVLA + Licence disc serial number + prefix number + taxation class	Value determined from reference data
TV Licence Details	Type TV Licence + [Colour | Mono] + {Refund B&W} + {Blind Reduction}	Value determined from reference data
Other Licence Details	Type Other Licence + {Concession}	Value determined from reference data
Insurance Product Details	Type Insurance + Value	

FUJ00119561

Rent Payment Details	Type Rent Payment + Value + [Card Payment | Voucher Payment]	
Bunches Details	Type Bunches + [Today | Next Day] + Value	
BT Bill Payment Details	Type BT Bill Payment + Value + Account Number	
DNS Withdrawal Details	Type DNS Withdrawal + Value	
Girobank Withdrawal Details	Type Girobank Withdrawal + Girobank Transaction Type + Account Number + Value + {Fee} + {Authorisation Code}	
Postal Order Details	Type Postal Order + Value* + Value of Stamps + Fee	* Can be multiple values for multiple postal orders
OBCS Encashment Details	OB Bar Code? + Foil Amount + Number of Foils + {Cheque Component} + {Number of Milk Tokens} + {Impounded}	

Key:
| represents 'or'
+ represents 'and'
{ } encloses an optional component
[ ] encloses a selection list from which only one entry must be chosen

FUJ00119561

B. Call Enquiry Matrix

KEY TO CMS/PAS HELP DESK CALL MATRIX

ABBREVIATION	FULL TITLE
SAL	ANNOUNCE SALUTATION TO CALLER
INT	INTRODUCTION - ASCERTAIN REASON FOR CALL
I.D.	ESTABLISH I.D. OF CALLER
KEY	KEY CARD, NINO DETAILS, BATCH BAR-CODE
SEA	SEARCH FOR CARD DETAILS
PER	CHECK PERSONAL DETAILS RELATING TO CUSTOMER
CMS	CHECK CARD / PUN ORDER DETAILS/STATUS
PAS	CHECK PAYMENT DETAILS
REL	RELAY INFORMATION TO CUSTOMER VIA CALLER
ACT	TAKE ACTION -E.G. INS STOPS, BLOCK AND RE ISSUE CARD/PUN
REF	REFER CALLER TO BENEFIT AGENCY/APPROPRIATE AREA
CONF	CONFIRM ACTION TAKEN AND WHAT CALLER CAN EXPECT NEXT
END	CLOSE THE CALL

FUJ00119561

REF	SOURCE/ENQUIRY TYPE	HELP DESK	SAL	INT	I.D.	KEY	SEA	PER	CMS	PAS	REL	ACT	REF	CONF	END
	PO COUNTER CALLS														
PO 1	Bar-code from batch of cards not recognised.	CMS	✓	✓	✓	✓	✓		✓		✓	✓		✓	✓
PO 2	FAD code or batch number incorrect on card receipt.	CMS	✓	✓	✓	✓	✓		✓		✓	✓		✓	✓
PO 3	Unable to locate card on list (e.g. expired) within PO.	CMS	✓	✓	✓	✓	✓		✓		✓	✓		✓	✓
PO 4	Payment details required, system down (Help Desk does not authorise the payment)	PAS	✓	✓	✓	✓				✓		✓			✓
PO 5	Payment details required and extended verification procedure invoked, system down (Help Desk does not authorise the payment).	PAS	✓	✓	✓	✓		✓		✓	✓	✓			✓
PO 6	Foreign Encashment, payment details required, system down (Help Desk does not authorise the payment).	PAS	✓	✓	✓	✓				✓		✓			✓
PO 7	Foreign Encashment, payment details required and extended verification procedure invoked, system down (Help Desk does not authorise the payment).	PAS	✓	✓	✓	✓		✓		✓	✓	✓			✓
PO 8	Report PUN found.	CMS	✓	✓	✓	✓			✓			✓		✓	✓
PO 9	Report card found.	CMS	✓	✓	✓	✓			✓			✓		✓	✓
PO 10	Change of Nominated Post Office when PO Counter down.	CMS	✓	✓	✓	✓		✓	✓			✓		✓	✓
	PO COUNTER - INAPPROPRIATE CALLS														
POI 1	Query from PO. e.g. Order status of card and or PUN. Cannot read PUN. Card to be impounded, reason sought. Card missing/excess. PO rings for payment details without card details. Report lost/stolen PUNs/cards. Report non-received PUNs. Foreign payment enquiries during roll-out. Misc enquiries.	CMS	✓	✓									✓		✓

FUJ00119561

DSS/POCL Functional Specification
Call Enquiry Matrix

REF	SOURCE/ENQUIRY TYPE	HELP DESK	SAL	INT	I.D.	KEY	SEA	PER	CMS	PAS	REL	ACT	REF	CONF	END
	BA OFFICE CALLS														
BA 1	Report lost, stolen, damaged PUNs - NINO always available.	CMS	✓	✓	✓	✓			✓			✓		✓	✓
BA 2	Report lost, stolen, damaged cards - NINO always available.	CMS	✓	✓	✓	✓			✓			✓		✓	✓
BA 3	Payment history enquiries (restricted to unencashed payments not yet expired, encashed payments yet to be reported back via CAPS, or payment with stops that have yet to expire. e.g. Is a stop in place Recently encashed payments, where cashed, when cashed, by whom were they cashed. Payments currently outstanding.) Activities will be different for NSI cases where call will be transferred to supervisor.	PAS	✓	✓	✓	✓				✓					✓
BA 4	What was the last payment made, not yet reported back to CAPS, before card STOP placed?	PAS	✓	✓	✓	✓			✓	✓					✓
BA 5	Insert Payment Stop.	PAS	✓	✓	✓	✓				✓		✓			✓
BA 6	Enquiries regarding Card and PUN Status/History?	CMS	✓	✓	✓	✓			✓						✓
BA 7	Report non received PUNs - NINO always available.	CMS	✓	✓	✓	✓		✓	✓			✓		✓	✓
BA 8	Report card not available at PO - NINO always available.	CMS	✓	✓	✓	✓			✓			✓		✓	✓
BA 9	Insert Termination or Suspension on Card.	CMS	✓	✓	✓	✓			✓			✓		✓	✓
BA 10	Card found.	CMS	✓	✓	✓	✓			✓			✓		✓	✓
BA 11	PUN found.	CMS	✓	✓	✓	✓			✓			✓		✓	✓
BA 12	Take order for emergency batch of temporary tokens.	CMS	✓	✓	✓				✓			✓		✓	✓
	BA OFFICE - INAPPROPRIATE CALLS														
BAI 1	Payment enquiries, details already referred back to CAPS.	PAS	✓	✓	✓	✓				✓			✓		✓
BAI 2	Amendments to static data (personal details and nom PO).	CMS	✓	✓									✓		✓
BAI 3	Misc enquiries.	CMS	✓	✓									✓		✓

FUJ00119561

REF	SOURCE/ENQUIRY TYPE	HELP DESK	SAL	INT	I.D.	KEY	SEA	PER	CMS	PAS	REL	ACT	REF	CONF	END
	CUSTOMER CALLS														
CC 1	Report lost, stolen, damaged PUNs - NINO available.	CMS	✓	✓	✓	✓			✓			✓		✓	✓
CC 2	Report lost, stolen, damaged PUNs - NINO not available.	CMS	✓	✓	✓		✓		✓			✓		✓	✓
CC 3	Report lost, stolen, damaged Cards - NINO available.	CMS	✓	✓	✓	✓			✓			✓		✓	✓
CC 4	Report lost, stolen, damaged Cards - NINO not available.	CMS	✓	✓	✓		✓		✓			✓		✓	✓
CC 5	Customer has not received PUN and also advises address unsafe and mail shouldn't be sent there -NINO available.	CMS	✓	✓	✓	✓		✓	✓			✓	✓		✓
CC 6	Customer has not received PUN and also advises address is unsafe and mail shouldn't be sent there - NINO not available.	CMS	✓	✓	✓		✓	✓	✓			✓	✓		✓
CC 7	Report non received PUNs - NINO available.	CMS	✓	✓	✓	✓		✓	✓			✓		✓	✓
CC 8	Report non received PUNs - NINO not available.	CMS	✓	✓	✓		✓	✓	✓			✓		✓	✓
CC 9	Card PUN Status Enquiry - NINO available.	CMS	✓	✓	✓	✓			✓						✓
CC 10	Card PUN Status Enquiry - NINO not available.	CMS	✓	✓	✓		✓		✓						✓
CC 11	Card previously reported lost/stolen-now found - NINO available.	CMS	✓	✓	✓	✓			✓					✓	✓
CC 12	Card previously reported lost/stolen-now found - NINO not available.	CMS	✓	✓	✓		✓		✓					✓	✓
CC 13	PUN previously reported lost/stolen-now found - NINO available.	CMS	✓	✓	✓	✓			✓					✓	✓
CC 14	PUN previously reported lost/stolen-now found - NINO not available.	CMS	✓	✓	✓		✓		✓					✓	✓
	CUSTOMER - INAPPROPRIATE CALLS														
CCI 1	Where is my money? Disputed entitlement. Amend details on card. Change of personal details. Change of nominated Post Office. Refuses to accept Card and or PUN. Which PO have I nominated? General complaints about the system. Queries re changes to BA payment system or rates. Disputed encashment. General Benefit entitlement or history. Queries regarding the transitional period between launch and full automation of benefits.	CMS	✓	✓									✓		✓

FUJ00119561

	Request to insert suspension on card. Misc enquiries.														
CCI 2	Queries received from customers but we are unable to trace customer record on CMS (excludes calls referred to in CCI 1).	CMS	✓	✓			✓						✓		✓

FUJ00119561

DSS/POCL Functional Specification
Call Enquiry Matrix

REF	SOURCE/ENQUIRY TYPE	HELP DESK	SAL	INT	I.D.	KEY	SEA	PER	CMS	PAS	REL	ACT	REF	CONF	END
	NON CUSTOMER CALLS														
NCC 1	Bomb threats.	CMS	✓	✓								✓		✓	✓
NCC 2	Nuisance calls.	CMS	✓	✓								✓		✓	✓
NCC 3	Report found Cards and PUNs.	CMS	✓	✓		✓			✓			✓			✓