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**Abstract:** This security policy specifies mandatory security requirements to

be applied throughout Pathway.

**Document Status:** APPROVED

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### 0.0 Document Control

## 0.1 Document History

Version No.	Date	Reason for Issue	Associated CP/PinICL
0.1	27/5/96	Initial draft issued for comments	
0.2	31/5/96	Revised draft issued for comments	
0.3	26/6/96	Incorporates comments from the Pathway Management team	7
1.0	16/8/96	Incorporates comments from DSS/BA and POL	
2.0	23/9/96	Incorporates further comments from Authority	
3.0	8/10/96	Approved	
3.1	24/11/97	Revised for internal review purposes	
3.2	10/01/98	Incorporates comments from internal review	
3.3	23/2/98	Incorporates further comments	
3.4	28/9/98	Minor updates	
4.0	30/4/99	Approved	
4.1	24/6/99	Removal of references to DSS/Benefits Agency relating to Contract changes.	7
4.2	03/10/00	Incorporates changes following internal review and re-organisation of responsibilities.	
5.0	13/11/00	Approved Internally	
5.1	20/11/00	Incorporates clarification in respect of DPA and OBCS.	
6.0	20/11/00	Approved Internally	
6.1	08/08/01	Incorporation of changes in organisation. For review and circulation as a baseline to inform NWB contractual negotiations.	
6.2	30/04/02	Change from ICL branding to Fujitsu Services	
7.0	28/05/02	Approved	
7.1	12/07/02	Incorporation of the Network Banking Service. Minor typographical and contextual changes.	
7.2	15/08/02	Incorporation of comments from review.	
8.0	03/09/02	Approved	
8.1	Jan 2003	Updates in line with ISO17799 and inclusion of the	

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		Debit Card System	
9.0	24/01/03	Approved	

## 0.2 Review Details

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### 0.3 Associated Documents

Reference	Version	Date	Title	Source
PA/TEM/001			Fujitsu Services Document Template	PVCS
			Fujitsu Services Group Security Policy	Fujitsu Services
RS/PRO/028			Pathway Security Management Procedures	PVCS
RS/POL/003			Pathway Access Control Policy	PVCS
KH2879			Post Office Information	Post Office Ltd.

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	Systems Security Policy Document
BP/POL/002	Post Office Counters Information Systems Security Policy (SSR Appendix 4-1)
BP/ION/002	A Code of Practice for PostPost Office Ltd Office Information Systems Security
	ISO17799 - A Code of ISO Practice for Information Security Management
CR/FSP/004	System Architecture Design PVCS Document
RS/FSP/001	Security Functional PVCS Specification

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

#### 0.4 Abbreviations/Definitions

Abbreviation	Definition
APS	Automated Payment Services
CESG	Communications-Electronics Security Group
CLEF	Commercial Licensed Evaluation Facility
COTS	Commercial Off The Shelf
DCS	Debit Card System
DSS	Department of Social Security
EPOSS	Electronic Point Of Sale Service
ISO	International Standards Organisation
LFS	Logistics Feeder Service
NBS	Network Banking Service
OBCS	Order Book Control Service
PFI	Private Finance Initiative
PIN	Personal Identification Number
PPP	Public Private Partnership

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SEM	Security Event Management			7

# 0.5 Changes in this Version

Version	Changes
9.0	Minor amendment to Diagram in paragraph 4 to reflect revised Post Office Organisation

## 0.6 Changes Expected

Changes	
None	

**Fujitsu Services** 

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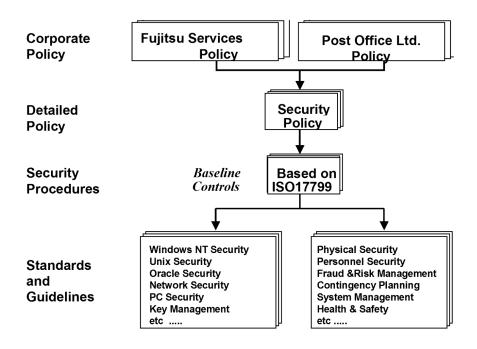
#### 1.0 Foreword

This document defines Pathway's policy for the protection of its assets (including hardware, applications, databases, network, people and documentation) against loss of confidentiality, integrity and availability. It also enables Pathway to comply with legislative and commercial requirements.

Pathway's policy statement (which is essentially the same as the Corporate Policy statement used by Group (Fujitsu Services)) is:

It is the policy of Fujitsu Services, Pathway to provide a secure working environment for the protection of employees, and also to ensure the security of all assets owned by or entrusted to Pathway.

This document fits into the structure illustrated below, with the ISO17799 Code of Practice being used as a basis for Pathway's Security Procedures. Lower level implementation standards are incorporated as appropriate.



Pathway's Security Policy, Procedures and Standards

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#### 2.0 Introduction

In May 1996, Fujitsu Services, Pathway, formerly ICL (Pathway), was selected to set up and operate the services to automate counter transactions at Post Offices throughout the UK.

The requirement to implement a Benefit Payment Service for the Benefit Agency was removed when the UK Government's major Private Finance Initiative (PFI) project was changed to a Public Private Partnership (PPP) project during 1999.

In July 2002, Pathway was awarded a contract to provide a Network Banking Service (NBS), which initially supports several On-line counter transaction types. In September 2002 this contract was extended to include a Debit Card system interfacing with National Westminster Streamline as Merchant Acquirer.

The purpose of this policy document is to lay the foundation that enables Pathway to protect the integrity, availability and confidentiality of all assets associated with the services. It also enables Pathway to comply with legislative and commercial requirements.

#### 2.1 Service Overview

The agreement is a PPP project, whereby Pathway automates 18,000 Post Offices and provides the infrastructure which enables users to make automated payments at outlets throughout the UK.

Computerised facilities at Post Office counters enable a range of Automated Payment Services (APS) to be provided, allowing customers to make payments to utilities and other clients supported by Post Office Limited.

The Electronic Point Of Sale Service (EPOSS) supports all services, or products, provided by the counter clerk to the customer.

The Order Book Control Service (OBCS) is a discrete counter application, transactions in respect of which are recorded via EPOSS.

The Logistics Feeder Service (LFS) supports the management of stock and cash transfers into and out of Post Office outlets.

The Network Banking Service (NBS) initially supports several On-line counter transaction types, each being initiated by the presentation of a bank card. Verification is via the use of PIN Pads or a check of customer signature. There is no customer verification for deposits.

The Debit Card System (DCS) also supports several On-line counter transactions, each being initiated by the presentation of a bank card. Verification for DCS is via the use of a visual check of the customer signature. DCS does not provide a deposit service.

The services are designed to provide secure payment facilities, hence particular attention is focused upon the security aspects of the services throughout their life cycle.

### 2.2 Scope

This Security Policy specifies mandatory security requirements to be applied throughout Pathway.

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Pathway has overall responsibility for the design, development, implementation, roll-out, operation and support of the service throughout the contract period. Specific activities are subcontracted to appropriate organisations, which are required to work within the security framework defined by Pathway.

Pathway's Security Policy must be compatible with Post Office Ltd. Security Policy. The interfaces between Pathway and all external organisations must be clearly defined and formally agreed with the organisations concerned.

Security obligations for subcontractors involved in development activities (including Escher, Oracle and Fujitsu Services) are subject to individual agreements with Pathway. Commercial off the shelf (COTS) products are provided by the appropriate product suppliers (including Microsoft).

#### 2.3 Policy Review

Once approved, this policy document will be formally reviewed at least annually and after any significant security incident or occurrence of fraud, and updated whenever necessary.

Responsibilities for approval, review and issue of Pathway's Security Policy and Procedures are defined in section 4

### 3.0 Objectives

This document provides a definition of Pathway's high-level Security Policy.

Pathway will establish an infrastructure that will minimise and control liabilities to itself and Post Office Ltd.

The Security Policy defines the requirements for Pathway enabling it to protect the integrity, availability and confidentiality of information used and produced by the services. This includes making adequate provision for:

- Business Continuity, and
- compliance with relevant legislation.

The responsibilities for policy implementation are defined (in section 4) in order that the policy requirements can be communicated throughout Pathway. This ensures that all parties are fully aware of their responsibilities and legal obligations.

Pathway has stated its commitment to ensuring that it encompasses the very best commercial practices for security. Pathway's aim is to be fully compliant with ISO17799.

Compliance with legislative requirements (including the Data Protection Act 1998) and ISO17799 is considered under "Compliance" (in section 10).

### 3.1 Business Objectives

The business objectives are:

- 1. Identifying and managing risks
- 2. Protection of information assets

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3. Protection of IT assets

4. Provide continuity of services

5. Maintenance of Pathway's reputation.

#### 3.2 IT Security Objectives

Pathway's overall IT security objective can be summarised as achieving the requirement expressed in the following policy statement:

It is the policy of Fujitsu Services, Pathway to protect its investment in IT assets and to ensure the confidentiality, integrity and availability of all information conveyed, processed or stored, by the services.

- Security measures in Pathway's IT systems will ensure appropriate confidentiality, integrity and availability of services, software components and data, whether in storage or in transit.
- 2. Physical and logical access to the IT systems will be controlled, with access granted selectively, and permitted only where there is a specific need. Access will be limited to persons with appropriate authorisation and a "need to know" requirement.
- Authentication, whereby a user's claimed identity is verified, is essential before any access
  is granted to any IT system. Authentication mechanisms are also required to ensure that
  trust relationships can be established between communicating components within, and
  external to, Pathway's services.
- 4. All users of Pathway's services will be individually accountable for their actions. Accountability for information assets will be maintained by assigning owners, who will be responsible for defining who is authorised to access the information. If responsibilities are delegated then accountability will remain with the nominated owner of the asset.
- 5. Audit mechanisms are required to monitor, detect and record events that might threaten the security of the Pathway services or any service(s) to which it is connected. Regular analysis of audit trails is essential to facilitate the identification and investigation of security breaches.
- 6. Alarm mechanisms are required to alert security personnel to the occurrence of security violations that could seriously threaten the secure operation of Pathway's services. These alarms will be used to trigger prompt investigation and remedial action in order to minimise the impact of any security breach.
- 7. Pathway will monitor all developments and operations to maintain assurance that its services are performing in accordance with approved security procedures and controls. This will give a high level of confidence that all information is being protected during processing, transmission and storage.

### 3.3 Legal Obligations

Pathway must remain fully compliant with all relevant legislation and regulations.

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In addition to the existing legislative obligations, identified in section 10.2, it is important to track and anticipate emerging UK and European regulations that could affect Pathway's operation.

### 4.0 Responsibilities For Security

Pathway's Managing Director has ultimate responsibility for security.

Pathway's commitment to security will be communicated throughout Pathway, as evidenced by board level approval of Pathway's Security Policy.

Figure 1 illustrates the security organisation used within Pathway. Senior management is supported by experienced specialists and technical staff with specific expertise in the areas of IT security, risk management and, where appropriate, fraud prevention.

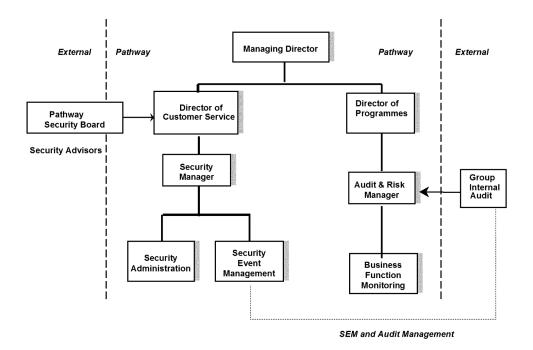


Figure 1 Pathway's Security Management Structure

#### 4.1 Director, Customer Services

The security related responsibilities of the Director, Customer Services, include:

- overall control and management of security throughout Pathway,
- provision of adequate resources for security,
- being Chairman of the Pathway Security Board (see section 4.2),
- owner of Pathway's Security Policy,
- approval authority for Pathway's Security Policy,
- approval authority for Pathway's Security Procedures,
- establishing the security interface with Post Office Ltd, and

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• establishing the security interface with all subcontractors.

Overall control of risk management functions is the responsibility of the Programme Director.

#### 4.2 Pathway Security Board

The representatives on Pathway's Security Board are nominated by the Director, Customer Services, and approved by the Pathway Board.

The Security Board participants, who will include Horizon Security Liaison staff, represent a broad range of interests to ensure that alternative perspectives are considered.

Whenever necessary, the Security Board can commission independent specialists to undertake studies, investigations or audits.

Security Board responsibilities include:

- ownership of Pathway's Security Strategy,
- determining the adequacy of Pathway's Security Policy definition,
- formal review of all Security Policy documents,
- review of security incidents, on a regular basis, and
- liaison with external bodies and specialists.

### 4.3 Security Manager

The Security Manager is responsible for ensuring implementation of policy and procedures, and maintaining "best practice", within the remit of Pathway.

Pathway's Security Manager's responsibilities include:

- physical and environmental security,
- monitoring for compliance with Pathway's Security Policy,
- providing the point of contact for reporting all types of security incidents,
- ensuring that security incidents are recorded and investigated,
- ensuring that security relevant events are recorded,
- ensuring that system audit trails are analysed on a regular basis,
- documentation of Pathway's Security Policy,
- owner of Pathway's Security Procedures,
- documentation of Pathway's Security Procedures,
- communication of security policy and procedures throughout Pathway,
- authorisation and approval for system changes,
- co-ordinating the evaluation of all new security products proposed,
- specifying and arranging security education and training,
- devising and conducting security awareness programmes,
- maintaining a partnership approach to security with Post Office Ltd Security staff.
- liaison with the Post Office Ltd Information Security Manager, external regulators and suppliers' security personnel,

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 reporting to the Post Office Limited Information Security Manager any actual or potential threats or breaches that may have a material effect on any service, and

• recruitment selection of security administration personnel.

#### 4.4 Security Administration

The description "Security Administration" is used to describe Pathway personnel assigned to roles with particular responsibility for security.

Pathway's Security Manager is the normal line manager for this group; hence many of the activities assigned to Security Administrators are in support of the functions listed in section 4.3.

Wherever possible, Security Administrators act in a supporting or monitoring role rather than as a Service Provider for the operational services. In this capacity they can:

- monitor compliance with Pathway's Security Policy,
- implement Pathway's Security Procedures,
- conduct independent reviews of compliance to policy and procedures,
- report actual and suspected security incidents, and recommend changes, to enhance Pathway's security controls, to the Security Manager.

### 4.5 Responsibilities for Physical Security

The local Site Managers have responsibility for physical security at all sites used by Pathway.

At some sites, notably Data Centres and support sites, Pathway can benefit from existing security infrastructure in order to protect against threats from physical and environmental sources.

At Post Office outlets, the Post Office Manager has particular responsibility for safeguarding the Pathway equipment installed.

#### 4.6 All Personnel

All service users, most of whom are at Post Office counters, will be included in Pathway's awareness and/or training programmes. Security aspects, an integral part of these programmes, will be set in a context appropriate to the user's role (for example, Post Office Manager or clerk).

All Pathway employees, subcontractors and system users have security responsibilities and they are required to work together in support of this security policy. Personnel who may not regard themselves as any kind of "system user" still have security responsibilities. In particular, they are expected to be vigilant in reporting anything they believe may be suspicious.

Promoting security awareness, throughout Pathway, to subcontractors, and within Post Offices, is an important responsibility assigned to Pathway's Security Manager.

Publicising security reporting and escalation procedures will be part of this awareness strategy.

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#### 4.7 Reporting Security Incidents

Pathway has established effective procedures for reporting, acting upon and escalating all incidents that could affect security. It is the responsibility of all users of the Pathway services and Pathway personnel to use these procedures.

Pathway's Security Manager is responsible for ensuring that all incidents are recorded, investigated and resolved with appropriate urgency. This will include liaison with Horizon Security Liaison staff to review incidents and actions.

### 5.0 Responsibilities For Audit

The Director of Programmes is accountable for the Audit function within Pathway, as illustrated in figure 1.

The Audit Manager's responsibilities, listed in section 5.1, are primarily concerned with managing the internal Audit function within Pathway but they also include liaison with Post Office Ltd. audit personnel.

As the point of contact with external audit personnel, the Audit Manager maintains regular contact with many Pathway groups (e.g. Customer Service, Programmes, Commercial and Finance) to co-ordinate audit related activities.

The Security Event Management function, illustrated in figure 1, encompasses the routine IT Security activities concerned with security relevant events recorded by Pathway's systems. It is really part of the day-to-day security administration activity, but has been highlighted to identify the need for regular analysis of event logs.

### 5.1 Audit Manager's Responsibilities

Pathway's Audit Manager is responsible for ensuring implementation of Pathway's Audit Policy and maintaining "best practice", within the remit of Pathway.

The Audit Manager's responsibilities include:

- planning and carrying out audits of Pathway's business functions,
- examining and evaluating the results of (business function) audits,
- developing and agreeing improvement programmes,
- monitoring and reporting improvement activities,
- monitoring for compliance with Pathway's Audit Policy,
- providing the point of contact for all audit related matters,
- overall responsibility for Pathway's Audit activities,
- documentation of Pathway's Audit Policy,
- being the owner of Pathway's Audit Standards,
- documentation of Pathway's Audit Standards,
- communication of Audit policy and standards within Pathway,
- co-ordinating the evaluation of all new audit products proposed,
- specifying and arranging Audit education and training,
- liaison with Post Office Ltd. audit personnel,
- liaison with Fujitsu Services Group Audit personnel, and

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• recruitment selection of Audit personnel.

#### **5.2** Business Function Monitoring Responsibilities

The description "Business Function Monitoring" has been used to describe Pathway personnel assigned to roles with particular responsibility for Audit.

Pathway's Audit Manager is the normal line manager for this group; hence many of the activities assigned to Business Function Monitoring are in support of the functions listed in section 5.1.

Wherever possible, Business Function Monitoring acts in a supporting role rather than as a Service Provider for the operational services. In this capacity it can:

- monitor compliance with Pathway's Audit Policy,
- implement Pathway's Audit Standards,
- conduct independent reviews of compliance to policy and standards,
- report actual and suspected security incidents, and
- recommend changes, to enhance Pathway's audit controls, to the Audit Manager.

### **5.3** Security Event Management Responsibilities

The description "Security Event Management" is used to describe Pathway personnel assigned to roles with particular responsibility for security relevant events recorded by Pathway's systems.

Pathway's Security Manager is the normal line manager for this group; hence many of the activities assigned to Security Event Management personnel are supporting functions.

Wherever possible, Security Event Management acts in a monitoring role supporting the audit related security administration activities. In this capacity it can:

- ensure that specified events are being audited on the relevant platforms,
- ensure that all access (and attempted access) to Pathway's systems is audited.
- monitor usage by Pathway operations and management staff,
- analyse the audit logs generated by the different Pathway platforms,
- assist with investigations (as assigned by the Security Manager),
- extract copies of audit information for investigation purposes,
- ensure that archived audit information is being stored securely,
- implement Pathway's Security Procedures (particularly with regard to audit).
- report actual and suspected security incidents, and
- recommend changes, to enhance Pathway's security controls, to the Security Manager.

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## **6.0** Personnel Security

Staff concerned with the operations and management of central services are to be managed under the guidance of Fujitsu Services' Personnel Policy Manual and associated documents.

Staff working on high-risk areas in the organisation (those classified as "sensitive") are to be subject to more frequent vetting reviews and internal audits. This applies to Pathway's own employees and to staff from subcontractor's organisations.

#### 6.1 Recruitment Selection

All applicants are subject to an appropriate level of vetting, using criteria approved and provided by Fujitsu Services Group Security. This includes checks on their identification, qualifications and financial circumstances.

Business and personal references are checked for all applicants.

#### **6.2** Job Descriptions, Contracts and Assessment

Pathway will apply best commercial practice, based upon ISO17799, to include security considerations within:

Employees Terms and Conditions for Employment, and generic job descriptions.

### 6.3 Security Education and Training

Pathway's education and training programme will promote security awareness and explain the importance and use of security controls.

The programme will include:

- all Pathway employees,
- training for all system users, tailored to their particular role, and
- appropriate training for contractors and third parties.

### 7.0 Implementation Policies

The following subsections provide an overview of the controls required for:

- asset classification and control,
- physical and environmental security, and
- system access control.

Pathway's Security Procedures will provide more detailed guidance based upon the corresponding ISO17799 sections. This will include the provision and maintenance of an asset register and up to date inventories of all significant component assets – information, software, hardware and services.

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#### 7.1 Information Classification

All information used by Pathway will be handled in accordance with its classification, as specified by its owner. Information owners are required to classify all information that they own, in accordance with a process that will be jointly agreed.

The sensitivity of information will be measured by the consequences of a potential security breach associated with that information.

Pathway will assume that aggregation cannot increase the classification of any information unless risk assessment indicates otherwise.

Pathway's Security Procedures will include guidance on protective marking and handling of information.

#### 7.2 Safeguarding Post Office Ltd. Records

Pathway will protect all manual and electronic records supplied by Post Office Ltd in accordance with agreed contractual obligations. The records will be safeguarded from unauthorised disclosure, modification, loss, destruction and falsification.

#### 7.3 Physical and Environmental Security

Use of existing secure computing facilities for Pathway's central services simplifies the task of establishing secure areas for the protection of IT facilities. The physical security measures include:

- specialist site security staff in attendance 24 hours per day,
- surveillance and intruder detection systems,
- multi-zone areas controlled by a card access system, and
- regular security reviews and audit checks.

All equipment and cabling will be well maintained and protected against environmental hazards, including fire and water damage.

Post Offices pose some significant challenges for several reasons:

- Pathway supports approximately 18,000 sites throughout the UK,
- Pathway cannot control the physical security at Post Offices,
- Pathway owns the IT assets installed in each Post Office,
- high specification commercial PCs are installed at each site,
- Pathway cannot vet or select Post Office personnel, and
- changes to the Post Office operating environment can occur.

The security measures associated with installed equipment will take these factors into consideration to reduce Pathway's risks to an acceptable level.

Similar considerations apply to Pathway assets at other non-Pathway sites (e.g. AP Client sites)

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#### 7.4 System Access Control

Control of access to Pathway's systems and data is in accordance with Pathway's Access Control Policy, which is based upon analysis of security and business requirements.

The Access Control Policy and associated Security Procedures specify:

- a clear definition of responsibilities for all authorised users,
- specification of roles and responsibilities for all types of system usage,
- control of access to all Pathway systems components,
- control of access to all data within the Pathway systems,
- control of access to all stored information and documentation,
- control of access to database facilities and tools,
- control of access to applications running on servers and workstations,
- control of access to the network and network management systems,
- procedures for allocation of access rights to IT systems,
- management, assignment and revocation of privileges,
- identification and authentication of human and system "users", and
- password management, including password generation and expiry.

Accountability of individuals is essential and segregation of duties is enforced where appropriate.

Wherever authorisation is given orally, normally over a telephone link, additional verification methods must be used.

### 7.5 Cryptography

Pathway complies with Government Policy with regard to the protection of Government Data. It also complies with relevant regulatory requirements and with ISO standards for the handing of cryptographic key material in accordance with agreed contractual obligations.

Where appropriate, Pathway will seek the guidance of Communications-Electronics Security Group (CESG) or follow recognised financial industry guidelines on all matters concerning cryptography. This includes:

- choice of encryption algorithms,
- strength of mechanisms,
- encryption of information stored on disks within Post Offices, and
- encryption key management (including key generation, distribution and change).

## 8.0 Administration of Security

The following subsections provide an overview of the controls required within Pathway's organisation. Pathway's Security Procedures provide further guidance, based upon the ISO17799 controls, for:

computer and network management, and

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• system development and maintenance.

#### 8.1 System and Network Management

Operational control of Pathway's services are managed by a central System Support unit responsible for system and network management.

The system privileges and access permissions required to perform management functions are considerably higher than those assigned to normal users. Pathway therefore ensures that:

- staff assigned to management functions are carefully selected,
- physical and logical access controls are clearly defined and rigorously implemented,
- individuals are not granted unnecessary privileges,
- separation of duties is achieved whenever appropriate,
- individuals are held accountable for all system changes,
- the ability to grant and modify access permission is controlled, and
- all significant system changes are recorded.

#### 8.2 Audit Management

Pathway ensures that:

- all security critical events are time stamped and recorded,
- auditable events are carefully selected to minimise overheads,
- audit trail information is protected from modification,
- audit trails include a record of all significant system changes,
- effective audit analysis reduction and analysis tools are used,
- all observed system irregularities are investigated, and
- audit trails are archived and stored for an agreed duration.

## 8.3 Systems Development and Maintenance

Pathway ensures that system security, considered at the requirements analysis stage, fully reflects the business value of the information assets involved. The analysis will consider:

- identification and authentication of human and system "users",
- control of access to information and services,
- segregation of duties,
- secure operation in degraded mode,
- incorporation and analysis of audit trails,
- data and system integrity protection,
- use of encryption to prevent unauthorised disclosure and/or modification of data, and
- system resilience, including operation in fallback mode and recovery.

All software developed by or for Pathway will be specified and implemented using proven methodologies, taking care to ensure that:

- input data validation is comprehensive and reliable,
- processing protects against errors and attacks, and

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• integrity checking is performed where appropriate.

Pathway ensures that software development activities are fully supported by procedures and standards that cover all aspects of the development process. Audits and reviews are conducted to ensure that the procedures are being applied effectively and that any supporting documentation meets approved standards. Security testing provides confirmation that the security functionality of the systems has been implemented to meet the agreed security specifications.

Assurance during development is supported by the definition of security requirements, security architecture, detailed security design, design reviews and security testing.

Design and specification changes are reviewed to ensure they do not compromise the security of the systems.

All software is subject to appropriate acceptance procedures prior to integration with other components.

#### 8.4 Malicious Software Control Policy

Pathway analyses threats associated with malicious software and, where appropriate, implements effective controls. These controls include virus prevention, virus detection and appropriate user awareness procedures.

#### 8.5 Information Exchange Control

Pathway defines, agrees and enforces (with relevant parties) procedures for the exchange of information handled electronically and by other means. The procedures used comply with legal and contractual requirements and depend upon the sensitivity of the information.

In particular, the exchange of information, with Post Office Ltd, is subject to formally agreed controls.

### 8.6 Control of Proprietary Software

Pathway uses proprietary software within the terms of the licence conditions.

Unauthorised copying of software and documentation is prohibited.

Pathway will not permit any modified or non-standard software components to be incorporated unless the modifications have been applied and validated by the normal supplier, and approved by Pathway's Security Manager.

Pathway's configuration management system will maintain an inventory of all proprietary software used by their services.

### 8.7 External Contractors and Suppliers

Pathway ensures that appropriate safeguards cover the use of external contractors and suppliers. This includes agreements with contractual terms and conditions and checks on the integrity of external contractors before any work is assigned to them.

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External personnel are not allowed access to any classified information without prior written authority from the information owner and completion of a non-disclosure agreement.

Suppliers of goods and services (including Escher and Oracle) will be subject to formal agreements in support of this security policy. Individual agreements with suppliers of standard COTS components are not required.

Evidence of the adequacy of suppliers' security procedures is sought where externally supplied goods or services are used to process critical and/or sensitive information.

## 9.0 Business Continuity

Pathway ensures that an effective business continuity plan is agreed with Horizon Security Liaison staff and implemented to reduce the risks from deliberate or accidental threats to deny access to vital services or information.

Plans are established to enable internal operations and business services to be maintained following failure or damage to vital services, facilities or information. All relevant security provisions will be maintained, even if degraded conditions are in effect.

#### 9.1 Contingency Planning

In order to minimise any disruption to the services managed by Pathway, contingency plans encompass:

- handling emergency situations,
- operating in fall-back mode, and
- recovery (or Business Resumption) to full operational status.

### 9.2 Testing Contingency Plans

All contingency plans are tested on a regular basis under representative operational conditions.

### 9.3 Subcontractor's Contingency Plans

Contingency arrangements are examined and managed to ensure that risks are minimised, wherever Pathway is dependent upon subcontractors (or third parties), for essential services or supplies.

### 10.0 Compliance

Pathway is required to comply with legislative requirements and commercial standards.

## 10.1 Compliance with Pathway's Security Policy

Compliance with the requirements defined in this Security Policy is mandatory. The policy is to be applied throughout Pathway for the secure management and operation of the services.

Periodic reviews are carried out, under the direction of Pathway's line managers, to verify that Pathway is operating in accordance with its security policy and procedures.

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Pathway's Audit function (see section 5) provides the essential monitoring activities needed to provide senior management with visibility that Pathway is operating in accordance with this policy.

#### 10.2 Compliance with Legislative Requirements

Pathway will ensure compliance with all legislative requirements, including the:

- Data Protection Act (1998),
- Regulation of Investigatory Powers Act (2000)
- Computer Misuse Act (1990), and
- Copyright, Designs and Patents Act (1988).

All applications handling personal data on individuals will comply with data protection legislation and principles. Pathway shall process personal data only in accordance with the instructions of each Data Controller as set out in the Codified Agreement and applicable provisions of the Service Definition Schedules dealing with such processing.

The security features, capabilities and related procedures provided in respect of the NBS will be compliant with the requirements of Part 3 of the Regulation of Investigatory Powers Act 2000.

Under the Computer Misuse Act, it is an offence to access or modify material without proper authority, or to access material with intent to commit further offences. Warning notices to this effect will be displayed to potential users prior to system log-on.

Pathway will protect against unauthorised copying of documentation and software.

In addition to the Acts identified above, Pathway will comply with appropriate sections of PACE, Post Office and Telegraph Acts, Official Secrets Act 1989, Companies Act and relevant EU Directives.

### 10.3 Compliance with ISO17799

The controls defined in ISO17799 are designed to provide a sound baseline for commercial organisations of many types.

Pathway will apply ISO17799 to provide a baseline definition for information security encompassing the ten categories of controls. This security policy document considers each of the categories, as indicated in Table 1, and outlines the requirements in the Pathway context.

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ISO17799 Section	Category of Controls	Security Policy Section
1	Security Policy	All
2	Organisational Security	4 (and 5)
3	Asset classification and control	7.1 and 7.2
4	Personnel security	6
5	Physical and environmental security	7.3
6	Communications and operational management	8.1
7	Access control	7.4
8	Systems development and maintenance	8.3
9	Business continuity planning	9
10	Compliance	10

**Table 1** ISO17799 Control Categories

Pathway's Security Procedures will provide further guidance, based upon the ISO17799 Code of Practice.