



IMPACT PROGRAMME: POL FS TO NS&I

APPLICATION INTERFACE SPECIFICATION





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1. Change Control

1.1 Change Process

Any changes to the draft version of this document will be made, controlled and distributed by:

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1.2 Change History

Issue	Author	Date	History
0.1 (draft)	Steve Greenaway	14 th October 2004	Initial draft of document

Table 1 Change History





2. Introduction

2.1 Purpose

The purpose of this document is to define the Transaction Value Summaries interface (including any delayed data) required from the POL Finance System (POLFS) to the National Savings and Investments (NS&I). This interface handles the transfer of information from POLFS for subsequent upload to the NS&I.

2.2 Scope

The scope of this document is restricted to electronic data, which is both computer-generated and computer-consumed and relates specifically to the transfer of data from the POL Finance System to the National Savings and Investments.

The specification describes the format and volumes of the data files to be passed across the interface. The data to be interfaced will be described and backed up with diagrams and appendices when thought necessary. The structure of the interface in terms of file and record layouts is also given.

This document, once signed off, will be subject to change control procedures.

2.3 Background

With release S80 of the POL Impact Programme the existing POL to National Savings & Investments interfaces will become redundant. The interfaces proposed within this document are intended to replace the following existing interfaces.

- Transaction Value Summaries
- Late Cash Accounts
- Cash Account Adjustments

A single interface is proposed to replace the Transaction Value Summaries and to include any delayed data in the same file. Cash Account Adjustments (the result of error notices) cannot easily be replicated, so it is proposed that any requirements in this area are met by reporting transaction correction data out of POLFS.

Currently, National Savings & Investments receive the information on a weekly basis from POL in a flat file format. The existing interfaces will become redundant with the next release of the Impact Programme. Therefore, a new interface is required to obtain the information from POLFS.

The required data will be extracted daily from POLFS in a flat file format and will be placed onto a UNIX directory from where it will be interfaced into NS&I via FTP.

The file will contain information for the following National Savings & Investments products:

- Deposits
- Withdrawals





2.4 Terms & Abbreviations

Term or Abbreviation	Meaning
AIS	Application Interface Specification
EAI	Enterprise Application Integration
FAD	Financial Accounting Description – a code which identifies the PO branch
FTP	File Transfer Protocol
IMPACT	Improved Accounting programme, a PO Ltd initiative to rationalise back-end systems and processes.
NS&I	National Savings and Investments
POL	Post Office Limited
POLFS	POL Finance System
SAP R/3	SAP applications, built around their latest R/3 system, provide the capability to manage financial, asset, and cost accounting, production operations and materials, personnel, plants, and archived documents.
TBD	To be determined

Table 2 Terms and Abbreviations

2.5 Reference Documentation

Ref	Title	Version	Date
Α	PO Ltd Financial Systems Release 3 Conceptual Design	1.0	01/06/2004

Table 3 Reference Documentation

2.6 Contacts

Organisation	Name	Contact
Xansa	Nigel Stone	GRO
Xansa	Philip Godden	GRO

Table 4 Contacts and Contributors





2.7 Audience

- PO Ltd IMPACT Programme Design Authority and Test Team
- Prism Alliance

3. Interface Details

The following data for the required National Savings and Investments products should be extracted from POLFS.

- Trading Date
- Office
- Product
- Volume
- Value

The extracted data should then be transformed into the format required by the National Savings and Investments.

3.1 Interface Diagram

The diagram shows the high level systems infrastructure involved with the interface.

The extracted data is initially dropped onto the POLFS server and an automated FTP pulls it across to the EAI space whereby the data is transformed and sent onwards to NS&I.

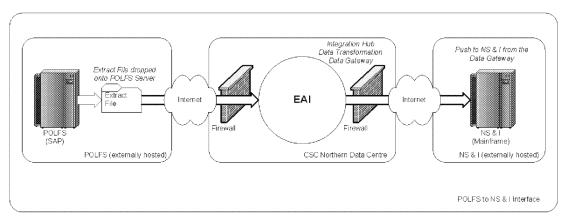


Figure 1 Interface Diagram





3.2 Data Flow

The following schematic illustrates the data flow from POLFS to National Savings and Investments.

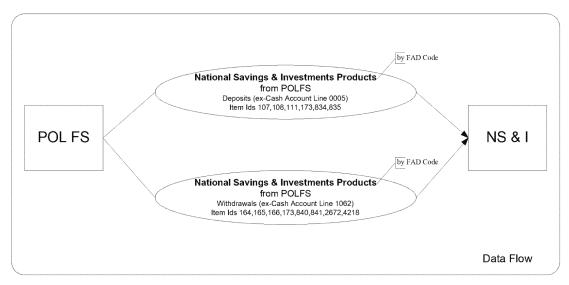


Figure 2 Data Flow Diagram





3.3 POLFS to NS&I Product Mapping

The following table identifies the POLFS source of data mapped to the National Savings and Investments products.

POLFS Item Id	POLFS Item Description	Ex-Cash Account Line	NS&I Product Description
107	NS & I Ord Acct Dep	0005	Deposits
108	NS & I Invest Acct Dep	0005	Deposits
111	NS & I Error Notice Dep	0005	Deposits
173	NS & I Error Notice Dep	0005	Deposits
834	NS & I Ord Acct Intl Dep	0005	Deposits
835	NS & I Invst Ac Intl Dep	0005	Deposits
164	NS & I Ord Acct Wdl	1062	Withdrawals
165	NS & I Reg Cust Wdl	1062	Withdrawals
166	NS & I Invest Acct Wdl	1062	Withdrawals
173	NS & I Error Notice Wdl	1062	Withdrawals
840	NS & I Oth Cash Warrant	1062	Withdrawals
841	NS Oth Crossed Warrants	1062	Withdrawals
2672	NS & I Ord Acct Spl Wdl	1062	Withdrawals
4218	NS & I Ord Wdl GT£100	1062	Withdrawals

Table 5 POLFS to NS&I Product Mapping

3.4 Data Overview

The interface files will be in flat file format. All data will be transferred in one or more files and each file has a header record, data records and a trailer record.

3.4.1 Transaction Summaries

It is proposed that each transmission consists of a single header record, zero or more detail records, and a single trailer record. A file will always be produced, with a header and trailer record, even if there are no detail records.

The interface file will contain the following:

3.4.1.1 Header Record

Header Office	Header Date	Header Input Code	Header Week No	Filler

3.4.1.2 Detail Record(s)

Office Code	Date	Input Code	Week Number	Deposits	Withdrawals	Postmaster Indicator	Ĺ
Office Code	Date	mpar code	VV CCR TYGITIDGI	Deposito	VVIIIIGIAVAIS	1 ostinastei maioatoi	Ĺ
	1	1			l		ı





3.4.1.3 Trailer Record

PIVOT Region	Office Control	Date	Input Code	Office Count	Deposits	Withdrawals

3.4.1.4 Delimiters

Fields will be fixed length.

If a Character field is empty it will be populated by spaces.

If a Numeric field is empty it will be populated by zeros.

Each line will be ended with the character return of ASCII 10.

3.4.2 Data Types

The format of each of the data types is defined below.

The character set used is ASCII.

Туре	Size & Description
P(n)	Packed decimal of n bytes.
9(n)	A numeric integer with a total of n ASCII digits (this is not binary).
X(n)	An Alphanumeric of n bytes.
V	Explicit decimal point.
A(n)	An Alpha of n bytes.





3.5 File Structure Overview

3.5.1 Transaction Summaries

The file structure for the interface file is illustrated below.

Note: This is the current interface file format and may change.

00000000020244444444444444444444444444	Normal EBCDIC character representation. Hex vertical i.e. the two digits making up the hex representation of each EBCDIC character are directly under that character.
b@.%	
b@.%b.*%. 0002078706020008250000760 010C902C1C2C00621C00357CC	
b@.%	Normal EBCDIC character representation Hex vertical i.e. the two digits making up the hex representation of each EBCDIC character are directly under that character.
b@.%b.*%. 0002078706020008250000760 010C902C1C2C00621C00357CC	
@.øb@.%ÂræÎ& 0417078706020006990007500	
102C902C1C2C00129C00060CC	•
.æYYï&mø%ÉËÀ. 09EE000001072025976017760 1C88000C2C17C06040C04134C	Normal EBCDIC character representation Hex vertical i.e. the two digits making up the hex representation of each EBCDIC character are directly under that character
øb@.% 000107870602000000000000 210C902C1C2C00000C00000CC	





3.6 File Format

POLFS will provide a single original file per week (so the number reference will be 001). However, if subsequent files are sent on the same day then the number will increase sequentially. The weekly feed may include transactions that are in error – these will be corrected through the new transaction corrections process. The corrected transaction will have the week when it was actually transacted – there will be no reference to the original transaction.

POLFS will provide flat fixed length files.

All fields are fixed and will include leading zeroes where necessary.

All values are positive (no signs).

3.6.1 Transaction Summaries File Format

It is proposed that each transmission consists of a single header record, zero or more detail records, and a single trailer record. A file will always be produced, with a header and trailer record, even if there are no detail records.

3.6.2 Transaction Summaries File Name

The transfer filename structure is based upon the following details.

Note: Awaiting clarification of requirements.

File Type (Logical Name)	File Name
TBD	TBD

3.6.3 Transaction Summaries Header Record File Format

The format of the header record is specified as follows:

Note: This is the current interface file format and may change.

Field name	Description	Format	Comments, Value
Header Office		P(4)	Value = Zeroes
Header Date		P(4)	Value = Zeroes
Header Input Code		P(2)	Value = 2
Header Weekno	The processing week number	P(2)	Processing week number
Filler	Space filler	X(13)	Value = Spaces





3.6.4 Transaction Summaries Detail Record File Format

The format of the header record is specified as follows:

Note: This is the current interface file format and may change.

Field name	Description	Format	Comments
Office Code	The Office to which the values relate	P(4)	Office FAD code (no check digit)
Date	Week end date as defined by the POL calendars	P(4)	Week end date (YYMMDD)
Input Code		P(2)	Value = 16
Week Number		P(2)	The week number to which the details relate
Deposits	Value of the deposits	P(6)	Value of deposits (2 decimal places)
Withdrawals	Value of the withdrawals	P(6)	Value of withdrawals (2 decimal places)
Postmaster Indicator		P(1)	Value = 0 (Zero)

3.6.5 Transaction Summaries Trailer Record File Format

The trailer record is produced on break of PIVOT region.

The format of the header record is specified as follows:

Note: This is the current interface file format and may change.

Field name	Description	Format	Comments
PIVOT Region		P(2)	1st character of Office, followed by '9'
Office Control		X(2)	Value = YY
Date		P(4)	Value = Zeroes
Input Code		P(2)	Value = 21
Office Count		P(3)	Number of Offices output
Deposits	Total value of deposits	P(6)	Total value of deposits
			(2 decimal places)
Withdrawals	Total value of withdrawals	P(6)	Total value of withdrawals
			(2 decimal places)





3.7 File Types

- All fields are mandatory unless otherwise stated.
- · Records should be sorted as follows
 - Detail records in Branch Identifier order

3.8 Delivery Details

The proposed file transmission window is advised as follows:

Note: Awaiting clarification of requirements.

3.9 Volumes Anticipated

POLFS will supply an interface file per week.

Based upon sizes of the current interfaces from CBDB, the total number of records will be approximately 16,000 records.

3.10 Interface Availability

The interface will be provided on a weekly basis, overnight. The file is expected each week and all files should be received by National Savings & Investments by the specified time.

Note: Awaiting clarification of requirements.

3.11 File Transfer

Note: Awaiting clarification of requirements.

Acknowledgement processing in line with the current file transmissions should also be used.

3.12 Fallback & Exception Processing

To be agreed with National Savings & Investments.

In the event of a file being detected but upload or processing fails, an error is also logged and an alert should be raised through systems management. It is assumed that any faults will be resolved in accordance with agreed service level agreements.

File generation is the responsibility of POLFS.

Standard Error Messaging will also be used.





3.13 Interface Security

To be agreed with National Savings & Investments.

3.14 Extract Rules

3.14.1 Data Validation

The following main data validation rules should be used.

Header Data:

Awaiting clarification of requirements

Detail Records:

Awaiting clarification of requirements

Trailer Data:

Awaiting clarification of requirements

3.14.2 Transmission Validation

There should be a file sent per transmission and the file is expected each week.

3.15 Load Rules

Awaiting clarification of requirements.

3.16 Issues

Issue no.	Issue description	Action	Owner
001	Clarification of requirements	Awaiting details	National Savings & Investments