



Data formats for Interchange

Pay.UK Standard October 2018

Copyright

Copyright in this document lies with NPSO LIMITED. Without the express written permission of the Pay.UK Limited **must not** be:

- 1) altered or amended in any way;
- 2) copied or reproduced in whole or in part in paper form, electronically or otherwise (other than as is reasonably necessary for the application of this standard by the purchaser);
- 3) re-sold in whole or in part.

Copies of this standard are available **exclusively** from:

Industry Standards
Pay.UK Limited
2 Thomas More Square
London E1W 1YN

Telephone: +44 (0)20 3217 8319
E-mail: standards@wearepay.uk

Background Information

This Standard was developed in order to accommodate, within a single document, the range of data record formats available to banks and their customers. It is designed to be used in conjunction with Standard 27 'Interchange using Magnetic Media'.

Other forms of electronic data transfer, including transmission, are acceptable options for Standard 29. Recognising that there are a large number of options these are not specifically covered within this Standard and should be agreed between individual interchange parties.

Scope

This Standard specifies application formats for data being sent:

via BACS Ltd (see Part 1)

from Banks to their Customers (see Part 2)

from one Bank to another (see Part 3)

between Credit Card Companies and Retailers/Banks (see Part 4)

The data record formats are independent of magnetic media and can be used, if required, for interchange using data communications.

Label variables relating to particular applications are highlighted. The label standards themselves are specified in Standard 27.

The permitted range of magnetic media to be exchanged within particular application areas must be by prior agreement between interchange parties.

A standard is a facility not a service. Publication of a Standard should not be taken to imply its actual availability. Where a service is provided for which a Standard has been issued, it can normally be expected to conform to the Standard.

Guide to Usage

This Standard should be used in conjunction with Standard 27. It is structured to allow information relevant to a particular application to be extracted as required. Each page indicates whether the content is of general interest or specifically concerned with a particular interface area.

Contents

| | |
|---|-----------|
| 1. FILES SENT VIA BACS | 5 |
| 2. FILES SENT FROM BANKS TO THEIR CUSTOMERS | 6 |
| 2.1 Statement and Reconciliation Entries | 6 |
| 2.1.1 Transaction Codes | 6 |
| 2.1.2 Data Record Format | 6 |
| 2.2 File Structure Integrity | 7 |
| 2.3 Label Variables | 9 |
| 2.3.1 Label Variables - Magnetic Tape and Magnetic Cartridge | 9 |
| 2.3.2 Label Variables - 90mm (3.5 in) Diskette | 11 |
| 2.4 ATM Card Warning Files | 12 |
| 2.4.1 Data Record Format | 12 |
| 2.5 Label Variables (Magnetic Tape and Magnetic Cartridge) | 13 |
| 2.5.1 Introduction | 13 |
| 2.5.2 Volume Header Label (VOL1) | 13 |
| 2.5.3 3.1 | 13 |
| 3. FILES SENT FROM ONE BANK TO ANOTHER | 16 |
| 3.1 Debit Clearing Items | 16 |
| 3.1.1 Transaction Codes | 16 |
| 3.1.2 Data Record Format | 16 |
| 3.1.3 Label Variables (Magnetic Tape and Magnetic Cartridge) | 17 |
| 3.2 Credit Clearing Items | 19 |
| 3.2.1 Volume Header Label (VOL1) | 19 |
| 3.2.2 First File Header Label (Hdr1) | 19 |
| 3.2.3 Second File Header Label (HDR2) | 20 |
| 3.2.4 User Header Label (UHL1) | 20 |
| 3.2.5 First End Of File/Volume Label (EOF1/EOV1) | 21 |
| 3.2.6 Second End Of File/Volume Label (EOF2/EOV2) | 21 |
| 3.2.7 User Trailer Label (UTL1) | 21 |
| 3.2.8 Data Record | 22 |
| 3.2.9 Item Identification | 22 |
| 3.3 ATM Card Warning Files | 23 |
| 3.3.1 Data Record Format | 23 |
| 4. FILES EXCHANGED BETWEEN CARD COMPANIES AND RETAILERS/BANKS | 24 |
| APPENDICES | |
| A.1 FLEXIBLE FILE FORMAT (CREDIT CARD COMPANIES AND RETAILERS/BANKS) | 23 |
| B.1 KEY TO DATA FORMATS | 24 |
| C.1 NORMATIVE REFERENCES | 25 |

1. Files sent via BACS

BACS provides a service for interchange of payment information recorded on a variety of magnetic media. Interchange via BACS may be:

from customers to banks and credit card companies;

between banks;

between credit card companies and banks.

Standard 18 - BACS Interchange Standards provides a current definition of:

the record validation performed by BACS for files submitted by banks and their customers;

the records output to the banks by BACS.

BACS also publishes User Manuals which specify, for each interchange medium:

physical requirements and file structures (based on Standard 27);

data formats.

Facilities are also available for delivery of files to BACS via data transmission.

2. Files sent from Banks to their Customers

2.1 Statement and Reconciliation Entries

Bank customers may wish to receive details in automated form of entries, both credits and debits, passing through their account. Where such facilities are offered by banks, then this Standard specifies the detailed data record and those label requirements which are application variable. This is for the benefit of customers seeking technical consistency between the services of different banks.

Standard specifications (data records and label variations) for non-financial data (transfer of ATM card warning lists) are also available.

2.1.1 Transaction Codes

Transaction codes are used to identify various types of debit and credit entries. Customers can obtain a definitive list of available codes from their banks.

2.1.2 Data Record Format

| FIELD | | | | FIELD NAME AND CONTENTS |
|-------|------|-------|------|--|
| No | Size | Pos'n | Type | |
| 1 | 6 | 0 | N | DESTINATION BRANCH SORTING CODE |
| 2 | 8R | +6 | N | DESTINATION ACCOUNT NUMBER |
| 3 | 1 | +14 | N | TYPE OF ACCOUNT - Normally zero filled. Some banks may replace the zero with an alternative numeric character where the recipient's account is other than a current account. |
| 4 | 2 | +15 | N | TRANSACTION CODE |
| 5 | 6 | +17 | N | ORIGINATOR'S SORTING CODE - If not used must be zero filled. |
| 6 | 8R | +23 | N | ORIGINATOR'S ACCOUNT NO. - If not used must be zero filled. |
| 7 | 4 | +31 | N | The originator may use this field to quote a unique numeric reference, otherwise must be zero filled. |
| 8 | 11R | +35 | N | AMOUNT - Amount of payment (unsigned) in the lowest denomination of the currency involved. |
| 9 | | | | NARRATIVE - (see Note 1) |
| 9.1 | 18 | +46 | A | ORIGINATOR'S NAME/TRANSACTION DESCRIPTION - If not used must be space filled. |
| 9.2 | 18 | +64 | A | REFERENCE (see Note 2) - Where applicable, characters 64 - 69 will contain the item serial number (see Note 3). If not used must be space filled. |
| 9.3 | 18 | +82 | A | BENEFICIARY NAME - If not used must be space filled. |
| 10 | 6 | +100 | A | DATE - Format bYYDDD - Date entry applied. |

Note 1: When this data record is used to advise agencies of credits, the format of Field 9 shall be as agreed between the exchanging parties.

Note 2: This field may contain either the reference of the originator or the reference of the recipient (account to be credited or debited) or both. Where both references are quoted, the recipient's reference should be placed in the left most positions in the field

with the originator's reference in the rightmost positions divided by the symbol ampersand. Whenever the recipient's reference is quoted this reference should be restricted to alpha-numeric characters.

Note 3: Full narrative is available from transactions received via BACS. Only the cheque serial number is available from paid cheques. Encoded credits show what is available in the encoded reference field.

2.2 File Structure Integrity

A financial integrity check is used to validate a submission file.

Financial integrity is achieved by a hierarchical structure (see diagram overleaf).

Each transaction record contains the details of one transaction (i.e. a debit or credit).

A file contains:

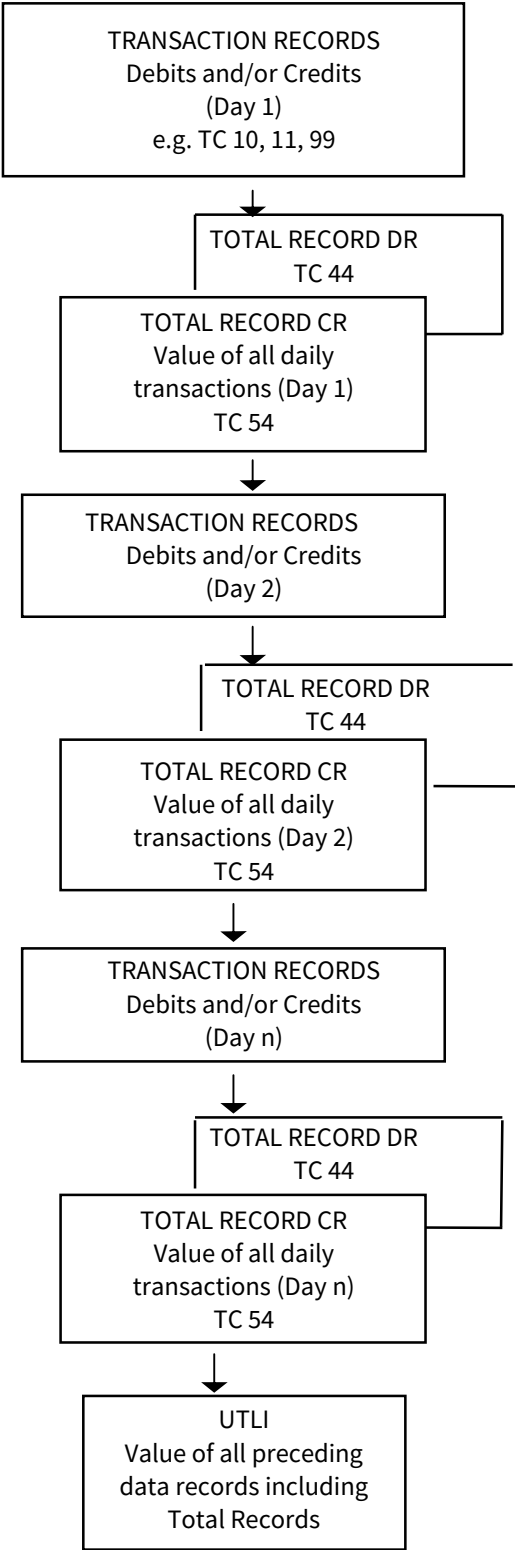
- Mixed debit and credit transaction records in date order, within account.
- Control total record (transaction codes 44 and 54) at change of day, indicating the value of all daily debit and credit transactions.

If a customer has more than one account, then each account is to be treated as a separate file.

Irrespective of the type of records present on the file, both debit and credit total records must be present.

The number and value of all data records, including Totals Records, appearing on the file sent to customers are shown separately within the audit fields of the User Trailer Label.

Financial Integrity
File/Account A



Note: This unit of financial integrity will be repeated for each account.

2.3 Label Variables

2.3.1 Label Variables - Magnetic Tape and Magnetic Cartridge

2.3.2 Introduction

This section should be read in conjunction with the label standards specified in Standard 27. The label variables highlighted in this Standard describe only the label fields in Standard 27 marked 'Application Variable'.

2.3.2.1 Volume Header Label (VOL1)

| FIELD | | | FIELD NAME AND CONTENTS |
|-------|------|-------|---|
| No | Size | Pos'n | |
| 6 | | | OWNER IDENTIFICATION |
| 6.1 | 4 | +37 | LABEL STANDARD VERSION - 1 |
| | | | - Space filled |
| | | | LABEL STANDARD VERSION - 3 |
| | | | - Any alpha numeric character other than space. |
| 6.2 | 6 | +41 | SORTING CODE OF THE ORIGINATING BANK |
| 6.3 | 4 | +47 | Reserved for future use (space filled). |

2.3.2.2 File Header Label (HDR1)

| FIELD | | | FIELD NAME AND CONTENTS |
|-------|------|-------|--|
| No | Size | Pos'n | |
| 3 | | | FILE IDENTIFIER |
| 3.1 | 7 | +4 | SORTING CODE - "A" followed by the Sorting Code of originating bank or a unique number identifying this file as agreed between the interchange parties. (In a Single-Volume File or Multi-Volume File same as positions 41-46 in Volume Header Label). |
| 3.2 | 1 | +11 | RECORD TYPE IDENTIFIER - Z = Statement and Reconciliation entries. |
| 3.3 | 2 | +12 | VERSION NUMBER OF STANDARD - Currently space filled. |
| 3.4 | 1 | +14 | FILE SERIAL NUMBER - Single-Volume File or Multi-Volume File: space filled or as specified below. - Single-Volume Multi-File or Multi-Volume Multi-File: file serial number (1-9) of the exchanging party whose data records follow this Header label. It must be incremented by 1 for each file from the SAME exchanging party within a Single-Volume Multi-File or Multi-Volume Multi-File. All files from the SAME exchanging party will have identical contents in the Sorting Code field (field 3.1) |
| 3.5 | 6 | +15 | OWNER IDENTIFICATION - Single-Volume File or Multi-Volume File: space filled or as specified below: - Single-Volume Multi-File or Multi-Volume Multi-File same as Owner Identification (41-46) in the Volume Header Label. |
| 9 | 6 | +41 | CREATION DATE - bYYDDD As the data records following are for advice only, this date must be greater than, or equal to, the Processing Date in User Header Label Field 3. |

| FIELD | | | FIELD NAME AND CONTENTS |
|-------|------|-------|---|
| No | Size | Pos'n | |
| 10 | 6 | +47 | EXPIRATION DATE - bYYDDD Earliest date at which tape may be overwritten, to be decided by the recording party. Must be greater than the Processing Date in User Header Label field 3. A file is regarded as 'expired' on a day whose date is equal to or greater than the date given in this field. In this case the remainder of the volume may be overwritten. To be effective on a Single-Volume Multi-File therefore, the expiration dates of a file must be less than or equal to the expiration dates of all previous files on the volume. |

2.3.2.3 *Second File Header Label (HDR2)*

| FIELD | | | FIELD NAME AND CONTENTS |
|-------|------|-------|-------------------------|
| No | Size | Pos'n | |
| 3 | 1 | +4 | RECORD FORMAT - F |
| 5 | 5 | 10 | RECORD LENGTH - 00106 |

2.3.2.4 *User Header Label (UHL1)*

| FIELD | | | FIELD NAME AND CONTENTS |
|-------|------|-------|---|
| No | Size | Pos'n | |
| 4 | | | IDENTIFYING NUMBER OF RECEIVING PARTY |
| 4.1 | 6 | +10 | Sorting Code of the receiving bank or a unique number identifying the receiving party, as agreed between interchange parties. |
| 4.2 | 4 | +16 | Reserved for future use (space filled). |

2.3.2.5 *User Trailer Label (UTL1)*

| FIELD | | | FIELD NAME AND CONTENTS |
|-------|------|-------|---|
| No | Size | Pos'n | |
| 3 | | | AUDIT TOTALS |
| 3.1 | 13R | +4 | MONETARY TOTAL OF DEBIT ITEMS - Must contain the monetary total of all debit data record amounts including totals since the preceding HDR Label Group. (In pence [unsigned], or in the lowest denomination of the currency involved.) |
| 3.2 | 13R | +17 | MONETARY TOTAL OF CREDIT ITEMS - Must contain the monetary total of all credit data record amounts including totals since the preceding HDR Label Group. (In pence [unsigned], or in the lowest denomination of the currency involved.) |
| 3.3 | 7R | +30 | COUNT OF DEBIT ITEMS - Must contain the count of all debit data records including totals since the preceding HDR Label Group. |
| 3.4 | 7R | +37 | COUNT OF CREDIT ITEMS - Must contain the count of all credit data records including totals since the preceding HDR Label Group. |
| 3.5 | 10 | +44 | Reserved for future standardisation (space filled). |
| 3.6 | 26 | +54 | Use of recording party. May contain any valid characters in the coded character set at the option of the recording party. If not used must be space filled. |

2.3.3 Label Variables - 90mm (3.5 in) Diskette

2.3.3.1 Introduction

This section should be read in conjunction with the label standards specification in Standard 27. The label variables highlighted in this Standard describe only the label fields in Standard 27 marked 'Application Variable'.

2.3.3.2 Volume Header Label (VOL1)

| FIELD | | | FIELD NAME AND CONTENTS |
|-------|------|-------|---|
| No | Size | Pos'n | |
| 6 | | | OWNER IDENTIFICATION |
| 6.1 | 4 | +37 | Any alpha numeric characters. Must not be space filled. |
| 6.2 | 6 | +41 | SORTING CODE OF THE ORIGINATING BANK |
| 6.3 | 4 | +47 | Reserved for future use (space filled). |

2.3.3.3 File Header Label (HDR1)

| FIELD | | | FIELD NAME AND CONTENTS |
|-------|------|-------|--|
| No | Size | Pos'n | |
| 4 | | | FILE IDENTIFIER |
| 4.1 | 7 | +5 | SORTING CODE - "A" followed by the Sorting Code of originating bank or a unique number identifying this file as agreed between the interchange parties. (In a Single Volume File or Multi-Volume File same as positions 41-46 in Volume Header Label). |
| 4.2 | 1 | +12 | RECORD TYPE IDENTIFIER - Z = Statement and Reconciliation entries. |
| 4.3 | 2 | +13 | VERSION NUMBER OF STANDARD - Currently space filled. |
| 4.4 | 1 | +15 | FILE SERIAL NUMBER <ul style="list-style-type: none"> - Single-Volume File or Multi-Volume File: space filled or as specified below. - Single-Volume Multi-File or Multi-Volume Multi-File: file serial number (1-9) of the exchanging party whose data records follow this Header Label. It must be incremented by 1 for each file from the SAME exchanging party within a Single-Volume Multi-File or Multi-Volume Multi-File. All files from the same exchanging party will have identical contents in the Sorting Code field (field 4.1). |
| 4.5 | 6 | +16 | OWNER IDENTIFICATION <ul style="list-style-type: none"> - Single-Volume File: space filled - Single-Volume Multi-File same as Owner Identification (41-46) in the Volume Header Label. |
| 10 | 1 | +39 | RECORD FORMAT - F |
| 17 | 6 | 47 | CREATION DATE - bYYDDD As the data records following are for advice only, this date must be greater than, or equal to, the Processing Date in User Header Label Field 3. |
| 18 | 4 | 53 | RECORD LENGTH - 0106 |

| FIELD | | | FIELD NAME AND CONTENTS |
|-------|------|-------|--|
| No | Size | Pos'n | |
| 23 | 6 | 66 | EXPIRATION DATE - bYYDDD Earliest date at which diskette may be overwritten, to be decided by the recording party. Must be greater than the Processing Date in User Header Label Field 3. A file is regarded as 'expired' on a day whose date is equal to or greater than the date given in this field. To be effective on a Single Multi-Volume File therefore, the expiration dates of a file must be less than or equal to the expiration dates of all previous files on the volume. |

2.3.3.4 User Header Label (UHL1)

| FIELD | | | FIELD NAME AND CONTENTS |
|-------|------|-------|---|
| No | Size | Pos'n | |
| 4 | | | IDENTIFYING NUMBER OF RECEIVING PARTY |
| 4.1 | 6 | +10 | Sorting Code of the receiving bank or a unique number identifying the receiving party, as agreed between interchange parties. |
| 4.2 | 4 | +16 | Reserved for future use (space filled). |

2.3.3.5 User Trailer Label (UTL1)

| FIELD | | | FIELD NAME AND CONTENTS |
|-------|------|-------|---|
| No | Size | Pos'n | |
| 3 | | | AUDIT TOTALS |
| 3.1 | 13R | +4 | MONETARY TOTAL OF DEBIT ITEMS - Must contain the monetary total of all debit data record amounts. (In pence [unsigned], or in the lowest denomination of the currency involved.) |
| 3.2 | 13R | +17 | MONETARY TOTAL OF CREDIT ITEMS - Must contain the monetary total of <u>all</u> credit data record amounts. (In pence [unsigned], or in the lowest denomination of the currency involved.) |
| 3.3 | 7R | +30 | COUNT OF DEBIT ITEMS - Must contain the count of all debit data records. |
| 3.4 | 7R | +37 | COUNT OF CREDIT ITEMS - Must contain the count of <u>all</u> credit data records. |
| 3.5 | 10 | +44 | Reserved for future standardisation; space filled. |
| 3.6 | 26 | +54 | Use of recording party. May contain any valid characters in the coded character set at the option of the recording party. If not used must be space filled. |

2.4 ATM Card Warning Files

2.4.1 Data Record Format

| FIELD | | | | FIELD NAME AND CONTENTS |
|-------|------|-------|------|---------------------------------|
| No | Size | Pos'n | Type | |
| 1 | 19R | 0 | N | CARDHOLDER NO. - TO BE FULL PAN |
| 2 | 2 | 19 | A | TRANSACTION CODE - F7 |

| FIELD | | | | FIELD NAME AND CONTENTS |
|-------|------|-------|------|--|
| No | Size | Pos'n | Type | |
| 3 | 2 | 21 | N | FILE UPDATE CODE (see ISO 8583) 01 = Add record 02 = Amend record 03 = Delete record 08 = Delete file (Cardholder number all zeros.) |
| 4 | 7 | 23 | N | SEQUENCE NUMBER (commencing 1) of this record within the file. |
| 5 | 3 | 30 | A | CARD SEQUENCE NUMBER - If not used space filled. A number distinguishing between separate cards with the same Primary Account Number. |
| 6 | 4 | 33 | N | CARD EXPIRY DATE (YYMM) |
| 7 | 1 | 37 | A | CARD TYPE (as defined by the issuer) - If not used space filled. |
| 8 | 2 | 38 | A | UPDATE TYPE (see ISO 8583) 04 = Pick up card 05 = Decline transaction |

2.5 Label Variables (Magnetic Tape and Magnetic Cartridge)

2.5.1 Introduction

This section should be read in conjunction with the label standards specified in Standard 27. The label variables highlighted in this Standard describe only the label fields in Standard 27 marked 'Application Variable'.

2.5.2 Volume Header Label (VOL1)

| FIELD | | | FIELD NAME AND CONTENTS |
|-------|------|-------|--|
| No | Size | Pos'n | |
| 6 | | | OWNER IDENTIFICATION |
| 6.1 | 4 | +37 | LABEL STANDARD VERSION - 3 |
| 6.2 | 6 | +41 | - Any alpha numeric character other than space. |
| 6.3 | 4 | +47 | SORTING CODE OF THE ORIGINATING BANK - Reserved for future use (space filled). |

2.5.2.1 First File Header Label (HDR1)

| FIELD | | | FIELD NAME AND CONTENTS |
|-------|------|-------|---|
| No | Size | Pos'n | |
| 3 | | | FILE IDENTIFIER |
| 2.5.3 | 7 | +4 | SORTING CODE - "A" followed by the Sorting Code of originating bank or a unique number identifying this file, as agreed between the interchange parties. (In a Single-Volume File or Multi-Volume File same as positions 41-46 in Volume Header Label). |
| 3.2 | 1 | +11 | RECORD TYPE IDENTIFIER - F = Warning items. |
| 3.3 | 2 | +12 | VERSION NUMBER OF STANDARD - Currently space filled. |

| FIELD | | | FIELD NAME AND CONTENTS |
|-------|------|-------|---|
| No | Size | Pos'n | |
| 3.4 | 1 | +14 | - Single-Volume File or Multi-Volume File; space filled or as specified below: - Single-Volume Multi-File or Multi-Volume Multi-File: file serial number (1-9) of the exchanging party whose data records follow this Header Label. It must be incremented by 1 for each file from the SAME exchanging party within a Single-Volume Multi-File or Multi-Volume Multi-File. All files from the SAME exchanging party will have identical contents in the Sorting Code field (field 3.1). |
| 3.5 | 6 | +15 | - Single-Volume File or Multi-Volume File; space filled or as specified below: - Single-Volume Multi-File or Multi-Volume Multi-File; same as Owner Identification (41-46) in the Volume Header Label. |
| 9 | 6 | +41 | CREATION DATE - bYYDDD This date must be less than or equal to the Processing Date in User Header Label Field 3. |
| 10 | 6 | +47 | EXPIRATION DATE - bYYDDD Earliest date at which tape may be overwritten, to be decided by the recording party. Must be greater than the Processing Date in User Header Label Field 3. A file is regarded as 'expired' on a day whose date is equal to or greater than the date given in this field. In this case the remainder of the volume may be overwritten. To be effective on a Single-Volume Multi-File therefore, the expiration dates of a file must be less than or equal to the expiration dates of all previous files on the volume. |

2.5.3.1 Header Label (HDR2)

| FIELD | | | FIELD NAME AND CONTENTS |
|-------|------|-------|-------------------------|
| No | Size | Pos'n | |
| 3 | 1 | +4 | RECORD FORMAT - F |
| 5 | 5 | +10 | RECORD LENGTH 00040 |

2.5.3.2 User Header Label (UHL1)

| FIELD | | | FIELD NAME AND CONTENTS |
|-------|------|-------|---|
| No | Size | Pos'n | |
| 4 | | | IDENTIFYING NUMBER OF RECEIVING PARTY |
| 4.1 | 6 | +10 | Sorting Code of the receiving bank or a unique number identifying the receiving party, as agreed between interchange parties. |
| 4.2 | 4 | +16 | Reserved for future use (space filled) |

2.5.3.3 User Trailer Label (UTL1)

| FIELD | | | FIELD NAME AND CONTENTS |
|-------|------|-------|--|
| No | Size | Pos'n | |
| 3 | | | AUDIT TOTALS |
| 3.1 | 13R | +4 | MONETARY TOTAL OF DEBIT ITEMS - Zero filled. |
| 3.2 | 13R | +17 | Reserved for future use (space filled) |
| 3.3 | 7R | +30 | COUNT OF DEBIT ITEMS - Zero filled. |
| 3.4 | 7R | +37 | Reserved for future use (space filled) |
| 3.5 | 7R | +44 | COUNT OF WARNING RECORDS |

| FIELD | | | FIELD NAME AND CONTENTS |
|-------|------|-------|---|
| No | Size | Pos'n | |
| 3.6 | 3 | +51 | Reserved for future standardisation; space filled. |
| 3.7 | 26 | +54 | Use of recording party. May contain any valid characters in the coded character set at the option of the recording party. If not used must be space filled. |

3. Files sent from One Bank to another

Data exchange between banks may be either direct, as is the case for debit clearing items, or via BACS, as is the case for claims for unpaid cheques (see Standard 10).

Contingency procedures for credit clearing are covered by bilateral agreement between Members, however, to support those Members who choose to use it a file format for credit clearing contingency files has been defined and is reproduced under Section 3.2 below.

For details of data interchange using Society for World-wide Interbank Financial Telecommunication (SWIFT) refer to the appropriate SWIFT User Handbook.

CHAPS Sterling and CHAPS Euro services are run over SWIFT services using SWIFT message formats.

3.1 Debit Clearing Items

3.1.1 Transaction Codes

For details of transaction codes refer to Standard 1 - 'Allocation of Inter-Bank Transaction Codes'.

3.1.2 Data Record Format

| FIELD | | | | FIELD NAME AND CONTENTS |
|-------|------|-------|------|--|
| No | Size | Pos'n | Type | |
| 1 | 3 | 0 | A | ITEM IDENTIFICATION - As agreed between interchange parties (see Notes 1, 2 & 3). |
| 2 | 6 | 3 | N | SERIAL NUMBER - If no serial number present on the items, must be zero filled. |
| 3 | 6 | +9 | N | SORTING CODE - For value items this is the Sorting Code of the paying branch. For control Vouchers this is the Sorting Code of the collecting party. |
| 4 | 8R | +15 | N | ACCOUNT NUMBER - Account Number of the drawer. If not present, must be zero-filled (see Note 3). |
| 5 | 2 | +23 | N | TRANSACTION CODE - (see Part 2, Section 2.1.1, page 6) (see Note 3) |
| 6 | 11R | +25 | N | AMOUNT - Amount in the lowest denomination (unsigned) of the currency involved. |

Note 1: For items arising from Payments Council Clearing Contingency operations, Field 1 will contain one of the following codes:

- ARR - Amount Readable Rejects
- REJ - All Invalid Items and Sub Total and Docket Control Vouchers
- VAL - All accepted items

Note 2: For items arising from CSCB Clearing Contingency operations, Field 1 will contain one of the following codes:

ARR - Amount Readable Rejects
VAL - All accepted items

Note 3: Field specifications for DCV data record (see over).

For Docket Control Voucher data arising from the standard DCV data exchange system, field contents will be:

Field 1 One of: COR - Correct DCV
ALT - Altered DCV
Field 4 All zeros
Field 5 49

3.1.3 Label Variables (Magnetic Tape and Magnetic Cartridge)

This section should be read in conjunction with the label standards specified in Standard 27. The label variables highlighted in this Standard describe only the label fields in Standard 27 marked 'Application Variable'.

3.1.3.1 Volume Header Label (VOL1)

| FIELD | | | FIELD NAME AND CONTENTS |
|-------|------|-------|---|
| No | Size | Pos'n | |
| 6 | | | OWNER IDENTIFICATION |
| 6.1 | 4 | +37 | LABEL STANDARD VERSION - 1 |
| | | | Reserved for future use (space filled). |
| | | | LABEL STANDARD VERSION - 3 |
| | | | - Any alpha numeric character other than space. |
| 6.2 | 6 | +41 | SORTING CODE OF THE ORIGINATING BANK |
| 6.3 | 4 | +47 | Reserved for future use (space filled). |

3.1.3.2 Header Label (HDR1)

| FIELD | | | FIELD NAME AND CONTENTS |
|-------|------|-------|--|
| No | Size | Pos'n | |
| 3 | | | FILE IDENTIFIER |
| 3.1 | 7 | +4 | SORTING CODE - "A" followed by the Sorting Code of originating bank or a unique number identifying this file as agreed between the interchange parties. (In a Single-Volume File or Multi-Volume File same as positions 41-46 in Volume Header Label). |
| 3.2 | 1 | +11 | RECORD TYPE IDENTIFIER - C = Debit clearing items for inter-bank exchange. |
| 3.3 | 2 | +12 | VERSION NUMBER OF STANDARD - Currently space filled. |

| FIELD | | | FIELD NAME AND CONTENTS |
|-------|------|-------|---|
| No | Size | Pos'n | |
| 3.4 | 1 | +14 | FILE SERIAL NUMBER - Single-Volume File or Multi-Volume File: space filled or as specified below. - Single-Volume Multi-File or Multi-Volume Multi-File: file serial number (1-9) of the exchanging party whose data records follow this Header label. It must be incremented by 1 for each file from the SAME exchanging party within a Single-Volume Multi-File or Multi-Volume Multi-File. All files from the SAME exchanging party will have identical contents in the Sorting Code field (field 3.1). |
| 3.5 | 6 | +15 | OWNER IDENTIFICATION - Single-Volume File or Multi-Volume File: space filled or as specified below: - Single-Volume Multi-File or Multi-Volume Multi-File same as Owner Identification (41-46) in the Volume Header Label. |
| 9 | 6 | +41 | CREATION DATE - bYYDDD As the data records following are value items, this date must be less than or equal to the Processing Date in User Header Label Field 3. |
| 10 | 6 | +47 | EXPIRATION DATE - bYYDDD Earliest date at which tape may be overwritten, to be decided by the recording party. Must be greater than the Processing Date in User Header Label field 3. A file is regarded as 'expired' on a day whose date is equal to or greater than the date given in this field. In this case the remainder of the volume may be overwritten. To be effective on a Single-Volume Multi-File therefore, the expiration dates of a file must be less than or equal to the expiration dates of all previous files on the volume. |

3.1.3.3 Second File Header Label (HDR2)

| FIELD | | | FIELD NAME AND CONTENTS |
|-------|------|-------|-------------------------|
| No | Size | Pos'n | |
| 3 | 1 | +4 | RECORD FORMAT - F |
| 5 | 5 | 10 | RECORD LENGTH - 00036 |

3.1.3.4 User Header Label (UHL1)

| FIELD | | | FIELD NAME AND CONTENTS |
|-------|------|-------|---|
| No | Size | Pos'n | |
| 4 | | | IDENTIFYING NUMBER OF RECEIVING PARTY |
| 4.1 | 6 | +10 | Sorting Code of the receiving bank or a unique number identifying the receiving party, as agreed between interchange parties. |
| 4.2 | 4 | +16 | Reserved for future use (space filled). |

3.1.3.5 User Trailer Label (UTL1)

| FIELD | | | FIELD NAME AND CONTENTS |
|-------|------|-------|---|
| No | Size | Pos'n | |
| 3 | | | AUDIT TOTALS |
| 3.1 | 13R | +4 | MONETARY TOTAL OF DEBIT ITEMS - Must contain the monetary total of all debit data record amounts including totals since the preceding HDR Label Group. (In pence [unsigned], or in the lowest denomination of the currency involved.) |
| 3.2 | 13R | +17 | Reserved for future use (space filled). |
| 3.3 | 7R | +30 | COUNT OF DEBITS ITEMS - Must contain the count of all debit data records including totals since the preceding HDR Label Group. |
| 3.4 | 7R | +37 | Reserved for future use (space filled). |
| 3.5 | 10 | +44 | Reserved for future standardisation; space filled. |
| 3.6 | 26 | +54 | Use of recording party. May contain any valid characters in the coded character set at the option of the recording party. If not used must be space filled. |

3.2 Credit Clearing Items

3.2.1 Volume Header Label (VOL1)

| FIELD | | | | FIELD NAME AND CONTENTS |
|-------|------|-------|------|---|
| No | Size | Pos'n | Type | |
| 1 | 3 | 0 | A | LABEL IDENTIFIER - VOL |
| 2 | 1 | 3 | N | LABEL NUMBER - 1 |
| 3 | 6 | 4 | N | VOLUME IDENTIFIER - Serial number of tape. 3 alpha + 3 numeric characters with the alpha prefix indicating the processing Bank (see Standard 8L, Appendix A). |
| 4 | 1 | 10 | A | Reserved for future use (space filled). |
| 5 | 26 | 11 | A | Reserved for future use (space filled). |
| 6 | | | | OWNER IDENTIFICATION |
| 6.1 | 4 | 37 | A | 4 'Full Stop' characters. |
| 6.2 | 6 | 41 | N | Sorting code of the Processing Bank. (See Standard 8L, Appendix D) |
| 6.3 | 4 | 47 | A | Reserved for future use (space filled). |
| 7 | 28 | 51 | A | Reserved for future use (space filled). |
| 8 | 1 | 79 | N | LABEL STANDARD VERSION - 3 |

3.2.2 First File Header Label (Hdr1)

| FIELD | | | | FIELD NAME AND CONTENTS |
|-------|------|-------|------|--|
| No | Size | Pos'n | Type | |
| 1 | 3 | 0 | A | LABEL IDENTIFIER - HDR |
| 2 | 1 | 3 | N | LABEL NUMBER - 1 |
| 3 | | | | FILE IDENTIFIER |
| 3.1 | 7 | 4 | A | Sorting code - 'A' followed by sorting code of Remitting Bank. |

| FIELD | | | | FIELD NAME AND CONTENTS |
|-------|------|-------|------|---|
| No | Size | Pos'n | Type | |
| 3.2 | 1 | 11 | A | Record type identifier - G. |
| 3.3 | 9 | 12 | A | Reserved for future use (space filled). |
| 4 | 6 | 21 | A | FILE SET IDENTIFICATION - Same as Field 3 of VOL1. |
| 5 | 4 | 27 | N | FILE SECTION NUMBER - 0001 for first volume, 0002 for second volume, etc. |
| 6 | 4 | 31 | N | FILE SEQUENCE NUMBER - 0001 for first file, 0002 for second file, etc. |
| 7 | 4 | 35 | A | GENERATION NUMBER - Numeric. If not used, must be 0001. |
| 8 | 2 | 39 | A | GENERATION NUMBER. Numeric. If not used, must be 01. |
| 9 | 6 | 41 | N | CREATION DATE - bYYDDD |
| 10 | 6 | 47 | N | EXPIRATION DATE - bYYDDD (not less than 7 days after creation) |
| 11 | 1 | 53 | A | Reserved for future use (space filled). |
| 12 | 6 | 54 | N | Reserved for future use (zero filled). |
| 13 | 13 | 60 | A | SYSTEM CODE - May contain any valid characters in the coded character set at the option of the recording party; if not used must be space filled. |
| 14 | 7 | 73 | A | Reserved for future use (space filled). |

3.2.3 Second File Header Label (HDR2)

| FIELD | | | | FIELD NAME AND CONTENTS |
|-------|------|-------|------|--|
| No | Size | Pos'n | Type | |
| 1 | 3 | 0 | A | LABEL IDENTIFIER - HDR |
| 2 | 1 | 3 | N | LABEL NUMBER - 2 |
| 3 | 1 | 4 | A | RECORD FORMAT - F |
| 4 | 5 | 5 | N | BLOCK LENGTH - 02000 |
| 5 | 5 | 10 | N | RECORD LENGTH - 00080 |
| 6 | 35 | 15 | A | Reserved for operating systems; may contain any valid characters in the coded character set, at the option of the recording party; if not used must be space filled. |
| 7 | 2 | 50 | N | Reserved for future use (zero filled). |
| 8 | 28 | 52 | A | Reserved for future use (space filled). |

3.2.4 User Header Label (UHL1)

| FIELD | | | | FIELD NAME AND CONTENTS |
|-------|------|-------|------|---|
| No | Size | Pos'n | Type | |
| 1 | 3 | 0 | A | LABEL IDENTIFIER - UHL |
| 2 | 1 | 3 | N | LABEL NUMBER - 1 |
| 3 | 6 | 4 | N | PROCESSING DATE - bYYDDD Normal presentation date (2nd day of the Clearing cycle). |
| FIELD | | | | FIELD NAME AND CONTENTS |
| No | Size | Pos'n | Type | |

| | | | | |
|-----|----|----|---|---|
| 4 | | | | IDENTIFYING NUMBER OF RECEIVING PARTY |
| 4.1 | 6 | 10 | A | Sort code of Destination Bank |
| 4.2 | 4 | 16 | A | Reserved for future use (space filled).. |
| 5 | 8 | 20 | N | Reserved for future use (zero filled). |
| 6 | 9 | 28 | A | Reserved for future use (space filled). |
| 7 | 3 | 37 | N | FILE NUMBER - 001 for first file, 002 for second file, etc. |
| 8 | 14 | 40 | A | Reserved for future use (space filled). |
| 9 | 26 | 54 | A | Use of recording party. May contain any valid characters in the coded character set excluding padding at option of the recording party. If not used must be space filled. |

3.2.5 First End Of File/Volume Label (EOF1/EOV1)

| FIELD | | | | FIELD NAME AND CONTENTS |
|---------|------|-------|------|---------------------------------------|
| No | Size | Pos'n | Type | |
| 1 | 3 | 0 | A | LABEL IDENTIFIER - EOF (or EOVS) |
| 2 | 1 | 3 | N | LABEL NUMBER - 1 |
| 3 to 11 | 50 | 4 | A/N | Same as corresponding fields in HDR1 |
| 12 | 6 | 54 | N | BLOCK COUNT |
| 13 & 14 | 20 | 60 | A | Same as corresponding fields in HDR1. |

3.2.6 Second End Of File/Volume Label (EOF2/EOV2)

| FIELD | | | | FIELD NAME AND CONTENTS |
|--------|------|-------|------|---------------------------------------|
| No | Size | Pos'n | Type | |
| 1 | | 0 | A | LABEL IDENTIFIER - EOF (or EOVS) |
| 2 | 1 | 3 | N | LABEL NUMBER - 2 |
| 3 to 8 | 76 | 4 | A/N | Same as corresponding fields in HDR2. |

3.2.7 User Trailer Label (UTL1)

| FIELD | | | | FIELD NAME AND CONTENTS |
|-------|------|-------|------|--|
| No | Size | Pos'n | Type | |
| 1 | 3 | 0 | A | LABEL IDENTIFIER - UTL |
| 2 | 1 | 3 | N | LABEL NUMBER - 1 |
| 3 | | | | AUDIT TOTALS |
| 3.1 | 13 | 4 | N | Monetary value (field 6) of items with 'VAL' or 'ARR' in first three positions of data record. |
| 3.2 | 13 | 17 | N | Monetary value (field 6) of all DCVs. |
| 3.3 | 7 | 30 | N | Count of items (all VAL + ARR + REJ). |
| 3.4 | 7 | 37 | N | Count of all Control Vouchers including both DCVs and Subtotal Vouchers. |
| FIELD | | | | FIELD NAME AND CONTENTS |
| No | Size | Pos'n | Type | |
| 3.5 | 10 | 44 | A | Reserved for future use (space filled). |

| | | | | |
|-----|----|----|---|---|
| 3.6 | 26 | 54 | A | Reserved for future use (space filled). |
|-----|----|----|---|---|

3.2.8 Data Record

| FIELD | | | | FIELD NAME AND CONTENTS |
|-------|------|-------|------|---|
| No | Size | Pos'n | Type | |
| 1 | 3 | 0 | A | ITEM IDENTIFICATION - 'VAL', 'ARR', 'REJ'. |
| 2 | 6 | 3 | N* | As agreed between interchange parties. |
| 3 | 6 | 9 | N* | SORT CODE - Destination Branch or Collection Account. |
| 4 | 8R | 15 | N* | ACCOUNT NUMBER |
| 5 | 2 | 23 | N* | TRANSACTION CODE. |
| 6 | 11R | 25 | N* | AMOUNT - Value amount of credit, DCV or Subtotal Voucher in pence unsigned. |
| 7 | 18R | 36 | A* | REFERENCE |
| 8 | 6 | 54 | N* | SORT CODE - Remitting Branch (i.e. DCV Sort code). |
| 9 | 10R | 60 | N* | SEQUENCE NUMBER - Unique number to each credit or Control Voucher. |
| 10 | 9R | 70 | N | AMOUNT DUE - Pre-encoded amount in pence unsigned. |
| 11 | 1 | 79 | A* | DDIM - (Joint Giro Credits) |

- * Individual missing or invalid characters will be replaced by asterisks. Totally absent fields will be zero for 'N' fields or blank for 'A' fields.

3.2.9 Item Identification

'VAL'

- Accepted Value Item
- Amount Field = 11 numeric digits
- Transaction code = 2 numeric digits 70-99
- Account number = 8 numeric digits
- Sort code (field 3) = 6 numeric digits.

'ARR'

- Amount Readable Reject
- Amount field = 11 numeric digits
- Transaction code = 2 numeric digits 70-99
- Sort code (field 3) = 6 numeric digits.

'REJ'

- Rejected Value item

- All other items not falling into the above categories and failing to meet an agreed acceptance criteria
- Amount field = Zero filled.

3.3 ATM Card Warning Files

3.3.1 Data Record Format

The format specified in Part 2, Section 2.4.1 shall be used.

4. Files Exchanged between Card Companies and Retailers/Banks

Data formats related to Card Companies previously published as Part 4 of Standard 29, i.e. fixed length record formats, have been removed from this standard and are now to be found in Part 8 of Standard 70-3 Card Acceptor to Acquirer Interface Standard - Messages, data elements and code values for post-event systems.

Part 8 of Standard 70-3 includes the data formats for both:

- Files sent from Retailers/Banks to Card Companies; and,

Files sent to Retailers/Banks from Card Companies

APPENDIX A

A.1 Flexible File Format (Card Companies and Retailers/Banks)

Data formats related to Card Companies previously published as Appendix A to Standard 29, i.e. variable length record formats (colloquially referred to within the industry as Standard 29B), have been removed from this standard and are now to be found in Appendix F of Standard 70-3 Card Acceptor to Acquirer Interface Standard - Messages, data elements and code values for post-event systems.

Appendix A of Standard 29 now Appendix F of Standard 70-3 contains enhancements to the fixed format formally published as Part 4 of Standard 29 (now Part 8 of Standard 70-3) and as such is an extension to the fixed length record formats NOT a replacement for it.

APPENDIX B

B.1 Key to data forms

- | | | |
|---|--|---|
| R | Right Justified | The data in this field must be right justified. If the field is numeric, insignificant leading digits must be zero filled; if it is alpha or alphanumeric, insignificant leading characters must be space filled. |
| L | Left Justified | Applies to alpha or alphanumeric fields only. The data in this field must be left justified. Insignificant trailing characters must be space filled. |
| N | Numeric (0-9) | |
| A | Alpha Character Set (as specified in Standard 27). | |

APPENDIX C

C.1 Normative References

| | |
|----------------|---|
| Standard 1 | Allocation of Inter-Bank Transaction Codes |
| Standard 10 | Standard Procedure for Handling Claims for Unpaid Cheques through BACS |
| Standard 18 | BACS Interchange Standards |
| Standard 27 | Interchange using Magnetic Media |
| ISO 8583: 1987 | Bank card originated messages - Interchange message specifications - Content for financial transactions |

