

999 Emergency File Format
Issue 2.3

Table of Contents

[1. Introduction 4](#_Toc42758155)

[2. Systems Overview. 5](#_Toc42758156)

[3. EFF Files 6](#_Toc42758157)

[3.1. High Level File Specifications 6](#_Toc42758158)

[3.2. File Records (Excluding .FCO File) 7](#_Toc42758159)

[3.3. Capitalisation within a file 7](#_Toc42758160)

[3.4. 999 data requirements 7](#_Toc42758161)

[4. Data Processing Overview 8](#_Toc42758162)

[4.1. Data Processing Flow Diagrams 8](#_Toc42758163)

[4.2. DAT File Validation 9](#_Toc42758164)

[5. Input (.DAT) File. 11](#_Toc42758165)

[5.1. DAT File Naming Convention 11](#_Toc42758166)

[5.2. DAT File Header Record Description 11](#_Toc42758167)

[5.3. DAT File Header Record Format. 12](#_Toc42758168)

[5.4. DAT File Record Description 13](#_Toc42758169)

[5.4.1 Duplicate records. 17](#_Toc42758170)

[5.4.2 Renumbers. 17](#_Toc42758171)

[5.4.2.1 CNI (Call Number Intercept) and Caller Redirect. 18](#_Toc42758172)

[5.5. DAT Record Format 19](#_Toc42758173)

[5.6. DAT File Examples. 22](#_Toc42758174)

[6. Confirmation of File Receipt (.FCO). 23](#_Toc42758175)

[6.1. FCO File Naming Convention 23](#_Toc42758176)

[6.2. Confirmation of File Receipt (.FCO) Examples 23](#_Toc42758177)

[7. Confirmation And Rejection (CAR) File. 25](#_Toc42758178)

[7.1. CAR File Naming Convention 25](#_Toc42758179)

[7.2. CAR File Header Record Description. 25](#_Toc42758180)

[7.3. CAR File Header Record Format. 26](#_Toc42758181)

[7.4. CAR Data Record Description 26](#_Toc42758182)

[7.5. Unsolicited CAR messages and CP Transaction ID. 27](#_Toc42758183)

[7.5.1 Unsolicited CAR messages and Source Data System. 27](#_Toc42758184)

[7.6. CAR Data Record Format. 28](#_Toc42758185)

[7.7. CAR File Examples. 30](#_Toc42758186)

[8. Audit File (.AUD) Format 31](#_Toc42758187)

[8.1. Audit File Naming Convention 31](#_Toc42758188)

[8.2. Audit File Header Record. 32](#_Toc42758189)

[8.3. Audit File Data Record. 32](#_Toc42758190)

[9. Vet Checks 35](#_Toc42758191)

[9.1. Valid Characters 35](#_Toc42758192)

[10. Number Portability 36](#_Toc42758193)

[10.1. Porting Process. 36](#_Toc42758194)

[10.2. Missing Port Messages. 36](#_Toc42758195)

[10.3. CUPID Mismatch. 36](#_Toc42758196)

[10.4. Effective Date Mismatch. 37](#_Toc42758197)

[10.5. Cooling Off customer records 37](#_Toc42758198)

[10.5.1 Modify/Activate 37](#_Toc42758199)

[10.5.2 Renumber 37](#_Toc42758200)

[10.5.3 Cease 37](#_Toc42758201)

[10.5.4 Effect of EFF Porting on Cooling Off customer records 38](#_Toc42758202)

[10.5.5 EFF Export Handling 38](#_Toc42758203)

[10.5.6 EFF Import Handling 38](#_Toc42758204)

[10.6. Porting Examples 40](#_Toc42758205)

[10.6.1 Example 1. A Number Port occurs on the effective date. 40](#_Toc42758206)

[10.6.2 Example 2. A Number Port occurs after the effective date but before the 10 day limit expires. 41](#_Toc42758207)

[10.6.3 Example 3. A Number Port occurs after the 10 day limit but before the 11 day cutoff. 41](#_Toc42758208)

[10.6.4 Example 4. A Number Port fails due to missing export.. 42](#_Toc42758209)

[11. Confirmation messages & error codes 43](#_Toc42758210)

[12. Glossary 47](#_Toc42758211)

[13. References 48](#_Toc42758212)

[14. Document Control. 49](#_Toc42758213)

[14.1. Authorisation 49](#_Toc42758214)

[14.2. Document History 49](#_Toc42758215)

# Introduction

The UK telecoms market is regulated by the Office of Communications (OFCOM). OFCOM requires all UK Communication Providers (CP’s) to provide an emergency call capability. BT offers the 999/112 call handling service to UK CP’s on a wholesale basis. OFCOM also mandates that all CP’s who provide fixed line or VoIP services register accurate location information for use during an emergency call.

This document details the interface to be used by all CP’s to pre-register their customer name and address details with the BT 999 platform.

The BT 999 system consists of a number of servers that are collectively known as the Trinity 999 Platform. The Trinity Data Manager (TDM) holds the master copy of all 999 name and address information.

The data provided over EFF is used to route emergency calls to the correct Emergency Service that serves the callers location. The data is also electronically passed to the Emergency Service and used by them to guide Emergency Service vehicles to the correct location. This facility is particularly important when the caller is unable to communicate their location.

Consideration should be given by the CP to the type of data provided to the BT 999 systems. The address provided should be the installation address or the address the caller is most likely to be at, rather than the billing or any other type of address. The customer name provided should be that of the person resident at the installation address or, in the case of a business, should be the “**name above the door**” rather than a holding company. Further advice on Emergency Data is available in Refs 1 and 3. (see Section 13), it is strongly recommended that CPs take this information into account when designing their interface.

**It is essential that all CPs provide accurate and complete customer data over the EFF interface. Failure to provide full and accurate information to BT will delay the Emergency Services response to emergency situations.**

This EFF interface includes 100 (Operator Services) data for use by BT. Non-BT data that is provided for the purpose of emergency call handling only, will not be used in any way for 100 call handling purposes.

Further information supporting the management of data for the Operator Assistance (100) and Emergency Assistance (999/112) services is available from the document referenced in Section 13.

# Systems Overview.

CPs should use the Calypso staging server to transfer their EFF files to the BT 999 platform. Calypso is a secure internet facing server. The file transfer mechanism used on Calypso is TLS encrypted FTP. Following EUGDPR legislation surrounding data ‘at rest’ we also now require CP’s to encrypt their DAT files, FCO and CAR files are also encrypted – further information and instructions can be found in the ‘BT 999 Calypso file transfer encryption guidelines version 1.2’.

CPs should use an FTPS client to pass data securely to Calypso. Please note that FTPS is different to SFTP. SFTP is not compatible with Calypso and therefore cannot be used.

Input files are dropped off into INCOMING/FTP and receipt and confirmation files are collected from OUTGOING/FTP.

Once CP files have been transferred to Calypso they will be moved into BT’s internal network for processing. Acknowledgement files will then be sent back to Calypso for retrieval by CP’s at their convenience.

A URL to check the file format as well as a test Calypso server is available to allow CPs to test their software.

A high level diagram of Calypso is shown below -

**Internet**

**BT DMZ**

**CP Corporate
Network**

**Calypso
Gateway**

**CP
System**

A full description of the Calypso Engagement procedure is documented in Ref [4].

BT customer data originating from within the BT corporate network will not use Calypso; instead an identical green side solution is available. Further information on this route is available from the principle EFF contact as specified on the title page of this document.

**\*\* This process must NOT be used for your BT Wholesale IP Exchange customer name and address data (sub-allocated/ported in via IPEX) – you must use the BTW Portal for updates, any updates sent wrongly will be rejected \*\***

# EFF Files

The 999 EFF interface uses four file types.

|  |  |
| --- | --- |
| **INPUT (.DAT) FILE** | Used to send 999 name and address data to the BT 999 Platform. The format for .DAT files is shown in section 5 (Input File Format). |
| **CONFIRMATION OF FILE RECEIPT (.FCO) FILE** | Produced automatically; within 5 minutes of a file being dropped off by the file transfer system, as acknowledgement of receipt/rejection of an entire Input file. The format for .FCO files is described in section 6 (FCO File Format) |
| **CONFIRMATION/REJECT (.CAR) FILE** | CAR files are produced after each update run of the BT 999 system (currently 8 times per day). These detail whether each 999 record sent by a specific CP has been accepted or rejected. Rejected records will also provide details of the reason for rejection. The file will contain rejects arising from data quality checks (Refer to Section 4.2 for details of this process). The first file of the day will also contain any Import or Export records awaiting adoption by or export to the CP concerned and any records that the Data Operations team have had to manually re-try. These files will conform to the format specified in Section 7. |
| **AUDIT (.AUD) FILE** | These files are produced by request only and are an extract of all data on the BT 999 Platform sourced from a specific CP. The format for the .AUD files are shown in Section 8. |

## High Level File Specifications

The format of all files (Excluding .FCO File – See Section 5.6) must satisfy the following requirements:

1. **7 bit ASCII** flat file format must be used (**Please note**: The use of Extended ASCII character set will cause your record to fail e.g. in the word café the fleck above the e is part of extended not standard ASCII).
2. File suffixes MUST be in upper case.
3. Each file will contain a Header Record at the top of each file.
4. Each record will be of a fixed length. Each record will be separated by an end of line marker.
Note that files sent to the BT 999 platform can either be in Unix (LF - Line feed) or DOS (CRLF - Carriage Return/Line Feed) format. Files returned from the BT 999 platform will be generated with a UNIX (LF) end of line but this may be converted to DOS format by the FTPS client chosen by the CP. Every field within each record will be of a fixed length and must be padded with spaces to achieve the required field length.
5. Unless otherwise defined in the field description, mandatory numeric fields should be padded out with leading zeros to the left.
6. Unless otherwise defined in the field description, Alpha and mandatory Alpha/Numeric fields must be padded out with spaces to the right. Where optional fields are not populated the field should be padded out using spaces only.
7. ‘Spare’ fields must be populated with spaces.
8. Trailer records are not used.

.

## File Records (Excluding .FCO File)

A description of all fields contained within the various record types including details of field length and whether Numeric or Alpha/Numeric is given in Section 5 for DAT files, Section 6 for FCO files, Section 7 for CAR files and Section 8 for Audit files.

## Capitalisation within a file

It is preferred if CPs send records with mixed case letters, (except when appropriate e.g. HSBC Bank).

## 999 data requirements

The purpose of the data provided to support Emergency Assistance is threefold:

* The location identified by the CLI, especially the Post Code, is used by the BT call-handling agents to route the call to the control room of the EA providing the required service for that locality
* The location information identified by the CLI is used by the EA to direct the response correctly and by the responding unit (fire tender, ambulance, police car) to locate the emergency
* The name provided is used:
	+ In the case of business premises, to help the responding unit to locate the appropriate location, e.g. on trading estates where the “PC World” sign above a store will be easier to find than the premises number
	+ In the case of consumer customers to help prioritise the EAs response, especially in the case of ‘silent’ calls where there is no audible speech on the line.

It is essential therefore that the information provided in the fields supporting the customer’s name and address are populated as accurately and fully as possible.

NAME – for consumer customers, the name should be that of the person most likely to be making the call i.e. the person resident in the property, who may not be the bill payer. A title or first name that identifies the person’s gender is a useful adjunct. For businesses, the best approach is to supply “**the name above the shop door**” i.e. the information that should be visible to responding units. For example although the customer contracting for the telephone service maybe “DSG Intl” or “Dixons Stores Group”, it is better to supply the name for a given locations as “PC World” or “Currys”. \*\* This should not contain the name of a contact at that business as this can cause confusion with call handling \*\*

ADDRESS- It is essential that the post code provided in the address is accurate. This will ensure the call is routed to the correct EA and that the EA dispatches a unit close to the locality. The rest of the address (street, town etc) should be provided in full as well to mitigate the circumstances where the post code may be incorrect or have been based on a different version of the Royal Mail’s PAF database.

The “premises” field is also especially important. In many cases the house number or name will provide sufficient information for a responding unit to identify where the call came from. However for larger premises and multi-tenanted buildings, any available sub-premises information can be provided in the premises field (as a suffix, rather than prefix, to the premises information). For example Flat Numbers, Floors, “outside No 21…” for outdoor locations such as payphones. Increasingly, EAs will be using the government sponsored Unique Property Reference Number (UPRN) scheme as a locality system. CPs should consider sending UPRN information as well as the current address information if it is available to them.

# Data Processing Overview

##  Data Processing Flow Diagrams

The diagram below shows a typical sequence of events when files are passed between the CP and BT and the table below the diagram explains the steps being taken at each stage.

It should be noted that there is no direct mapping between DAT files and CAR files. DAT files are processed 8 times per day (Every 2 hours 7am-7pm with a further run at 11pm) and that DAT file processing is followed by a CAR file generation process. The CAR file generated will include records processed from the last DAT run as well as suspended records that have met their effective date and porting reminder messages.

**CP’s should only send records for CLI’s that do not have outstanding acknowledgements pending**. Should the CP need to send an update while a record is pending they should first cancel the original record. Records sent while there is another record pending for the same CLI will result in both records being rejected.

Similarly batch files should not contain more than one record for a particular CLI. Should more than one record be received both will be rejected.

**CP System**

**BT 999**

**via**

**Calypso Staging Server**

2. EFF Input (.DAT) file send using FTPs.

1. EFF Input (.DAT) file created by CP

3. EFF FCO file created by BT 999 platform

4. FCO file retrieved by CP from Calypso.

5. CP processes FCO and takes action if required.

6.BT processes records.
CAR file generated

7. CAR file retrieved by CP from Calypso.

8. CP processes CAR file and takes action if required.

|  |  |  |
| --- | --- | --- |
| **No.** | **Action** | **Full Description** |
| 1. | Create Input File | The CP generates an input (.DAT) file consisting of all records that have changed. This data is assembled into the input file and uses installation addresses and end user customer names (person resident at address or business name above the door). |
| 2. | Send Input File | The file is transferred across the internet in an encrypted state using FTPs to the **INCOMING/FTP** directory on the Calypso staging server. Internal BT transfers should be made using XFB direct to the BT 999 platform. |
| 3 | FCO File Created | The input file (as opposed to the records in the file) goes through a number of checks and an FCO file is created within 5 minutes of the file being loaded, and placed in **OUTGOING/FTP** folder on the Calypso staging server. |
| 4 | The CP collects the FCO file | The CP transfers the FCO file, again using FTPs from **OUTGOING/FTP** folder on the Calypso staging server. |
| 5 | The CP processes the FCO file. | If the .DAT file has been rejected the CP must amend and resubmit the entire file. **A rejected FCO files does not increment the .DAT run number therefore the resubmitted .DAT file should have the same run number as the rejected .DAT file.** |
| 6 | BT 999 Processing | Assuming the file passed FCO checks then the BT 999 platform processes the records within the input file.A CAR file is generated showing the status of processed records. Additional records are added to the file for any records that were pending if the effective date has been reached and additional records are added should BT 999 be waiting for any porting messages. The CAR file is then placed in **OUTGOING/FTP** folder on Calypso ready for uplift by the CP. |
| 7 | The CP collects the CAR file.  | The CP transfers the CAR file from **OUTGOING/FTP** folder on the Calypso staging server. |
| 8 | CAR File processed by CP | The CAR file is processed by the CP. Any failures are corrected and resubmitted in the next input (.DAT) file. |

## DAT File Validation

Upon receipt of an Input File, the BT 999 platform will perform the following checks on data contained in the file:

1. Check that a Header Record, in the correct format, exists at the top of the file (i.e. all mandatory fields must be populated with valid data).
2. Check that the CUPID identified in the header is registered with the BT 999 Platform. The whole file will be rejected if the CUPID identified in the header is not registered.
3. Check the Record count (in the Header Record) is equal to the number of records in the file; this count must include the Header record itself.
4. Check the ‘Run Number’ in the Header Record of the file is one greater than the ‘Run Number’ of the last Input file with the same Sending CP Identifier. If the ‘Run Number’ is not one greater, the file will be rejected. The options are then a) For the CP to correct the run number and resubmit the file or b) The CP to send the files with missing run number(s) and resubmit the original file.

 **\*\* If a file fails any of the above checks it will be rejected (in its entirety) back to the sending CP and the run number will NOT be incremented \*\***

1. Check that all records have a CP identifier (CUPID). (CPs will only be allowed to change records within their own franchise(s). Records will be rejected where they do not belong to the CP sending the data input. **\*\* Individual records failing this check will be rejected back to the sending CP as part of the subsequent CAR file \*\***

**Data vets applied against all records are detailed in section 9.**

# Input (.DAT) File.

This section gives a detailed description of the input (.DAT) file that CP’s generate and send to the BT 999 platform. An input file consists of a single header line at the top of the file followed by the data records. There is one data record per line.

## DAT File Naming Convention

The file name field length can be a maximum of 14 characters (excluding the .DAT). The first six characters are mandatory: BT1 followed by the sending CPs 3 digit CUPID. The other characters should be populated by the CP to create a unique filename of their choice, e.g. the date, followed by a 2 digit run number for the day – the format can be DDMMYYNN.

The file name must have a “.DAT” extension.

An example of a filename for Magrathea (CUPID 102):

**BT110212091801.DAT**

Filenames should be unique and a specific filename should only be used a second time in the event that the original file was rejected in its entirety. If a file is successfully processed but an identically named file then subsequently received then this file will be rejected with a “Feed file previously received and not rejected” error in the response FCO file.

## DAT File Header Record Description

The table below gives a description of each field present in the header record. The header record must be on the first line of the file.

|  |  |  |  |
| --- | --- | --- | --- |
| **FIELD NAME** | **TYPE** | **SIZE****(bytes)** | **DESCRIPTION** |
| RECORD TYPE | N | 1 | Identifies record type. 0 = header record  |
| FILE VERSION NO | N | 3 | Version number of the file – to cater for occasions when the file format has to be changed and the CP community are unable to convert to producing data in the new format at the same time. The versions should be set as follows. All files complying with EFF prior Issue 2.0 should set this value to 001. |
| SENDING CP IDENTIFIER (CUPID) | N | 6 | Identifies the CP originating the file. |
| RECORD COUNT | N | 8 | Count of records in the file including header. |
| RUN NUMBER | N | 8 | A sequential number to identify the file. CP can specify the first run number as they wish to use anything greater than zero. This field is mandatory for auditing purposes. Note that the run number does not need to correlate in any way with the naming convention used in the file name. |
| HEADER DATE | N | 8 | Date that the file was submitted to the BT 999 platform by either the CP or BT in the format YYYYMMDD. |
| HEADER TIME | AN | 8 | Time that the file was submitted to the BT 999 platform by either the CP or BT in the format HH:MM:SS |
| CP FILE ID | AN | 32 | Name of the file placed on the BT 999 File Transfer platform by the CP.  |

## DAT File Header Record Format.

All fields in the header record are mandatory.

The header line data is fixed length and must be 74 bytes of data followed by an end of line marker.

| **INPUT FILE FORMAT HEADER RECORD** | **Field SIZE** | **FiEld Type**N = NumericA= Alpha | **Field Start Position** |
| --- | --- | --- | --- |
| 1 | RECORD TYPE (0 to indicate header) | 1 | N | 1 |
| 2 | FILE VERSION NO | 3 | N | 2 |
| 3 | SENDING CP IDENTIFIER | 6 | N | 5 |
| 4 | RECORD COUNT | 8 | N | 11 |
| 5 | RUN NUMBER | 8 | N | 19 |
| 6 | HEADER DATE | 8 | N | 27 |
| 7 | HEADER TIME | 8 | AN | 35 |
| 8 | CP FILE ID | 32 | AN | 43 |

## DAT File Record Description

The data records follow the header record, starting at line 2 of the file. Each data record in the file represents the state of a single phone number. CP’s must only send a **single record** for a CLI in a batch file, even if they have different effective dates. CP’s should also wait for a successful acknowledgement before sending any other updates for a particular CLI, with exception of the K (cancel) command. Should more than one record be received for the same CLI before a successful acknowledgement is returned then all pending records for that CLI will be rejected.

The “100 Data” column indicates a field used for 100 call handling. These fields are for BT use only, non BT CP’s should leave these fields padded with spaces.

The data record is fixed length and must be 1357 bytes of data followed by an end of line marker.

| **FIELD NAME** | **TYPE** | **SIZE** | **100 Data** | **DESCRIPTION** |
| --- | --- | --- | --- | --- |
| RECORD TYPE | N | 1 |  | Identifies record type. 1 = data record |
| CP IDENTIFIER  | N | 6 |  | A three digit Identifier for the CP owning the entry. Commonly referred to as CUPID. This field needs to be padded with zeros. Example CUPID 025 would be shown as 000025.  |
| CP TRANSACTION ID REFERENCE NUMBER | AN | 20 |  | This is a transaction ID code assigned to the entry by the CP (where the information was sent via batch file) and returned in Confirmation/Reject records. This identifier should be unique for all records (except in the case of a “K” command as discussed below). Records being sent with the same identifier may be rejected. |
| SOURCE DATA SYSTEM | AN | 8 |  | This field is available for the CP to identify the CP-owned database that the customer data is mastered on. It can be used when an intermediary system is used to collect data from a number of systems before sending to the BT 999 platform so that records in corresponding CAR files can be correctly routed back to the source database.**Please note values in this field should be registered with the 999 team to avoid accidental duplication**. |
| SYSTEM ROUTING FLAGS | A | 10 |  | A series of 10 1-byte flags to indicate to which BT system a record in an Input file is to be sent. Values are Y (send) or N (do not send). Flag 1 is to be used for BT 999 Database (999); flag 2 is to be used for OSIS (Number Information). Flags 3 – 10 are currently spare. The BT 999 File Transfer platform will only process records showing a Y in Flag 1.  |
| COMMAND | A | 1 |  | Commands are used by the BT 999 Database to determine what action to take upon receipt.‘A’ Activate Customer (Modify is also an acceptable command for an activate)‘C’ Cease Customer‘E’ Export Number porting to another CP‘I’ Import – CP adopting a ported number‘K’ Cancel an advanced order that has not yet reached its Effective Date.**The kill command must be sent with a CP TRANSACTION ID REFERENCE NUMBER that matches the advanced record to be cancelled**.‘M’ Modify customer details (Activate is also acceptable command for a Modify) ‘P’ Inform BT 999 Database of a new Postcode that is about to be used ‘R’ Renumber (Can be used but we would prefer CEASE/ACTIVATE) |
| EFFECTIVE DATE | N | 8 |  | Date on which the command associated with the record is to be executed. Format used must be YYYYMMDD where YYYY = Year, MM = Month in the range 1 to 12.DD = Day in range 1 to 31.The effective date is used to determine when the customer details are to be used when dealing with 999 calls, It is the CP’s responsibility to ensure that effective dates are consistent and that old data is not sent through to the BT 999 platform as no consistency checking of the effective date is performed by BT. If the CP sends though old data with an old effective date this will be accepted even if it overwrites a more recent piece of data. Similarly this should be considered with records dated too far in the future. TDM will not hold more than one pending record but will apply records with an immediate effective date when a record is held awaiting a future effective date. |
| SERVICE  | A | 1 |  | **Note this field is for BT use only.** |
| LINE\_STATUS | A | 1 | ✓ | **Note this field is for BT use only.** |
| PBX LINE TYPE | A | 1 | ✓ | **Note this field is for BT use only.** |
| INSTALLATION CLASS | N | 2 | ✓ | **Note this field is for BT use only.** |
| ICB | A | 1 | ✓ | **Note this field is for BT use only.** |
| OCB | A | 1 | ✓ | **Note this field is for BT use only.** |
| CPS INDICATOR | A | 1 | ✓ | **Note this field is for BT use only.** |
| CALL SIGN  | A | 1 | ✓ | **Note this field is for BT use only.** |
| CNI | A | 1 | ✓ | **Note this field is for BT use only.** |
| DPRCB | A | 1 | ✓ | **Note this field is for BT use only.** |
| NSI | A | 1 |  | **Note this field is for BT use only**  |
| WLR Version | AN | 1 | ✓ | **Note this field is for BT OpenReach use only for WLR information.** |
| TOS | A | 1 | ✓ | **Note this field is for BT use only.** |
| TOS/B | A | 1 | ✓ | **Note this field is for BT use only.** |
| TOS/S | A | 1 | ✓ | **Note this field is for BT use only.**. |
| OUTGOING CALLS BARRED BILLING | A | 1 | ✓ | **Note this field is for BT use only.** |
| PRCB | A | 1 | ✓ | **Note this field is for BT use only.** |
| ANONYMOUS CALL REJECT | A | 1 | ✓ | **Note this field is for BT use only.** |
| MOBILE CALL BARRING | A | 1 | ✓ | **Note this field is for BT use only.** |
| RETAILER IDENTIFIER | AN | 4 |  | An identifier allocated by the CP and used when the CP does not own the customer. The identifier will typically represent a retailer or third party.  |
| TITLE | A | 20 |  | Mr, Mrs, Miss, etc. Titles that disclose gender are preferred by the emergency authorities, particularly some Police forces.**\*\* RESIDENTIAL DATA ONLY see section 3.4 \*\*** |
| INITIALS / FORENAME | A | 20 |  | Data that will be placed after the title field in the entry.If more than one initial is included, these MUST be separated by a full stop e.g. D.R.A Smith**\*\* RESIDENTIAL DATA ONLY see section 3.4 \*\*** |
| NAME | AN | 50 |  | Surname or Business name for entry.Business names should be chosen that best allow the Emergency Services to identify the business; typically the name over the door rather than a holding company name should be used.**\* \* for further see section 3.4 \*\*** |
| HONOURS | AN | 30 |  | Crown or professional honours**This field is not required for 999 call handling no validation is carried out other than ‘valid character’ check in section 9.1** |
| BUSINESS SUFFIX | AN | 50 |  | Addition to business name (e.g. ‘& Son’, ‘Ltd’, ‘plc,) A brief description can also be used that describes the function of the business. For example “Hospital”, “Hotel”, “Petro Chemical Plant”, “Fuel Storage Depot” will give valuable extra information to the emergency services. |
| LINE\_TYPE (PRODUCT) | AN | 30 |  | Used to describe the product the record refers to, or alternatively the technology used. Standard options for the population of this field are EXT, DDI, FNET, or VOIP, although other products can be built onto the system on request. For normal PSTN lines this field should just be padded with spaces.**This product information is used by the 999 systems to highlight to the BT operator and the Emergency Services that, due to the nature of the product, the address given in the record may not accurately reflect the actual location of the caller. This is therefore an important piece of information and should be considered mandatory if applicable.** |
| PREMISES  | AN | 60 |  | Identifies premises on a thoroughfare i.e. house name and/or number.Examples “24”, “Bleak House”.**Although this field is optional CPs should send a complete and accurate address. If this field is not populated then full use must be made of other address fields.**  |
| THOROUGHFARE | AN | 55 |  | The thoroughfare name and type Examples: Byron Close, Suffolk Lane, and High Street. **Although this field is optional CPs should send a complete and accurate address. If this field is not populated then full use must be made of other address fields.**  |
| LOCALITY | AN | 30 |  | Village or an area within a town **and** Town if possible.**Although this field is optional CPs should send a complete and accurate address. If this field is not populated then full use must be made of other address fields.**  |
| POST CODE | AN | 9 |  | The full current postcode for the address as recognised by the Royal Mail’s PAF database. This must be sent in the format of Out-code space In-code i.e.: LS11 5DF, S9 5AD, S60 3ML.This field is 9 characters to allow for additional characters in the future. The field will be truncated to 8 and only return 8 in the Confirmation/ Rejection and Audit files. The field should be padded with the necessary number of trailing spaces.**This field is essential for 999 call handling as it is used by both BT to route the call to the correct emergency authority and by the emergency authorities to navigate to the emergency incident. This field is therefore mandatory for all 999 records and CPs should make every effort to ensure that the provided post code is full and accurate.** |
| SOURCE\_DATA\_SYSTEM | AN | 8 |  | Source data system can be used by CP’s to more easily identify which of their systems a record has originated from if they have more than one. |
| ADDRESS\_ID | AN | 12 |  | The Address identifier is any unique address identifier the CP may want to send that will aid processing of data or processing of the call. This field is principally targeted for use of the Unique Property Reference Number (UPRN). A UPRN is a government initiative to allocate a unique identifier to every property in the UK. If UPRN is not available CPs can use this as a reference to their own address systems, for example BT NAD. |
| ADDRESS\_ID\_SOURCE | AN | 1 |  | Used to communicate the source of the ADDRESS\_ID. If ADDRESS\_ID is populated then this field is mandatory.U = UPRN. Other identifiers will be allocated by the BT 999 Application Support team on a case by case basis.N = BT OpenReach NADR = BT Rest of BT (RoBT) NADThis value is dependent on the CUPID with the exception of U as this is a universal address identifier. |
| TELEPHONE NUMBER | N[[1]](#footnote-1) | 15 |  | Telephone number to be assigned to the entry. **Note that this field should be left justified and padded with spaces and not zeros. Some CP’s store CLI’s without the leading zero, however CLI’s passed in this fields should have a single leading zero.** |
| NEW TELEPHONE NUMBER | N1 | 15 |  | Contains the new telephone number to be applied to an entry using the renumber command.**Note that this field should be left justified and padded with spaces and not zeros. Some CP’s store CLI’s without the leading zero, however CLI’s passed in this fields should have a single leading zero.** |
| CROSS REFERENCE NUMBER | N1 | 15 | ✓ | **Note this field is for BT use only.**Contains any cross referenced number, typically the MAIN number associated with a DDI extension. **Note that this field should be left justified and padded with spaces and not zeros. Some CP’s store CLI’s without the leading zero, however CLI’s passed in this fields should have a single leading zero.** |
| CP IDENTIFIER (EXPORT/IMPORT) | N | 6 |  | Identifies the cupid of the gaining or losing CP for number portability records (‘E’ & ‘I’ commands for TDM/999 records). **\*\* Please note this field should NEVER contain your own CUPID** \*\* |

### Duplicate records.

**CP’s must only send a SINGLE record for a CLI in a batch file.** CP’s should wait for a successful acknowledgement from a future dated(or port) record before sending **any** further updates for a particular CLI, with exception of the K (cancel) command.

Should more than one record be received for the same CLI before a successful acknowledgement is returned then all subsequent records from that CP, for that CLI will be rejected with error code 75 ‘More recent record exists’.

For example;

* If an Activate/Modify is sent with an effective date 4 days in the future, any subsequent Activate/Modify/Cease record for that same CLI will be rejected on an error code 75.
* If an Import record is sent and is **still within the 10 day port period**; (in that we haven’t had the Export from the losing CP) any subsequent Activate/Modify record you send will be rejected on an error code 75 until AFTER the port has completed and you then own that number.
* Similarly if an Export record is **still within the 10 day port period**; (in that we haven’t had the Import from the gaining CP) a subsequent CEASE will reject with error 75. You must wait until the error code 49 has been returned to you before sending the cease.

Currently we also reject ALL records from all CPs if we receive multiple records from one or the other either by mistake or due to a change of CRD.

For example;

* We have future dated Import and Export records pending and maybe the date changes, so the LCP may send a new Export with the new effective date without cancelling the previous one: all 3 records would reject. (This also applies if 2 Imports are sent)
* Or we also see scenarios where we have an Export pending and we receive 2 Imports from 2 DIFFERENT CPs – this also currently causes ALL records to reject back.

However, we will be changing this as soon as possible so that only the CP that has sent the duplicate record receives the error code 75s for both of their records. The other records will not be affected and remain in a valid state awaiting a new port record. Where 2 Imports have been received the effective date will be checked and the later port will be put onto the pending table awaiting the effective date. We will advise when this change has been made and update EFF accordingly.

### Renumbers.

The purpose of the Renumber command is to simply change the CLI of a record. The following rule set will be followed when a renumber is received from a CP.

If the old number does not exist or has been ceased on the 999 system then the renumber will be rejected and an error code 13 (Telephone number missing) returned to the CP.

If the new number does not exist on the 999 systems but falls within a number range owned by the CP then:

• The old record will be given the new number.

• The old number will be marked as ceased and, if not in the CP’s number range, returned to the range holder.

• A “Renumber Successful” error code (40) will be returned to the CP.

If the new number does not exist on BT’s 999 systems and does not fall within a number range owned by the CP then:

• The renumber will fail with an error code of 28 (Renumber in invalid range). No records will change.

If the new number exists on BT’s 999 systems and the record is owned by the CP then:

• The details of the existing record will be overwritten with the details of the old record (except the CLI).

• A success error code (40) will be returned to the CP.

• The old record will be ceased and, if not in the CP’s number range, returned to the range holder.

If the new number exists on BT’s 999 systems but is owned by another CP then:

• The renumber will be rejected with error code 18 (CP does not own record).

**\*To ensure we have the correct data, we would prefer Cease and Activates be used rather than renumber.**

#### CNI (Call Number Intercept) and Caller Redirect.

CNI and Caller Redirect (C/R) are essentially the same facility implemented in different ways. Each provides a recorded message when a telephone number is called informing the caller of a new number that should be dialled. CNI and CR are treated in EFF as being synonymous and both share the CNI facility in the interface.

CNI/CR numbers are virtual and incapable of making outgoing calls , including 999/112. CNI/CR numbers are not associated with a physical installation and should therefore be registered against their service providers name and the address of the local exchange.

When registering a CNI/CR record on EFF the Cross Reference Number field should contain the number the caller is redirected to.

## DAT Record Format

**Note: The overall length of a data record contained in an EFF Input (.DAT) file should be 1357 bytes, followed by an end of line marker**.

| **INPUT FILE FORMAT** | **fIELD size** | **FIELD TYPE** | **Field start position** | **Value of the COMMAND Field** |
| --- | --- | --- | --- | --- |
| **No.** | **DATA RECORD** |  |  |  | **A** | **C** | **E** | **I** | **K** | **Mo** | **P** | **R** |
|  | RECORD TYPE | 1 | N | 1 | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** |
|  | SPARE FIELD  | 10 |  | 2 |  |  |  |  |  |  |  |  |
|  | CP IDENTIFIER (CUPID) | 6 | N | 12 | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** |
|  | SPARE FIELD  | 20 |  | 18 |  |  |  |  |  |  |  |  |
|  | CP TRANSACTION ID REF. NO | 20 | AN | 38 | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** |
|  | SPARE | 8 |  | 58 |  |  |  |  |  |  |  |  |
|  | SYSTEM ROUTING FLAGS | 10 | A | 66 | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** |
|  | SPARE FIELD  | 80 |  | 76 |  |  |  |  |  |  |  |  |
|  | COMMAND | 1 | A | 156 | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** |
|  | EFFECTIVE DATE | 8 | N | 157 | ***M*** | ***M*** | ***M*** | ***M*** |  | ***M*** |  | ***M*** |
|  | SERVICE | 1 | A | 165 | ***O*** | ***O*** |  | ***O*** |  | ***O*** |  |  |
|  | LINE STATUS | 1 | A | 166 | ***O*** | ***O*** | ***O*** | ***O*** |  | ***O*** |  |  |
|  | PBX LINE TYPE | 1 | N | 167 | ***O*** |  |  | ***O*** |  | ***O*** |  |  |
|  | INSTALLATION CLASS | 2 | N | 168 | ***O*** |  |  | ***O*** |  | ***O*** |  |  |
|  | ICB | 1 | A | 170 | ***O*** |  |  | ***O*** |  | ***O*** |  |  |
|  | OCB | 1 | A | 171 | ***O*** |  |  | ***O*** |  | ***O*** |  |  |
|  | CPS INDICATOR | 1 | A | 172 | ***O*** |  |  | ***O*** |  | ***O*** |  |  |
|  | CALL SIGN  | 1 | A | 173 | ***O*** |  |  | ***O*** |  | ***O*** |  |  |
|  | CNI | 1 | A | 174 | ***O*** |  |  | ***O*** |  | ***O*** |  |  |
|  | DPRCB | 1 | A | 175 | ***O*** |  |  | ***O*** |  | ***O*** |  |  |
|  | NSI | 1 | A | 176 | ***O*** |  |  | ***O*** |  | ***O*** |  |  |
|  | WLR Version | 1 | N | 177 | ***O*** |  |  | ***O*** |  | ***O*** |  |  |
|  | Spare  | 1 |  | 178 |  |  |  |  |  |  |  |  |
|  | TOS | 1 | A | 179 | ***O*** |  |  | ***O*** |  | ***O*** |  |  |
|  | TOS/B | 1 | A | 180 | ***O*** |  |  | ***O*** |  | ***O*** |  |  |
|  | TOS/S | 1 | A | 181 | ***O*** |  |  | ***O*** |  | ***O*** |  |  |
|  | OUTGOING CALLS BARRED BILLING | 1 | A | 182 | ***O*** |  |  | ***O*** |  | ***O*** |  |  |
|  | PREMIUM RATE CALL BARRING | 1 | A | 183 | ***O*** |  |  | ***O*** |  | ***O*** |  |  |
|  | ANONYMOUS CALL REJECT | 1 | A | 184 | ***O*** |  |  | ***O*** |  | ***O*** |  |  |
|  | MOBILE CALL BARRING | 1  | A | 185 | ***O*** |  |  | ***O*** |  | ***O*** |  |  |
|  | RETAILER IDENTIFIER | 4 | AN | 186 | ***O*** |  |  | ***O*** |  | ***O*** |  |  |
|  | SPARE FIELD  | 5 |  | 190 |  |  |  |  |  |  |  |  |
|  | TITLE | 20 | AN | 195 | ***O*** |  |  | ***O*** |  | ***O*** |  |  |
|  | INITIALS / FORENAME | 20 | AN | 215 | ***O*** |  |  | ***O*** |  | ***O*** |  |  |
|  | NAME | 50 | AN | 235 | ***M*** |  |  | ***M*** |  | ***M*** |  |  |
|  | HONOURS | 30 | AN | 285 | ***O*** |  |  | ***O*** |  | ***O*** |  |  |
|  | BUSINESS SUFFIX | 50 | AN | 315 | ***O*** |  |  | ***O*** |  | ***O*** |  |  |
|  | SPARE FIELD  | 50 |  | 365 |  |  |  |  |  |  |  |  |
|  | LINE TYPE (PRODUCT) | 30 | AN | 415 | ***O*** |  |  | ***O*** |  | ***O*** |  |  |
|  | PREMISES***[[2]](#footnote-2)*** | 60 | AN | 445 | ***O*** |  |  | ***O*** |  | ***O*** |  |  |
|  | THOROUGHFARE***2*** | 55 | AN | 505 | ***O*** |  |  | ***O*** |  | ***O*** |  |  |
|  | LOCALITY***2*** | 30 | AN | 560 | ***O*** |  |  | ***O*** |  | ***O*** |  |  |
|  | SPARE FIELD  | 70 |  | 590 |  |  |  |  |  |  |  |  |
|  | POSTCODE | 9 | AN | 660 | ***M*** |  | ***M*** | ***M*** |  | ***M*** | ***M*** |  |
|  | ADDRESS\_ID | 12 | AN | 669 | ***O*** |  | ***O*** | ***O*** |  | ***O*** |  |  |
|  | SOURCE\_DATA\_SYSTEM  | 8 | AN | 681 | ***O*** | ***O*** | ***O*** | ***O*** | ***O*** | ***O*** | ***O*** | ***O*** |
|  | ADDRESS\_ID\_SOURCE  | 1 | AN | 689 | ***O*** |  | ***O*** | ***O*** |  | ***O*** |  |  |
|  | SPARE FIELD  | 29 |  | 690 |  |  |  |  |  |  |  |  |
|  | TELEPHONE NUMBER | 15 | N | 719 | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** |  | ***M*** |
|  | NEW TELEPHONE NUMBER | 15 | N | 734 |  |  |  |  |  |  |  | ***M*** |
|  | SPARE FIELD  | 15 |  | 749 |  |  |  |  |  |  |  |  |
|  | CROSS REFERENCE NUMBER | 15 | N | 764 | ***O*** |  |  | ***O*** |  | ***O*** |  |  |
|  | SPARE FIELD  | 75 |  | 779 |  |  |  |  |  |  |  |  |
|  | CP IDENTIFIER (EXPORT/IMPORT) | 6 | N | 854 |  |  | ***M*** | ***M*** |  |  |  |  |
|  | SPARE FIELD  | 498 |  | 860 |  |  |  |  |  |  |  |  |

On ceasing a BT line the service field should be used to determine if the record should be kept as ceased on the 100 service system (service = “B”) or if the record should be completely deleted (service = “E”). Ceased records are always kept on 999 with a reference to the owning CUPID.

## DAT File Examples.

The examples below are of DAT files, one is correctly formatted and the other has errors.

  

# Confirmation of File Receipt (.FCO).

The FCO file contains a summary of the data in the input file.

The FCO file will be generated within 5 minutes of a file being loaded, using Unix formatted end of lines but this may be converted by the CPs file transfer mechanism.

## FCO File Naming Convention

The FCO file is sent from the BT 999 Platform to the CP to confirm receipt or rejection of an Input file and give a summary of records to be processed. This file is produced before individual records are processed onto the BT 999 Platform. BT 999 simply replaces the .DAT extension with .FCO to produce the FCO filename. Confirmation of File Receipt for the Magrathea input file example would therefore be:

**BT110222110801.FCO**

## Confirmation of File Receipt (.FCO) Examples

The example shown below is for an accepted .DAT file containing one record, where NNN = cupid and XXXXXX = run number.

CALYPSO System has started to process file: BT1NNN10021098.DAT

Run number XXXXXX on date 10-Feb-2010 at time 11:10:44

File Statistics:

 Number of Blank lines in file = 0

 Number of Header records in file = 1

 Bad orders - size = 0

 Number of fields = 8

 Unknown LO code = 0

 Total number of records rejected = 27

 Total number of records successful = 1186

New Amend Cease Reno Import Export Kill PCode Other

293 301 5 0 413 174 0 0 0

11:18:53 - finished processing file

CALYPSO System finished processing file: BT1NNN10021098.DAT

The example shown below is for a rejected .DAT file with a “Read Error”, where NNN = lopid and XXXXX = run number. A Read error can be received if a file is sent in Binary instead of ASCII.

CALYPSO System has started to process file: BT1NNN291002.DAT

Run number XXXXX on date 10-Feb-2010 at time 15:58:46

File Statistics:

File BT1NNN291002.DAT rejected due to Invalid Run Number: 263 in header record in file BT1025291002.DAT Previous Run Number 263.

15:58:46 - finished processing file

CALYPSO System finished processing file: BT1NNN291002.DAT

In the event that the .DAT file is rejected in its entirety CP’s should note that no records are processed from the rejected file and they should ensure that all records are submitted to BT in a subsequent file.

# Confirmation And Rejection (CAR) File.

This section gives a detailed description of the Confirmation and Rejections (.CAR) file that the BT 999 999 platform generates. The CAR file consists of a single header record followed by data records.

CAR files are produced in UNIX format but may be converted by the CP’s FTPs client software.

## CAR File Naming Convention

The CAR file is sent from the BT 999 Platform to the CP.

The CAR file name is structured as follows:

BT1***<CUP><DDMMYY><NN>***.CAR

where:

***CUP*** is the three numeric CUPID of the CP.
***DDMMYY*** is the date and time in numeric form

where:

 ***DD*** is the date of the month in the range 1 to 31.
***MM*** is the month, in the range 1 to 12
***YY*** is the year

***NN*** is a 2 digit run number, reset to 01 at the start of each day, therefore in the range of 01 to 08 as there are 8 processing runs per day.

The filename extension will be “.CAR”. An example of a CAR file produced for Magrathea cupid 102 on 22nd November 2018 in the first of the day’s batch run would be –**BT110222111801.CAR**

## CAR File Header Record Description.

The table below gives a description of each field present in the header record. The header record must be on the first line of the file.

The overall length of a header record contained in a CAR file will be 40 bytes followed by and end of line character

|  |  |  |  |
| --- | --- | --- | --- |
| **CONFIRMATION/REJECT HEADER RECORD** | **Field SIZE** | **FiEld Type** | **dESCRIPTION** |
| 1 | RECORD TYPE  | 1 | N | Identifies record type. 0 = header record |
| 2 | FILE TYPE  | 1 | A | Identifies File type. C = CAR file |
| 3 | RECEIVING CP IDENTIFIER | 6 | N | Identifies the CP that the CAR file is intended for. |
| 4 | RECORD COUNT | 8 | N | The number of records in the file including the header. |
| 5 | RUN NUMBER | 8 | N | The run number within the CAR file does not relate in any way to the run number in the DAT file. The header run number will increment with every new CAR file generated for the CP. |
| 6 | HEADER DATE | 8 | N | Date that the file was created in the format YYYYMMDD.WhereYYYY = Year;MM = Month in range 01 to 12DD = Day in range 01 to 31. |
| 7 | HEADER TIME | 8 | AN | Time that the file was created in the format HHMMSSwhereHH = Hour of day in range 00 to 23.MM = Minute of hour in range 00 to 59.SS = Seconds in range 00 to 59Followed by 2 spaces to complete the length |

## CAR File Header Record Format.

The header record will be in the first line of the header record. All fields are mandatory.

|  |  |  |  |
| --- | --- | --- | --- |
| **CONFIRMATION/REJECT HEADER RECORD** | **Field SIZE** | **FiEld Type** | **Field start position.** |
| RECORD TYPE  | 1 | N | 1 |
| FILE TYPE  | 1 | A | 2 |
| RECEIVING CP IDENTIFIER | 6 | N | 3 |
| RECORD COUNT | 8 | N | 9 |
| RUN NUMBER | 8 | N | 17 |
| HEADER DATE | 8 | N | 25 |
| HEADER TIME | 8 | AN | 33 |

## CAR Data Record Description

The table below gives a description of each field present in the data record.

 A CAR file data record is a fixed length of 273 bytes of data followed by an end of line character.

|  |  |  |  |
| --- | --- | --- | --- |
| **CONFIRMATION/REJECT HEADER RECORD** | **Field SIZE** | **FiEld Type** | **dESCRIPTION** |
| 1 | RECORD TYPE | 1 | N | Identifies record type. 1 = data record |
| 2 | ORIGINATING SYSTEM  | 10 | AN | The system that created the file, in this case the value “EDB” will always be present. |
| 3 | CP IDENTIFIER | 6 | N | The CUPID of the record sent in the original DAT file. |
| 5 | CP TRANSACTION ID. REF NO. | 20 | AN | The CP TRANSACTION ID REF NO of the record sent in the original DAT file.(Note Section 7.5) |
| 6 | SOURCE DATA SYSTEM | 8 | AN | The SOURCE DATA SYSTEM of the record sent in the original DAT file.(Note Section 0) |
| 7 | TELEPHONE NUMBER | 15 | N | The TELEPHONE NUMBER of the record sent in the original DAT file.Left justified, padded with spaces. |
| 9 | POST CODE | 9 | AN | The POST CODE of the record sent in the original DAT file |
| 10 | CONFIRMATION/REJECT CODE | 4 | N | The error code generated by the BT 999 Platform when it processed the record. Refer to Section 11 for a comprehensive list of error codes. |
| 11 | ERROR MESSAGE | 70 | AN | The error message generated by the BT 999 Platform when it processed the record. Refer to Section 11 for a comprehensive list of error messages. |

## Unsolicited CAR messages and CP Transaction ID.

Where the CAR message is a prompt to a CP to send a porting message; then the “CP TRANSACTION ID REF NO” will be one generated by the other CP involved in the port and will not relate to any other message sent by the CP.

### Unsolicited CAR messages and Source Data System.

In the case where a CAR record is unsolicited, i.e. the CP hasn’t provided an import or export record and the effective date set by the other CP has passed then the source data system field may or may not be populated as follows:

If the exporting CP hasn’t sent their port message then the Source Data System will be copied from the existing data record stored on the 999 system.

If the importing CP hasn’t sent their port message then the Source Data System will be blank (spaces).

If the reminder is being sent to the CP that has provided a port message (for their information) then the Source Data System will be copied from the port message.

## CAR Data Record Format.

The format of the CAR data record is shown below. The originating system refers to the system that generated the CAR file and this will always be set to “EDB”.

The CP IDENTIFIER, TELEPHONE NUMBER, POST CODE, CP TRANSACTION ID and SOURCE DATA SYSTEM fields will be populated with the same data sent in the original input record except where the error codes 45 to 50 are being returned. These error codes relate to port reminder messages where it is possible that no original message was sent from the CP.

The records in the DAT file and CAR file are not one to one mappings, it is possible for a record in a CAR file to be generated by a completing port, request for a port or due to manual intervention by the BT 999 Data Team.

|  |  |  |  |
| --- | --- | --- | --- |
| **CAR File Format** | **FIELD LENGTH**  | **FIELD START POSITION**  | **Corresponding command in 999 Data file** |
| **DATA Record** |  |  | **a** | **C** | **E** | **I** | **K** | **Mo** | **P** | **r** | **PortReminder** |
|  | RECORD TYPE | 1 | 1 | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** |
|  | ORIGINATING SYSTEM (Set to “EDB”) | 10 | 2 | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** |
|  | CP IDENTIFIER | 6 | 12 | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** |
|  | SPARE FIELD | 20 | 18 |  |  |  |  |  |  |  |  |  |
|  | CP TRANSACTION ID. REF NO. | 20 | 38 | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** | ***O*** |
|  | SOURCE DATA SYSTEM | 8 | 58 | ***O*** | ***O*** | ***O*** | ***O*** | ***O*** | ***O*** | ***O*** | ***O*** | ***O*** |
|  | TELEPHONE NUMBER | 15 | 66 | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** |  | ***M*** | ***M*** |
|  | SPARE FIELD | 50 | 81 |  |  |  |  |  |  |  |  |  |
|  | POST CODE | 9 | 131 | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** |
|  | CONFIRMATION/REJECT CODE | 4 | 140 | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** |
|  | ERROR MESSAGE | 70 | 144 | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** | ***M*** |
|  | SPARE FIELD | 60 | 214 |  |  |  |  |  |  |  |  |  |

**Note: The overall length of a data record contained in CAR file should be 273 bytes, followed by and end of line character. Records where there is no postcode on the record will have a default postcode of Z99 9ZZ**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| KEY | M = Mandatory | O = Optional |  = Not Applicable |  |  |
|  | **A** = Activate Customer | **C** = Cease | **E** = Export | **I** = Import | **K** = Kill |
|  | **Mo** = Modify | **P** = Inform BT of a Post Code | **R**  = Renumber |  |  |

## CAR File Examples.

The examples below are of CAR files.

 

#

# Audit File (.AUD) Format

Audit files are created by BT on request for CP’s. The CP should, at a minimum, conduct an annual audit to compare installation addresses held on the CP’s own systems with the location information held on the BT 999 database. Ad hoc audits may be required in cases where the level of discrepancies for a CP begins to give cause for concern.

Once created audit files will be placed in the CP’s outgoing directory for collection. Audit files can be very large so CP’s are asked to retrieve their audit files in a timely manner.

In the event that the CP should find discrepancies between the audit file and their own records then the errors can be corrected by sending Modify or Cease commands in next appropriate EFF DAT file to refresh the data.

If customer data appears in the audit file but has been exported to another CP then the BT Data Delivery Team should be contacted to resolve the issue, an EFF export should **not** be used to refresh this data as it is unlikely the owning CP will respond with an Import message and the port will fail.

Audit files consist of a single header record at the start of the audit file followed by the audit data records.

## Audit File Naming Convention

Audit files are generated to allow comparison between the 999 database and the CPs database. Audit files are normally generated by the BT 999 system and passed to the CP for comparison; however the audit files specification allows other systems to generate an audit file for input to audit tools.

Audit files are generated on the BT 999 Platform after a manual request for an audit file has been received from the CP. The audit files can then be placed in the outgoing directory for collection.

The audit file name is structured as follows:

**BT*<CUP>*\_*<YYYYMMDDhhmm>*.AUD**

where

***CUP*** is the three digit cupid of the CP requesting the audit
***YYYYMMDDHHMM*** is the date and time in numeric form

Where ***YYYY*** is the year

***MM*** is the month, in the range 1 to 12

***DD*** is the date of the month in the range 1 to 31.

***hh*** is the hour of the day in the range 00 to 23

***mm*** is the minute of the hour in the range 00 to 59.

The time will be specified in daylight saving times.

An example of a filename is:

**BT483\_201506171330.AUD**

This is an audit file for cupid 483 generated on the 17th of June 2015 at 13:30 hrs BST.

There is no run number in the file name and the run number used in the header record (as specified in Section 1) is decided by the BT 999 Platform on the creation of the audit file and is not related to any other file transferred between the CP and the BT 999 Platform.

## Audit File Header Record.

The header record is a fixed length of 50 bytes followed by an end of line character.

The description and format of the header record are shown in the table below.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **TDM AUDIT FILE FORMAT HEADER RECORD** | **FIELD TYPE**  | **FIELD SIZE** | **START POSITION** | **DETAILS** |
|  | RECORD TYPE | N | 1 | 1 | This will be 0 (zero) indicating a Header Record. |
|  | ORIGINATING SYSTEM | AN | 10 | 2 | An audit file generated by the BT 999 platform will have “EDB” in this field. If CPs use this system for their own audit files they should set this field to a representative value.The field will be right padded with spaces. |
|  | FILE TYPE | A | 1 | 12 | This field will always be set to “A” indicating an audit file. |
|  | RECEIVING CP IDENTIFIER | N | 6 | 13 | The cupid of the CP requesting the audit file.This field will be left padded with zeros. |
|  | RECORD COUNT | N | 8 | 19 | The number of records in the file including the header.Left Padded with zeros. |
|  | RUN NUMBER | N | 8 | 27 | Sequence number generated per cupid. Left padded with zeros. |
|  | HEADER DATE | N | 8 | 35 | The date the audit was extract in the format YYYYMMDD |
|  | HEADER TIME | AN | 8 | 43 | The time the audit was extract in the format HH:MM:SS |

## Audit File Data Record.

The data record is a fixed length of 1148 bytes of data followed by an end of line marker.

The audit file will return all values stored on the BT 999 platform, where no data is stored the fields will be populated with spaces.

Ceased lines are also stored on the BT 999 platform but the names and address are removed. When an audit file is generated it contains all the lines held by that CP that have data on the BT 999 database. \*Please note audit files no longer contain ceased lines

The description and format of the audit data record is shown in the table below.

| **TDM AUDIT FILE FORMAT DATA RECORD** | **FIELD TYPE**  | **FIELD SIZE** | **START POSITION** | **DETAILS** |
| --- | --- | --- | --- | --- |
|  | RECORD TYPE | N | 1 | 1 | “1” indicating a data record. |
|  | CREATION DATE | AN | 10 | 2 | YYYY-MM-DD |
|  | CP IDENTIFIER | N | 6 | 12 | Left Padded With Zeros |
|  | SPARE SPACE  | AN | 40 | 18 | Padded With Spaces |
|  | SOURCE DATA SYSTEM | AN | 8 | 58 | Right Padded With Spaces |
|  | SPARE SPACE  | AN | 99 | 66 | Padded With Spaces |
|  | LINE STATUS | A | 1 | 165 | Right Padded With Spaces |
|  | PBX LINE TYPE | N | 1 | 166 | Right Padded With Spaces |
|  | INSTALLATION CLASS | N | 2 | 167 | Right Padded With Spaces |
|  | ICB | A | 1 | 169 | Right Padded With Spaces |
|  | OCB | A | 1 | 170 | Right Padded With Spaces |
|  | CPS INDICATOR | A | 1 | 171 | Right Padded With Spaces |
|  | CALL SIGN  | A | 1 | 172 | Right Padded With Spaces |
|  | CNI | A | 1 | 173 | Right Padded With Spaces |
|  | DPRCB | A | 1 | 174 | Right Padded With Spaces |
|  | NSI | A | 1 | 175 | Right Padded With Spaces  |
|  | Spare |  | 1 | 176 | Padded With Spaces |
|  | WLR Version | N | 1 | 177 | Right Padded With Spaces  |
|  | TOS | A | 1 | 178 | Right Padded With Spaces |
|  | TOS/B | A | 1 | 179 | Right Padded With Spaces |
|  | TOS/S | A | 1 | 180 | Right Padded With Spaces |
|  | OUTGOING CALLS BARRED BILLING | A | 1 | 181 | Right Padded With Spaces |
|  | PREMIUM RATE CALL BARRING | A | 1 | 182 | Right Padded With Spaces |
|  | ANONYMOUS CALL REJECT | A | 1 | 183 | Right Padded With Spaces |
|  | MOBILE CALL BARRING | A | 1 | 184 | Right Padded With Spaces |
|  | RETAILER IDENTIFIER | AN | 4 | 185 | Right Padded With Spaces |
|  | SPARE SPACE  |  | 17 | 189 | Padded With Spaces |
|  | NAME / HEADER | AN | 50 | 206 | Right Padded With Spaces |
|  | HONOURS | AN | 30 | 256 | Right Padded With Spaces |
|  | SPARE SPACE  |  | 100 | 286 | Padded With Spaces |
|  | LINE TYPE | AN | 30 | 386 | Right Padded With Spaces |
|  | PREMISES  | AN | 60 | 416 | Right Padded With Spaces |
|  | THOROUGHFARE  | AN | 60 | 476 | Right Padded With Spaces |
|  | LOCALITY  | AN | 30 | 536 | Right Padded With Spaces |
|  | SPARE SPACE  |  | 103 | 566 | Padded With Spaces |
|  | ADDRESS\_ID | AN | 12 | 669 | Right Padded With Spaces |
|  | ADDRESS\_ID\_SOURCE | AN | 1 | 681 | Padded With Spaces |
|  | SPARE SPACE |  | 4 | 682 | Padded With Spaces |
|  | POSTCODE  | AN | 8 | 686 | Right Padded With Spaces |
|  | TELEPHONE NUMBER | N | 15 | 694 | Right Padded With Spaces Leading zero included |
|  | SPARE SPACE  |  | 40 | 709 | Padded With Spaces |
|  | CROSS REFERENCE NUMBER | N | 15 | 749 | Right Padded With SpacesLeading zero included |
|  | SPARE SPACE  |  | 385 | 764 | Padded With Spaces |

# Vet Checks

The BT 999 File Transfer platform will apply system vets to ensure that all mandatory fields are populated. 999 Data will be validated by BT 999 against the criteria indicated below.

The Commands for which fields are mandatory can be found in Section 7.

##  Valid Characters

Below is a list of **allowable** data characters, vetted by the BT 999 platform. Where these vets are failed, the record will be rejected and reported to the CP, in their CAR file. Any additional field specific values are discussed in the relevant sections.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Character** | **Printer Graphic** | **Record Type** | **FIELD TYPE** | **Position in field** |
| Space | Space | All | A, AN[[3]](#footnote-3) | Anywhere |
| Full stop | . | All | A, AN[[4]](#footnote-4) | Anywhere |
| Left Parenthesis | ( | All | A, AN4 | Anywhere |
| Ampersand | & | All | A, AN4 | Anywhere |
| Exclamation Mark | ! | All | A, AN4 | Anywhere |
| Right Parenthesis | ) | All | A, AN4 | Anywhere |
| Minus | - | All | A, AN4 | Anywhere |
| Virgule | / | All | A, AN4 | Anywhere |
| Comma | , | All | A, AN4 | Anywhere |
| Colon | : | All | A, AN4 | Anywhere |
| Apostrophe | ’ | All | A, AN4 | Anywhere |
| Back tick | ` | All | A, AN4 | Anywhere |
| At | @ | All | A, AN4 | Anywhere |
| Quotes | ” | All | A, AN4 | Anywhere |
| A to Z | A to Z | All | A, AN3 | Anywhere |
| a to z | a to z | All | A, AN3 | Anywhere |
| 0 to 9 | 0 to 9 | All | N, AN | Anywhere |

# Number Portability

For the purposes of EFF the term Number Portability is defined as the change of CUPID associated with a CLI.

Each CP is allocated groups or ranges of CLIs by OFCOM. Once a CLI has been allocated to a CP then that CP will remain the range holder for that CLI irrespective of any porting that occurs.

A number will normally port from one CP to another at the request of the end customer, however if a customer ceases service on a ported number then that number will revert back to the ownership of the range holder on TDM when the Cease record is received from the losing CP.

Please note that this porting process is for 999 purposes only and **is in addition** to any porting process between CPs (including BT) and range holders to actually change the routing in the network.

**It is strongly recommended that CPs do not send port messages in their EFF files more than 10 days prior to the effective date.**

## Porting Process.

For a number to port records must be sent to BT 999 by **both the gaining and losing CP’s**. The losing CP will send an export message and the gaining CP will send an import message. Both import and export records must contain the CUPID of the other CP, this allows BT to validate the port and to send reminder messages to the other CP about missing port records. However to reduce the volume of issues we have amended the system to allow an Activate or Modify to behave as if it were an Import as long as it matches the GCP cupid in the Export we receive.

When Trinity BT 999 receives the first of the porting message it will store the message for a number of days currently 10 calendar days, (this can be varied after industry notification) and wait to receive the second porting message from the other CP.

Once both import and export messages have been received on the BT 999 platform, and the effective date has been reached then the port will occur and the CUPID associated with the record will be changed to that of the importing CP. Success messages[[5]](#footnote-5) will be sent to both CP’s

## Missing Port Messages.

If no second message has been received by the effective date then BT 999 will start to send reminder messages[[6]](#footnote-6) to both CP’s. This message will be sent for 10 calendar days (effective date to effective date +9) or until the second port message is received.

If no message is received from the second CP by the 10th day then an import or export is 10 days overdue message[[7]](#footnote-7) is sent to both CP’s. This message is only sent once on the 10th day and if no port record is received on the 11th day then an export or import removed message[[8]](#footnote-8) is sent to both CP’s and the port is deemed to have failed.

## CUPID Mismatch.

If the cupid in an export message does not match the BT 999 registered cupid for that CLI then the record will be rejected back to the sending CP with a CP does not own record message[[9]](#footnote-9).

If the second cupid (losing CP) in an import record does not match the BT 999 registered cupid then the record will be rejected back to the sending CP with an, ‘Export/Import OLO Mismatch’ message[[10]](#footnote-10).

## Effective Date Mismatch.

Both port messages should have the same effective date. If the effective dates differ and the first effective date is reached then BT 999 will act as if the second port has not been received as start to send reminder messages to both CP’s.

If the effective dates differ by less than 10 days then the port will be completed on the later effective date.

If the effective dates differ by more than 11 days then the first port message will be rejected on the 11th day with an export or import removed message8. The second message will then start reminder messages6 again when its effective date is reached.

## Cooling Off customer records

To bring EFF in line with Network activity, we have introduced a 14 day cooling off period where the number will remain in a ceased state with the current CP (Historically this would have returned the number to the rangeholder straight away). Once a record is in a ‘Cooling Off’ state it will still continue to be subject to further EFF changes. The following sections describe the processing of EFF records on customer records that are in the ‘Cooling Off’ state.

### Modify/Activate

Any EFF change (Modify or Activate EFF Command Types) that is received from the owning CP during this period and with an active[[11]](#footnote-11) effective date will simply overwrite the existing customer record’s NAA data and Feed Type. It will no longer be in the Cooling Off state, the current owner is retained and no further EFF update is required. This approach, without the immediate return to range owner, will help with the issues where Cease and Activates are used to amend imported records. Either a *New* (37) or *NAA Record Successful* (39) will be generated which requires no manual intervention.

\*However, if the new EFF record should fail for any reason, the Cool Off process will continue. This is also true of the other pending records, future effective records, which will only cancel Cool Off once they become active.

### Renumber

A Renumber is always rejected if received during Cooling Off and result in a response error code of 28 (*Renumber in Invalid Range*)

### Cease

An EFF Cease message type on an already ceased customer record (irrespective of whether it is in Cooling Off or not) will have no effect and is effectively ignored (the Cool Off period is unaffected). The CAR response record will be a code 38 (*Cease Record Successful*). This also applies to a pending cease once it becomes active.

### Effect of EFF Porting on Cooling Off customer records

Cooling Off customer records may be ported using EFF. In this situation, the Cool Off is cancelled only when the port itself takes place. If only one part of the port request has been received, it will not affect the Cool Off process.

**It is important to note that this can lead to a situation where the Cooling Off period ends before the porting process is due to complete. The result is that the original porting request is rejected**.

### EFF Export Handling

Exports are handled in one of two ways, depending on the type of importing CP

* **Exports to NOLO**

If the Export request record is to a NOLO (this is a gaining CP that does not take 999 service), then it is applied immediately because no other corresponding port record is expected. TDM will reply with a message type 55 (*Export Record Successful)* and requires no DDT action. As is current, the customer record appears as a Cease but with the new NOLO owner.

If the Export record is in error, the Cool Off should continue.

As is the current case, future effective records will not cancel Cool Off until they become active.

* **Exports to OLO**

Upon receipt of an EFF Export type record (with an immediate effective date) from the owning CP will initiate the standard port process (as described above) and start sending out reminders but it will not cancel any Cool Off in progress. This porting process will be subject to the normal porting timeout limits but if the Cool Off expires before the port takes place, then ownership of the customer record will change back to the range holder and result in an error response in the CAR file once the *pendman* process runs again (error 18: *OLO does not own Entry*.)

If the Export is in error, the Cool Off process continues.

As is current, future effective Export records will just be put into pending until they become active.

### EFF Import Handling

Imports are handled in one of two ways, depending on the gaining CP:

* **Owner initiated EFF Imports**

When the current owner of a CLI sends an active EFF Import whilst the record is in a Cooling Off state, it will be treated as if it was either an Activate or Modify command. This means that the NAA details in the Import record are applied directly to the customer record. The customer record feed type will become an Import and the response in the CAR file will be an *Import Successful* message type (56) which requires no manual intervention.

If the Import record is in error, the Cool Off should continue.

Future effective records will not cancel Cool Off until they become active.

Note that this proposed new functionality where CPs import onto their own record will be allowable for any customer record, not just ceased ones.

* **Non Owner EFF Imports**

An EFF Import from a non-owner OLO will have no effect on the Cooling Off state of the existing customer record. It will simply be accepted as part of a potential port and held in the pending table (If the losing CP on the import record is the Range Holder and not the current CP then this will be rejected as a code 43). TDM will respond with an *Export Record is missing* (EC47). This will be sent out daily to both CPs at the beginning of each day.

If the owning CP then sends in a corresponding valid EFF Export record before the Cool Off period expires, the port takes place and the appropriate responses sent out in the CAR file.

A failure on the corresponding Export record (invalid details) does not cancel the Cool Off. In this situation, a failure to correct the Export record within the Cool Off time limit will result in the underlying customer record ownership reverting back to the range owner. Subsequently the original Import will fail because the record ownership has changed and TDM will send back an error type 18 (*OLO does not own Entry*) on the next processing run after the Cool Off expires.

Similarly, if an EFF Export for a customer record is not sent by the owning CP in response to an EFF Import before the end of the Cool Off, then the customer record ownership will revert to the range owner and the original Import record rejected. As mentioned earlier, this happens because TDM will assume that the Importer had attempted a port from a CP that did not own the record and result in an error type 18 (*OLO does not own Entry*) It should be noted that this is a change from the current functionality in that the EC18 will not be sent on receipt of the Import but instead when the cooling off period expires.

Note that if the Export is received in time, but with an effective date beyond the Cool Off, it will also be rejected (with an error type 18, *OLO does not own Entry*) but only at the time of its effective date.

|  |  |  |  |
| --- | --- | --- | --- |
| **EFF Command Type** | **Current behaviour (on a normal active record)** | **New behaviour on a Cease (during its Cooling Off period)** | **Comments** |
| Cease | Only allowed for the CLI owner | Only allowed for the CLI owner | Note that a Cease on a Cease will not change the timestamp in order to retain the original Cool Off period |
| Activate | Only allowed for the CLI owner | Only allowed for the CLI owner |  |
| Modify | Only allowed for the CLI owner | Only allowed for the CLI owner |  |
| Renumber | Only allowed for the CLI owner | EFF record rejected |  |
| Export | Only allowed for the CLI owner | Only allowed for the CLI owner | If a valid export, the porting process is initiated but the Cool Off continues. NOLO Exports will be applied immediately and appear as a Cease but with the NOLO as owner. |
| Import | Disallowed for the CLI owner | CLI owner Import  | This is treated as if it is a Modify/Activate EFF record and the NAA details applied |
| Non owner Import  | This is acceptable but must be completed with a corresponding Export from the current owner within the Cooling Off period. The Import alone does not take the record out of the Cooling Off state. |
| Postcode Change | N/A | N/A |  |
| Cancel | EFF record rejected | EFF record rejected | A cooling off record cannot be cancelled as it does not exist in the pending table (unless it is a future one or in error). Attempts to cancel a cooling off a record will result in a *Cancellation Invalid* (34) but will not require DDT action  |

## Porting Examples

The following sub sections give examples of numbers porting scenarios.

### Example 1. A Number Port occurs on the effective date.

**CP 1**

**The gaining CP**

**CP 2**

**The losing CP**

**TDM**

Record Changed

Import

Import Successful

Export

**Time**

Export Successful

Effective date.

### Example 2. A Number Port occurs after the effective date but before the 10 day limit expires.

Effective date+1.

Effective date+2.

Effective date+3.

**CP 1**

**The gaining CP**

**CP 2**

**The losing CP**

**TDM**

Record Changed

Import

Export Record Missing

Import Successful

Export Record Missing

Export Record Missing

Export

**Time**

Export Successful

Effective date.

Export Record Missing

Export Record Missing

Export Record Missing

### Example 3. A Number Port occurs after the 10 day limit but before the 11 day cutoff.

**CP 1**

**The gaining CP**

**CP 2**

**The losing CP**

**TDM**

Effective date.

Effective date+1.

Effective date+2.

Effective date+9.

Import

Export Record Missing

Export Record Missing

Export Record Missing

Export Record Missing

Effective date+10.

Effective date+11.

Export is 10 days overdue

Import Successful

Export

Export Record Missing

Export Record Missing

Export Record Missing

Export Record Missing

Export is 10 days overdue

### Example 4. A Number Port fails due to missing export..

**CP 1**

**The gaining CP**

**CP 2**

**The losing CP**

**TDM**

Effective date.

Effective date+1.

Effective date+2.

Effective date+9

Import

Export Record Missing

Export Record Missing

Export Record Missing

Export Record Missing

Export is 10 days overdue

Import Removed No Export

Import Removed No Export

Export Record Missing

Export Record Missing

Export Record Missing

Export Record Missing

Further details on the Number Portability processes are best obtained via the OFCOM website <http://www.ofcom.org.uk/>

# Confirmation messages and error codes

Some of the confirmation and error code messages can be considered as ‘interim’ messages. This means that there could be an issue with the information held on BT 999 and this needs the 999 Data Operations team to do some investigation which could then result in either a successful or failure message, or the number is involved in a port and the CP may be required to action. A document explaining what happens in further detail is available from the 999 Data Operations team (Interim and Final messages).

| **Msg\_no.** | **Msg Text (26)+ space (1)** | **Actions to be taken.** |
| --- | --- | --- |
| 13 | Telephone Number Missing. | BT 999 TO BUILD RANGE AND RETRY IF APPLICABLE (N.B. THIS MAY BE FOLLOWED UP BY ERROR 37, 38, 39 OR 57), OR CP TO CORRECT ENTRY |
| 14 | Telephone number invalid | TELEPHONE NUMBER INVALID – CP TO CORRECT AND RESUBMIT |
| 18 | OLO does not own Entry. | BT 999 TO INVESTIGATE AND RETRY IF APPLICABLE– (N.B. THIS MAY BE FOLLOWED UP BY ERROR 37 , 38, 39 OR 57) FOLLOWING A 57 CP TO CONTACTRELEVANT NUMBER PORTING GROUPS |
| 19 | Invalid OLO. | BT 999 TO CHECK VALIDITY OF CP. CP TO RESEND IF APPLICABLE. – (N.B. THIS MAY BE FOLLOWED UP BY ERROR 37 , 38, 39 OR 57)  |
| 28 | Renumber in Invalid Range. | BT 999TO BUILD RANGE IF APPLICABLE AND REQUEST CP TO RESUBMIT – OR CP TO CORRECT ENTRY |
| 33 | Cancellation Successful. | NO ACTION |
| 34 | Cancellation Invalid. | CP TO SUBMIT CORRECTION AS AMENDMENT |
| 35 | Cancellation Unsuccessful. | CP TO SUBMIT CORRECTION AS AMENDMENT. (Currently Unused) |
| 37 | New Record Successful. | NO ACTION |
| 38 | Cease Record Successful. | NO ACTION |
| 39 | NAA Record Successful. | NO ACTION |
| 40 | Renumber Successful. | NO ACTION |
| 43 | Export/Import OLO Mismatch. | BT 999 TO INVESTIGATE AND RETRY IF APPLICABLE– (N.B. THIS MAY BE FOLLOWED UP BY ERROR 37 , 38, 39 OR 57) FOLLOWING A 57 CP TO CONTACT RELEVANT NUMBER PORTING GROUPS |
| 45 | Import Record is Missing. | GAINING CP TO SUBMIT IMPORT RECORD |
| 46 | Import is 10 days overdue. | LAST WARNING BEFORE DELETION – CP TO SUBMIT IMPORT RECORD (10 day value may change however the wording of the error wont) |
| 47 | Export Record is Missing. | LOSING CP TO SUBMIT EXPORT RECORD |
| 48 | Export is 10 days Overdue. | LAST WARNING BEFORE DELETION – CP TO SUBMIT EXPORT RECORD (10 day value may change however the wording of the error wont) |
| 49 | Export removed, no Import. | LOSING CP TO CONTACT GAINING CP TO REARRANGE PORT  |
| 50 | Import removed, no Export. | GAINING CP TO CONTACT LOSING CP TO REARRANGE PORT  |
| 55 | Export Record Successful. | NO ACTION |
| 56 | Import Record Successful. | NO ACTION |
| 57 | Data Record is invalid | IF A RECORD HAS FAILED PREVIOUSLY E.G. FOR ERROR CODE 18 AND IT HAS BEEN CONFIRMED AS INCORRECT THIS SECOND MESSAGE WILL BE RETURNED AFTER THE DATA DELIVERY TEAM HAS INVESTIGATED. |
| 60 | Postcode not found. | DATA DELIVERY TEAM TO CHECK POSTCODE WITH ROYALMAIL AND RETRY IF VALID. IF POSTCODE IS INVALID CP WILL BE NOTIFIED BY DATA DELIVERY TEAM, CP TO THEN CORRECT AND RESUBMIT |
| 61 | Postcode is acceptable. | NO ACTION |
| 73 | Record Received. | NO ACTION |
| 75 | More Recent Record exists. | IF TWO RECORDS ARE RECEIVED FOR THE SAME TELEPHONE NUMBER BOTH WILL BE FAILED WITH THIS ERROR – CP TO INVESTIGATE AND RESUBMIT |
| 76 | Command Line Status Mismatch | CP to correct record and resubmit. |
| 100 | Blank record. | BLANK RECORD, CP TO CORRECT AND RESUBMIT |
| 101 | Invalid record type. | RECORD TYPE NOT ‘0’ OR ‘1’ CP TO CORRECT AND RESUBMIT |
| 102 | Feed Type is missing. | COMMAND VALUE NOT PRESENT IN RECORD, CP TO CORRECT AND RESUBMIT |
| 103 | Feed Type is incorrect. | INVALID COMMAND VALUE IN RECORD, CP TO CORRECT AND RESUBMIT |
| 104 | OLO ID is missing. | CP ID NOT PRESENT IN RECORD, CP TO CORRECT AND RESUBMIT |
| 105 | Invalid OLO ID. | INVALID CHARACTER IN CP ID FIELD, CP TO CORRECT AND RESUBMIT |
| 106 | OLO ID in record not owned by OLO in header. | CP ID IN RECORD NOT OWNED BY CP IN HEADER, CP TO CORRECT AND RESUBMIT |
| 107 | Reference ID is missing. | CP TRANSACTION ID REF. NUMBER NOT PRESENT IN RECORD, CP TO CORRECT AND RESUBMIT |
| 108 | Reference ID incorrect. | INVALID CHARACTERS IN CP TRANSACTION ID REF. NUMBER, CP TO CORRECT AND RESUBMIT |
| 109 | System Routing Flags is missing. | SYSTEM ROUTING FLAG NOT PRESENT IN RECORD, CP TO CORRECT AND RESUBMIT |
| 110 | System Routing Flags incorrect. | INVALID CHARACTERS IN SYSTEM ROUTING FLAGS, CP TO CORRECT AND RESUBMIT |
| 111 | 999 routing Flag set to ‘N’. | FLAG 1 IN SYSTEM ROUTING FLAGS FIELD MUST BE SET TO ‘Y’, CP TO CORRECT AND RESUBMIT |
| 112 | NI only record found in file. | NO NI-ONLY RECORDS ARE ACCEPTED VIA TELESTO, CP TO CORRECT AND RESUBMIT |
| 113 | Invalid Effective Date. | DATE INCORRECT, CP TO CORRECT AND RESUBMIT |
| 114 | Title is incorrect. | INVALID VALUE IN TITLE FIELD, CP TO CORRECT AND RESUBMIT |
| 116 | Initials / Forename is incorrect. | INVALID VALUE IN INITIALS / FORENAME FIELD, CP TO CORRECT AND RESUBMIT |
| 117 | Name is missing. | NAME VALUE NOT PRESENT IN RECORD, CP TO CORRECT AND RESUBMIT |
| 118 | Name is incorrect. | INVALID VALUE IN NAME FIELD, CP TO CORRECT AND RESUBMIT |
| 119 | Honours is incorrect. | INVALID VALUE IN HONOURS FIELD, CP TO CORRECT AND RESUBMIT |
| 120 | Business Suffix is incorrect. | INVALID VALUE IN BUSINESS SUFFIX FIELD, CP TO CORRECT AND RESUBMIT |
| 121 | Premises is incorrect. | INVALID VALUE IN PREMISES FIELD, CP TO CORRECT AND RESUBMIT |
| 122 | Thoroughfare is incorrect. | INVALID VALUE IN THOROUGHFARE FIELD, CP TO CORRECT AND RESUBMIT |
| 123 | Locality is incorrect. | INVALID VALUE IN LOCALITY FIELD, CP TO CORRECT AND RESUBMIT |
| 124 | Post Code is missing. | POST CODE NOT PRESENT IN RECORD, CP TO CORRECT AND RESUBMIT |
| 125 | Post Code is incorrect. | INVALID VALUE IN POST CODE FIELD, CP TO CORRECT AND RESUBMIT |
| 126 | Telephone number not present in record. | TELNO VALUE NOT PRESENT IN RECORD, CP TO CORRECT AND RESUBMIT |
| 127 | Telephone Number Invalid. | INVALID VALUE IN TELNO FIELD, CP TO CORRECT AND RESUBMIT |
| 128 | New Telephone number is missing. | NEW TELEPHONE NUMBER IS NOT PRESENT IN THE RECORD, CP TO CORRECT AND RESUBMIT |
| 129 | New Telephone number is incorrect. | NEW TELEPHONE NUMBER CONTAINS INVALID CHARACTERS, CP TO CORRECT AND RESUBMIT |
| 130 | New OLO ID is missing. | NEW CP ID NOT PRESENT IN RECORD, OR NEW CUPID IS DUPLICATE OF OLO\_ID, CP TO CORRECT AND RESUBMIT |
| 131 | New OLO ID is incorrect. | INVALID VALUE IN SECOND CP FIELD.CP TO CORRECT AND RESUBMIT |
| 132 | Unknown Error. | CP TO CONTACT DATA DELIVERY TEAM |
| 133 | Invalid Service  | THE SERVICE FIELD IS SET TO A VALUE OTHER THAN THOSE SPECIFIED IN SECTION 5.4 CP TO CORRECT AND RESUBMIT. |
| 134 | Invalid Line Status  | THE LINE STATUS IS INCORRECT, CP TO CORRECT AND RESUBMIT. |
| 135 | Invalid PBX Line Type  | THE PBX LINE TYPE IS SET TO A VALUE OTHER THAN THOSE SPECIFIED IN SECTION 5.4 CP TO CORRECT AND RESUBMIT. |
| 136 | Invalid Installation Class value | THE INSTALLATION CLASS IS SET TO A VALUE OTHER THAN THOSE SPECIFIED IN SECTION 5.4. CP TO CORRECT AND RESUBMIT. |
| 137 | Invalid ICB value  | THE ICB VALUE IS NOT SET TO A VALUE OTHER THAN “Y” OR “N”, CP TO CORRECT AND RESUBMIT. |
| 138 | Invalid OCB value  | THE OCB VALUE IS SET TO A VALUE OTHER THAN “Y” OR “N”, CP TO CORRECT AND RESUBMIT. |
| 139 | Invalid CPS Indicator value  | THE CPS INDICATOR IN THE RECORD IS NOT A PERMITTED VALUE AS DEFINED IN SECTION 5.4. CP TO CORRECT AND RESUBMIT. |
| 140 | Invalid RID  | UNKNOWN RID.CP TO CORRECT OR SEND DETAILS OF NEW RID TO BT 999 AND RESUBMIT. |
| 141 | Invalid Facility Value  | A FACILITY FIELD IS POPULATED WITH AN INVALID CHARACTER (NOT ‘Y’, ‘N’ OR ‘ ‘(SPACE). CP TO CORRECT AND RESUBMIT. |
| 142 | Invalid Address ID  | CP TO CORRECT AND RESUBMIT. |
| 143 | Invalid Source Data System | SOURCE DATA SYSTEM CONTAINS INVALID CHARACTERS. CP TO CORRECT AND RESUBMIT. |
| 144 | Invalid Cross Reference Number | CROSS REFENCE NUMBER CONTAINS NON NUMERIC CHARACTERS.CP TO CORRECT AND RESUBMIT. |
| 145 | PO Box Address detected | RESERVED FOR FUTURE IMPLEMENTATION.A PO BOX ADDRESS HAS BEEN DETECTED. THE CP SHOULD REVIEW THE ADDRESS AND RESUBMIT THE RECORD. |
| 146  | Invalid LINE\_TYPE | THE VALUE IN THE LINE TYPE FIELD IS NOT KNOWN TO TDM. BT 999TO INVESTIGATE. |
| 147 | Invalid Address ID Source | CP TO CORRECT AND RESUBMIT. |
| 148 | Invalid WLR Version | WLR CONTAINS INVALID CHARACTERS. CP TO CORRECT AND RESUBMIT.  |
| 149 | Invalid Name Source Indicator | NSI CONTAINS INVALID CHARACTERS, CP TO CORRECT AND RESUBMIT. |

Note: Error / Message codes 100 – 132 (Blue text) apply to checks that will be made first, followed by the other checks for error/message codes 13 – 76 and 133 to 149.

# Glossary

|  |  |
| --- | --- |
| **Acronym/Term**  | **Definition** |
| ASCII | American Standard Code for Information Interchange |
| AUD File | Audit File |
| BT 999 | Data Operations Team – Internal BT group who are responsible for the Data Administration of the BT 999 system |
| CAR File | Confirmation and Rejection File |
| CP | Communications Provider |
| CUPID | Communications Provider Identity Codes (a code allocated by OFCOM <http://www.ofcom.org.uk/>) |
| DAT File | Data Input File |
| EDB | Emergency Database – replaced by TDM (Trinity Data Manager) |
| EFF | Emergency File Format |
| FTP  | File Transport Protocol |
| FTPS | Secure FTP client that uses SSL to encrypt data, not to be confused with sFTP which uses SSH. |
| FCO File | Confirmation of File receipt/rejection |
| TDM | Trinity Data Manager – the Database which manages 999 data. |

# References

1. Title: Code of Practice for the Public Emergency Call Service (PECS) between Communication Providers and the Emergency Services.
2. Title: Schedule 225: Emergency Service (Fixed Emergency Calls, VoIP originated Emergency Call, Non Geographic Emergency Calls and Mobile Emergency Calls.

Available from: BTD.user.support@bt.com

1. Title: User Handbook for 999

Available from: BTD.user.support@bt.com

1. Title: Calypso Gateway, 999 Data Feed Support

Available from: BTD.user.support@bt.com

1. Title: BT 999 Calypso file transfer encryption guidelines

Available from: BTD.user.support@bt.com

# Document Control.

## Authorisation

This document has been authorised by:

|  |  |  |  |
| --- | --- | --- | --- |
| **NAME** | **POSITION** | **Email**  | **DATE** |
| Lorna Stephenson | Senior Manager Voice Services | Lorna.stephenson@BT.com | July 2019 |

## Document History

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Date** | **Author** | **Date & Reason for change** |
| Draft 0.1 |  | Lynda da Nobrega | Separation of data feeds into NI to LORS2 and 999 to Telesto and incorporation of references to the new Trinity Data Manager. |
| Issue 1 |  | Dave Shaw | Issued after feedback from Virgin Media |
| Issue 1.1 |  | Ian Johnston | Updated interface to support 100 service data. |
| Issue 1.1a | Nov 2009 | Ian Johnston | Updated to correct various typo’s.All CLIs now defined as numeric only fields in DAT and AUD files. |
| Issue 1.1b | Jan 2010 | Ian Johnston | Added an error code to reject records containing PO box addresses.Changed porting diagrams in section 10.6 to reflect that reminder messages go out to both CP’s.Added in the Stopped line state to section 5.4.4.Changed CAR file definition for postcode command by making CLI a ‘not applicable’ field rather than mandatory.Changed Mandatory and Optional symbols in DAT and CAR data tables. This was done as the unusual symbols used caused problems with some versions of MS Word.Section 8.3, CAR file table. The description for NSI and WLR Version changed from “padded with zero’s” to “right padded with zero’s. |
| Issue 1.1c | Mar 2010 | Ian Johnston | Added error code to reject unknown LINE\_TYPES.Changed description of EC 146 to reflect that RID may not be recognised on the system.Section 11, swapped EC’s 140 and 141 as CSS RID error is 140 not 141 as previously stated. Section 5.4.2, the table showing mappings between commands and Line States has been changed to prevent addresses being sent for retained lines. Line State of D – Soft Dial Tone has been added.The porting period has changed from 28 days after effective date to 10 days after effective date and from 3 days grace period to 1 day grace period. |
| Issue 1.1d | June 2010 | Stuart Goodman/Ian Johnston | Section 5.4.2, Command/Line Status table. Added the line state of “D” (soft dial tone) to command ‘Activate’ to allow SDT lines to be activated.Section 8.3, Audit file table. Removed the Mandatory/Optional column because it did not add any value. Altered the text to say that, where TDM did not have a particular piece of dat, that spaces would be returned.Added advisory note to the description of Effective Date to advise that current or future dates should only be sent.Section 11, 999 messages & error codes. Added error codes for invalid Address ID and invalid Address ID Source.Section 8. Clarified that exports and imports should not be included in data refreshes. Added Section 5.4.1 giving more details of how renumbering works.Section 5.5 table. Removed the optional value for Source Data System from the Renumber column and greyed it out.Section 6.2 Added paragraph stating that when .DATS are rejected that no records from that file are processed.Section 5.1 Added paragraph stating that filenames should not be re-used.Section 8. Changed the wording of the audit section in line with OFCOM guidance on frequency of audits. |
| Issue 1.1e | April 2011 | Ian Johnston | Added in sections 7.4.1 and 7.4.2 to explain the Source Data System and LO TRANS ID field values in unsolicited CAR responses.Changed porting section to allow effective dates to differ by more than 28 days but still allow the port to complete.Added clarification on use of CNI numbers.In audit file data record definition the “originating system” has been changed to “SOURCE\_DATA\_SYSTEM” to be consistent with naming in the DAT file. The field contents will be the same but the description of the field is now consistent with the DAT definition.Error code 53 (effective date mismatch) removed from specification and porting section modified to reflect actions should effective dates not match.Made Business Suffix a Alpha Numeric rather than purely Alpha.Removed reference document “Connecting to Telesto” and replaced with Calypso Gateway, 999 Data Feed SupportAdded notes to various fields in Section 5.4 stating that there will be additional charges for use of the 100 fields in the interface.Added note to the CLI fields stating they should be left justified and right padded with spaces.Sect 4.1 Stage 5 File rejection. Added note saying the corrected .DAT file should use same run number as original. |
| Issue 2.0 | July 2011 | Deana Surtees/ Ian Johnston | Introduction; Added ‘name and address’ to first paragraph, and changed the version number in the last paragraph4.2 Moved the text ‘If a file fails in its entirety….’ To after #4. Deleted #6 ‘Check that the CP in the header…’ and made 7 a notation rather than a check5.4 added a comment concerning records sent too far in the future6.2 deleted duplication of text ‘ Confirmation and Rejects…’7.5 Put M in table for port reminder messages and added a note about dummy postcode use Z99 9ZZ11 Re-titled from ‘999 messages and error codes’ |
| Issue 2.2 | July 2019 | Deana Surtees | 2. GDPR data encryption information3.1.1 Clarification on ASCII 7 bit Standard Character set as opposed to 8 bit Extended Character set3.4 New section explaining data requirements4.1 Updated from 5 processing times to 84.2.3 Updated to make clear that Header record should be included in the overall record count in the header5.4 Command – Activate or modify are treated the same, Title and Initials corrected to be AN and Honours description added in.5.4.1 Amended to; If the old number does not exist or has been ceased on the 999 system then the renumber will be rejected and an error code 13 (Telephone number missing) returned to the CP6.2 Updated the name of the system in FCO files from TELESTO to CALYPSO7.4.3 New Cooling off section10.1 Activate/Modify to be treat as an Import as long as cupid on Export matches.11. Removal of error code 14 as this is no longer used. Amendment of DDT to BT 999 throughout this section.\*\* UTF8 conversion to standard ASCII characters |
| Issue 2.3 | June 2020 | Kathy Peatroy | Remove reference to BT only dataRemove embedded filesRemove version/issue control of documents references Update BT BrandingAt request of G. Barang – 999 Product Manager |

1. Although this field is numeric it should be left justified and padded with spaces to the right rather than zero’s. [↑](#footnote-ref-1)
2. **It should be noted that even though the Premises, Thoroughfare and Locality fields are optional that all CP’s must provide accurate and complete addresses in these fields. Failure to provide full and accurate information to BT will delay the Emergency Services response to emergency situations.**  [↑](#footnote-ref-2)
3. Except all telephone number fields. [↑](#footnote-ref-3)
4. Except all telephone number and postcode fields

\*\* CP’s will be advised once these characters can be used [↑](#footnote-ref-4)
5. Error Code 55 (Export Record Successful) and Error Code 56 (Import Record Successful) [↑](#footnote-ref-5)
6. Error Code 45 (Import Record is Missing) or Error Code 47 (Export Record is Missing). [↑](#footnote-ref-6)
7. Error Code 46 (Import is 10 Days Overdue) or Error Code 48 (Export is 10 Days Overdue) [↑](#footnote-ref-7)
8. Error Code 49 (Export Removed, No Import) or Error Code 50 (Import Removed, No Export) [↑](#footnote-ref-8)
9. Error Code 18 (CP does not own Entry) [↑](#footnote-ref-9)
10. Error Code 43 (Export/Import OLO Mismatch) [↑](#footnote-ref-10)
11. An active EFF record is one with a non-future effective date (non-pending) and can be applied immediately [↑](#footnote-ref-11)