

ECAS Schedule 4

Location information requirements

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Location information Requirements

1. OVERVIEW

All Operators shall provide Fixed Line Location Information, and/or Mobile Location Conversion Information to the ECAS as appropriate to their operation.

The ECAS will maintain a number of databases for the purposes of determining caller location including the ECAS Fixed Line Information Database, and the ECAS Mobile Location Information Conversion Database.

It is the responsibility of the Operator to ensure that the Location Information is provided to the ECAS System in a timely manner. Provided the Location Information meets the specifications provided and is readable by the ECAS System then the ECAS System will process the information provided. .

Name, address and where possible, Location Information, is to be used by the ECAS to accurately route Emergency Calls to the correct Emergency Services call handling centre. This data may also be passed electronically to the Emergency Services when the Emergency Call is transferred to the Emergency Service.

2. SCOPE

This Schedule describes the general requirements relating to information which must be provided by the Operator to BT that will enable Calling Party location and other required details to be determined by BT.

The technical details including file and field formats for the various data feeds is described in the ECAS data transfer specifications outlined below to which Operators should refer.

3. REFERENCES

All references contained in this document are correct at time of issue.

4. GENERAL REQUIREMENTS

The Operator shall provide all required data in the form of text files conforming to the relevant ECAS specification for the type of data to be transferred.

The Fixed Line Location Information is provided by the Operator to facilitate that when a relevant and valid CLI number is checked by ECAS System, the best available address, name and other information shall be found.

Changes to the Operator's records as a result of number portability shall be reflected in the Operator's Fixed Line Location Information and BT shall not be involved or concerned with the number portability process in determining caller location.

The Mobile Location Conversion Information supplied by the Operator to BT shall ensure that when a call is presented to the ECAS, including mobile location transfer information as described in Schedule 3 to this Agreement, that the best geographical area for the Calling Party can be determined based on the Cell Identity that originates the call so that the appropriate Emergency Service call handling centre for the Calling Party can be determined quickly.

5. DETAILED TECHNICAL SPECIFICATION

The technical details including file formats and data transfer arrangements are provided in the following specification documents which have been made available to the Operator:

- ECAS Fixed Line Location Information Specification

- ECAS Mobile Location Conversion Specification
- ECAS Data Transfer Specification
- ECAS Mobile Location Information Transfer Specification

The ECAS System will support the above specifications. These specifications are subject to change from time to time and all changes will be issued by BT. If data is submitted in other formats or variants, BT does not assure that the data will be processed or that optimal processing will occur.

In the case of a call from a mobile handset, the Mobile network cell site details to which the caller is connected are presented to ECAS with the emergency call as part of the C7 signaling. The format for the transfer of this information is described in the document:

- ECAS Mobile Location Information Transfer Specification

6. HIGH LEVEL ARCHITECTURE

The high level architecture relevant to the data transfer requirements is outlined in Figure 1.

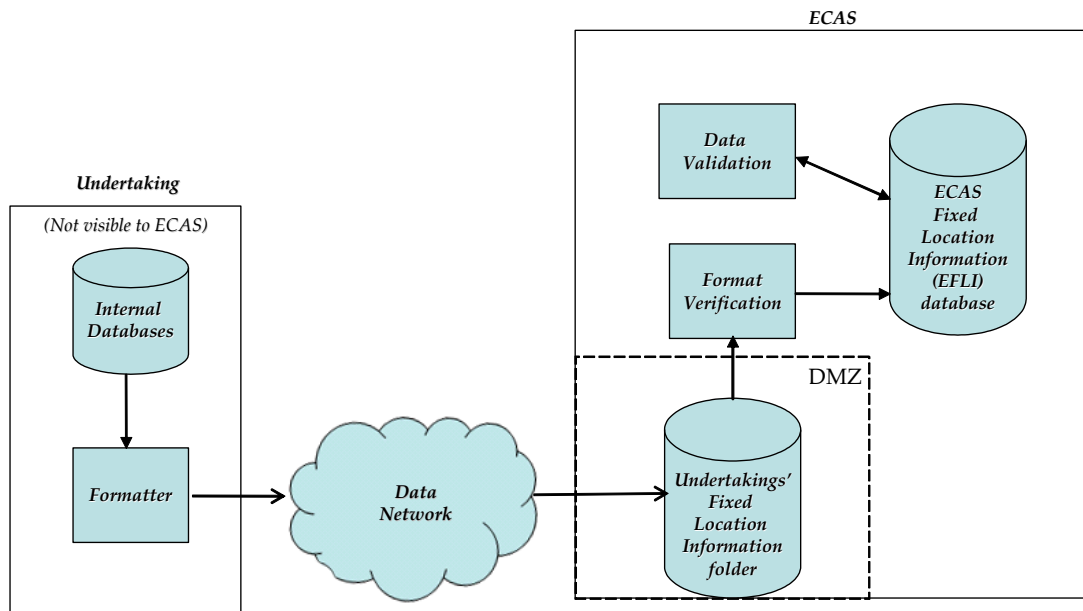


Figure 1: Architecture

The Operator shall upload Fixed Line Location Information and/or Mobile Location Conversion Information to a file folder located on a server in a Demilitarized Zone (DMZ), of the ECAS network.

The ECAS Fixed Line Location Information Database shall contain data from all operators (including the Operator) providing such information.

7. DATA NETWORK AND DATA TRANSFER

The transfer of information will be in accordance with the ECAS Data Transfer Specification.

BT will identify by “condition of connection” to the Operator the nature of the connected systems and links and their use, and propose, agree and implement security measures to counter the

risks to the ECAS. The implementation and operation of such links and measures shall be at the Operator's expense. No connections to the ECAS shall occur until BT written approval has been obtained.

8. CONFIDENTIALITY REQUIREMENTS

The use of Fixed Line Location Information and Mobile Location information by the ECAS shall comply with relevant national and EU data protection and communications regulations and legislation.

9. DATA REQUIREMENTS

BT will import information from the Operator as a separate file for each information type. For each imported file, the import process will create a report file which will contain the number of records imported and details of any rejected records.

9.1. INFORMATION TYPES

The following information (where appropriate to the Operator's service and Customer base) shall be supplied to BT at regular intervals

9.1.1. FIXED LINE INSTALLATION RECORDS

The ECAS System will accept the fixed line installation record information in files conforming to the data, file format, and field value requirements detailed in "ECAS Fixed Line Location Information Specification"

9.1.2. FIXED LINE BILLING RECORDS

The ECAS System will accept the fixed line billing record information in files conforming to the data, file format, and field value requirements detailed in the "ECAS Fixed Line Location Information Specification"

9.1.3. MOBILE LOCATION CONVERSION – LOCATION AREA CODES

Mobile location conversion – location area codes will be used by BT as a reference to the LAC (Location Area Codes) received as part of the mobile location information transfer described in Schedule 3. The ECAS System will accept this information in files conforming to the data, file format, and field value requirements detailed in the "ECAS Mobile Location Conversion Specification"

9.1.4. MOBILE LOCATION CONVERSION – CELL GLOBAL IDENTIFIER

Mobile location conversion cell global identifiers will be used by BT as a reference to the CGI (Cell Global Identifier – or Cell Identity) received as part of the mobile location information transfer described in Schedule 3. The ECAS System will accept this information in files conforming to the data, file format, and field value requirements detailed in the "ECAS Mobile Location Conversion Specification" Crucially for ECAS the CGI file shall include the Cell site location and optionally the approximate area and direction of coverage and this will be used by BT to determine Calling Party location and hence the Connect To Numbers for the Emergency Services.

9.2. UPDATE TYPES

Depending on the quantity and type of information to be submitted, BT will support either full updates only or a full and incremental update approach.

The frequency and timings where both full and incremental updates are to be submitted to BT will be agreed between the Operator and BT at an operational level.

9.2.1.FIXED LINE INFORMATION

For fixed line installation and fixed line billing information both full and incremental update information will be accepted by BT from the Operator.

If the Operator submits both full and incremental updates, it shall use its reasonable endeavours to ensure that the data submitted to the ECAS Fixed Line Information Database is considered consistent and accurate.

9.2.1.1. FIXED LINE INFORMATION – FULL UPDATE

In order to ensure that accurate and complete fixed line information is available to BT and minimize any potential update inconsistencies, a full update of all relevant installation and billing subscriber records shall be provided by the Operator. This update will replace all of the installation and billing records for the Operator within the ECAS Fixed Line Information Database. Please see Clauses 13 and 14 of this Schedule 4 for update frequency.

9.2.1.2. FIXED LINE INFORMATION – INCREMENTAL UPDATE

Following a full update from the Operator to BT, subsequent, incremental updates shall be provided by the Operator at regular intervals containing details of all change to records in the time period since the previous full or incremental update was provided.

It is acknowledged that the Operator's installation and billing data may change on a continual basis; however the Operator shall implement appropriate measures within their required data export process to ensure that missed updates will not occur

10. NUMBER PORTABILITY, WLR, AND RELATED PROCESSES.

BT takes no account of fixed line number portability concerns, SB-WLR (Single Billing – Wholesale line rental) or any associated processes as it is considered that these arrangements and processes are outside the scope of the ECAS.

BT is concerned only with locating the Calling Party in an emergency situation, connecting the Calling Party to the appropriate Emergency Service control centre and providing useful details to the requested Emergency Service. As a result BT is not involved in any associated industry process and requires only that the ECAS Fixed Line Information Database accurately reflects the state of line and other Customer information.

The Operator shall ensure (as described in the "ECAS Fixed Line Location Information Specification") that all changes as a result of number portability and other processes are reflected in the ECAS Fixed Line Information Databases as soon as possible using the normal update facilities described in the specifications.

11. PROCESSING AND IMPORT ERRORS

Records in all input files will be processed and imported sequentially by BT. For each input file submitted a report file will be generated as described in the "ECAS Data Transfer Specification" document.

12. REPORT FILES

BT will generate a report file for each data file received containing details of any processing errors encountered during the import of the data file.

The Operator shall retrieve the relevant report files from BT after processing has concluded and take action in a reasonable timeframe to resolve any processing errors reported in order to

ensure that the records are correctly formatted and will process correctly and will be re-submitted as soon as practical.

The format of the report files generated is described in the “ECAS Data Transfer Specification” document.

13. FREQUENCY OF UPDATES

The frequency of updates and times of day that updates are to be submitted by the Operator and report files are to be retrieved will be agreed at an operational level between the Operator and BT. The ECAS system is available to receive updates on a daily basis and process those updates nightly. It is up to the Operators to decide and advise BT of the frequency of its updates.

14. TIMELINESS OF UPDATES

Updates to both Fixed Line Location Information and Mobile Location Conversion Information shall be submitted by the Operator to BT as soon as is practical following updated information on fixed lines or mobile network coverage. Operators should note that updates will be imported by the BT ECAS systems on a nightly basis. Any changes to fixed line information should be included in the next scheduled update to be generated and uploaded to the ECAS System.

The Operator shall endeavor to make updated information available to BT in a timely manner after a new installation is configured within its internal systems or in the case of a change to a mobile cell site affecting range or area covered is identified.

15. MISSED UPDATES

The Operator shall take reasonable steps to ensure that missed updates do not occur.

In the situation where for any reason an expected update is not produced by the Operator, the actions as described in the “ECAS Data Transfer Specification” should be carried out by the Operator to rectify the situation as soon as is practical ensuring that the data in the ECAS databases is consistent.

16. DATA CONSISTENCY

The Operator shall make reasonable endeavours to ensure that an accurate and consistent representation of the required Fixed Line Location Information and Mobile Location Conversion Information can be constructed by BT using the last full update and the application of the changes contained in any and all subsequent incremental updates provided.

17. DATA ACCURACY

17.1. Location Information - installation address format

To improve the efficiency of call handling it would be best practice to place the town and county in the designated address fields.

The ECAS will accept the timely updating of installation address location information from the Operator.

17.2. Location Information - Billing Address and Customer Name format

To improve the efficiency of call handling it would be best practice to place the town and county in the designated address fields.

The ECAS will accept the timely updating of billing address location information from the Operator.

17.3. Periodic Reporting

It should be noted that BT has an obligation to periodically report to the DCENR mismatches of data between the data supplied by operators/providers to locate a Customer and the actual address of the Calling Party using the Emergency Service.

The Operator shall be responsible for the accuracy of its Fixed Line Location Information and Mobile Location Conversion Information.

The Operator shall ensure that to its knowledge and based on the information provided to it by its subscribers, the data submitted to the ECAS is accurate for the purposes of determining Calling Party location.

18. PROCESS REQUIREMENTS

The high level process and responsibilities for both BT and the Operator are described in detail in the ECAS Data Transfer Specification.

19. ADDRESS RECORDS

The ECAS System will process correctly formatted location information defined in the relevant record definitions. The record and field definitions provided in the “ECAS Mobile Location Conversion Specification” and the “ECAS Fixed Line Location Information Specification” include eight address line fields. It should be noted that for best practice the fields to be used will depend on the address information in question as address information data type is implied in the fields.

For example County details should be provided in the Address H field (County), if the address is a Dublin address then the Address G (City, Town, or Postal area) field should be completed and the Address H (County) field should be blank, or if the address does not contain a street number then the Address E field (street number) should be blank.

All addresses component fields shall be provided in English except in the case where the official local authority name for the town or locality is in Irish and this name can be referenced in the An Post GeoDirectory Database, or where the customer of the Operator has submitted the billing address in Irish, the Irish name may be provided for the address component. The Operator shall ensure where possible that address component values are provided using correct spelling for all localities, streets, towns etc. The data contained within the An Post GeoDirectory Database shall be considered the single authoritative source for correct spelling of address component values.

20. TESTING

- a) The Operator shall confirm in writing that information will be supplied as required by this Agreement which confirms to the relevant issued specifications referenced here.
- b) The Operator agrees to provide BT with live test data as specified in this schedule and the issued specifications.
- c) The Operator agrees to test the required data transfer mechanism as detailed in the “ECAS Data Transfer” specification.
- d) Where BT enhances the relevant issued specifications, the Parties shall inform each other, provide details of the changes and agree any additional testing that may be deemed necessary in accordance with the terms and conditions in this Agreement.

21. GLOSSARY

CGI	Cell Global Identifier
DMZ	Demilitarized Zone
GSM	Global System for Mobile
IP-SEC	Internet Protocol Security – suite of protocols
ITU	International Telecommunication Union
LAC	Location area code
SFTP	Secure file transfer protocol (a.k.a SSH File Transfer Protocol)
VPN	Virtual private network