

ETSI/STC/SMG9/UMTS  
15-16 th of December 1998  
Copenhagen

Tdoc 98u068

## **Mandatory GSM Elementary files and procedures**

**Source: Nokia**

### **1 Introduction**

The purpose of this input paper is twofold:

- To list all the mandatory GSM SIM files and procedures, according to GSM 11.11 v7.1.0. This is done to enable a USIM to fulfil the requirement of providing a UMTS subscriber access to a GSM network (see e.g. 22.00 v1.5.0 Ch. 9 and 22.01 v3.3.0 Ch. 14.1), as these files and procedures must be a mandatory part of the USIM application.
- To propose a list of GSM SIM optional files which are recommended to be part of a USIM application. This part also propose to move some files from the TELECOM directory to the USIM.

### **2 Mandatory GSM files**

**Mandatory files at MF level:**

EF<sub>ICCID</sub> (ICC Identification)

**Mandatory files at the GSM application level:**

EF<sub>LP</sub> (Language preference)

EF<sub>IMSI</sub> (IMSI)

EF<sub>Kc</sub> (Ciphering key Kc)

EF<sub>HPLMN</sub> (HPLMN search period)

EF<sub>SST</sub> (SIM service table)

EF<sub>BCCH</sub> (Broadcast control channels)

EF<sub>ACC</sub> (Access control class)

EF<sub>FPLMN</sub> (Forbidden PLMN's)

EF<sub>LOCI</sub> (Location information)

EF<sub>AD</sub> (Administrative data)

EF<sub>Phase</sub> (Phase identification)

EF<sub>KcGPRS</sub> (GPRS Ciphering key KcGPRS)

EF<sub>LOCIGPRS</sub> (GPRS location information)

**Mandatory files at the DF<sub>TELECOM</sub> level:**

None.

**Mandatory procedures:**

The list of procedures at the SIM/ME interface in GSM network operation is as follows:

**General Procedures:**

- |                    |    |
|--------------------|----|
| - Reading an EF    | ME |
| - Updating an EF   | ME |
| - Increasing an EF | ME |

**SIM management procedures:**

- |  |    |
|--|----|
| - SIM initialization                   | ME |
| - GSM session termination              | ME |
| - Emergency call codes request         | ME |
| - Extended language preference request | ME |
| - Language preference request          | ME |
| - Administrative information request   | ME |
| - SIM service table request            | ME |
| - SIM phase request                    | ME |

**CHV related procedures:**

- |                          |     |
|--------------------------|-----|
| - CHV verification       | MMI |
| - CHV value substitution | MMI |
| - CHV disabling          | MMI |
| - CHV enabling           | MMI |
| - CHV unblocking         | MMI |

**GSM security related procedures:**

- |                                      |     |
|--------------------------------------|-----|
| - GSM algorithms computation         | NET |
| - IMSI request                       | NET |
| - Access control information request | NET |
| - HPLMN search period request        | NET |
| - Location Information               | NET |
| - Cipher key                         | NET |
| - BCCH information                   | NET |
| - Forbidden PLMN information         | NET |

**3 Recommended files**

The following GSM files are proposed to be present on the UICC either in the USIM application, under the MF or in the Telecom dir.

It should be noted that some of the files should/will change format but the generic information should be there.

**Files at MF level:**

The EF<sub>DIR</sub> must be present under the MF to hold a list of the applications in the UICC.

The EF<sub>ELP</sub> should be there to enable every possible language.

**Files at USIM level:**

Files containing the following information should be present in the USIM application.

EF<sub>CBMID</sub> For SAT CB download

EF<sub>CBMI</sub> For Cell Broadcast

EF<sub>ECC</sub> Emergency call codes

EF<sub>CBMIR</sub> For Cell Broadcast

Files to be (re)moved from the Telecom directory to the USIM application(s)

EF<sub>FDN</sub> Could be both common and USIM appl. specific.

EF<sub>SMS</sub> Could be both common and USIM appl. specific.

EF<sub>SMSP</sub> Could be both common and USIM appl. specific.

EF<sub>SMSS</sub> Could be both common and USIM appl. specific.

EF<sub>CCP</sub> Follows their respective "ancestor" files or they could be generic

EF<sub>SDN</sub> Should be USIM appl. specific.

EF<sub>BDN</sub> Should be USIM appl. specific.

EF<sub>EXT1-4</sub> Follows their respective "ancestor" files