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**Satellite Personal Communications Networks (S-PCN);
Network Control Facilities (NCF) for
Mobile Earth Stations (MESs) including handheld earth stations,
for S-PCN in the 1,6/2,4 GHz and the 2,0 GHz bands,
providing voice and/or data communications under the
Mobile Satellite Service (MSS)**

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Foreword

This European Telecommunication Standard (ETS) has been produced by the Satellite Earth Stations and Systems (SES) Technical Committee of the European Telecommunications Standards Institute (ETSI).

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|---|-----------------|
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1 Scope

This European Telecommunication Standard (ETS) provides specifications for the standardization of the characteristics of a minimum set of Network Control Facilities (NCF) for Mobile Earth Stations (MESs) with both transmit and receive capabilities.

NCFs are specified in order to protect other users of the frequency spectrum from unacceptable interference, by ensuring that the network operator is able to suppress and enable the transmissions from the MESs. In particular, these facilities will allow certain interference situations, resulting from the emissions from interfering MESs, to be terminated.

This ETS defines specifications for the control facilities in an S-PCN network in which MESs as defined in ETS 300 733 [1] and ETS 300 734 [2] operate.

2 Normative references

This ETS incorporates, by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text. The publications are listed hereafter. For dated references, subsequent amendments to, or revisions of any of these publications apply to this ETS only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

- [1] ETS 300 733: "Satellite Personal Communications Networks (S-PCN); Mobile Earth Stations (MESs) including handheld earth stations for S-PCN in the 1,6/2,4 GHz Bands, providing voice and/or data communications under the Mobile Satellite Service (MSS)".
- [2] ETS 300 734: "Satellite Personal Communications Networks (S-PCN); Mobile Earth Stations (MESs) including handheld earth stations, for S-PCN in the 2,0 GHz bands, providing voice and/or data communications under the Mobile Satellite Service (MSS)".
- [3] European Union Council Resolution 9529/95/EEC (January 1995): "International requirements for the lawful interception of telecommunications".

3 Abbreviations

For the purposes of this ETS, the following abbreviations apply:

| | |
|-------|--|
| MES | Mobile Earth Station |
| MSS | Mobile Satellite Service |
| NCF | Network Control Facilities |
| S-PCN | Satellite Personal Communications Networks |

4 Test report

The test report shall contain the results of the test.

5 Suppression of MES transmissions

Purpose:

To inhibit the transmissions from any MES when found necessary, with the Network Control Facilities (NCF).

Specification:

It shall be possible to suppress the transmissions from any MES in a network by entering the appropriate command at the NCF.

Once the command to inhibit an MES is entered into the NCF the necessary mechanism shall be invoked so that the selected MES receives a transmission disable command, suppresses its transmission (carrier-off) within 30 seconds, until the MES transmissions are re-enabled.

Verification:

By documentary evidence and demonstration. Verification of transmission suppression shall be performed after commanding inhibition under the three following test conditions:

- when the MES is in idle mode;
- during a period of transmission;
- before an intended period of transmission.

6 Re-enabling of MES transmissions

Purpose:

To re-enable transmissions from an MES or MESs whose transmissions have previously been suppressed.

Specification:

At the NCF, provided a link is available, it shall be possible to re-enable transmissions of the MES whose transmissions have previously been suppressed.

Verification:

By documentary evidence and demonstration.

7 Lawful interception

Purpose:

To ensure that lawful interception of users' communications is possible.

To protect "access to interception functions" and "interception data" from abuse.

Specification:

Provisions shall be made so that lawful interception of users' communications is possible. This concerns the real-time communications consisting of "call content" and "call associated data".

The NCF shall provide a real-time and full-time monitoring capability for the lawful interception of users' communications.

The access to the interception functions shall be protected. In order to trace misuse of lawful interception, all data relating to any interception or interception attempt, authorized or unauthorized, shall be recorded and protected. In addition, all data acquired through interception shall be protected.

NOTE 1: Access to the lawful interception functions of the NCF should be made available to the national law enforcement agencies, according to national laws.

NOTE 2: Recording of the data acquired through interception depends on each of the national laws.

NOTE 3: Some countries may require information regarding the location of the intercepted MESs.

NOTE 4: Additional requirements according to national laws may be applicable.

NOTE 5: General information contained in European Union Council Resolution 9529/95/EEC [3].

NOTE 6: To date, no generic standard on technical interception requirements has been published by ETSI.

Verification:

By documentary evidence and demonstration.

History

| Document history | | | |
|------------------|----------------|---------|--------------------------|
| June 1996 | Public Enquiry | PE 107: | 1996-06-03 to 1996-09-27 |
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