



EUROPEAN
TELECOMMUNICATION
STANDARD

FINAL DRAFT
pr **ETS 300 735**

December 1996

Source: ETSI TC-SES

Reference: DE/SES-05015

ICS: 33.020

Key words: Network, control, facility, NCF, S-PCN, mobile, satellite, service, MSS, earth stations, MES, data, voice

**Satellite Earth Stations and Systems (SES);
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)**

ETSI

European Telecommunications Standards Institute

ETSI Secretariat

Postal address: F-06921 Sophia Antipolis CEDEX - FRANCE

Office address: 650 Route des Lucioles - Sophia Antipolis - Valbonne - FRANCE

X.400: c=fr, a=atlas, p=etsi, s=secretariat - **Internet:** secretariat@etsi.fr

Tel.: +33 4 92 94 42 00 - Fax: +33 4 93 65 47 16

Copyright Notification: No part may be reproduced except as authorized by written permission. The copyright and the foregoing restriction extend to reproduction in all media.

© European Telecommunications Standards Institute 1996. All rights reserved.

Contents

Foreword	5
1 Scope	7
2 Normative references	7
3 Abbreviations.....	7
4 Test report.....	7
5 Suppression of MES transmissions	7
6 Re-enabling of MES transmissions	8
7 Lawful interception	8
History.....	10

Blank page

Foreword

This final draft European Telecommunication Standard (ETS) has been produced by the Satellite Earth Stations and Systems (SES) Technical Committee of the European Telecommunications Standards Institute (ETSI), and is now submitted for the Voting phase of the ETSI standards approval procedure.

Proposed transposition dates	
Date of latest announcement of this ETS (doa):	3 months after ETSI publication
Date of latest publication of new National Standard or endorsement of this ETS (dop/e):	6 months after doa
Date of withdrawal of any conflicting National Standard (dow):	6 months after doa

Blank page

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 Earth Stations and Systems (SES); 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 Earth Stations and Systems (SES); 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
December 1996	Vote	V 9709:	1996-12-31 to 1997-02-28