### CEPT/ERC/RECOMMENDATION 11-01 E (Turku 1996)

# TYPE APPROVAL FOR SATELLITE EARTH STATIONS EQUIPMENT, VSAT (Very Small Aperture Terminals) and SNG (Satellite News Gathering)

Recommendation proposed by the Working Group "Radio Regulatory" (WGRR)

Text of the Recommendation adopted by the "European Radiocommunications Committee" (ERC):

### INTRODUCTION

It is noted that the equipment covered by this Recommendation is within the scope of directive 93/97/EEC supplementing directive 91/263/EEC on the approximation of the laws of the Member States concerning telecommunications terminal equipment, including the mutual recognition of their conformity, in respect of satellite earth station.

Since however a CTR has not been developed for the equipment the mentioned directive can not yet be applied in practice and therefore an interim CEPT type approval procedure is developed to make mutual recognition of type approval possible already now, when the equipment is in conformity with the relevant ETS.

"The European Conference of Postal and Telecommunications Administrations,

#### considering

- a) that the VSAT terminals are using the frequency bands 14.0 GHz 14.5 GHz (uplink) and 10.7 GHz 11.7 GHz and 12.50 GHz 12.75 GHz (downlink) and the SNG terminals are using the frequency bands 12.75 GHz 13.25 GHz and 13.75 GHz 14.5 GHz (uplink) and 10.7 GHz 11.7 GHz and 12.50 GHz 12.75 GHz (downlink),
- b) that it would be advantageous for CEPT administrations to have a common approach in the harmonisation of the procedures for type approval and marking of VSAT and SNG terminals,
- c) that the VSAT and SNG terminals fall within the scope of the EC Directive 91/263/EEC [1] extended by EC Directive 93/97/EEC [2] which cover Satellite Earth Station terminals and that these Directives provide for the testing of compliance with the essential requirements through a Notified Body,
- d) that equipment may at the same time be subject to other regulations outside the scope of this Recommendation (e.g. EMC, electrical safety etc.),
- e) that in the absence of CTRs or TBRs within the EEA countries, the granting of type approval is only possible against the essential requirements of ETS 300 159 [3] and ETS 300 160 [4] for VSAT and ETS 300 327 [5] for SNG,
- f) that CEPT administrations permit VSAT and SNG terminals to be placed on the market provided that the equipment conforms to the relevant ETS,
- g) that ETSI report ETR 169, Satellite Earth Stations and Systems (SES); Common Technical Regulations (CTRs) in Satellite Earth Stations Equipment field has defined the essential requirements for satellite terminal equipment (art. 4e of the Directive 91/263/EEC), see enclosed Annex I,

h) that the Satellite Earth Station terminals declared to be directly connected to the public network can be required to fulfil the essential requirements for interconnection with PSTN. For these requirements manufacturers have to obtain supplementary type approval by each CEPT type approval authority. In this case national marking can be required,

#### recommends

- 1) that CEPT administrations shall accept the type approval given by any CEPT type approval authority to equipment complying with the essential requirements in the latest version of the relevant ETS following type testing at a test laboratory accredited in accordance with the ISO guides 25 and 38 or EN 45001 and EN 45002 or a National Standard conforming to ISO guides 25 or EN 45001 and EN 45002,
- 2) that the VSAT and SNG satellite terminal equipment shall bear a mark as specified in Annex II of this Recommendation,
- 3) that, once VSAT and SNG satellite terminals have been granted type approval by any CEPT type approval authority according to the requirements of Recommends 1 and 2 above, no additional type approval information shall be required by CEPT administrations except to identify the equipment."

#### References

- [1] Council directive 91/263/EEC: "On the approximation of the laws of the Member States concerning telecommunications terminal equipment, including the mutual recognition of their conformity" (The TTE Directive).
- [2] Council Directive 93/97/EEC: "Supplementing Directive 91/263/EEC in respect of Satellite Earth Station equipment" (The SES Directive).
- [3] ETS 300 159: "Satellite Earth Stations (SES); Transmit/receive Very Small Aperture Terminals (VSATs) used for data communications operating in the Fixed Satellite Service (FSS) 11/12/14 GHz frequency bands".
- [4] ETS 300 160: "Satellite Earth Stations (SES); Control and monitoring functions at a Very Small Aperture Terminal (VSAT)".
- [5] ETS 300 327: "Satellite Earth stations and Systems (SES); Satellite News Gathering (SNG) Transportable Earth Stations (TESs) (13-14/11-12 GHz)".

## ANNEX I

# ESSENTIAL REQUIREMENTS FOR VSAT AND SNG TERMINALS (art. 4e of the Directive 91/263/EEC)

Requirement title	VSAT ETS 300 159	SNG ETS 300 327
Spurious radiation above 1 GHz	Applicable	Applicable
On axis spurious radiation	Applicable	Applicable
Tx carrier center frequency stability	Applicable	Applicable
Off axis e.i.r.p.	Applicable	Applicable
Tx polarisation discrimination	Applicable	Applicable
Carrier on-off	Applicable	Not applicable
Mechanical (antenna pointing)	Applicable	Applicable

All requirements in ETS 300 159 and ETS 300 327 to be documented in test reports issued by accredited test laboratories.

Requirement title	VSAT ETS 300 160
Processor monitoring	Applicable
Transmit subsystem monitoring	Applicable
Control channel reception	Applicable
VSAT transmission validation	Applicable
Suppression of transmission on receipt of a disable message	Applicable

All requirements in ETS 300 160 to be documented by manufacturer's declaration.

## ANNEX II

## THE MARKING FOR VSAT and SNG TERMINALS

The marking shall be placed on the terminal equipment of the VSAT and SNG in the following forms:

(ERC VSAT Y) (ERC SNG Y)

Y is the symbol of the country where the equipment has been type approved. This symbol could be followed by the national authorisation number and the year of type approval.