**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*

1. 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),
2. 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,
3. 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,
4. that equipment may at the same time be subject to other regulations outside the scope of this Recommendation (e.g. EMC, electrical safety etc.),
5. 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,
6. that CEPT administra­tions permit VSAT and SNG terminals to be placed on the mar­ket provided that the equipment conforms to the relevant ETS,
7. 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,
8. 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 | VSATETS 300 159 | SNGETS 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 | VSATETS 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.