
Fiksni radijski sistemi - Oprema in antene tipa točka-točka - Generični harmonizirani standard za digitalne fiksne radijske sisteme in antene tipa točka-točka, ki zajema bistvene zahteve člena 3.2 direktive 1999/5/EC (o radijski in telekomunikacijski terminalski opremi (R&TTE))

Fixed Radio Systems - Point-to-Point equipment and antennas - Generic harmonized standard for Point-to-Point digital fixed radio systems and antennas covering the essential requirements under article 3.2 of the 1999/5/EC Directive

Final draft ETSI EN 301 751 V1.2.1 (2002-07)

Candidate Harmonized European Standard (Telecommunications series)

**Fixed Radio Systems;
Point-to-Point equipments and antennas;
Generic harmonized standard for Point-to-Point digital
fixed radio systems and antennas covering
the essential requirements under article 3.2
of the 1999/5/EC Directive**



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Foreword

This Candidate Harmonized European Standard (Telecommunications series) has been produced by ETSI Technical Committee Transmission and Multiplexing (TM), and is now submitted for the ETSI standards One-step Approval Procedure.

The present document has been produced by ETSI in response to a mandate from the European Commission issued under Council Directive 98/34/EC (as amended) [30] laying down a procedure for the provision of information in the field of technical standards and regulations.

The present document is intended to become a Harmonized Standard, the reference of which will be published in the Official Journal of the European Communities referencing the Directive 1999/5/EC [1] of the European Parliament and of the Council of 9 March 1999 on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity ("the R&TTE Directive").

Technical specifications relevant to Directive 1999/5/EC [1] are given in annex A.

This second version intends to endorse, within the scope and applicability under the R&TTE Directive [1] of the present harmonized EN, some new product standards and revisions of already considered product standards. They have been produced by TC-TM, following the market demand, after the publication in the OJ of the first version V1.1.1.

For systems already covered by the previous version of the present document, only equal or technically equivalent requirements have been introduced by this second version. Therefore, from a strictly technical point of view only, it is expected that equipment already conforming to the previous version, would not need re-assessment of essential requirements according to this second version; however, legal implications on the actual declaration of conformity and equipment labelling are outside the scope of the present document.

In addition, justification has been introduced in order to support some positions, commonly shared in the Fixed Service community, on some areas not yet fully clarified in their application and relationship to R&TTE Directive [1] implementation. This with the intention of, at least, keeping a common understanding of those issues, in the spirit of maintaining market competition on equitable level.

Proposed national transposition dates	
Date of latest announcement of this EN (doa):	3 months after ETSI publication
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	6 months after doa
Date of withdrawal of any conflicting National Standard (dow):	24 months after doa

Notes to the NSOs for the OAP procedure:

In tables 2 to 14 reference is made to a specific version of a number of ENs; most of them are under amendment currently at various stages of approval. When these new or amended ENs are approved they should be published as ENs with the quoted version number (as currently required for dated references provisions in harmonized standards).

Prior to the publication of the present document, references of table 2 will be updated to match with the current status of the references deliverables and the publication of the present document will be held until all the quoted versions are published.

In the case that one or more of the revisions are unacceptably delayed beyond the end of this OAP, the reference will be changed to the previous published version of the EN and provision will be made for an amendment of the present document for endorsing such amendment.

The present document does not introduce any new technical requirements beyond those already present in the ENs listed in table 2, currently approved or under approval procedure.

Introduction

Digital Radio systems for the Fixed Service, used in European countries, are presently referred to in a relatively large number of specific ETSI standards.

These ENs contain other requirements that even if not considered essential under the R&TTE Directive [1] are nevertheless applicable, on the ETSI commonly understood voluntary basis, to guarantee good performance and operability of Digital Fixed Radio Systems (DFRS).

These standards either for point-to-point or for point-to-multipoint systems, cover a very wide range of frequency bands of emission, traffic capacities, channel separations and modulation formats that, for the point-to-point systems subject of the present document, are typically summarized in table 1.

Table 1: Digital Fixed Radio System (DFRS) parameters

Parameter	Range
Frequency bands	below 1 GHz to 58 GHz
Traffic capacities	from 9,6 kbit/s to 622 Mbit/s
Channel separations	from 25 kHz to 112 MHz
Modulation formats	from 2 to 512 states (amplitude and/or phase and/or frequency states).
Typical applications	POINT-TO-POINT (P-P) CONNECTIONS: long haul (trunk), rural and urban low/medium/high capacity links STAND ALONE ANTENNAS: for all the above applications when integral antennas are not employed

Many of the standards are produced for similar systems, which have different capacity and spectrum efficiency parameters, for applications in the various radio frequency channel arrangements as shown in table 1. It is expected that other standards will be developed in the future to cover emerging technologies and/or new frequency bands.

All the systems are very similar in the "principles of parameters" but, besides a few common horizontal parameters, they differ in the "required numerical values".

The present document, for point-to-point systems contains only the phenomena relevant to the essential requirements of article 3.2 of the R&TTE Directive [1], giving the reference of the relevant clauses of the ETSI product standards, which contain the actual numerical values and the relevant test methods for the declaration of conformity to the essential requirements.

Where appropriate some horizontal requirements are directly reported.

The selection of the phenomena relevant to the essential requirements has been based on the guidance given by EG 201 399 [27] and by the specific analysis applied to DFRS given in TR 101 506 [28].

The present document is part of a set of standards designed to fit in a modular structure to cover all radio and telecommunications terminal equipment under the R&TTE Directive [1]. Each standard is a module in the structure. The modular structure is shown in figure 1.

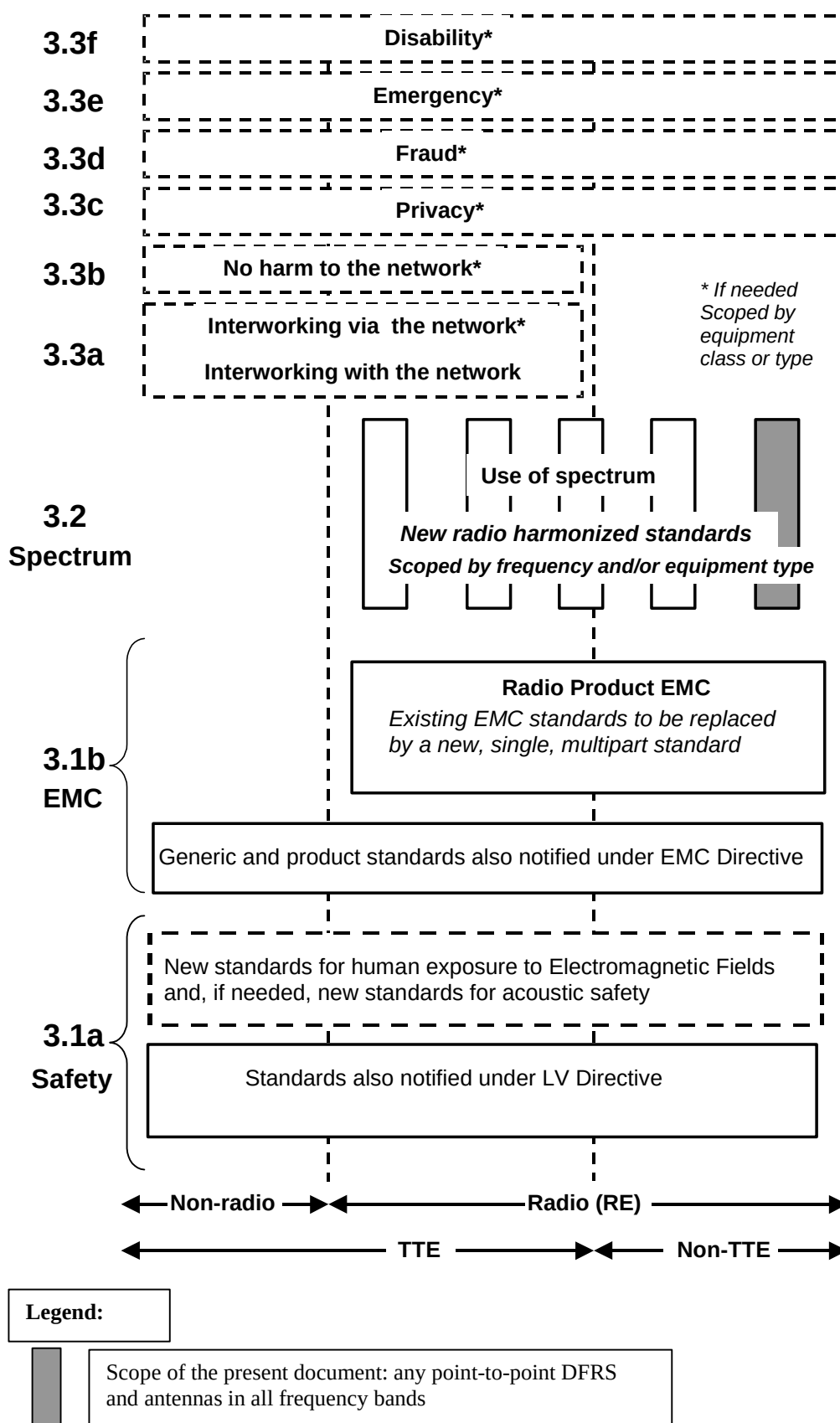


Figure 1: Modular structure for the various standards used under the R&TTE Directive