



**Welcome
to the World
of Standards**



HARMONISED STANDARDS AND R&TTE DIRECTIVE

Igor MINAEV, ETSI Technical officer

for ETSI WS in Georgia, 29-30 May 2012

ETSI and European Regulations



- Recognised European Standards Organisation (ESO) under EU Directive 98/34/EC
- **ETSI objective** to maintain **technical standards**, and as ESO to maintain technical standards to achieve a large unified European market for telecommunications [ETSI statutes, Article 2]
- This is achieved by the prompt and efficient production of Harmonized European Norms (ENs) that are referenced in the Official Journal of the European Union (OJEU).

21.7.98 EN Official Journal of the European Communities

DIRECTIVE 98/34/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
of 22 June 1998
laying down a procedure for the provision of information in the field of technical standards and regulations

7. 'European standardisation body', a body referred to in Annex I;

21.7.98 EN Official Journal of the European Communities

ANNEX I

EUROPEAN STANDARDISATION BODIES

CEN
European Committee for Standardisation

Cenelec
European Committee for Electrotechnical Standardisation

ETSI
European Telecommunications Standards Institute

Equipmen

Network & Services

EC Decision (NLF*)
768/2008/EC

•R&TTE Directive
(1999/5/EC)

• EMC Directive
(2004/108/EC)

•Low Voltage
Directive

Radio Spectrum
Decision
676/2002/EC

Directive 2009/140/EC

Framework
Directive
2002/21/EC

Access Directive
2002/19/EC

Authorisation
Directive
2002/20/EC

Directive 2009/136/EC

Universal Service
Directive
2002/22/EC

Privacy Directive
2002/58/EC

Regulation (EC) No
2006/2004 on cooperation
between national authorities
responsible for the
enforcement of consumer
protection laws

Marine Equipment
Directive

Electronic Fee
Collection

Medical
Devices

Single European
Sky

Sector Specific Directives and regulations

European Regulations for internal market (equipment regulations)



- **New Approach** (22 EU Directives) Standardisation to remove technical barriers to trade in the EU/EFTA
- **R&TTE Directive** is one of the most progressive pieces of legislation from the EC aimed at reducing both the financial burden and the time-to-market delays associated with regulatory approval.
- Speed of **placing equipment on the EU/EFTA market** is now largely controlled by manufacturers and is not influenced by outside agencies..

ETSI standards in the OJEU



More than 160 standards listed under RTTE&D and EMCD

R&TTE Directive:

- art.3.1b (EMC) – 35 (Essentially EN 301 489 series)
- art. 3.2 – more than 120;
- art.3.3 – 7 (Maritime specific requirements)

EMCD ([Directive 2004/108/EC](#)) – 3

Commission communication in the framework of the implementation of the Directive 1999/5/EC 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

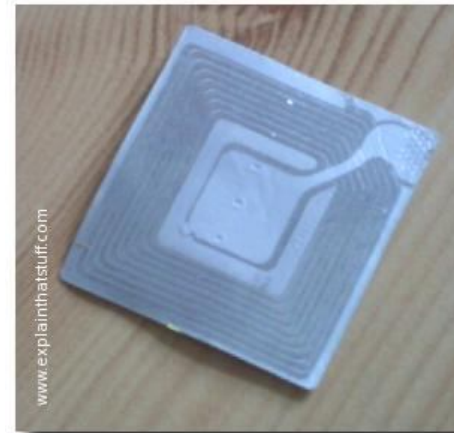
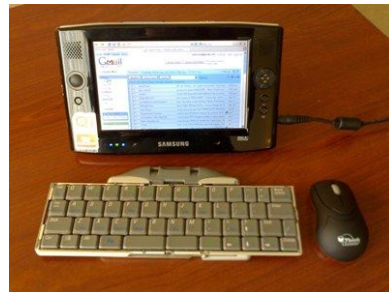
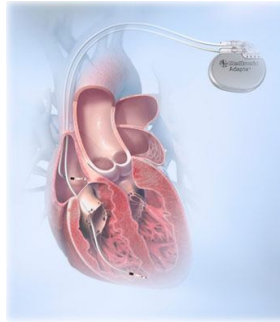
(Text with EEA relevance)

(Publication of titles and references of harmonised standards under the directive)

(2010/C 216/02)

ESO (*)	Reference and title of the harmonized standard (and reference document)	Reference of superseded standard	Date of cessation of presumption of conformity of superseded standard Note 1	Article of Directive 1999/5/EC
ETSI	EN 301 459 V1.4.1 Satellite Earth Stations and Systems (SES); Harmonized EN for Satellite Interactive Terminals (SIT) and Satellite User Terminals (SUT) transmitting towards satellites in geostationary orbit in the 29,5 GHz to 30,0 GHz frequency bands covering essential requirements under article 3.2 of the R&TTE Directive	EN 301 459 V1.3.1 Note 2.1	Date expired (31.3.2009)	Article 3(2)
ETSI	EN 301 489-1 V1.6.1 Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements	EN 301 489-1 V1.5.1 Note 2.1	Date expired (30.11.2008)	Article 3(1)(b)

Radio equipment under R&TTED





ABOUT R&TTE DIRECTIVE (R&TTED)

ORIGIN AND AIM OF THE R&TTE



- The market for R&TTE equipment exceeds 30 BEURO and is undergoing rapid growth
- It was regulated through an EU Directive (98/13/EC) and more than 1000 national approval regulations
- As of 8 April 2000 the R&TTE directive had replaced these national regulations and govern the marketing and use of R&TTE equipment
- Directive establishes a regulatory framework for the placing on the market, free movement and putting into service in the Community of radio equipment and telecommunications terminal equipment

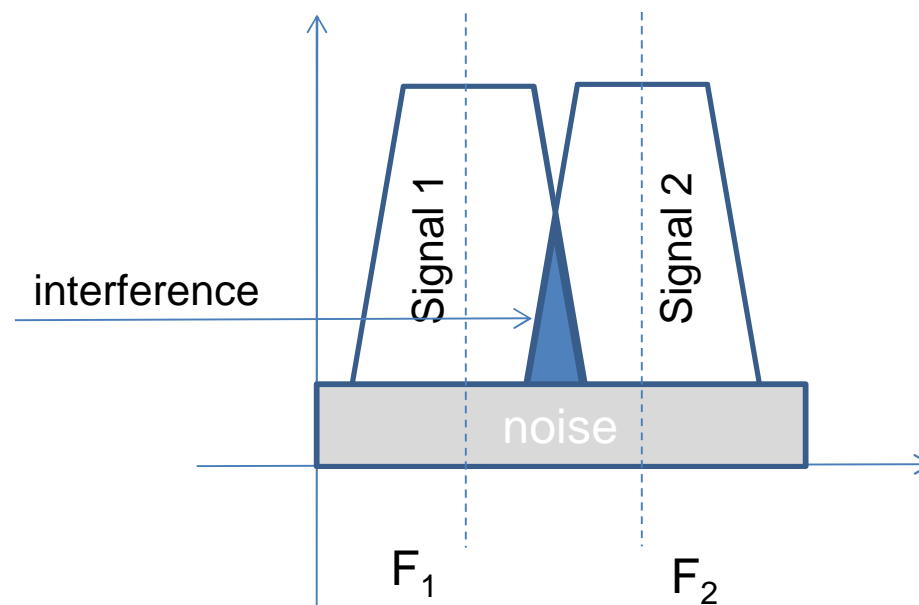
More information: http://ec.europa.eu/enterprise/sectors/rtte/index_en.htm

Article 1

- (a) "apparatus" means any equipment that is either radio equipment or telecommunications terminal equipment or both;
- (b) "telecommunications terminal equipment" means a product enabling communication or a relevant component thereof which is intended to be connected directly or indirectly by any means whatsoever to interfaces of public telecommunications networks (that is to say, telecommunications networks used wholly or partly for the provision of publicly available telecommunications services);
- (c) "radio equipment" means a product, or relevant component thereof, capable of communication by means of the emission and/or reception of radio waves utilising the spectrum allocated to terrestrial/space radio communication;
- (d) "radio waves" means electromagnetic waves of frequencies from 9 kHz to 3 000 GHz, propagated in space without artificial guide;

EU Directives: R&TTE, art. 3.2 to avoid harmful interference

- The overlapping signal is seen as interference to the legacy receiver.
- This was traditionally solved by exclusive licensing.
- ETSI EN 300 220 (SRDs operating in up to 1GHz), EN 300 328 (Wideband transmitting systems in 2,4 GHz) to solve inter systems interference



Harmful Interference. Interference which endangers the functioning of a radionavigation service or of other safety services or seriously degrades, obstructs, or repeatedly interrupts a radiocommunication service operating in accordance with [the ITU] Radio Regulations.

- **Protection of the health and the safety** of the user and any other person (Art.3.1a)
- **Protection requirements regarding electromagnetic compatibility** (Art.3.1b)
- **Radio equipment** shall be constructed to effectively use the spectrum allocated to terrestrial/space-based radio communication and orbital resources so as to avoid harmful interference. (Art. 3.2)

Conformity assessment procedure under R&TTED




Annex II	Annex III	Annex IV	Annex V
Internal Production Control	Internal Production Control plus specific apparatus tests	Technical construction file	Full Quality Assurance
<p>Manufacturer draws up technical documentation and test reports</p> <p>Involvement of a NB not necessary</p>	<p>As Annex II, plus Identification of the test suites by a NB</p> <p>(except where the test suites are defined in the harmonised standards)</p>	<p>As Annex III, plus Presentation of technical documentation and test reports (Annex II) and Declaration of Conformity to the specific test suites (Annex III) to one or more NB. Issue of an opinion of NB within 4 weeks. The manufacturer is not bound to the opinion of the NB.</p>	<p>Analogue to the current regime under Dir. 98/13/EC</p> <p>NB shall approve the Full Quality Assurance System</p>

<p>Telecommunications terminal equipment which does not make use of the spectrum allocated to radio communication and receiving parts of radio equipment</p> <p>According to the choice of the manufacturer</p>			<p>Radio equipment where the manufacturer has applied harmonised standards</p> <p>According to the choice of the manufacturer</p>			<p>Radio equipment where the manufacturer has not applied or has only applied in part harmonised standards</p> <p>According to the choice of the manufacturer</p>	
Annex II	Annex IV	Annex V	Annex III	Annex IV	Annex V	Annex IV	Annex V

- “harmonised standard’ shall mean a standard adopted by one of the European standardisation bodies listed in Annex I to Directive 98/34/EC of the European Parliament and of the Council of 22 June 1998 laying down a procedure for the provision of information in the field of technical standards and regulations and of rules on Information Society services on the basis of a request made by the Commission in accordance with Article 6 of that Directive;”

- EU Parliament and Council adopt New Approach Directive (RTTE&D, EMC)
- European commission issues a Mandate to ESO(s) to develop Harmonised standards under a New Approach Directive. This mandate is adopted by Member States 98/34 Committee. In ETSI BOARD has to accept the Mandate)
- European Commission Publishes a standard in the OJEU developed and processed by an ESO in accordance with appropriate procedures (PE, Vote)

HARMONISED STANDARD ESSENTIALS (2)

 **EC-Declaration of Conformity to the Essential Requirements of the applicable Directive 1999/5/EC**

We, **Logitech Ireland Services Limited**, Ballincollig Cork Ireland, declare under our sole responsibility that the Radio-communication product

Brand Name: **LOGITECH**

Model Number Mouse: **M-RBK93b**

Model Number Receivers: **C-UM34**

are fully in conformity with the essential requirements of the Council Directive 1999/5/EC (R&TTE). This declaration is based on the full compliance of the product with the following European standards:

RF: **EN 300 440-1 v 1.3.1 (2001-09) EN 300 440-2 v 1.1.1 (2001.09)**

EMC: **EN 301 489 part 1& 3 V 1.4.1 (2002-08)**

Electrical Safety: **EN 60950 : 2000 or EN 60950-1 : 2001**

Laser Safety: **EN 60825-1 (1994) + A11(1996) + A2 (2001)**

Authorized Representative: **LOGITECH IRELAND SERVICES LTD**
 Units 1 and 2 Westpoint Buildings
 Westpoint Business Park
 Ballincollig
 IE -CO. Cork

Signed: *Bernie Barber* Cork, 23 May, 2005

Bernie Barber,
WW Director Environmental and Compliance programs

Logitech Document Number: **624003-0914.A0**

For Information: On the basis of this declaration, these products and the packaging will bear following marking:

CE

-In Europe responsibility for placing equipment on the market under the New approach legislation is always on the shoulders of manufacturers

-Harmonised standard is a way to access the market

-Use of HENs helps to reduce costs of production up to **40%**

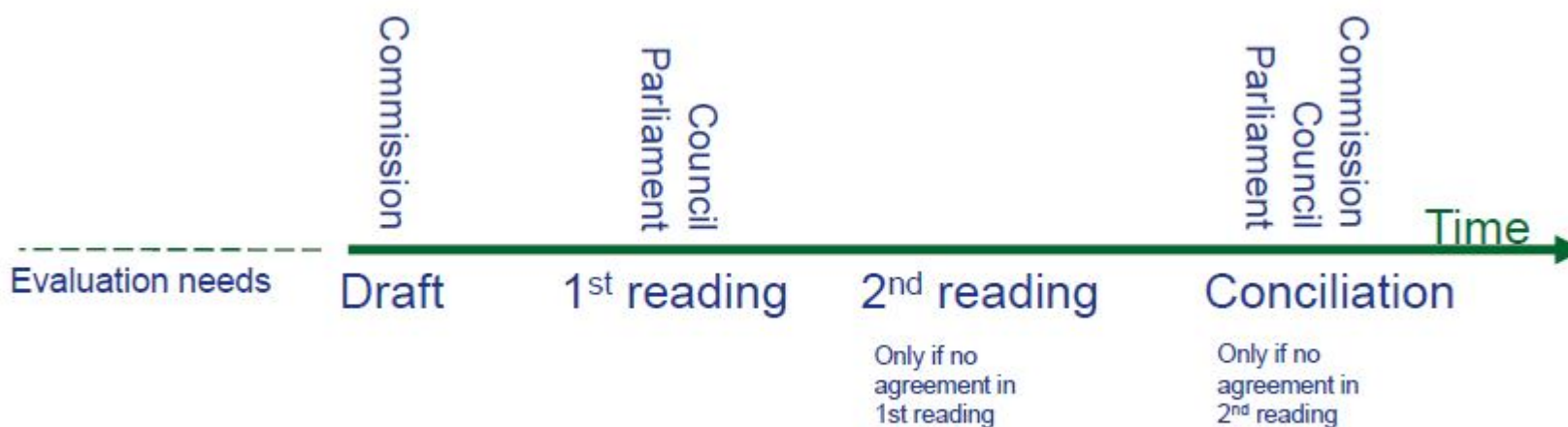


- **EMC&Radio Spectrum Matters**
- **Intelligent Transport Systems**
- **Broadband Radio Access Net.**
- **Sat Earth Stations & Systems**
- **TETRA**
- **DECT**
- **Railway telecommunications**
- **Access, Terminals, Transmission and Multiplexing**
- STQ (acoustic shock)
- TISPAN (WG7)
- M2M
- Reconfigurable Radio Systems

R&TTED is under revision



- Blue guide, R&TTE and EMC Guides revisions



The commission is likely to propose a long transitional period

R&TTED fine tuning: Definitions

(c) ‘radio equipment’ means a device which intentionally emits or receives radio waves in order to serve its purpose. All ancillary elements, including software, which may affect compliance of the radio equipment with the essential requirements in article 3 of this Directive are considered as part of the radio equipment. Other active devices which enable the emission and/or reception of radio waves are also considered as radio equipment;

-Change in the scope of radio equipment, which is extended to equipment which does not necessarily communicate but is a regular, ‘voluntary’ user of spectrum.

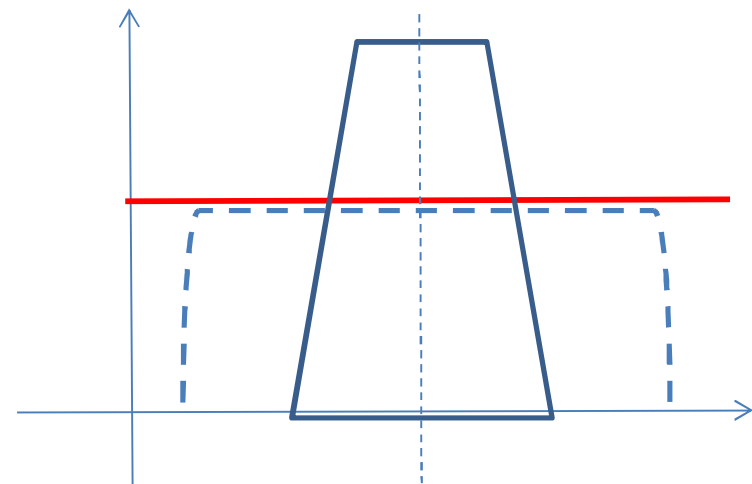
This allows to bring all wanted users of spectrum under the same legal framework.

Some examples of equipment affected/clarified: jammers, wireless chargers, positioning systems

- Definition of radio equipment is changed (“capable of communication”)

- Many more products can become an R&TTE products (wireless charges)

- Absence of definition **efficient use of spectrum**



R&TTED fine tuning: Essential req/s



2. In addition, radio equipment shall be so constructed so as to efficiently use the spectrum allocated to terrestrial/space radio communication and orbital resources and so as to avoid harmful interference. These requirements apply both to emission and reception,

-efficient in order to refer to use of spectral resources

-clarification with regard to the applicability of the requirement to reception

Clarification is needed regarding the goals of the change of the wording for this requirement in order to determine the extent of the impact on the harmonised standards (e.g. a review of existing harmonised standards is needed).

The criterion has been changed from "effective" in the current directive to "efficient" in this draft. Definitions need to be given in the Directive for the terms used: "effective" and "efficient". This will facilitate the work in creating the related harmonised standards.

It is important to have a common understanding of the criterion (e.g. effective, efficient) throughout all the languages.

- Changes in the art. 3.2 must not make ETSI to revise all HENs and Cooperation agreement with CEPT



THANK YOU



ADDITIONAL SLIDES *

New Legislative Framework



- August 2008 Council and European Parliament adopted the “goods package”, a set of horizontal measures aimed at enhancing the functioning of the internal market in goods (to increase the safety of products on the market and compliance with EU Directives)
- NLF consists of two complementary instruments:
 - Regulation 765/2008/EC on accreditation and market surveillance, and
 - Decision 768/2008/EC establishing a common framework for the marketing of products.



- The Decision sets out a **common framework for EU legislation** that lays down requirements for the marketing of products. It contains the provisions which are commonly used in EU product legislation (e.g. definitions, obligations of economic operators, safeguard clause, etc).
- Decision also has the objective of bringing **more consistency into the whole EU regulatory framework for products**. It is designed as a toolbox that contains the elements commonly used in technical harmonisation legislation



Revision of R&TTE in the light of Decision 768/2008/EC



- Align the provisions of the R&TTE Directive with the one of the Decision for economic operators
 - manufacturers,
 - Importers,
 - Distributors, as well as
 - the bodies testing and certifying products
- Fine tune the Directive after more than 10 years of existence
 - Scope
 - Definitions
 - Essential requirements
 - Harmonised standards
 - Annex I

