About ETSI

ETSI is one of the world’s leading standards development organizations for Information and Communication Technologies (ICT). Founded initially to serve European needs, ETSI has grown rapidly to become highly-respected as a producer of technical standards for worldwide use. In addition to our global focus, ETSI is formally recognized by the European Union as a European Standardization Organization.

ETSI membership is composed of manufacturers and network operators – all the “big names” and many smaller companies too – plus ANSPs, national administrations, ministries, regulators, universities, research groups, consultancies and user organizations. A powerful and dynamic mix of skills, resources and ambitions, all working together to bring the very best ICT solutions to the global marketplace. Geographically, our membership of over 700 companies and organizations is drawn from more than 60 countries on 5 continents.

ETSI is independent of all other organizations and structures, a key feature for ensuring neutrality and trustworthiness. That brings benefits not only in the acceptance of our standards and other publications, but also in our growing range of ancillary services, such as interoperability testing. And because standardization inevitably draws upon the bright ideas of our members, we have an Intellectual Property Rights (IPR) policy in place that has become the model for many other organizations.

ETSI’s standardization activities are open to all interested companies and organizations. Your company can be part of this dynamic organization. For more information about how you can be involved, please visit:

http://www.etsi.org/membership

If you are interested in joining the standardisation work of TC ERM TG28 or should you have any other questions, then further details on these ETSI’s SRD standardisation activities can be found at:

http://www.etsi.org/WebSite/Technologies/ShortRangeDevices.aspx

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What are Short Range Devices?

Short Range Devices (SRD) are essentially low power radio communications systems. SRD technologies can include wireless links for example, data, audio, video or telemetry, sensors & actuators through to low power radar systems. Typically, the range of an SRD is a few cm up to 100 metres. Car key fobs and wireless alarms are examples of SRDs, as are Bluetooth and WiFi devices. RFID systems are also SRDs.

Generally SRDs operate licence free in Europe. To be allowed this freedom of use, SRDs must inherently be devices that have a low capacity to cause interference to other radiocommunications. This is ensured by conformance to the relevant ETSI standards.

The low capacity to cause interference allows SRDs to coexist with other radio communications services. Consequently, SRD are permitted to operate in a number of bands across the radio spectrum.

SRDs can be mass market devices or highly specialised technologies. There is a high degree of spectrum harmonisation across Europe for these devices. In most cases, once conformance with the standard has been demonstrated, a device can be used freely throughout Europe, with no need for an end user licence or any paperwork.

SRDs are not considered a “Radio Service” under the meaning of ITU Radio Regulations (Article 1). However, both the European Commission and the European Conference of Postal and Telecommunications (CEPT) produce a mandatory harmonisation Decision (2006/771/EC – periodically updated), specific technology based Decisions e.g. ECC/DEC(06)04 and a Recommendation (CEPT ERC/Rec 70-03) intended to promote the most efficient implementation of these devices.

The CEPT SRD Recommendation categorises SRDs as follows:

- Non-specific Short Range Devices
- Tracking, Tracing and Data Acquisition
- Wideband Data Transmission systems
- Railway applications
- Road Transport and Traffic Telematics (RTTT)
- Radiodetermination applications
- Alarms
- Model Control
- Inductive applications
- Radio microphones and Assistive Listening Devices
- Radio frequency identification applications
- Active Medical Implants and their associated peripherals
- Wireless Audio Applications

Who is involved in SRD standardization work?

The purpose of SRD standardisation is to develop standards that enable the production of equipment that will be compatible with other radiocommunication systems. ETSI’s Technical Committee for EMC and Radio Spectrum Matters has a number of groups that undertake this activity.

- ERM-TG 11 Wideband Data Systems
- ERM-TG17 Standards for broadcast and ancillary communications equipment
- ERM-TG28 Generic Short Range Devices [and RFID]
- ERM-TG30 Medical Devices
- ERM-TG34 [UHF specific] Radio Frequency Identification Devices (RFID)
- ERM-TG 37 Intelligent Transport Systems
- ERM-TG SRR Automotive and Surveillance Radar
- ERM-TG TLPR Tank Level Probing Radars
- ERM-TG UWB Ultra Wide Band SRDs

The majority of activity for generic and mass market technologies is completed within TC ERM. In particular ERM-TG28 deals with Generic Short Range Devices, and other committees listed above deal with more specialised technologies.

Current standardization activities

Standards are subject to amendment over time as technologies evolve. There are both Generic standards for SRD and some quite specific standards for the more specialised technologies.

There are four generic (non-specific) standards covering different sectors of the radio spectrum:

- 9 kHz to 30 MHz EN 300 330
- 25 MHz to 1000 MHz EN 300 220
- 1 GHz to 40 GHz EN 300 440
- 40 GHz to 246 GHz EN 305 550

and generic UWB standard:

- Ultra Wideband (Communication) EN 302 065

Specific SRD standards include:

- EN 300 328 Wideband Transmission Systems
- EN 300 422 Wireless Microphones in the 25 MHz to 3 GHz frequency band
- EN 302 510 Ultra Low Power Active Medical Membrane Implants and Accessories
- EN 302 195 Ultra Low Power Active Medical Implants 9 – 315 kHz
- EN 302 536 Inductive applications in the 315-600 kHz range for animal implant communication.
- EN 302 066 Ultra Wideband (Ground- and Wall-Probing Radar)
- EN 302 208 Radio Frequency Identification
- EN 302 372 Tank Level Probing Radar
- EN 302 858 Narrowband Short Range Radar (24 GHz)
- EN 302 288 UWB Short Range Radar (24 GHz)
- EN 302 264 UWB Short Range Radar (79 GHz)
- EN 301 091 Long Range Radar (76 GHz)