

# COMMON REGULATORY OBJECTIVES FOR BLUETOOTH EQUIPMENT

## **PART 2**

### SPECIFIC ASPECTS OF BLUETOOTH EQUIPMENT

#### **1. SCOPE**

This Common Regulatory Objective, CRO, is applicable to Bluetooth equipment, as defined in Clause 2.

A CRO is structured in 2 parts:

- **Part 1:** Part 1 of all ICT equipment CROs specifies the common and general requirements needed to satisfy the regulatory objectives of the participating Countries.
- **Part 2:** The present document is Part 2 of the Bluetooth equipment CRO and specifies, for Bluetooth equipment, the specific requirements needed to satisfy the regulatory objectives of the participating Countries.

The validity of a CRO is only achieved with the full application of both Part 1 and Part 2.

This CRO specifies the requirements needed to satisfy the regulatory objectives of Countries. Thus, this agreement will allow Bluetooth equipment which is in compliance with this CRO to be placed on the market and be put into service as equipment within Countries, that have implemented this CRO.

#### **2. BLUETOOTH EQUIPMENT**

Bluetooth is an industry standard for wireless connectivity using data and/or voice links over short distances. The Bluetooth protocol is standardized by the Bluetooth SIG Inc. For the remainder of this document, “Bluetooth equipment” covers any component or end product, using Bluetooth technology.

#### **3. REFERENCES**

In addition to the references in Part 1 of this CRO, relevant references are:

Bluetooth V1.1	Core Specification
	Technical Specification of the Bluetooth system part 1
Bluetooth V1.1	Profile Specification
	Technical Specification of the Bluetooth system part 2

<http://www.bluetooth.org/specifications.htm>

#### **4. DEFINITIONS**

In addition to the references in Part 1 of this CRO, applicable definitions are found in:

Bluetooth V1.1	Core Specification Technical Specification of the Bluetooth system part 1
Bluetooth V1.1	Profile Specification Technical Specification of the Bluetooth system part 2 <a href="http://www.bluetooth.org/specifications.htm">http://www.bluetooth.org/specifications.htm</a>

#### **5. PRODUCT REQUIREMENTS**

This CRO covers the legitimate regulatory objectives for Bluetooth equipment.

The objectives cover:

- Safety, including Electromagnetic Fields
- Electromagnetic Compatibility
- Effective use of the radio spectrum

#### **6. REFERENCE TO STANDARDS**

The recognized standards relevant for this CRO are listed in the Annex.

## ANNEX

Bluetooth equipment shall be held to be compliant if they comply with each of the standards listed. The version of the standard listed is valid at the time of publication of this CRO. Subsequent versions of the listed standards are accepted unless otherwise stated by Countries having agreed on this CRO.

Conformity requirements can be found in the standards where the technical requirements are defined, or in separate standards.

### **A. Safety, excluding Electromagnetic Fields**

IEC 60950 (1999)	Safety of information technology equipment
CB Bulletin (parts covering the intended markets)	IECEE (The IEC System for Conformity Testing and Certification of Electrical Equipment).

### **B. Electromagnetic Fields**

#### **Exposure limits**

ICNIRP (April 1998)	Guidelines for limiting exposure to time-varying electric, magnetic, and electromagnetic fields (up to 300 GHz) – International Commission on Non-Ionizing Radiation Protection, Health Physics, Vol. 74, No. 4, April 1998.
IEEE C95.1 (1999)	Standard for safety levels with respect to human exposure to radio frequency electromagnetic fields, 3 kHz to 300 GHz.

#### **Compliance Assessment (portable and mobile devices)**

CENELEC EN 50360:2001	Product standard to demonstrate the compliance of mobile phones with the basic restrictions related to human exposure to electromagnetic fields (300 MHz – 3 GHz).
CENELEC EN 50361:2001	Basic standard for the measurement of Specific Absorption Rate related to human exposure to electromagnetic fields from mobile phones (300 MHz – 3 GHz).

CENELEC EN 50371:2002 Generic standard to demonstrate the compliance of low power electronic and electrical apparatus with the basic restrictions related to human exposure to electromagnetic fields (10 MHz – 300 GHz) – General public.

FCC OET Bulletin 65 (2001) Supplement C: Evaluating compliance with FCC guidelines for human exposure to radiofrequency electromagnetic fields: Additional information for evaluating compliance for mobile and portable devices with FCC limits for human exposure to radiofrequency emissions.

### **Compliance Assessment (base stations and fixed terminal stations)**

CENELEC EN 50385:2002 Product standard to demonstrate the compliance of radio base stations and fixed terminal stations for wireless telecommunication systems with the basic restrictions or the reference levels related to general public exposure to radio frequency electromagnetic fields (110 MHz – 40 GHz).

CENELEC EN 50383:2002 Basic standard for the calculation and measurement of electromagnetic field strength and SAR related to human exposure from radio base stations and fixed terminal stations for wireless telecommunication systems (110 MHz – 40 GHz).

CENELEC EN 50371:2002 Generic standard to demonstrate the compliance of low power electronic and electrical apparatus with the basic restrictions related to human exposure to electromagnetic fields (10 MHz – 300 GHz) – General public.

### **C. Electromagnetic Compatibility**

ETSI EN 301 489–1 v1.3.1 Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements

ETSI EN 301 489–17 v1.1.1 Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 17: Specific conditions for Wideband data and HIPERLAN equipment

FCC Part 15.207 (2001) Radio Frequency Devices; Intentional Radiators; Conducted limits

FCC Part 15.209 (2001) Radio Frequency Devices; Intentional Radiators; Radiated emission limits

**D. Effective use of the radio spectrum**

ETSI EN 300 328-1 v1.3.1 Electromagnetic compatibility and Radio spectrum Matters (ERM); Wideband Transmission systems; Data transmission equipment operating in the 2,4 GHz ISM band and using spread spectrum modulation techniques; Part 1: Technical characteristics and test conditions

FCC Part 15:247 (2001) Operation within the bands 902 - 928 MHz, 2400 - 2483.5 MHz, and 5725 - 5850 MHz.

FCC Part 15:205 (2001) Restricted bands of operation.

ARIB STD-T66 v1.0 Second Generation Low Power Data Communication System/Wireless LAN System

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