JUSTIFICATION FOR COMMON REGULATORY OBJECTIVES FOR ICT PERIPHERAL EQUIPMENT

This document provides the justification for a Common Regulatory Objective related to Personal Computer (PC), Telecommunications Terminals and other Information and Communications Technology (ICT) common peripheral equipment. It identifies the requirements that are relevant to the CRO. The output from this document will be used for the ICT peripherals CRO.

1. ICT PERIPHERAL EQUIPMENT

1.1 GLOBAL USE

ICT peripheral equipment is in worldwide use today. There is no reason to have different versions for different regions, and consequently ICT peripherals are designed for a true global market. People travel with their portable PCs and telephones, including their peripherals, and connect them successfully to the mains power network.

1.2 APPLICATIONS COVERED

The range of applications covered by this equipment is extremely wide and can be considered a powerful extension of ICT base products. The PC the telephone and other ICT material, with its dramatic increase of performance and price reduction became during the last half century THE tool of our life. In the administrations, in production lines, in the business, at home, in the means of transports, in hospitals, virtually everywhere there is at least a PC enhancing the human existence. The recent trend to integrate several Telecom technologies in the PC will further enhance the quality of life of the citizens and most of all is likely to be the solution to overcome the existing “digital divide”.

In principle, a ICT peripheral can, under the control of a PC or other ICT device, be the central tool of some of the following applications:

- printing documents available in the PC;
- memorising data from a PC or a mobile telephone;
- offering the ICT device for memory or further treatment video, audio or data from sensors included in the device or external to it.

Security, safety, health, research, education, social support, administration in general, small business and many other areas can therefore easily beneficiate from this technology.

The range of applications covered by ICT peripherals like printers, scanners, memory units may be understood as an enhancement of the above set of central applications.

2. IDENTIFICATION OF STANDARDS /RECOMMENDATIONS TO SATISFY REGULATORY OBJECTIVES

Standards are continually revised. It is necessary to allow for a transition period between versions. This means that, in general, more than one version of a standard is acceptable as a basis for the CRO. Rather than list all acceptable versions, the “oldest acceptable” version at the time of publication of the CRO is listed. Subsequent versions of the listed standards are to be accepted unless otherwise stated by Countries having agreed on the CRO.

The standards relevant for this CRO are listed in the Annex. A rationale for the choice of these standards is given.

3. REVIEW

This document should be reviewed periodically to ensure that the requirements are still valid and suitable for the CRO in question. The review should aim to reduce the requirements in the CRO to a minimum allowing for new innovative products and/or solutions to be placed on the market.

Where necessary, an update of the CRO should be initiated.

ANNEX

A. Safety

IEC 60950 (1999)	Safety of information technology equipment
National deviations/ amendments to IEC 60 950	National deviations or amendments valid in countries that participate in the CRO

Rationale:

The international standard for equipment in this sector is IEC 60950. Due to special national conditions in some countries, national deviations or amendments exist. The deviations/amendments valid in those countries that participate in this CRO need to be taken into account.

Note: there is a collection of such deviations and amendments given in the CB Bulletin, used for the The "IEC System for Conformity Testing and Certification of Electrical Equipment" (IECEE). For information about the IECEE SB-Scheme, see http://www.iecee.org/.

B. Electromagnetic Compatibility

CISPR 22:1997 + Am1:2000 Class B	"Information technology equipment – Radio disturbance characteristics – Limits and methods of measurement "
FCC Part 15.109 Class B	**Additional for emissions above 1 GHz:** "Radio Frequency Devices; Unintentional Radiators; Radiated emission limits"
IEC 61000-3-2:1995 + Amendments	**For equipment with AC mains power:** "Electromagnetic compatibility (EMC) – Part 3-2: Limits – Limits for harmonic current emissions (equipment input current ≤16 A per phase)"
IEC 61000-3-3:1995	**For equipment with AC mains power:** "Electromagnetic compatibility (EMC) – Part 3-3: Limits – Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤16 A per phase and not subject to conditional connection"
CENELEC EN 55024:1998 (Alt: CISPR 24:1997)	"Information technology equipment – Immunity characteristics – Limits and methods of measurement"

Rationale:

CISPR 22: CISPR 22 is a widely recognised international standard for emission protection of radio spectrum from disturbances caused by “non-intentional transmitters”. It is published as national standards in many countries. According to the classification given in CISPR 22, personal computers intended for domestic use should meet Class B.

FCC Part 15: The FCC Rules allow the use of CISPR 22 as a replacement for FCC Part 15 for “digital devices” (Part 15.109(g)). However since CISPR 22 currently does not contain limits above 1 GHz, it is required to comply with FCC part 15.109 for emissions above 1 GHz. According to the classification given in FCC Part 15, personal computers intended for domestic use should meet Class B.

IEC 61000-3-2, -3: In EU, protection of electricity distribution networks is part of the emission aspects of EMC regulation. Therefore requirements for harmonics and flicker are part of the standards used for regulatory purposes. The European standards EN 61000-3-2, -3 are identical to the IEC standards.

CENELEC EN 55024 / CISPR 24: Immunity aspects are included in EU’s EMC regulation. EN 55024 differs from CISPR 24 regarding the surge test and its compliance criterion for ports intended for connection of telecom lines to outdoor facilities. A PC without ports for connection to outdoor facilities is not subject to this test, and consequently for this case either standard can be used for immunity requirements. It should be noted that Ethernet ports are not connected directly to outdoor facilities, whereas PSTN modem ports normally are.

Note: The following international standards (in the form of European standards) are called up by EN 55024: IEC 61000-4-2, -3, -4, -5, -6, -8, -11

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