



October 2007

EMC Regulatory Update

Dear Colleague,

We have provided typical questions and answers that represent in most cases technical opinions with justification in FCC and CE requirements. The particulars of the product for certification must be considered with respect to the applicability of these questions and answers. We hope you find our update valuable and welcome your feedback if you have any special needs or questions. Call at 703-689-0368 or view archived issues of MultiPoint at our [web site](#).

Exhibiting Equipment at EU Trade Shows

QUESTION: Prior to marketing our products in Europe, we would like to exhibit in several EU trade shows. However, our equipment has not yet been tested for CE compliance. Can we still demonstrate our equipment at EU trade shows or exhibitions?

ANSWER: Equipment not (yet) allowed to be placed on the EU market, because of non-compliance with the Directive, may be **displayed** at trade shows and exhibitions provided a visible sign clearly indicates that such equipment may not be marketed or put into service in the EU. The **demonstration** or **use** of such equipment is not permitted under the Directive, but some National Authorities may allow very limited use (time, location, duration). The relevant authorities in the Member State therefore should be contacted if a manufacturer wishes to demonstrate the use of such equipment.

FCC SAR Rules for Part 80 VHF PTT Devices

QUESTION: Our firm manufactures Part 80 VHF hand held PTT devices. Can you clarify the SAR rules for this under Part 2, Clause 2.1093? Do all Part 80 devices require SAR evaluation?

ANSWER: Portable PTT devices with $P < 7W$ and $f < 300$ MHz do not require a SAR evaluation for TCB or FCC filings. Applicants that request inclusion of a SAR report must file directly with the FCC and not with a TCB.

EU "Alert Sign"

QUESTION: Our firm is considering marketing our products in Europe. I have noticed that similar products selling in Europe are marked with a CE Mark and then an "alert sign." What does this "alert sign" indicate?

ANSWER: The "[alert sign](#)" means that the use of the frequency band that is being used by the equipment to which it is affixed is not harmonized within the EU and/or that potential restrictions on its use are applicable in one or more EU Member States.

FCC Rules for RF Test Equipment

QUESTION: Is test equipment such as a Comparison Noise Emitter (CNE), used and marketed evaluating anechoic chambers and Open Area Test Sites (OATS), subject to the FCC rules and regulation? Does it require an equipment authorization?

ANSWER: The requirement for operating a low power transmitter without an individual license is contained in 47 CFR Part 15. A number of self-contained reference noise sources (e.g., CNE), comb generators, and other test equipment are marketed in the US for testing purposes. Most are used in a shielded room or in laboratories, which is permitted by the FCC rules. Another use of a reference noise source is to evaluate anechoic chambers or OATS. In this situation, a skilled technician to determine the suitability of a test site uses it infrequently. Although technically a reference noise source is not a digital device, the exemption in 47 CFR 15.103(c) for test equipment appears to be the appropriate classification for a reference noise source when it is used to evaluate radiated emissions test sites. This interpretation of 15.103(c) is limited to a low power reference noise source that is used exclusively for evaluating anechoic chambers or OATS facilities by a skilled technician. An equipment authorization is not required for a device operating under the 15.103 exemption. Other types of reference noise sources must be used in a shielded enclosure for immunity and similar types of testing, or a license must be obtained under Part 5 of the Rules.

Radio Restrictions in France

QUESTION: Our company intends on marketing its 2.4 GHz WLAN equipment to the EU but I have heard there are some restrictions in France. Can you explain these restrictions?

ANSWER: France has perhaps the most important restriction in use for 2.4 GHz WLAN equipment. For the frequency range of 2454-2483.5 MHz, the maximum output power is limited to 10 mW EIRP. This is because the French DOD operates closely to the upper part of the 2.4 GHz band. If a manufacturer does not inform the user correctly about this restriction in use (by means of the alert mark) then the user may inadvertently cause interference with military installations.

INTERNATIONAL UPDATE

EU: NEW CENELEC STANDARDS RELEASED THIS MONTH

This is a shortened list of the CENELEC standards published during the past month:

- o **EN 62127-1:2007** (10/5/2007) Ultrasonics - Hydrophones -- Part 1: Measurement and characterization of medical ultrasonic fields up to 40 MHz
- o **EN 60320-1:2001/A1:2007** (10/5/2007) Appliance couplers for household and similar general purposes -- Part 1: General requirements
- o **EN 62132-3:2007** (10/10/2007) Integrated circuits - Measurement of electromagnetic immunity, 150 kHz to 1 GHz -- Part 3: Bulk current injection (BCI) method
- o **EN 50428:2005/A1:2007** (10/10/2007) Switches for household and similar fixed electrical installations - Collateral standard - Switches and related accessories for use in home and building electronic systems (HBES)
- o **EN 60825-1:2007** (10/17/2007) Safety of laser products -- Part 1: Equipment classification and requirements
- o **EN 61800-5-2:2007** (10/19/2007) Adjustable speed electrical power drive systems -- Part 5-2: Safety requirements - Functional

See www.cenelec.org for additional information.

EU: NEW IEC STANDARDS RECENTLY RELEASED

This is a shortened list of the new IEC standards published during the past month:

- o **IEC 61496-1-am1** (9/25/2007) Amendment 1 - Safety of machinery - Electro-sensitive protective equipment - Part 1: General requirements and tests
- o **IEC 60335-2-79** (9/26/2007) Household and similar electrical appliances - Safety - Part 2-79: Particular requirements for high pressure cleaners and steam cleaners
- o **IEC 62132-3** (9/26/2007) Integrated circuits - Measurement of electromagnetic immunity, 150 kHz to 1 GHz - Part 3: Bulk current injection (BCI) method
- o **IEC 61097-4** (10/9/2007) Global maritime distress and safety system (GMDSS) - Part 4: INMARSAT-C ship earth station and INMARSAT enhanced group call (EGC) equipment - Operational and performance requirements, methods of testing and required test results
- o **IEC 60255-22-1** (10/9/2007) Measuring relays and protection equipment - Part 22-1: Electrical disturbance tests - 1 MHz burst immunity tests
- o **IEC 60079-0** (10/10/2007) Explosive atmospheres - Part 0: Equipment - General requirements
- o **CISPR 16-1-4-am1** (10/16/2007) Amendment 1 - Specification for radio disturbance and immunity measuring apparatus and methods - Part 1-4: Radio disturbance and immunity measuring apparatus - Ancillary equipment - Radiated disturbances
- o **CISPR 16-1-1** (10/16/2007) Specification for radio disturbance and immunity measuring apparatus and methods - Part 1-1: Radio disturbance and immunity measuring apparatus - Measuring apparatus
- o **CISPR 16-SER** (10/16/2007) Specification for radio disturbance and immunity measuring apparatus and methods - ALL PARTS
- o **ISO / IEC CASCO-CONF** (10/18/2007) Conformity assessment - Certification and inspection bodies

See [IEC](#) for additional information.

EU: NEW ETSI STANDARDS RELEASED THIS MONTH

This is a shortened list of the new ETSI standards published during the past month:

- o [ETSI EN 301 908-4 V3.2.1](#) (September 2007) Electromagnetic compatibility and Radio spectrum Matters (ERM); Base Stations (BS), Repeaters and User Equipment (UE) for IMT-2000 Third- Generation cellular networks; Part 4: Harmonized EN for IMT-2000, CDMA Multi-Carrier (cdma2000) (UE) covering essential requirements of article 3.2 of the R&TTE Directive
- o [ETSI EN 301 908-5 V3.2.1](#) (September 2007) Electromagnetic compatibility and Radio spectrum Matters (ERM); Base Stations (BS), Repeaters and User Equipment (UE) for IMT-2000 Third- Generation cellular networks; Part 5: Harmonized EN for IMT-2000, CDMA Multi-Carrier (cdma2000) (BS) covering essential requirements of article 3.2 of the R&TTE Directive
- o [ETSI EN 301 908-6 V3.2.1](#) (September 2007) Electromagnetic compatibility and Radio spectrum Matters (ERM); Base Stations (BS), Repeaters and User Equipment (UE) for IMT-2000 Third- Generation cellular networks; Part 6: Harmonized EN for IMT-2000, CDMA TDD (UTRA TDD) (UE) covering essential requirements of article 3.2 of the R&TTE Directive
- o [ETSI ES 200 674-1 V2.1.1](#) (October 2007) Electromagnetic compatibility and Radio spectrum Matters (ERM); Road Transport and Traffic Telematics (RTTT); Part 1: Technical characteristics and test methods for High Data Rate (HDR) data transmission equipment operating in the 5,8 GHz Industrial, Scientific and Medical (ISM) band
- o [ETSI EN 300 720-1 V1.3.2](#) (October 2007) Electromagnetic compatibility and Radio spectrum Matters (ERM); Ultra- High Frequency (UHF) on-board vessels communications systems and equipment; Part 1: Technical characteristics and methods of measurement

See new [ETSI website](#) for additional information.

CANADA: FIRST ISSUE OF RSS-194 AND AMENDMENT OF SRSP-300.953

On October 12, 2007, Industry Canada introduced a new Radio Standards Specification, RSS 194, which sets out certification requirements for radio transmitters and receivers in the band 953- 960 MHz for fixed wireless access (FWA) systems. Industry Canada also amended Standard Radio System Plan 300.953 (SRSP-300.953), which sets out technical requirements for licensing studio-to- transmitter links (STL) and FWA systems operating in the band 953-960 MHz.

- o [Radio Standards Specifications 194, Issue 1](#), Fixed Wireless Access Equipment Operating in the Band 953-960 MHz
- o [Standard Radio System Plan 300.953, Issue 2](#), Technical Requirements for Radio Systems in the Fixed Service Operating in the Band 953-960 MHz

KOREA: REVISION IN RADIO TECHNICAL REQUIRMENTS On October 17, 2007, Korea's RRL issued notice 2007-80 announcing a revision in the technical requirements for the radio equipment for other services than broadcasting, maritime, aeronautics. The main revisions are as follows:

- 1 IEEE 802.11n 40 MHz channel bonding is allowed.
- 2 Receiving function to search for channel can be used at 5.650-5.725 MHz and 5.825-5.850 MHz.
- 3 Frequency for MICS(Medical Implant Communication System) is allocated at 402- 405 MHz.
- 4 New technical requirement for wireless device for sensing moving objects is enacted.

ABOUT US

RTL has provided EMC compliance engineering & testing services since 1988 and has a superior reputation with both the Federal Communications Commission and others in the industry. RTL provides testing services to meet the emissions, immunity, and safety requirements of the European EMC Directive and the EU R&TTE Directive, all FCC rules and regulations, VCCI (Japan), ACMA (Australia), and other international standards.

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email: multipt@rheintech.com
phone: 703-689-0368
web: <http://www.rheintech.com>

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