

RF/EMC Regulatory Update

International Issue

Dear Colleague,

We have provided typical questions and answers that represent in most cases technical opinions with justification in international regulatory 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 us at 703-689-0368 for your product testing & certification requirements. You can view archived issues of MultiPoint at our [web site](#).

NOTE: We hope you enjoy reading our second monthly MultiPoint newsletter publication featuring Q/A on international regulatory requirements and developments.

China Certification Requirements

QUESTION: Our firm is considering selling to consumers in China. Can you tell us what the certification requirements are in China for electronic products?

ANSWER: The government of China, similar to other countries, has introduced certification/approval mechanisms to regulate electrical and electronic products. Manufacturers and retailers need to address these requirements when importing or marketing goods to China. At present, China has the following three major certification requirements:

CCC (China Compulsory Certification)

- Authority: CQC (China Quality Certification Center)
- Standards: China GB Standards
- Regulated products: 20 categories, 135 products (such as household appliances, motor vehicles, motorcycles, safety glasses, medical devices, lighting apparatus, cables and wires...etc)
- Testing: Safety, or both Safety and EMC (performed by CQC designated labs)
- Factory inspection: Initial inspection plus annual follow up inspection

SRRC Type Approval

- Standards: Requirements of Low Power Radio Equipment
- Regulated products: Most radio transmission equipment, such as radio communication, navigation, location, direction-finding, radar, remote control, telemetry, broadcasting and television that transmit radio wave, but not including industrial, scientific and medical (ISM) equipments, electric transport system, high-voltage power line and other electrical appliances that radiate electromagnetic wave.
- Testing: Frequency range, frequency tolerance, transmitting power, occupied bandwidth and spurious emission limits (performed by SRMC - State Radio Monitoring Center)
- Factory inspection: No inspection required
- Mark: No formal mark required, but certificate number must appear on the products or labels

NAL (Network Access License -sometimes referred to as CTA) Approval

- Authority: MIIT (Ministry of Industry and Information Industry Technology)
- Standards: China GB Standards
- Regulated products: Two groups, 28 types (such as telecommunication terminal equipment, radio telecommunication equipment and internet equipment)
- Testing: Safety, EMC, and telecom performance (performed by MIIT designated labs),
- Factory inspection: No inspection required

It is important to note that manufacturers still need self- DOC for product by China RoHS' requirements.

China's CCC Approval Requirements

QUESTION: Can you provide a brief description of how China's CCC approval works? What kind of products are required to have CCC approval? Are international test reports acceptable for CCC approval?

ANSWER: CCC requires electronic products to be tested for EMC and Safety. Any products that fall within the scope of the various CCC categories require CCC approval. CCC categories cover many products such as wire & cable, switches, vehicle electronics, ITE products, cellphones, etc. CCC EMC requirements specify in-country testing by a laboratory designated as an accredited "China Government Laboratory." CCC safety requirements allow for CB test reports but also require some additional country specific safety tests for China.

China Local Representative and CCC Certificate Validity

QUESTION: Is a local representative or local certificate holder required by CCC? Also, how long is the CCC Certificate valid for?

ANSWER: There are no requirements by CCC for a local representative or local certificate holder. There is no specified time frame a CCC Certificate is valid for. Typically, five years is observed or it can also depend upon the agreement between manufacturer and factory.

CCC Factory Inspection

QUESTION: What requirements does CCC have for the manufacturer's factory? Can the factory be located outside of China?

ANSWER: There is no location requirement for the manufacturer's factory. However, CCC does require an initial factory inspection and follow-up inspections at the factory locations. The initial inspection is implemented by CQC, China Quality Certification Body, and the follow up inspection can be performed by CQC or a contracted certification body (approved by CQC) when the factory is located outside of China.

CCC Mark Label

QUESTION: After we have obtained our CCC Certification, where do we purchase the actual CCC mark label to affix on our product? Can our local printer print the label for us to use?

ANSWER: There are two methods to obtain CCC mark labels. The first method is to purchase the CCC mark labels directly from the Chinese government's CCC Mark Center. The second method is to submit a CCC mark printing application form with the product nameplate/artwork and obtain permission from China's CCC Mark Center to allow you to have the CCC mark label printed elsewhere. The second method will require annual verification of the label by China's CCC Mark Center.

Products Subject to China's NAL Approval

Question: Can you tell us what types of products are subject to Network Access License (NAL) Approval?

Answer: The main types of products subject to NAL Approval are:

- Telecom terminal equipment- a device connected to the end of PSTN for serving the function of sending and receiving information
- Radio Communications Equipment- a kind of telecom equipment that connects to PSTN, using radio as the means of communications
- Inter-network connecting equipment--a kind of telecom equipment connecting the networks of different telecom service providers or different service network

Latin American User Manual Requirements

QUESTION: My company hopes to distribute its product to Latin America next year. I was planning on obtaining translation services for some of the product instructions. An associate informed me that it is not only a good idea but a requirement by many of the Latin American countries in order to get the products approved. Is this true? If so, what translations do I need?

ANSWER: It is true that you will need translations in order to get your product approved for distribution in certain Latin American countries. For example, Venezuela, Colombia, Ecuador, and in some cases Mexico require the product user manual to be translated into Spanish. But it doesn't stop there. In Brazil, Category 1 and 2 products (typically intended for mass general distribution) must have the manuals translated into Portuguese.

The good news is that the translated manuals can be utilized again if you choose to distribute to various countries in the Caribbean.

Latin American Markets

QUESTION: One of my business associates recommended that we consider marketing our mobile products in South America. Specifically he was thinking of some of the more advanced countries like Brazil and Argentina. Is there really a market there? I didn't think cell phones are as popular there as they are in the U.S.

ANSWER: Latin America has a very large number of cell phone users. For example, in a recent report released by HighBeam research, Argentina had over 49.2 million mobile users by mid-2009. That is an astounding 14 percent year-on-year increase during rough economic times. The mobile traffic has increased to 3.82 billion calls, a 30 percent year-on-year rise! According to ANATEL, Brazil will have over 160 million connections this year and the mobile penetration in the country has reached over 84 percent. If you count just Argentina and Brazil, there is an enormous market for cell phones and mobile products.

Chile - Maximum Allowed Transmission Strength

QUESTION: Our firm is producing an RF based hand held system with transmitter and we hope to distribute it in Chile. We've heard differing stories on what the maximum allowed transmission strength is. Can you tell us the requirements for such transmissions?

ANSWER: Chile is very particular about the frequencies and power you may use to transmit. Per SUBTEL Resolution 666,2008 (an update of Resolution 755,2005 and 840,2007) the power limits fluctuate dramatically depending upon whether you are outside or inside of a building.

Inside of a building, you may use up to 150mW of maximum radiated power in the 2400 - 2483.5, 5250 - 5350 and 5725 - 5850 MHz range. You may also utilize the 5150- 5250MHz range but there are special considerations.

Outside, you may use up to 5mW of power in the 2400 - 2483.5 MHz range. However; if a manufacturer has

to. The carrier would apply to SUBTEL for a special permit to use such equipment. Among other things they would need to submit exactly where they would place the products and the power output so SUBTEL could review to see if it would interfere with other equipment nearby. There are many additional band/power options and the best strategy is to first consult with a specialist in Chile homologation, such as Rhein Tech, for determination of validity of your proposed product specifications.

INTERNATIONAL REGULATORY UPDATES

BRAZIL: NEW SAR REQUIREMENT On 12/16/09, ANATEL's new Resolution 533 (new SAR resolution) will become mandatory. Resolution 533 is applicable to the following equipment:

- Portable equipment
- Equipment with an output power over 20mW, measured in a time (average) of 6 minutes
- Equipment with frequencies between 300MHz and 6 GHz
- Equipment worn near the human body at a distance less than 20 cm

Currently, ANATEL is excluding laptops/notebooks from this new SAR resolution. However, ANATEL and INMETRO are in the process of creating new rules for laptops/notebook which will require these devices have ANATEL approval in the future.

KOREA: NEW CUSTOMS ENTRY PROCEDURE Beginning January 1, 2010, Korea's KCC/Radio Research Agency will require all imported communication equipment to follow a policy of ""Certification-First and Customs-Entry-Later"" in an effort to protect consumers and domestic industry from any uncertified or illegal equipments imported from overseas. To verify the Korean certification of a product or to apply for Korean customs entry, please see the following link to Korea's Internet Customs Portal (<http://portal.customs.go.kr/>)

CONTACT RHEIN TECH FOR YOUR INTERNATIONAL REGULATORY APPROVALS

Rhein Tech Laboratories' worldwide homologation services offer the best strategy for gaining product approval in a large number of target countries. In addition, we reduce the number of emissions, immunity, and product safety tests required by defining the minimum subset of regulatory standards at the onset, thus reducing the time and cost to enter multiple target countries. We offer research and approvals in over 50 countries.

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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