



American Certification Body, Inc.

News Letter

Connect to the Internet of Things Regulations and Requirements for Appliance Manufacturers

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Summary

Home appliances connect to the Internet via WiFi, Bluetooth and cellular networks. The Internet of Things (IoT) will affect how manufacturers place their products on the market, change consumer behavior and affect supply chain from manufacturer to local distributors.

It is estimated that 50 billion devices will be connected to the Internet. Wireless functions are necessary for the connection and equipment manufacturers are integrating wireless connections into their products. To place these devices on the international markets, they must comply with regulations. These regulations are often based on country laws.

To make a global product, a manufacturer must consider the following:

- Standards
- Frequencies
- Regulatory agencies
- Testing costs
- Local representation
- Legal requirements
- Language and warnings

The principal areas of concern for Appliances connected to the Internet are in three main areas: Electromagnetic Compatibility (EMC), Product Safety and Radio Frequency compliance. To meet the necessary requirements, testing is almost always necessary. The tests must include international standards and regulations, such as International Electrotechnical Commission (IEC), European Norms (EN), CISPR, ETSI, FCC, RSS and related requirements.

Fortunately, many standards have been harmonized for use in many markets. However, there are specific requirements for market entry. The presentation will cover regulations in the following major countries:



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North America
Europe
Japan
India
Brazil & South America
Russia
ASEAN
Middle East

The presentation will be delivered in English and Chinese.

The presenters:

Michael Violette, P.E., Director of American Certification Body. Mike has been active in the compliance industry for over 25 years. He founded a Test Laboratory and Certification Body that has been providing testing and product approvals for international markets and clients. He is an expert on product regulations for FCC, IC, IEC, CE, ANSI and ETSI requirements. Mike is a Certification Engineer and has experience with Notified Body applications and product safety, RF and EMC.

Major Chen is Asia Manager for American Certification Body. He has been active in the compliance industry for 15 years and is responsible for thousands of successful certifications performed by the ACB Asia and International team. Major has addressed numerous forums to discuss testing and certification requirements for high-technology products.

Herve Idoko, Review Engineer, American Certification Body. Herve has been working in the Certification and Product Compliance industry for 10 years. He has experience in WiFi, Cellular, Low Power and other technologies. His background includes reviewing projects and reports for FCC, Industry Canada, CE (Europe) and other regulations.



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中 华 人 民 共 和 国 工 业 和 信 息 化 部
中 国 国 际 贸 易 促 进 委 员 会 电 子 信 息 行 业 分 会

2016年中国（合肥）国际家用电器暨消费电子博览会

物联网时代智能家电的标准化主题论坛邀请函

各相关企业：

由安徽省人民政府、工信部、中国贸促会共同主办、中国国际商会支持的第十届中国（合肥）国际家用电器暨消费电子博览会（家博会）将于**2016年11月18日至20日**在安徽省合肥市举办。为进一步提高中国家电产品的国际竞争力，以达到国际标准，中国国际商会与家博会组委会合作，将于展会同期即**11月18日上午10:00-12:30**在合肥市滨湖会展中心登录大厅2层会议室举办“物联网时代智能家电的标准化”主题论坛。论坛将邀请美国国家标准检测认证机构的权威专家现场解读**FCC**新规定，并从整个产业链上介绍与智能家电及消费电子相关的国际标准及法律法规，现场与中国企业面对面交流，提供直接辅导。届时欢迎各相关智能家电、消费电子制造型、出口型企业 and 科研机构报名参会。

本次论坛旨在配合“中国制造2025”及“互联网+”国家战略，推动互联网与家电制造业融合，提升家电制造业的数字化、网络化、智能化水平，将物联网、云计算、大数据等技术融入家电及消费电子生产制造。在物联网时代，家用电器通过**WIFI**，蓝牙以及蜂窝网络和互联网连接在一起，无线功能在联通中的作用变得必不可少。越来越多的设备制造商开始将无线技术融入到他们的产品中，而实现这一技术的同时，家电厂商需重点关注电磁兼容性（**EMC**），产品安全性以及无线电频率合规性等。在智能家电及消费电子的整个产业链上，从制造商到分销商，要制造出面向全球的产品，并将这些设备投放在国际市场中，必经的环节就是通过标准检测，合乎以各国法律为基础的准则。



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国际标准和法规有很多，例如国际电工委员会标准（IEC），欧洲标准（EN），CISPR, ETSI, FCC, RSS等。除需要了解各种国际标准，制造商要想通过检测，还要考虑频率、监管机构、测试成本、当地代表、法律要求、语言和警告等多种重要因素。据悉美国联邦通讯委员会（FCC）将于2017年7月，对进口自中国的电子制造产品实施最新规定，新规定涉及到的具体产品范围很广，包括手机等通讯产品，电脑、电视及周边设备，电源、电缆，无线产品中的CB接收机、超再生接收机、扫描接收机、雷达指示器、遥控器以及所有射频发射设备等，这些均与物联网时代的智能家居及消费电子有密切关系。FCC新规定的实施，势必会对中国电子产品的生产与出口产生直接影响。现场美国权威专家将与中国企业面对面交流，提供直接辅导。

此次专业论坛将邀请美国国际标准检测华盛顿实验室CEO、美国国际标准认证机构董事迈克尔·维奥莱特（Mike Violette），审核工程师、美国认证机构工作人员赫维艾度克（Herveldoko）担任主讲，使用中英双语为企业讲解从北美、欧洲、日本、印度、巴西及南美的标准法规到俄罗斯、东盟、中东地区的检测标准，为企业答疑解惑。迈克尔先生是美国国际认证机构的第二代传人，在该领域从业25年，并成立了自己的华盛顿检测实验室及标准认证机构，为国际市场和全球500强企业提供专业的国际标准检测及产品认证服务。同时他还是FCC, IC, IEC, CE, ANSI和ETSI产品认证的权威专家，并在公告机构申请，产品安全，RF和EMC方面颇具丰富的经验。赫维艾度克先生有着10年的电子产品国际标准认证经验，专业领域涉及WIFI, 蜂窝网络，小功率等相关技术。

通过美国权威专家对FCC规则及国际标准检测认证的详细解读，不但可以帮助中国电子产品制造企业更好理解相关规则，避免因对规则的错误理解影响产品出口，给生产经营活动带来不必要的损失，还可以帮助中国企业获得更多市场信息，为赴美及全球投资创造更多便利。更重要的是增进中美产业界间的交流和互信，为合作打下良好基础。

此外，为增强活动的实效性，会议还拟邀请美国马里兰州国际商会向拟赴美投资的中国企业发布相关的美国市场信息，并与美国企业现场对接。

现诚挚邀请各相关生产制造出口企业、尤其是对美出口企业，以及研发中心、科研机构派代表参加该主题论坛，并与二位美国认证专家进行交流沟通。该论坛免参会费，但因名额有限，请提前填写附件参会报名表并在截止日期前发回。

感谢支持并欢迎参会。



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附件：论坛参会报名表

中国（合肥）国际家用电器暨消费电子博览会组委会

中国贸促会电子信息行业分会

2016年10月13日



附件：物联网时代智能家电的标准化主题论坛参会报名表

请于 11 月 5 日前将回执电邮至：中国贸促会电子信息行业分会 刘岩，电话：010-68200634 邮箱：

liuyan@ccpитеcc.com,

报名参加论坛人员名单：

序号	姓名	单位	职务	电话	手机	邮箱
1						
2						
3						

1、因名额有限，每家单位只接受不超过3名代表参会，报名申请根据先后顺序。如有特殊情况请邮件说明。

2、如有希望了解的问题，请在以下列出（不超过50字）：

3、未能及时报名而希望参会的人员，可现场根据空余座位数及先后顺序登记入场。如不能安排参会，敬请谅解。



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1. 有关NB TCF的解读.

Question: What a TCF is? How to determine it? Why it is needed?

Answer: The “TCF name” should be the overall name for the Technical Construction File compiled by the manufacturer. assembled under annex II of the RTTE Directive.

A TCF designator is required for Notified Body request. The TCF designator can be any that the applicant chooses. However, it is not suggested to use a model name for the TCF number. There are many cases where the same model number is used for products which are upgraded to revision 2, etc.

The use of a Notified Body to review the technical documentation falls under Annex IV:

ANNEX IV

CONFORMITY ASSESSMENT PROCEDURE REFERRED TO IN ARTICLE 10(5)

(Technical construction file)

This Annex consists of Annex III plus the following supplementary requirements:

The technical documentation described in point 4 of Annex II and the declaration of conformity to specific radio test suites described in Annex III must form a technical construction file.

The manufacturer, his authorised representative established within the Community or the person responsible for placing the apparatus on the market, must present the file to one or more notified bodies, each of the notified bodies must be informed of others who have received the file.

The NB should be reviewing a specific “Technical Construction File”, which is not the same as “reviewing supporting exhibits for an FCC certification”. The “TCF name” is the reference number to the submitted exhibits, and should be provided by the manufacturer, so that they have also have a reference to what they submitted. It is a basic quality control issue. It can trace back a collection of documents to a specific product. This is from page 60 of the Guide to the R&TTE Directive which confirms that a TCF should have a reference number:

Technical construction file

Issued by: ZZZ Products Manufacturing Co. Ltd.
Address: P.O. Box 111111
125 West Street, Company City, NJ 08888
USA
Date: 01 January 2008
File number: 102030CC.TCF



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2. RSS-210 issue 9的生效日期.

This is to inform you the following certification procedure will apply with regards to transition period for RSS-210 issue 9:

- 1) If a certificate has been issued to RSS-210 issue 8 before the date of publication of RSS-210 issue 9, nothing needs to be changed and it can be submitted as is to ISED via the Spectraweb application;
- 2) If a certificate has not been issued before the date of publication of RSS-210 issue 9, ISED will continue to accept test reports compliant with RSS-210 Issue 8 until February 26, 2017 and in such cases, the CB shall issue certificates showing RSS-210 Issue 8 compliance. After February 26, 2017, CBs shall issue certificates showing RSS-210 Issue 9 compliance and test reports may continue to be in compliance with RSS-210 Issue 8 until August 26, 2017, only if:
 - a) it is supplemented with a partial test report covering any missing requirements from RSS-210 Issue 9; or
 - b) it includes an attestation signed by the applicant, lab or CB indicating that the report covers all requirements in RSS-210 Issue 9.
- 3) After August 26, 2017, all test reports must be compliant with RSS-210 Issue 9.

3. DTS关于Integrated band power测试方法的引用。

Citing of Integrated band power test method for DTS.

Note that the KDB mentions C63.10 for some items. This is why some list both C63.10 and the KDB as reference documents usually near the front or back of the test report. However in sections that discuss the procedures, or summarize procedures used - these should clearly cite the KDB. However note that in cases where the KDB simply cites to follow C63.10 - it is expected to be clear that both were used with the KDB listed first. Some judgement may be necessary in analyzing the test report to ensure this is the case - but in general you should be able to deduce that one standard was followed. Also note that if C63.10 is selected to be used, it would not be expect to see the KDB listed in these cases.



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4. 有关于EN 55032: 2012 + AC: 2013 和 EN 55022: 2010。

Cenelec	EN 55032:2012 Electromagnetic compatibility of multimedia equipment — Emission requirements CISPR 32:2012	12.10.2013	EN 55022:2010 Note 2.1	5.3.2017	Article 3(1)(b)
	EN 55032:2012/AC:2013	12.9.2014			

The current list of harmonized standards for the RTTE Directive 1999/5/EC states that EN 55032: 2012 + AC: 2013 will replace EN 55022: 2010 on March 5, 2017:

Current list of harmonized standards under the RTTE Directive 1999/5/EC:

http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=uriserv:OJ.C_.2016.249.01.0001.01.ENG

Corrigendum to the current list of harmonized standards under the RTTE Directive 1999/5/EC:

http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=uriserv:OJ.C_.2016.342.01.0015.01.ENG

It is currently unknown if the same situation will exist for EN 55032 as a harmonized standards under the RED 2014/53/EU (because it has not yet been published as a harmonized standard under the RED) but it is very likely that EN 55022 will never be published as a harmonized standard under the RED.

5. 整机对RSE测试的要求。

Question: To test and certify a host device which has a module contained, can the radiated spurious emissions testing be taken from the module? In this case, the module is already certified, but the installer wishes to ignore the module certification and instead get full certification of the host product. Can the spurious emissions from the module be used as the emissions for the certification of the host?

Answer: No, the radiated emissions must be done on the host system. For Manufacturer, this is extra effort; more than the module would require if installed using the modular approvals. That it is because of the change in responsibility. It is no longer a module manufacturer responsible for their module, it is now a system manufacturer responsible for the whole system.



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6. CA载波聚合知识连载五。

Carrier Aggregation Explained (Serial VI)

Author: Jeanette Wannstrom, for 3GPP, (Submission, June 2013)

For heterogeneous network planning the use of for example remote radio heads (RRH) is of importance. From R11 it will be possible to handle CA with CCs requiring different timing advance (TA), for example combining CC from eNB with CC from RRH, see figure 6.

对异构网络地规划利用是很重要的,比方说远程射频头 (RRH). 从R 11开始将有可能处理带有CA的CC, 前提是需要不同的定时调整值 (TA), 例如, 合并从eNB到RRH的CC, 见图6。

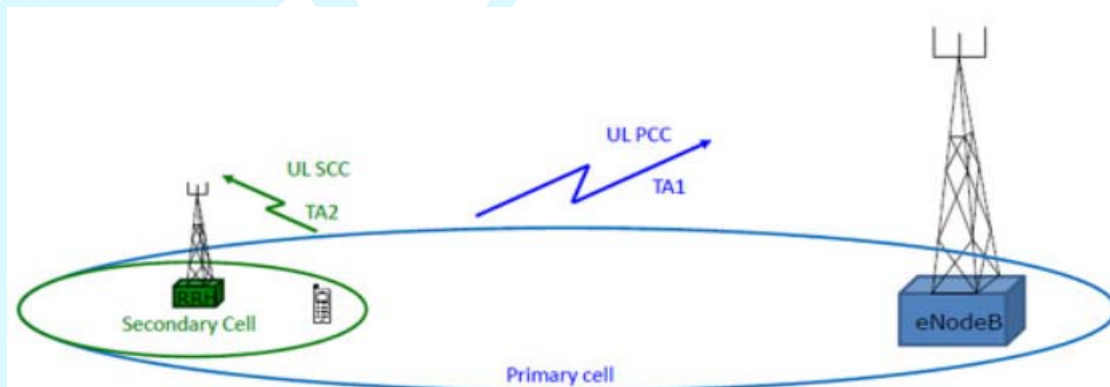


Figure 6. In R11 it will be possible to support serving cells with different Timing Advance (TA). Serving cells with the same TA belongs to the same TA Group (TAG).



认证小叮咛

1. comment回复请用邮件方式, 不要直接在ACB网站留言.
2. 在ACB网站开案时, 请将所有产品信息填写清楚.
3. 请确保上传的产品照片和测试照片是清晰的.