

2nd Edition - Winter 2011



Product Service

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WIRELESS :: Talk

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B A B T



Dear Readers:

Welcome to the second edition of WIRELESS Talk, the wireless newsletter from TÜV SÜD Product Service. After the great success of the first edition we hope to communicate important information and news, keeping you aware of changes in standards and the regulatory environment as well as our activities.

We trust you will enjoy this second issue. If you have any questions on any of the related topics please contact us, and we will be happy to help.
Jean-Louis Evans - Managing Director

TÜV SÜD Product Service soon to become the largest UKAS Accredited SAR Lab in the UK

TÜV SÜD Product Service is set to become the largest UKAS accredited SAR lab in the UK with the addition of 2 new SAR test systems. In addition to the 2 indexSAR SARA-2 platforms which are able to perform accredited testing to the EU standards (EN 50360, EN 62209-1, EN62209-2), the FCC standard for the USA (OET65(c)), Canada (RSS-102) and Australia (ACA2003), we will soon be able to offer accredited testing to the same standards using the Schmid and Partners DASY4 test system and we will also have the new IndexSAR SARA-C test platform.

The Schmid and Partner Engineering AG DASY4 system allows us to increase capacity to perform SAR testing as well as giving our customers the option of choosing which platform they would prefer to use for their testing. The DASY4 system is a very popular system and is preferred by some manufacturers who may have performed development testing on their pre-production samples using this system and would like to have the formal approval testing done on the same system. It will provide TÜV SÜD Product Service with HAC (Hearing aid compatibility) test capability as well as the ability to offer new services such as testing in the 5GHz band for 802.11a devices, and 2.6 GHz bands for LTE products.

The IndexSAR SARA-C is a new 4-axis SAR test system, which offers numerous benefits compared to the SARA-2 platforms, including quicker scan times, a much reduced footprint in terms of lab space and a unique scanning method, which will enable us to offer a more efficient package to our customers.

We plan to offer these new services to our customers in the first half of 2011, and believe that this will allow us to offer an unparalleled service to meet our customers' approval needs in global markets.



Non-Portable VHF DSC radios for the USA

The FCC has issued a reminder that fixed mount Class D DSC radios will very shortly need to comply with IEC 62238 if they are to continue to be imported, sold or installed into the USA. The deadline is March 25th 2011. For more information visit <http://www.vhf-dsc.info/sc101out.pdf>.

IEC 62238 Edition 1 is very similar to the EU harmonised standards EN 301 025-2 and EN 301 025-3, although not identical. It is possible to "kill two birds with one stone" and cover the requirements of the EU and USA with one test programme. The Canadian requirements can be addressed by testing to either of these standards. **Contact info@tuvps.co.uk for further details.**



BABT Certification in China

As part of a rolling programme to extend our certification services, BABT has delivered training to TÜV SÜD engineers in mainland China, Taiwan and Hong Kong in the area of FCC and Industry Canada certification. This will allow locally based technical certifiers to assess FCC and Industry Canada applications, prior to the formal issue of the TCB and/or FCB grant of authorisation by BABT in the UK. This service will be expanded to other regions of the TÜV SÜD group in the coming months.

BABT (British Approvals Board for Telecommunications) is the telecommunications certification body of the TÜV SÜD group and is appointed as a TCB (Telecommunication Certification Body) by the FCC and an FCB (Foreign Certification Body) by Industry Canada.

An "MOT" service for wireless

Did you know that when you take your car for a service in Germany it is called a "TÜV"? Here in the UK we offer a similar service for wireless equipment.

Since the introduction of the R&TTE Directive in 2000, market surveillance has been carried out by the relevant authorities in most countries which have implemented the directive. Although in most cases there is no information available on how much market surveillance has been performed and the results, some countries, for example Germany and Greece, do publish their results.

There have also been 4 joint cross-border European market surveillance campaigns investigating the compliance of various product types. The results have been published and the relevant reports can be found on the Europa website:

(http://ec.europa.eu/enterprise/sectors/rtte/documents/guidance/index_en.htm)

They show that many wireless products placed in the EU are non-compliant with the relevant legislation:

	Surveyed product types	Overall Non-Compliance (%)
Campaign 1 (2003)	DECT / GSM / Short Range Devices / PMR	76
Campaign 2 (2005/2006)	Short Range Devices	94
Campaign 3 (2008/2009)	2.4GHz Short Range Devices/ PMR	84
Campaign 4 (2009)	Low Power FM Transmitters	83

In most cases, the participating MSAs (Market Surveillance Authorities) examined technical documentation and performed testing to ensure the selected products met each of the essential requirements.

Regulation (EC) No. 765/2008 provides a framework for market surveillance of products to ensure they fulfil requirements providing a high level of protection of public interests. Manufacturers should be aware that market surveillance will increase to meet the requirements of an updated R&TTE directive, which is expected to be implemented within the next two years. As a result, the availability by manufacturers of fully up to date (and correct) documentation will become increasingly important for products covered under the revised directive.

Surveillance carried out by MSAs leading to non-compliances can result in financial penalties, the withdrawal of products from the whole EU marketplace, and worse still, damage to a company's reputation.

TÜV SÜD Product Service offers a production sampling test service where we test random samples provided by the manufacturer, together with a documentation checking service to ensure everything is in order. Typically we would check for Radiated Spurious Emissions and Power Output. The documentation service involves the checking of Technical Construction Files to ensure that they are complete and that the standards listed on Declarations of Conformity are in date, checking of equipment and package labels, and the provision of a brief summary detailing any shortcomings.

Contact info@tuvps.co.uk for further details.

Standards Update

Industry Canada Standards Update

Industry Canada continues to release updated standards with no transition period i.e. they are effective as soon as they are published. In December 2010, Industry Canada released the following new updates to standards:

- **RSS-210** - Licence-exempt Radio Apparatus (All Frequency Bands)
- **RSS-GEN** - General Requirements and Information for the Certification of Radio Apparatus).
- **RSS-102** - Radio Frequency (RF) Exposure Compliance of Radio communication Apparatus (All frequency bands)

It should be noted that RSS-GEN (Section 5.3) now requires that suppliers of radio apparatus shall provide notices and user information in both English and French.

Emergency Beacon Update

The Cospas-Sarsat Secretariat has released C/S T.007 Issue 4 – Revision 5 (October 2010) as the latest test standard for 406MHz Distress beacons.

The Radio Technical Commission for Maritime Service (RTCM) has now released Amendment 1 to RTCM 11010.2 (August 2010). This latest amendment includes "Annex G" which contains test methods and procedures for Personal Locator Beacons (PLBs) fitted with GPS receivers. It is understood that the RTCM is producing a new standard which will cover EPIRBs which contain an AIS transponder.

TÜV SÜD Product Service is able to perform accredited testing to the latest C/S T.007 standard and the RTCM standard for PLBs. We will also be able to test any AIS equipped EPIRB when the RTCM standard is eventually released.

New EMC standard for mobile phone External Power Supplies

EN 301 489-34 V1.1.1 is now a harmonised standard. This standard covers the "Specific conditions for External Power Supply (EPS) for mobile phones".

This standard has been produced following a joint initiative by the EU Commission and manufacturers to reduce the amount of electrical waste generated by unwanted mobile phone chargers. Eventually one type of charger ("USB micro-B" type) should be used for all mobile phones in the EU.

FREE SAR WEBINAR at the touch of a button

Our webinars are presented by TÜV SÜD Product Service experts, providing you with up to the minute information that affect you as compliance professionals along with the opportunity to interact from the convenience of your office or home.

And our webinars are free and take no longer than 60 minutes!

Upcoming Webinar

Wednesday 25th May at 14:00 – SAR, implications for hand sets

For more information on these topics and to register for one of our webinars, please visit our website at www.tuvps.co.uk/webinars.

New Industry Canada Bystanders SAR Testing Regulations for Laptop/Tablet Computers

Industry Canada has revised its RF exposure standard, RSS-102 "Radio frequency Exposure Compliance of Radiocommunication Apparatus", which now brings in bystanders SAR testing requirements for laptops and tablet computers which have built-in antennas in display screens.

Laptop-type computers such as notebooks and tablet computers will sometimes have a separation distance of 20 cm or less between the transmitter antenna to users and bystanders of such equipment, and therefore are subject to SAR testing under Industry Canada rules. The RSS-102 standard invokes FCC Knowledge Database Publication 616217 "SAR Evaluation Considerations for Laptop Computers with Antennas Built-in on Display Screens" to provide the measurement methodology to demonstrate compliance for users of laptop-type devices.

The latest RSS-102 standard now additionally makes reference to a new Supplementary Procedure, SPR-001, dated 1 January 2011, which addresses the SAR measurement requirements in relation to bystanders. It is important to consider the RF Exposure, not only for a user of such equipment, but also for bystanders while in close proximity to these devices, and to demonstrate that it does not pose a health hazard to the person(s) near the equipment by ensuring that the Canadian RF Exposure regulations are met.

Where necessary, bystanders body SAR testing needs to be performed with the side(s)/edge(s) of the display screen of the device pointing towards the flat phantom at a distance not exceeding 2.5cm. The supplementary procedure provides the following guidance for determining whether additional SAR testing for the display is required to demonstrate RF exposure compliance for a bystander:

- i) If the antenna-to-base of laptop separation distance is less than 2.5 cm, then 2.5 cm bystanders body SAR is not required due to the base of laptop already being tested for SAR.
- ii) If the antenna-to-base of laptop separation distance is less than 20 cm but greater than 2.5 cm, bystanders SAR testing with a 2.5 cm display-to-phantom separation distance is required.
- iii) If the antenna-to-base of laptop separation distance is greater than 20 cm, then 2.5 cm display-to-phantom bystanders body SAR is required.

The supplementary procedure also covers documentary requirements and exemptions. Transmitters incorporated within a laptop type device are exempt from SAR testing for bystanders and users provided that the output power complies with the exemption power levels outlined in section 2.5.1 of RSS-102.



TURKEY tightens up on imports of wireless equipment

Do you export wireless equipment to Turkey? Although Turkey is not a member of the EU, it has implemented the principles of the R&TTE Directive, but with some additions (for example a Notified Body opinion is required for every product). Just recently, the "Undersecretariat of the Prime Ministry for Foreign Trade" in Turkey has stopped imports of many wireless devices that are not supplied with Declarations of Conformity and Notified Body opinions.

Manufacturers therefore need to be aware that there is an obligation for "continuing compliance" of their wireless devices, not just in Turkey but in the EU as a whole. Compliance with harmonised standards is a "moving target", so manufacturers need to keep their documentation up to date with the latest harmonised standards as listed in the Official Journal, if the device is to continue to be placed on the EU marketplace. This applies even if you have a Notified Body opinion against earlier versions of the standards. Additional testing may or may not be required.

The Official Journal tends to be updated every 6 months or so. We publish it on our website as soon as it is released: Visit http://www.tuvps.co.uk/home_psu/company/news_and_downloads/legislation_downloads for details. The latest list of R&TTE harmonised standards is dated 29th December 2010.

