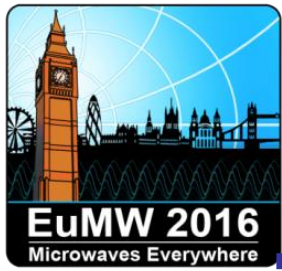


Result of Spectrum Activities in ETSI and CEPT for Audio and Video PMSE

Brian Copsey

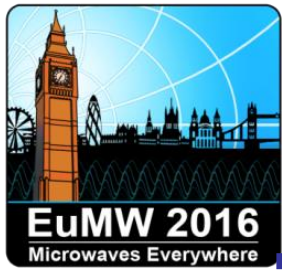
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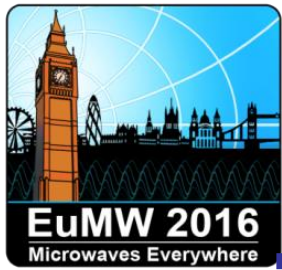
ETSI

- ETSI ERM TG 17 is responsible for PMSE standards , it is finalising revised standards for Radio Microphone, Cordless audio, Video links, under the Radio Equipment Directive(RED)
- Standards are required to go through the ETSI approval process of about 6 months ,then sent to the EC for inclusion in the Official Journal (OJ)
- Only after publication in the OJ is a standard “Harmonised”



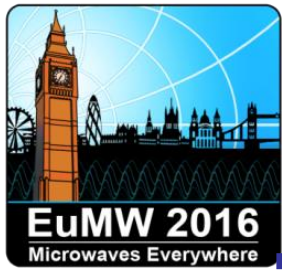
ETSI

- The RED has restored after some 22 years receiver testing in harmonised standards, this omission has often resulted in very sloppy receiver design which effects spectrum efficiency and “quality” of reception
- Unfortunately it has been almost impossible to discuss or ask questions about the EC s intentions for the RED, this has resulted in a standard of some sixty pages now becoming at least 280 pages!
- Other changes include testing such as blocking and intermodulation to improve spectrum efficiency



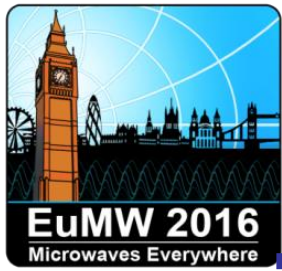
ETSI

- It is interesting to note that the major PMSE manufacturer's equipment has to undergo little if any change to comply with these requirements
- A new approach to PMSE spectrum use has been incorporated in the standard “WMAS” Wireless Multichannel Audio Systems , TR 103 450 provides information on this technology.
- WP3 has also updated EN 301-357 and the EMC standard EN 301-489-9
- EN300-422 part 1 has been published by ETSI but awaits the EC approval for the OJ



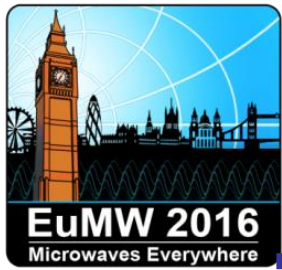
ETSI

- During the rewriting on EN 300-422 Ofcom UK announced that access to the 960-1165 MHz. band had been granted in the UK.
- We enquired if any additional testing should be incorporated within the standard but where told no nothing extra was required
- Given the complexity of this band especially the safety of Life issues we are hopeful that if CEPT starts a work item on this band we can bottom out any additional requirements for the next version of the standard



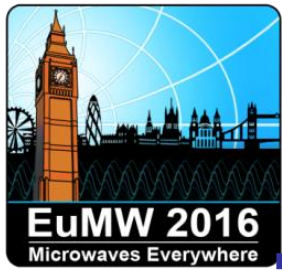
ETSI Video

- EN 302 064 Wireless Video Links operating in the 1,3 GHz to 50 GHz frequency band; Harmonised Standard covering the essential requirements of article 3.2 of the Directive 2014/53/EU
- Has been published by ETSI and awaits approval for the OJ



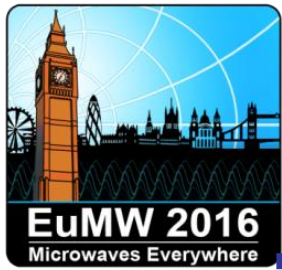
ETSI TG 17

- TG 17 has five working parties covering broadcast related standards, Broadcast transmitters and receivers, PMSE, Assistive listening Devices. Video links, TV mast head amplifiers and inductive loop systems for both hearing aids (T coil) and in tunnel FM car reception.
- I would like to express my deep felt thanks to all active members of the WPs and especially the reporters who have had a thankless job with constantly changing document format and the amount of testing required to understand reasonable limits for equipment



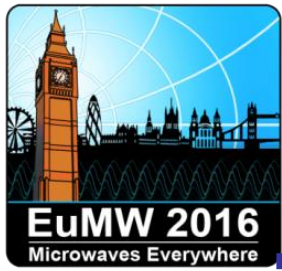
CEPT

- The PMSE community has been extremely active in CEPT working in some six groups which has resulted in:
- ECC Report 253 Compatibility studies for audio PMSE in the band 1492-1525 MHz
- Work is ongoing on the 862-870MHz band
- Revision of Recommendation 25-10 FREQUENCY RANGES FOR THE USE OF TEMPORARY TERRESTRIAL AUDIO AND VIDEO SAP/SAB LINKS (INCL. ENG/OB)
- Revision of Recommendation 70-03 annex 10 on PMSE , ALD and cordless audio spectrum



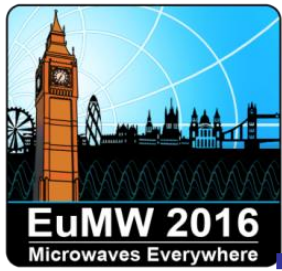
CEPT

- Administrators are (not unreasonably) trying to pack more SRDs in any given spectrum, this has resulted in a large amount of work to test the interference potential both to and from PMSE and has resulted in work on body loss and testing with “smart Meters” to name but a few.
- This work can only multiply as more innovative devices look for spectrum
- Many more reports on compatibility in various spectrum will be found at: <http://www.cept.org/ecc/deliverables>



ITU

- The ITU is in the process of considering the output of WRC 15, we have :
- **RESOLUTION ITU-R 59** Studies on availability of frequency bands and/or tuning ranges for worldwide and/or regional harmonization and conditions for their use by terrestrial electronic news gathering systems.
- This now includes SAB/SAP and enables further studies for PMSE in this work period



We are looking forward

It is an interesting and challenging time in the spectrum world and I believe PMSE has a good team of manufactures and users to compete for clean spectrum and innovation for PMSE in it various forms

Thank you for Listening

For further information please contact:

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