

## EMC Committee Report

This report is to the Spectrum Forum in preparation for its meeting on 3rd November 2012.

The EMCC has continued to meet on a bi-monthly basis or more frequently, to consider RSGB strategy and actions in the area of EMC. Topics in the last year have included:

- a) The question of an emission standard for powerline adaptors has continued to be a major issue for the Committee in 2012. Since the rejection of the draft standard (FprEN50561-1) in 2011, the Commission and CENELEC have been trying to encourage national standards organisations to revise their position and support the draft. Minor changes have been made and a revote was arranged for September-October 2012.

The IARU Region 1 EMC WG met in Friedrichshafen in June to consider the position. At an ad-hoc vote, there were 10 votes in favour of acceptance, out of 15 societies present. Sadly our own representative on the CENELEC WG chose to support the standard in helping lead the meeting. This was not RSGB policy, and RSGB itself voted against the draft at that meeting. However, the confusion from having one member of RSGB on the WG11 Committee apparently being in favour and the RSGB representative voting against did nothing to avoid confusion.

Subsequently, IRTS reversed its position and more recently so did DARC. The DARC position is quite extraordinary, as the Vice-Chairman of the IARU EMC WG is a DARC member who has been campaigning for support for the new standard. Something has gone fearfully wrong in the decision processes here.

Had those two member countries voted that way in FHN, the vote would have been 8:7, thus failing to achieve the 2/3<sup>rd</sup> majority for such a vote in IARU. Spain and Cyprus national societies have also added their voice to that of Switzerland and France in opposing the standard.

Sadly, all this confusion lost time. There was only a hope of the radio amateur movement being able to mount a convincing argument against the standard if it could reach a clear consensus quickly and then orchestrate appropriate lobbying of national standards organisations. This did not happen and I am pretty sure that the draft standard will be agreed.

Why is this so bad ? Well in the short term it is not. The amateur bands are “notched” so that there should be little short term impact. Also the standard specifies dynamic power control which can reduce the conducted levels by up to 30dB if manufacturers implement it correctly. Unfortunately the useful Power Down on Idle mitigation was removed in the final draft.

However more importantly, the standard will have set aside the “Essential Requirements” of the EMC Directive outside the notches, opening up a playing field for other devices to claim that the EN55022 standard (which the new draft exceeds by 45 dB) can be set aside in favour of EN50561. This is not just the RSGB view. It is also the view of the consultant employed by CENELEC and the EC to advise on EMC policy and legislation.

All in all, this has been poorly handled by those responsible for EMC in IARU and the price will be paid over the coming years. The full saga of all this is on the RSGB web site.

- b) Plasma TVs. We have had several cases of plasma TV interference which Ofcom says they can do nothing about. We are discussing with them their powers under the TV licence non-interference condition.
- c) The Committee is aware of a few solar PV installations that have caused significant wideband noise problems to amateur installations. Sadly there is no standard for a complete solar PV installation (it is the invertors themselves which are subject to a standard) and so the position is a little confusing for the average person. The EMCC has conducted a review of a number of Solar PV installations and the results are being assessed. We are clarifying with BIS, Ofcom's powers under the EMC Regs to enforce against non-compliant systems.
- d) Wind farms are also on the EMCC "radar" as there is anecdotal evidence of some wideband noise emissions from some installations. Work is still under way on this.
- e) Ofcom finally took powers under Section 54 of the WT Act to enable it to take action on cases of harmful interference from non-WT devices. It did this for the period of the Summer Games, with the assurance that a more permanent set of powers would be taken after the games were over. Sadly that seems to have been a false promise and nothing has yet materialised. We protested about the poor handling and drafting of the Olympics Regs in the hope that the more permanent Regs would give adequate protection to all spectrum users.
- f) Work has continued throughout the year on individual interference cases, including a case of intentional interference using "un-notched" PLAs and a horrific case of a BT infinity router power supply which wiped out the 10MHz band. Both were resolved, the first through the owner of the PLA moving house and the second through diligent work on the part of the amateur, advice from the EMCC and some useful help from BT. Generally however, Ofcom is fairly supine in terms of resolution of interference.
- g) Last year I reported that the EMCC needs more resource. I am pleased to say that since then we have identified a new Committee Chairman, John Rogers, MOJAV, and five new committee members, one of whom is in Germany and one in Ireland. I am hopeful that we are building up a strong resource, which will be helpful to the Society in its EMC work over the coming years
- h) For the year ahead we will also be investigating the potential for interference from LED lights, in particular low voltage LED arrays and continuing to watch for non-compliant computer PSUs. We also plan for better liaison with Ofcom in tracking and trending the interference reports, and to recruit more advisors so we can provide a faster turnaround and more specific help with members problems.

**John Rogers MOJAV**

**24 October 2012**