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Mr Christian M Verholt, OZ8CY  
Chairman EMC WG  
International Amateur Radio Union  
- by electronic mail -

Dear Mr Verholt

**EMC Newsletter October 2011- The Radio Amateur Services Position on prEN50561-1**

I am writing to you in my capacity as an advisor on PLT/PLC matters to the ADDX e.V. (Association of German Speaking Broadcast Listeners) to proffer the Association's comments/observations on the recommendations you appear to be making in your note.

Firstly, we take issue with your characterisation of EN55022:2006 (CISPR22) as being flawed due to, as you put it, manufacturers deliberately misinterpreting its provisions. As you correctly point out, this is nothing new: standards, norms, specifications and requirements are never absolutely safe from 'misinterpretation', be it deliberate or through genuine misunderstanding. Such misinterpretations do not, however, per se render the document in question defective and unacceptable. While we oppose in principle the adoption of any standard that does not without exception afford all radio users protection from harmful interference fully consistent with the essential requirements of the EMC Directive, national legislation derived from it and the ITU Radio Regulations, we consider EN55022:2006 (CISPR22) to be just acceptable due its lower emission limits and because it does not in our perception inherently limit recourse to legal remedies where PLT apparatus (and any other equipment violating the essential requirements, for that matter) causes harmful interference to the same extent that prEN50561-1 ultimately would. Any further effort expended should focus on improving the standard from the HF user perspective, if that is possible, instead of embarking on the prEN50561-1 adventure.

The fact that authorities (are claiming to) find it difficult to remove offending equipment from the market should not concern us. We at the ADDX take the simple view that it is the State's duty to uphold and defend the law, however difficult, and the Amateur Radio Service is not in any way obligated to make this task easier by entertaining questionable compromises. Indeed, we should not be deluded into believing that compromising the fundamental requirement to defend all spectrum users from harmful interference by endorsing prEN50561-1 will leave the Amateur Radio Service better protected from PLC interference. We can point to bad experience in this regard: When senior staff of the RegTp and the Federal Ministry of Economics and Technology told ADDX representatives in a meeting several years ago that the introduction of the NB30 finally provided them with the requisite authority (why the hell did they not simply enforce the law ?) to act against non-compliant PLC apparatus, we were right to be sceptical. Many years later the market is flooded with

apparatus flouting both the law, NB30 (which fact the Bundesnetzagentur even admitted in one of its annual reports some time ago) and EN55022, and nothing is being done about it.

Against this background we confidently predict that adoption of prEN50561-1, which we already know presents compliance difficulties to some PLC manufacturers, would not result in any improvements to HF users whatever. On the contrary, certain manufacturers would likely also 'misinterpret' that standard massively with administrations continuing to stand idly by because they are either frightened into submission by Brussels, or because they are pursuing their own neoliberal agendas or because they are simply worn down by industry lobbying. But having accepted this standard, the Amateur Radio Service as well as broadcast listeners would find it much more difficult to obtain remedies when conflicts between their operations and PLC arise; it would quickly be interpreted by interested parties (manufacturers, administrations) to moderate, override, and ultimately perhaps even effectively replace, EMC legislation. We, therefore, strongly oppose the adoption of prEN50561-1 and have made that position eminently clear at the DKE 767.17.3 work group session on 22 August of this year.

If the intention is to do away with spectrum protection and EMC legislation, then the legitimate spectrum users should strongly resist any attempts to have this done subterfugely by way of adopting questionable technical standards, and instead should force lawmakers to formally modify or rescind the law through proper parliamentary process.

Bearing the foregoing in mind, we are unable to follow your argument that prEN50561-1 is 'better' than EN55022:2006. The referenced technical 'advantages', such as adaptive notching of broadcast frequencies, which simply will not work satisfactorily in most circumstances in practice (for reasons we have elucidated in our comments on the draft to the DKE). In this connection we take little comfort from the EBU being satisfied with this approach; big-gun European broadcasters are increasingly vacating the shortwave bands or – if they maintain some services - deliver sufficient field strength to emulate laboratory conditions where adaptive notching is said to work. Permanent notching of Amateur Radio Service frequencies which at best reduces, but does not eliminate, interference is equally unsatisfactory and remains at odds with EMC legislation. We are also sceptical as regards the efficacy of dynamic power control and adherence by manufacturers to power level limits.

We need to be very mindful of the fact that we are not only dealing with powerline network adapters. There is, in our view, a possibly even greater threat on the horizon – the 'smart' electricity meter. The directive to equip all newly constructed buildings in the EU with this technology, which will likely be extended to retrofit smart meters to existing buildings over time, has the potential to open the PLC floodgates. With consumers paying for the requisite infrastructure by way of the electricity tariff, utilities will invariably seek to use these systems to deliver additional services, such as broadband. The obvious technology to employ then is access PLC and as a large chunk of the investment is borne directly by the consumer, the prospective economic performance of that business will look very inviting indeed, possibly leading to widespread deployment of such services. That would be difficult enough to live with under EN55022:2006; if prEN50561-1 with its 30-40dB higher emission levels were to be adopted it would be impossible.

Finally, we have great concern at the way the options available have been set out in your note. We would deplore any move to abandon the eminently prudent, and indeed necessary, stance that the Amateur Radio Service must continue to argue in favour of protecting all of the spectrum. If this causes difficulties for the authorities and 'marked control(?)', as you assert, so be it. As noted above, the Amateur Radio Service, like anyone else for that matter, is entitled to expect the 'authorities' to properly discharge their responsibilities without the benefit of de-facto bastardizing regulations and laws.

Any course of action that seeks to establish a privileged position for the Amateur Radio Service and that countenances, or tacitly approves the exclusion of other spectrum users from such privilege, is fraught with risk and will only serve to strip the Amateur Radio Service of any credibility in the spectrum preservation debate. Perceived advantages will in any event likely be short-lived and leave the Amateur Radio Service with nowhere to run if and when the tables are eventually turned on it.

A final thought: we have variously heard concerns expressed at the possibility of the Commission imposing a standard that would be harmful to the interests of HF users. If that possibility should indeed ever have been ventilated by anyone in the hallowed halls of the

Commission, which we doubt, then we would characterize this as sheer bluster. The Amateur Radio Service should not allow itself to be frightened into submission by such nonsense.

We are likewise not impressed by those who tell us that PLT is here to stay, and “you had better get used to it”, implying that one has to resign oneself to violations of EMC legislation as if this were an immutable natural law. It isn't and we can rightfully expect equipment manufacturers to present technology that does not have to rely on attempting to bend the laws of physics and violating legislation in order to function. Until such time as this has been achieved the HF user community should stand firm and not enter into any lame compromises.

The world is currently experiencing its worst economic crisis in 80 years. The blame for this disaster, which is leaving millions of people around the globe destitute, can be laid squarely at the door of those whose policies have dismantled the time-proven framework of prudent regulation and replaced it with a laissez faire, free-for-all approach.

The Amateur Radio Service should not allow itself to be taken down a similar path as it considers how to deal with the threat of an eventual total abandonment of sound EMC principles.

Sincerely

(J R Groeger)

Cc: Hans Blondeel Timmermann

