MODER Magdalena (ENTR)

From: Alexander S. Wood [alec_wood@ntlworld.com]
Sent: samedi 20 septembre 2003 18:37
To: BREFORT Thierry (ENTR)
Subject: PLT Data Transmission

Dear Sir

I have been given your email address as someone to whom I should make representation regarding the discussions at European Union level to permit the use of the elctricity ditribution system to provide for high-speed data transmission. Should I be mistaken, then I apologise for troubling you, and would ask that you pass it to a more relevant person.

In brief, I object to the proposals on the grounds of Electr0-Magnetic Compatability, EMC. By way of background to my argument, I am an electronic engineer with a radio engineering background. I am experienced in data transmission techniques although I currently work in the consumer electronics field.

PLT technology has been extensively tested in a number of geographical areas. While all these tests show that the technology acheives its data-delivery aims, serious problems of EMC remain unaddressed. In particular the emission figures of 10-50dBuV field strength at 30m from the receiving equipment would result in the complete blocking of large pieces of the radio spectrum. Of particular concern is the rendering useless of the entire shortwave band up to 30MHz. The history and background of the Japanese governments decision to cease further experimentation and testing in this area should not be dismissed as irrelevant as seems to be the case. The quoted emissions levels will result in

1. Lost amenity for tens of thousands of amateur radio operators throughout the world.
2. Serious difficulties and expense for the users of the aeronautical allocations below 30MHz. While much transmission by these services is by sattelite now, the continued provision of the service, and its installation requirement by regulators and insurers demonstrates its continued need as a backup, especially in times of emergency.
3. Commercial loss caused by reduction of service capability for broadcasters operating in this region.
4. Worldwide effects caused by the propogation of interfering signals from the equipment. Current propogation testing at the low-end of the 11 year sunspot cycle is inadequate. All testing for harm inducing potential should be of the "worst case scenario" nature, and as such should be modelled on propogation peak effects as will be seen at the top of the sunspot cycle. Countries of the devloping world could be seriously disadvantaged by the enhanced propogation of such signals.

The need for PLT technology is overstated. The telecommunications companies are reluctant to invest in recent technology that would allow high speed data transmission to use current telephone systems at a much lower interference potential. Their continued reliance on the asynchronous digital subscrber line concept is purely commercial decision on their part, in order that they can reap the full financial benefits of investing in yesterday's technology. In the same way as ADSL enablement of telephone systems requires an equipment upgrade, electricity distribution systems will also require the equivalent expenditure. Therefore it is unlikely that the much vaunted rural provision will in fact take place. Instead it will become a methd whereby electricity supply providers can take market share away from the current providers without actually benfiting the citizens in any way.

In recent years the European Union have brought forward several initiatives in the field of EMC. We have become world leaders in this. Permitting the PLT service would be an affront to this tradition. While we in the EU so often preach the environmental care message, why would we wish to be seen as hypocritical in allowing a global impacting EMC problem to pollute the

entire plane?

Kind regards

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