

I am opposed to any proposed plans to deliver Broadband Over Power Lines.

It is not appropriate for the FCC to authorize the implementation of "new" broadband services simply because a technologist has come up with a "unique" idea. There are currently broadband delivery systems using CATV, DSL over 4W-POTS, a plethora of options at 2.4GHz (wireless LAN, WiFi, CDMA, TDD and FDD based systems), 5.6GHz U-NII, mobile PCS and Cellular systems, Satellite TV systems, as well as LMDS. In addition, there are currently hybrid fibre-transmission line cables available and being deployed in the power grid that enable the carriage of very high speed data over the power lines. The level of penetration into the market of the existing, approved technologies is such that there is no demonstrated need for expansion of technology choices.

The FCC's historic lack of willingness to establish national standards for telecommunications has made a shambles of the national telecommunications infrastructure and has further made the national telecommunications infrastructure a joke for the rest of the world. All of these incompatible technologies have further placed unnecessary burden on consumers. Today, there are no less than 6 different mobile wireless technologies deployed in the US, most requiring customers to purchase new equipment should they wish to change providers. The FCC is continuing this misguided philosophy with broadband delivery:

- cable modems will not work with DSL
- each 2.4GHz, U-NII and L/MMDS manufacturer having different and proprietary modulation schemes (CDMA, TDD, FDD, WiFi, ?)
- consumer hardware for the various satellite delivery systems are incompatible with everything else.

The FCC should be seeking to harmonize the national telecommunications infrastructure, enabling consumers to choose between the best service provider. Consumers should not be required to obtain engineering degrees to understand the vagaries of the technology behind the delivery system.

Decades of experimentation in the HF and VHF Amateur bands between 2 MHz and 80 MHz have shown that world-wide communications is possible with extremely low emissions levels and simple antennas. The extent of interference to worldwide licensed users of the HF and VHF low-band will be great. Longwire antennas, of which power lines can be considered, will exhibit directionality and considerable gain. Since power lines are run in every direction, it will not be possible to control the direction of unintended radiation.

Harmful interference to licensed services in the HF and VHF low-band from 60Hz, which is supposed to be non-radiating, is an everyday occurrence. It is clear that the power lines, power delivery systems and power companies are not able to abide by current FCC regulations on the level of unintentional emissions at 60Hz. Why would the FCC believe that the same infrastructure and operators are capable of containing unintended radiation

at a level that will not cause interference on a world-wide scale over frequencies intended to be used for world-wide communications?

Doug Bergeron  
FCC-Licensee KO2R