



MAJOR COMMERCIAL BPL TRIAL IN HOBART

In the WIA National News of 5 December 2004, Owen Duffy's report on the Queanbeyan BPL trial also reported Tasmania's Aurora Energy's 2004 Annual Report as stating that a "major Tasmanian 'commercial' trial of powerline communications (PLC) technology is due to begin towards the end of the 2004/2005 financial year".

From the Aurora Energy 2004 Annual Report:

"A major Tasmanian 'commercial' trial of powerline communications (PLC) technology is due to begin towards the end of the 2004/2005 financial year. This follows the successful 'proof of concept' pilot conducted by Aurora earlier this year (*mid 2004, ed*) in partnership with Japan's Mitsubishi Electric and Tasmanian company, KeyPoint Internet".

"The pilot delivered broadband internet and voice services over low-voltage powerlines to Aurora's head office in Hobart as well as four adjacent private businesses in Kirksway Place. It was watched with interest by utilities from around Australia including Energy Australia, Country Energy, Transgrid, Hydro Tasmania and the Australian Communications Authority (ACA)...."

"A major commercial field trial of high-speed PLC technology is scheduled to begin in 2005 using 200Mbit chip technology from DS2 in Spain".

ABC news carried a story on 4 March 2005 (http://www.abc.net.au/science/news/scitech/SciTechRepublish_1315677.htm) in which Aurora Energy's Chief Executive Officer, Dr. Peter Davis, reported that the Hobart trial in mid 2004 was a success in that; "We sent an Internet signal into the power line, went into those houses, plugged in the computer, the signal comes through the computer and we were able to download streaming video off the Internet."

The article also stated "Backed by Japanese giant Mitsubishi, Aurora will hold a broadscale trial of the technology involving 1,000 Aurora customers later this year".

"Later this year" might be reasonably understood to mean later this calendar year, which accommodates some slippage from the timing stated in the annual report.

Has Aurora discovered that widespread BPL rollout is not as easy as some suggest? Time will tell!

Tasmanian Radio Amateurs need to be aware of the proven risk of interference to radiocommunications services by current BPL technologies. The WIA will coordinate collection of information on the geographical area and interference profile of the proposed Hobart trial. In preparation, the WIA is actively working on tools for identification of BPL, and field strength measurement.



Amateurs should also monitor the ACA BPL portal (internet.aca.gov.au/ACAINTER.2752830:STANDARD::pp=PC_2703,pc=PC_2845) which has a prominent link on the right side of the ACA home page at www.aca.gov.au.

In the same news article Dr Davis says "special chips are now capable of transferring up to 200 megabytes of information. Clearly with those sorts of speeds DVD-quality video is the sort of thing we're looking towards in the future."

Has somebody somewhere has made a mistake?

Even hand keyed Morse code, could transfer 200 megabytes of information given a few years. It is the information transfer rate (or megabytes per second) that is of interest to everyone. Did Dr Davis mean 200 megabytes per second, or are bits and bytes mixed up and does he really mean 200 megabits per second (which is only 12% of the former)?

Even if Dr Davis meant 200 megabits per second, that speed would not be obtained consistently in practice, in client premises using the new 200 Mb/s chipset. BPL bandwidth is diluted by the number of users transferring data at the same time on the same feed and speed reduction due to system data overheads, error correction, collisions, interference into the BPL system, and signal degradation with distance makes it worse.

Like much we have heard in this debate "200 megabytes" appears to be yet more marketing hype.

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