

Commission's investigation into Telstra's use of pair gain systems

In light of complaints to the Commission concerning Telstra's use of 'pair gain systems' ('PGS') in the public switched telephone network ('the PSTN'), and following discussions between Telstra and the Commission, Telstra has undertaken to increase the level of information it provides to consumers concerning the potential effect that network design decisions have on Internet access.

Earlier this year the Commission received a number of complaints from consumers alleging they had been adversely affected by Telstra's use of PGS. Specifically, complainants alleged they were experiencing slow dial-up speeds when accessing the Internet via their telephone line. In other cases, complaints were received about the inability to connect to ADSL, even where the local exchange had been ADSL enabled.

Generally it appeared that complainants were not aware of the effect some PGS may have on their dial-up Internet access speeds, nor of the inability to access ADSL on pair gained telephone lines. The Commission was also concerned at the lack of information about PGS on the jointly Telstra/Government funded Internet Assistance Program ('IAP') website. Commonly, complainants were not aware of the existence of a PGS until they had made numerous enquiries to Telstra.

The Commission is pleased that Telstra has taken steps to more fully disclose its use of PGS and advise consumers of the possible effect on data services over a pair gained line.

Further information on Telstra's use of PGS and details of the Commission's investigative findings are explained in more detail below.

Further Information

1. What is a PGS?

There are a number of different technologies which may be classed as a PGS. PGS may be 'small', 'medium' or 'large' depending upon the number of lines connecting to it.

(a) Small and medium PGS

The PGS itself is situated somewhere between the local telephone exchange and the consumer's premises. It is technology which electronically splits the transmission frequencies running along a particular twisted copper pair or pairs. Rather than requiring an entire twisted copper pair for the transmission of a standard telephone service voice call, two or more voice services may be provided along the telephone line.

(b) RIMs and large pair gain systems:

Large PGS may also be called RIMs or 'remote integrated multiplexers'. RIMs are more commonly used in housing estates and apartment blocks. Rather than building an additional line telephone exchange to service the requirements of the housing estate, a high capacity fibre optic cable extends the reach of the telephone exchange to the RIM. From the RIM, individual twisted copper pairs run out to consumers' houses.

2. Effect of a PGS

Although PGS do not affect the quality of voice services, they can have unfavourable effects on Internet dial-up speeds and also limit the ability to get ADSL. Under the Government's Universal Service Obligation ('USO') regime a 'standard telephone service' only needs to provide a quality 'voice' service. The only mandated data speed across a standard telephone service is a minuscule 2400 bits per second, which is the speed necessary for teletypewriters and faxes. Transmission speeds over 2400 bps are regarded by the Government and Telstra as a bonus for consumers.

The Commission's powers in relation to data speeds over a standard telephone service essentially only extend to ensuring that the consumer protection provisions in the Act, particularly those prohibiting

misleading conduct, are not breached. Consequently the Commission is committed to ensuring that Telstra makes consumers aware of the possible limitations of various types of PGS. Telstra is aware of the Commission's concerns.

For many consumers on small and medium PGSs, (but not RIMs), there is a 'Special Digital Data Service Area' rebate available on part of the installation costs for a one-way satellite data service. One-way satellite provides high speed access and may provide a reasonable alternative to ADSL for many consumers. The rebate is available for one-way satellite with both Telstra and Hotkey Internet Services. (Details of the rebate are available at: http://www.aca.gov.au/consumer/uso/special_ddsp and http://www.dcita.gov.au/Article/0,,0_1-2_1-4_104234,00.html)

3. Outcome of Commission's investigation

Following an extensive investigation and detailed communications with Telstra, the Commission has determined that:

" The use by Telstra of PGS is not, in itself, a breach of the *Trade Practices Act 1974*.

In many cases PGS are necessary in order for Telstra, as the current USO provider, is able to fulfil its new service provisioning time limit commitments under the *Telecommunication Act 1997*.

" Many complaints about PGS will not arise if there is greater disclosure of PGS, their uses and their possible effects on data service.

There will be greater disclosure and acknowledgment by Telstra of the use of PGS by Telstra. For example, Telstra's website now makes explicit reference to PGS, contains a basic explanation for such devices and, importantly, explains the potential effect PGS have on dial-up Internet access speeds and ADSL. Explanation of PGS is also expected to be made available soon on the jointly Telstra/Government funded 'Internet Assistance Program'.

" Many complaints about PGS arose from disparity between consumers' expectation of the speeds and types of data services which their standard telephone service would support and Telstra's obligations under the USO regime to simply provide a voice quality service.

Telstra will now specifically ask consumers their intended purpose for a second telephone line when they request the connection of a second line. When consumers respond that the second line is to be used to support a data service and/or to provide ADSL, Telstra will now provide information to consumers about the minimum telephone service it is obliged to provide under the USO and provide information about PGS and their possible impact on the provision of data services.

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