# **Senate Standing Committee on Environment and Communications**

## **Answers to Senate Estimates Questions on Notice**

### **Additional Estimates Hearings February 2014**

#### **Communications Portfolio**

# **Australian Communications and Media Authority**

**Question No: 8** 

Program No. Australian Communications and Media Authority (ACMA)

Hansard Ref: Page 12 (25/2/2014)

Topic: Customer Network Improvement (CNI) database

### **Senator PRATT asked:**

So you have not yet accessed the CNI database, but clearly that kind of information is relevant to the kind of information you are already highlighting?

**Mr Tanner:** We collect and we publish a fair bit of information about the performance of the fixed line network, including a fair bit of information on faults—the total number of faults from year to year. You can see the series data and the percentage of subscriber lines in any given month that experience problems. We publish that data. The number of lines that experience more than three faults in a 60 day period, we publish that data as a time series. The number of lines that experience more than, I think, four faults over a 365 day period, we publish time series on that as well. It is all in the communications report. So there is a substantial amount of data which is collected from the major carriers and put in the public domain.

**Senator PRATT:** Wouldn't the CNI database be a good complement to that information? **Mr Tanner:** I would have to take that on notice.

**Senator PRATT:** Can you take on notice the question about attenuation of frequencies for data versus voice? Clearly they are all related. In addition, could you also advise whether poor joints and the corrosion on the surface of a copper wire has a greater effect on the attenuation of higher frequencies used for data than it does for lower frequencies used for voice? Again, I would be happy for you to take that on notice to get ACMA's views.

**Mr Chapman:** I can't guarantee that they are matters within our expertise, but we will take it on notice and respond genuinely with respect to the limits of our expertise.

**Senator PRATT:** Okay. I would hope, given that they may be matters that affect consumers, that it is something that you could see to be within your remit, notwithstanding the clearly complex issues. Thank you.

#### **Answer:**

a) So you have not yet accessed the CNI database, but clearly that kind of information is relevant to the kind of information you are already highlighting?

The ACMA's monitoring of fixed line telephony consumer safeguards such as the Customer Service Guarantee, the Network Reliability Framework and Priority Assistance is directed at the outcomes experienced by consumers. We monitor for example the time taken to set up new connections and fix faults and the reliability level of fixed line services supplied to residential and small business consumers. This monitoring covers voice services and is not specific to any particular technology type, with the exception of the Network Reliability Framework monitoring, which is directed at Telstra's copper network.

The ACMA understands that the Customer Network Improvement (CNI) database relates to internal Telstra processes that deal with the degradation of physical infrastructure in order to maintain and restore services; the ACMA's focus to date has been on the outcome for consumers rather than the cause.

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- b) Wouldn't the CNI database be a good complement to that information?

  This would depend on the ACMA's reasons for collecting the information. To date the ACMA's regulatory focus has been on consumer outcomes rather than the cause of network problems.
- c) Can you take on notice the question about attenuation of frequencies for data versus voice? Clearly they are all related.

Copper twisted pair cables which are intended for telephony services operate optimally at lower frequencies and experience greater signal loss as frequencies increase.

Voice frequencies for analogue telephony fall into the range from 300Hz to 3400Hz. Voice services are low in frequency, compared with ADSL2+ services (25kHz to 2.2MHz), while VDSL2 services (138kHz to 30MHz) are higher again. For a given thickness and length of copper, services using higher frequency signals will experience greater degradation compared to lower frequency signals.

d) Do poor joints and the corrosion on the surface of a copper wire have a greater effect on the attenuation of higher frequencies used for data than it does for lower frequencies used for voice?

Poor joints and corrosion may contribute to the degradation of the performance of copper wires however the ACMA does not collect or have sufficient information on this issue to be able to provide a comparative assessment between the relative effects on voice and data services.

<sup>&</sup>lt;sup>1</sup> AUSTRALIAN STANDARD AS/ACIF S002:2005. Analogue interworking and non-interference requirements for Customer Equipment for connection to the Public Switched Telephone Network. http://www.commsalliance.com.au/ data/assets/pdf file/0015/25431/S002\_2005r.pdf

<sup>&</sup>lt;sup>2</sup> ITU-T G.993.2 Very high speed digital subscriber line transceivers 2 (VDSL2) http://www.itu.int/rec/T-REC-G.993.2-201112-I/en