

13 November 2020

Dear Mr Ratchford

Thank you for the opportunity to express the Internet Association of Australia (IAA) perspective on the Measuring Broadband Australia program. Many of IAA's members are small to medium sized internet service providers.

*Testing methodology*

1. Do you agree that a probe-based testing methodology would be the most reliable and accurate approach for the Australian context?
2. If you consider an alternative approach preferable, what approach do you prefer and why?

IAA is satisfied that a probe based testing methodology is effective, and for the most part reliable and sufficiently accurate. Probes have the advantage of yielding data from an end to end perspective, potentially yielding information on the performance of network termination devices as well as the networks themselves. If this data can be combined with upstream measurements then even greater information can be available to both suppliers and purchasers.

*Services*

3. What services should be included in the ACCC's proposed performance monitoring and reporting program? In particular:
  - a) Do you agree that the ACCC should monitor ADSL, HFC and NBN-based broadband services?
  - b) Do you agree that the ACCC should monitor small business broadband services?
  - c) Are there any other services which you consider should be included in the proposed program? In your response, please outline reasons.

It is preferable that the ACCC measure across all forms of commercially available broadband access technologies such that consumers can determine a clear and viable set of choices for the services they choose to procure. This should similarly apply to services offered to small business as they are rarely in a position to gather independent performance data from any other source, and frequently pay a price premium.

Mobile broadband is also increasingly being marketed as a reliable substitute for fixed networks. As customers move away from fixed to mobile it is important to ensure the claims made regarding

performance are justified. IAA therefore encourages the ACCC to include mobile broadband services in the measurement program.

NBN Fixed wireless should be covered like any other technology and if it is not fit for purpose, or is subject to unacceptable performance variation, then providers need to be held to account. It seems incongruous that the ACCC saw fit to intervene on FTTN performance, yet has not yet acted with respect to fixed wireless services. These customers have little choice of service and little transparency in the service performance. IAA would welcome ACCC intervention in this matter.

### *Regions*

4. How should the ACCC determine which regions to monitor as part of any program? In particular:
- How many Australian cities do you consider should be monitored as part of the proposed program? How could these be determined by the ACCC?
  - Would you consider State or Territory regions which encompass rural and regional areas outside of each major city would be sufficient to provide information to consumers living in these areas on the performance of broadband services? For example, a Victorian rural/regional delineation which encompasses services outside of metropolitan Melbourne.

IAA does not think it helpful to cherry pick cities, as each head end and aggregated path will perform differently to others. Localities that are well dimensioned can sit side by side with areas that are poorly dimensioned, thus can give a false impression of service performance available. It is IAA's view that the more broadly measurements can be conducted, the better. Indeed, with more and more people choosing – and needing – to work remotely, it is becoming more important that as wide a measurement set as possible be collected.

### *Internet service providers*

5. How should the ACCC determine which ISPs to monitor for ADSL and NBN-based services? For example:
- Should the ACCC monitor the largest ISPs by total market share in the Australian fixed-line broadband market?
  - Should the ACCC monitor the largest ISPs by market share for each technology
  - Should the ACCC monitor the largest ISPs by market share for each region?
6. If you consider that another approach to determining which ISPs to monitor is preferable, what is it and why do you prefer that approach?
7. Should the ACCC monitor all providers of HFC in Australia, or limit testing to the two major networks operated by Telstra and Optus?

It is IAA's belief that many of our members – large and small – would welcome the opportunity to join the ACCC monitoring program and would actively help to promote the program to their respective customer bases.

At present, the ACCC only measures what it considers to be major ISPs hence provides them with a marketing tool to effectively – and unfairly – position themselves against small players who are not represented (Case study 5 all but makes this point). They represent nine providers in a market with significantly more providers. The ones represented are ones with considerable financial backing and as such gives them an unfair advantage and creates an unfair barrier to market entry.

Telstra and Optus no longer operate the HFC networks as they are understood to have been divested to NBN Co and are now operated by it. It is IAA's view that all HFC networks should be treated similarly, and therefore measured and reported on.

Of concern is that third party layer two networks are not being included outside of the NBN footprint. It is important for consumers and RSPs to have publicly available data to demonstrate performance and hold the underlying suppliers to account. It is more important on these networks as consumers have little choice but to use the services provided.

### *Speed tiers*

8. Do you agree the ACCC should test both ADSL 1 and ADSL2+ services?

9. Should the ACCC test specific speed tiers for HFC and NBN-based services or should it test services falling within particular speed ranges? Please explain if and why you prefer a particular approach.

IAA is of the view that all speed tiers should be tested. This would ensure fairness across the market and not skew consumer service selection on the basis of perceived performance.

As stated above, IAA's view is that all technology types should be represented. ADSL does not reliably allow the required performance characteristics for the urban areas where it is used and does not provide a suitable service for the contemporary household demand. Customers on fixed wireless should be treated and expect the same level of service as other NBN technology types. Satellite services, should similarly be measured and reported on.

### *Sample size*

10. What is the minimum number of probes which would be required to provide robust results on the broadband performance likely to be experienced by consumers acquiring a particular ISP package or offering in a particular region (i.e. per sample set)?

11. Which of the variables (ISP, geographic region, speed tier or size of each 'sample set') is most important and why?

IAA encourages the ACCC to use statistical sampling methods and to map these across specific NBN architecture blocks such as fibre serving areas and POIs. As long as the sample is statistically robust and mapped to the underlying architectural components, results should accurately reflect the network performance. IIA encourages the ACCC to work with retail ISPs to properly reflect the architecture.

### *Metrics*

12. What information regarding download and upload data transfer rates (or 'speeds') would be most useful for ISPs and for consumers? In particular:

a) Do you agree that the ACCC should monitor both peak and off-peak data transfer rates?

b) What is the daily peak or 'busy' period for demand on broadband bandwidth in Australia?

c) To what extent are 'burst' speeds available for consumers in Australia and should they be accounted for in the ACCC's proposed testing program?

13. What additional quality of service parameters should the ACCC monitor so as to obtain rich and meaningful information regarding the performance of broadband services in Australia? In your response, please state each factor which you consider should be tested and why.

Busy hour statistics and performance are seen as generally useful, and published on a quarterly basis gives service providers time to correct faults and improve performance. Peak and off-peak rates are useful as it gives a range that consumers may expect. IAA metrics are openly published and can be seen at [metrics.ix.asn.au](http://metrics.ix.asn.au) by way of comparison and assist in clearly identifying peak periods. It would appear, however that overall daily consumption rates are increasing resulting in a significantly flatter peak than in previous eras.

Latency and other statistics would be useful for the industry to see, For example, how much bandwidth households are using per technology type, such that an average household usage or Mbps usage per household per occupant could be derived.

Application based statistics are useful also for consumers to consider in service selection, however care must be taken to ensure that the results are not affected by prioritisation of traffic.

With respect to quality of service metrics, IAA considers it more helpful to consumers, and the market generally, if ISPs are transparent in their policies such that any prioritisation of application or traffic classes are known to consumers. Where the ACCC's measurement program detects such mechanisms, then these should likewise be made public.

### *Reporting*

14. What do you consider is the best approach to reporting on broadband performance in Australia?

In particular:

- a) How often should the ACCC report on the results of its broadband performance testing?
- b) Do you agree that the ACCC should provide detailed observations, commentary or analysis on the results of testing?

15. To what extent would industry (e.g. ISPs) value access to the raw data collected by any testing program and want to have access to it?

IAA is satisfied with quarterly broadband performance reporting as this gives adequate time for retailers to adjust for faults or transient capacity issues. Longer term performance can be tracked and this would be of benefit to consumers.

Members have expressed concern that unscrupulous providers may manipulate the results by using quality of service or other techniques to prioritise traffic known to be subject to measurement. We therefore encourage the ACCC to publish what mechanisms it has in place to prevent manipulation of the results.

IAA would support the publication of raw data as it would enable further analysis by researchers and enable further characterisation of internet traffic and complex interactions of software and installed equipment. This would potentially enable improvements to troubleshooting and enabling protocols and software for the internet generally.

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Once again, I would like to take this opportunity to thank you for providing us with the opportunity to contribute to the review. IAA would indeed be happy to assist by holding a round table with the smaller RSPs should the ACCC wish to do so.

### About the Internet Association of Australia

The Internet Association of Australia Inc (IAA) is a member-based association representing the Internet community. Founded in 1995, as the Western Australian Internet Association (WAIA), the Association changed its name in early 2016 to better reflect our national membership and growth.

Our members comprise industry professionals, corporations and affiliate organisations. IAA provides a range of services and resources for members and supports the development of the Internet industry both within Australia and internationally. Providing technical services as well as social and professional development events, IAA aims to provide services and resources that our members need.

IX-Australia is a service provided by the Internet Association of Australia to Corporate and Affiliate members. It is the longest running and lowest cost Internet Exchange in Australia. Spanning six states and territories, IAA operates over 30 points of presence and operates the New Zealand Internet Exchange on behalf of NZIX Inc in New Zealand.

IAA is also a licenced telecommunications carrier, and operates on a not-for-profit basis.

Yours faithfully

Narelle Clark  
Chief Executive Officer  
Internet Association of Australia