



24 September 2013

Rebecca Larsen
Australian Competition and Consumer Commission
GPO Box 520
Melbourne Vic 3001

By email: BroadbandPerformance@acc.gov.au

Dear Ms. Larsen,

ACCC consultation on broadband performance monitoring and reporting proposal

NBN Co welcomes the opportunity to provide a submission in response to the ACCC's August 2013 consultation paper regarding the possible implementation of a monitoring and reporting program in relation to the performance of broadband internet services in Australia.

NBN Co is, in principle, supportive of the proposal to introduce such a program. If implemented effectively, a program of this nature could facilitate an increased level of public awareness of the relative performance of different retail broadband services. This would in turn enable consumers to make more informed choices about the broadband services they acquire. The availability of this information may also enable the industry to identify issues affecting the quality of retail broadband services.

In **Attachment A** to this letter, NBN Co has provided responses to those questions raised in the ACCC's consultation paper that NBN Co is currently in a position to address (using the same numbering as in the ACCC's paper). While NBN Co has not responded to each question, we will continue to consider the balance of the questions as the ACCC's planning for this proposed program progresses and may have additional perspectives to offer once the thinking in relation to the program is further developed (for example at the foreshadowed position paper stage).

We would be happy to discuss our responses further with you if necessary.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'Duncan Giles', is written over a light blue horizontal line.

Duncan Giles

Senior Advisor Regulatory Affairs

PHONE (02) 9926 1900 FAX (02) 9926 1901
EMAIL info@nbnco.com.au WEB www.nbnco.com.au

LEVEL 11, 100 ARTHUR STREET, NORTH SYDNEY NSW 2060

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ATTACHMENT A – RESPONSES TO CONSULTATION PAPER QUESTIONS

1. Do you agree that a probe-based testing methodology would be the most reliable and accurate approach for the Australian context?

NBN Co agrees that the adoption of a probe-based testing methodology would be appropriate and, if effectively implemented, likely to produce reliable and useful measurements of the performance of retail broadband services. The use of probes at end user premises is likely to minimise the chance that measurements are distorted by uncontrollable variables such as end-user hardware performance. Software-based solutions, conversely, are likely to be affected by these sorts of factors and therefore may be more prone to producing less consistent results.

2. If you consider an alternative approach preferable, what approach do you prefer and why?

N/A.

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?

NBN Co agrees with the ACCC's proposed approach. The ability to compare the relative performance of retail broadband services delivered over different types of network infrastructure would enable consumers to make more informed choices about what broadband services are most appropriate for their needs.

However, it is important to note that there may be inherent technical characteristics associated with certain types of network infrastructure that can affect the performance of retail broadband services. These are not necessarily the same across all technologies. For example, the signal propagation methods used on satellite and fixed wireless networks can be affected by external factors (such as interference) to a greater extent than in fixed line networks. To the extent that the proposed program compares retail services across these different types of technologies, these differences should be made clear as part of the information provided to consumers.

b) Do you agree that the ACCC should monitor small business broadband services?

NBN Co has no specific concern with including retail residential broadband services received by small businesses as part of the proposed program, assuming that these are the same services residential end users receive and are not based on 'business-grade' services offered by the network operator.

c) Are there any other services which you consider should be included in the proposed program? In your response, please outline reasons.

NBN Co notes that other carriers supply services over fibre optic networks in Australia. Consideration should presumably be given to monitoring broadband services delivered to consumers over these other fibre networks as part of this program (subject to a sufficient sample size being available).

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.

NBN Co believes that the proposed monitoring and reporting program should cover all Australian capital cities, and, if possible, also cover a representative selection of rural and regional areas in each state. This is because geographic location / remoteness is a key variable that has a bearing on the performance of retail broadband services.

The reasons for this include that:

- Differences may exist in the technical performance of some types of fixed line networks across different regions. For example, the length of copper loops from exchanges, as well as the grade and age of those loops can significantly affect the performance of broadband services delivered over copper networks.
- Geographic areas with lower population densities, and lower potential subscriber market sizes, generally experience lower levels of investment in broadband infrastructure. In an NBN context, for example, service providers may choose to provision backhaul capacity from individual POIs by weighing the potential market they are able to serve with the costs of provisioning that capacity back to their own point-of-presence.

The comparative performance of NBN based retail broadband services might, for example, be measured by monitoring the performance of retail services received by a range of end users connected to a representative subset of NBN Co's POIs servicing different Australian cities, and rural and regional areas in each state.

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.

NBN Co believes that there may be merit in testing and reporting on specific speed tiers for NBN based services. While regulators such as Ofcom in the United Kingdom and the FCC in the United States have favoured the monitoring of speed ranges, service providers supplying retail NBN-based services typically market their offerings to consumers using NBN-specific speed tiers (12 Mbps download/1 Mbps upload, 25/5, 50/20 or 100/40) and so it may be more useful for Australian consumers to have access to data that reflects the performance of services provided using these specific speed tiers. If the proposed program only involved testing specific speed tiers (rather than all available speed tiers), consideration would need to be given to the most useful tiers to test, for example this might include the lowest, highest and most popular of available speed tiers

NBN Co also notes that it provides its customers with considerable flexibility to change the speed tier supplied to an end user premises within a relatively short period of time. Depending on the frequency with which the ACCC reported on the performance of retail broadband services, there would not necessarily be any guarantee that a speed tier provisioned by an NBN-based retail service provider would remain the same over the entire reporting period. This may add a degree of complexity in terms of ensuring the performance information provided to consumers as part of the program is accurate.

If the ACCC was instead minded to test NBN retail services grouped together using specific speed ranges, this would need to be done carefully to ensure that the data provided to consumers was not misleading. Speed ranges that are unduly wide in nature may result in average speeds being reported across each range that would not necessarily provide consumers with useful information about the performance of specific NBN-based retail services.

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?

NBN Co considers that it would be useful to monitor the performance of retail broadband services across both peak and off-peak usage periods, as there can be considerable variance in the performance of services across a 24 hour period. Nevertheless, measurements taken during the peak usage period would, by definition, likely provide information that is most useful to consumers in terms of the likely performance of a retail broadband service they are considering purchasing.

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

The peak usage period for broadband services may vary across different networks in Australia and this should be taken into account in any monitoring and reporting program. In an NBN context, peak usage period falls between the hours of 9pm and 11pm daily.

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?

NBN Co notes that the type of consumer 'burst' speed functionality of the type referenced by the ACCC in its consultation paper is not available on the NBN.

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.

NBN Co believes that the metrics described in the consultation paper are adequate for the purpose of assessing the performance of retail broadband services.

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

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

NBN Co believes that a balance needs to be achieved between reporting at intervals that are of sufficient frequency to enable accurate and current data to be released regarding the performance of broadband services, whilst avoiding the possibility that an excess of information could confuse consumers. Issuing reports on a quarterly or half-yearly basis could strike this balance.

NBN Co notes that both Ofcom and the FCC release their performance reports on a roughly six monthly cycle – however, consideration could be given to providing industry with access to raw testing data on a more frequent (e.g. monthly) basis. NBN Co has no specific concerns with the ACCC providing some commentary or analysis on performance results, but this should ideally accompany the more detailed reports it releases to the public rather than just the release of raw testing data.

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?

NBN Co believes that it would be useful for industry to have access to raw data collected as part of the proposed monitoring and reporting program, provided that the raw data was provided in a format and structure that could be worked with easily.