



SENATOR THE HON STEPHEN CONROY

MINISTER FOR BROADBAND, COMMUNICATIONS AND THE DIGITAL ECONOMY
MINISTER ASSISTING THE PRIME MINISTER ON DIGITAL PRODUCTIVITY
DEPUTY LEADER OF THE GOVERNMENT IN THE SENATE

10 AUG 2012

Mr Robert Oakeshott MP
Chair
Joint Committee on the National Broadband Network
PO Box 6022
Parliament House
CANBERRA ACT 2600

Dear Mr ^{Rob}Oakeshott

Third Review of the Rollout of the National Broadband Network – answers to Mr Hartsuyker's Questions

Thank you for your letter dated 26 June 2012 seeking additional information on the answers to questions placed on notice (QONs) by Mr Luke Hartsuyker MP as part of the Joint Committee on the National Broadband Network's Third Review of the Rollout of the National Broadband Network (NBN).

I am pleased to enclose responses to the additional questions that were asked of NBN Co Limited (NBN Co) on matters relating to Greenfield development sites (QONS 19 - 22) (**Attachment A**). The responses take into account additional points of clarification conveyed by Mr Hartsuyker through the Joint Committee Secretariat on 3 July 2012 (**Attachment B**).

I apologise for the delay in responding to the Joint Committee's request. The Australian Government recognises the importance of providing information to the Committee, noting of course that time is required to prepare accurate and consistent responses to requests for information on the NBN rollout, and for necessary due diligence processes of NBN Co and the government.

I trust the enclosed information will be of assistance.

This letter has been copied to Mr Hartsuyker.

Yours sincerely

A handwritten signature in cursive script that reads 'Stephen Conroy'.

Stephen Conroy
Minister for Broadband,
Communications and the Digital Economy

Joint Committee on the National Broadband Network
Answers to Questions on Notice - Additional information
Public Hearing 16 April 2012
Broadband, Communications and the Digital Economy Portfolio
NBN Co Limited

Question Nos: 19, 20, 22

Hansard Ref: In writing

On 26 June 2012, Mr Oakeshott MP (Chair) sought additional information on the responses to question numbers 19 - 22 by Mr Hartsuyker MP that were lodged with the Committee on 12 June 2012. On 3 July 2012, Mr Hartsuyker provided additional points of clarification on what was required and this has been addressed through the supplementary information provided below in relation to question numbers 19, 20 and 22.

Question No: 19

Topic: Greenfields development - Bonnyrigg

Question 19a. The answer notes that dwellings were cabled to other providers' specifications. The Committee would like to know which providers (e.g. Telstra Velocity).

From information provided by the developer to NBN Co's contractor, NBN Co understands the premises in Bonnyrigg were cabled to comply with Telstra Velocity specifications.

Question 19b. The Committee wishes to know the specific quantity of homes built using Telstra Velocity specifications.

There are 104 premises and we are advised they were all originally provisioned to Velocity specifications.

Question 19d. The Committee would like to know what changes *builders* made to installations and an explanation of 'back to back' installation.

As context, one difference between NBN Co and Velocity specifications is the location of the network termination devices (NTDs). The Velocity specification assumes the use of an external NTD, while the NBN Co specifications support an internal NTD. This is one of the major sources of required changes.

A power point is required to support the operation of the power supply unit (PSU)/NTD, so where a power point was not proximate, a licensed electrician was required to relocate the power point. Where an external power point is provided to support an external Velocity premises connection device (PCD) (as per the Velocity specification) this can usually be relocated to become the internal power point supporting the internal PSU/NTD. Similarly, Cat 5 cabling pre-installed to the exterior of the home can be re-terminated onto an internal wall outlet. This work within the home is completed by a qualified electrician (usually appointed by the builder) and/or cabler, rather than by the builder directly. Some work may be undertaken directly by the builder if they hold the appropriate licences.

Due to the varied nature of homes (within greenfield and brownfield estates), NBN Co has a variety of approaches to connecting services to homes. A back-to-back installation refers to the placement of the internal equipment on to the wall directly aligned with the point where the optical fibre is connected to the external wall of the building (i.e. the PCD). The external and internal wall plates are therefore 'back-to-back' and internal cabling and installation time is minimised.

Question 19e. The Committee wishes to know the cost of any remediation; or, that if there was no remediation work done, that this is clearly stated.

The cost of the remediation was estimated by NBN Co's contractor to be \$19 893.60 exclusive of GST. This work was carried out by NBN contractors and the builder's nominated electrician who billed NBN Co's contractor.

Question 19f. The Committee wishes to know who paid for any remediation work; or, that if there was no remediation work done, that this is clearly stated. Was there an additional cost involved?

Bonnyrigg was the first broadacre greenfield estate for NBN Co and specifications and work practices were under development. NBN Co's subcontractor advises that they have paid the costs of remedial work carried out at the Bonnyrigg development. According to NBN Co's subcontractor, 61 out of 88 Single Dwelling Unit (SDU) premises and 16 Multi Dwelling Unit (MDU) premises required remediation to electrical works over the period August to October 2011. NBN Co has subsequently accepted and paid the contractor's claim of estimated costs of \$19 893.60 exclusive of GST across the estate.

Question 19h. The Committee would like to know if NBN Co received regular updates on the progress of the remediation works at Bonnyrigg?

Changes made by the builder to particular premises are not normally the subject of regular reporting or recording in corporate databases within NBN Co. Information may, however, be conveyed by developers, builders and NBN Co's contractor to NBN Co staff during regular meetings. As Bonnyrigg was an early development site, NBN Co staff did attend numerous project meetings and premises remediation by the builder was discussed.

Question No: 20

Topic: Greenfields development: Watson and Macgregor

Question 20a & 20b. The Committee would like to know what specifications were used in Watson and Macgregor, and, if this information is not to hand, where it might be obtained.

Watson and Macgregor were a different situation from that of Bonnyrigg. In Bonnyrigg, construction was well-advanced when NBN Co's specifications were released. In Watson and Macgregor while construction was also well advanced, NBN Co's specifications were released in time for incorporation in the construction works.

Upon inspection of Stage 1 premises in both Watson and Macgregor, it was found that premises had been incorrectly prepared. From NBN Co's inspection, they have been unable to attribute the installation as compliant with any particular specification familiar to NBN Co. The cabler employed by the builder may be able to provide further information.

Question 20d. The Committee would like a detailed list of the construction approaches used, not just one example.

The process of constructing a premises connection is described in the document *NBN Co In-home Wiring Guide for SDUs and MDUs*, which is available on the NBN Co website.

In practice, the standardised elements of construction must respond to the particular requirements of each premises. Where a building has been correctly prepared to support the reticulation of fibre, any extant cable pathway is utilised. In buildings without a prepared fibre pathway, an approach is selected in conjunction with the builder/ home owner to balance construction time and cost with practical and aesthetic objectives.

The lowest cost is the back-to-back approach previously described to support an SDU. In some premises, a 'ruggedised' fibre (a firmer, larger and more robust fibre) was utilised to provide in-building penetration where a cable pathway had not been provided.

Question 20e. The Committee wishes to know whether any remediation work was carried out, and the cost of said work.

As described above, this was a different situation to that of Bonnyrigg. Costs in Watson and Macgregor were met by the developer in order to ensure NBN availability within homes. This could include re-location or installation of new power points, and re-location of Cat 5 cable outlets. These costs were met by the builder and NBN Co does not have visibility of these costs. The cost of fibre reticulation was, of course, met by NBN Co.

Questions 20g. The Committee would like to know why records are not kept on remediation activity.

It is important to understand NBN Co's role in these developments as background. NBN Co employed a contractor to oversee the day-to day operations in these new developments. The contractor works with the developers and builders, who in turn work with their own subcontractors, including electricians and other tradespeople. Arrangements

for pit and pipe installation are made by developers (such work to be carried out to NBN Co specifications) and arrangements for cabling are made by builders and home owners.

NBN Co believes the model for minimising costs to taxpayers and home owners is to work with builders to properly prepare buildings to NBN Co specifications existing at the time of construction. Developers are required to notify NBN Co upon the achievement of specific milestones, including the remediation of defects identified in street conduit the subject of the developer deliverables. The builder does not operate within a contractual relationship with NBN Co, but is informed of the need to provide a fibre path by the developer. Details of builder activity, including any remediation activity, are not essential for NBN Co to manage its business. Records of such activity may be kept by builders. NBN Co does not normally have visibility of arrangements between developers and their suppliers; however, NBN Co staff may become aware of remedial work being undertaken by builders in the course of engaging with developers and builders for the construction of the fibre network.

Question No: 22

Topic: Consultation with the Australian Building Codes Board

Question 22. The Committee would like to know why NBN specifications have not been formally integrated within building codes.

NBN Co is not the infrastructure provider in all developments. It is also important to note that developers and builders are under no obligation to use NBN Co as the provider for fibre services in their new developments. Therefore, integration of fibre reticulation requirements into the various building codes would need to accommodate varying specifications. Increasingly, relevant industry associations and local councils are promoting the adoption of fibre ready practices across the States.