STATUTORY INFRASTRUCTURE PROVIDER: CONSULTATION ON REGULATED BROADBAND SPEEDS

PUBLIC SUBMISSION OF NBN CO

Introduction

NBN Co Ltd (**nbn**) welcomes the opportunity to respond to the consultation paper dated April 2025, released by the Department of Infrastructure, Transport, Regional Development, Communications and the Arts (**Department**), regarding the broadband speeds regulated under the Statutory Infrastructure Provider (**SIP**) regime (**Consultation Paper**).

nbn shares the Department's ambition to uplift the minimum SIP download speed from 25Mbps to 100Mbps. Over time, the nbn network upgrades that have been, or are being, undertaken will ultimately allow almost all premises to access peak wholesale download speeds of 100Mbps or higher across nbn's networks.[1] This includes:

- *Fixed-line:* upgrades to make up to 90% of the fixed-line network capable of close to 1Gbps wholesale download speeds by December 2025, with that percentage increasing to 94% by December 2030; and[2]
- *Fixed wireless:* upgrades (completed in December 2024) that make nbn's fixed wireless network capable of delivering a wholesale peak information rate of up to 100Mbps downstream across the entire fixed wireless footprint (with higher fixed wireless speed tiers available across the majority of the footprint, e.g. Fixed Wireless Home Fast is available to approximately 90% of the footprint, with peak wholesale download speeds of 200-250Mbps).

However, as the Consultation Paper notes, nbn (and other SIPs) use a variety of access technologies which have a range of capabilities, upgrade paths and associated timeframes. It will therefore be important to carefully consider how and when any change to the SIP speed requirement should be implemented, taking into account the commercial issues and challenges that underpin the timeframe over which network upgrades and customer service upgrades can take place, which is relevant for both nbn as the default SIP, as well as non-nbn SIPs.

In this context, nbn recommends that any changes are examined against the backdrop of multiple access technologies and upgrade paths. While work is underway to upgrade its network over time, nbn is still finalising its approach to a number of practical considerations relating to the scaled upgrade of several of its access technologies (including satellite, fibre-to-the-curb (**FTTC**), and fibre-to-the-node, (**FTTN**)). A worked example of some of these practical considerations for the FTTN and FTTC networks is provided for illustration below. These issues

[1] In this submission, references to SIP speeds should be understood to mean wholesale peak information rates.

[2] NBN Co, Half Year 2025 Financial Results Presentation, 12 February 2025, slide 5.

are not insurmountable but will have implications for the potential timing of changes to the minimum SIP speed.

nbn notes that it has made a separate confidential submission to the Department detailing the full range of practical and commercial considerations across all of its access technologies.

Worked example: FTTN and FTTC

nbn's FTTN and FTTC networks use legacy copper infrastructure to connect to a customer's premises and supply wholesale broadband services. These networks are progressively being upgraded to allow customers to access full fibre, and FTTN and FTTC will ultimately be retired.

While these networks remain in nbn's multi-technology mix, there would be a number of challenges with meeting an uplifted SIP speed on FTTN and FTTC. This is because copper-based networks face inherent speed limitations compared to fibre-based networks, e.g. due to the presence of long copper lines, and the age and ongoing degradation of the copper itself.

Noting the speed (and other limitations) associated with copper-based networks, nbn has programs[3] underway to upgrade premises currently served by its FTTN and FTTC networks to full fibre and then to retire FTTN and FTTC altogether. nbn is on schedule to make 3.5 million FTTN premises and 1.5 million FTTC premises eligible to upgrade to FTTP by the end of 2025. Additionally, since the joint nbn-Australian Government announcement in January 2025, nbn is working to upgrade the last remaining FTTN premises across Australia (benefiting around 622,000 homes and businesses, more than 95% of which will be eligible for fibre-to-the-premises).[4] These final upgrades are not expected to be completed until the end of 2030. Once customers are upgraded from FTTN and FTTC to full fibre, nbn will be in a better position to comply with an uplifted SIP download speed requirement for these customers.

Additional complexity arises in the case of strata-managed buildings (i.e. complex multi-dwelling units (**MDUs**) with common property and more complicated network design and deployment challenges). Currently, nbn is enabling FTTN and FTTC MDU premises to be made 'Ready For Order' and capable of upgrading to fibre, but for Complex MDUs nbn requires agreement with the Owners' Corporation or authorised representative of the MDU to install the FTTP network onto the property. In practice, this means that the relevant Owners' Corporation or authorised representative must agree to fibre in order to enable individual end-users in Complex MDUs to access full fibre.

Further considerations

nbn wishes to emphasise that any SIP speed uplift must be implemented in a way which also supports non-nbn SIPs and ensures they are not driven to a position where, rather than undertaking necessary infrastructure or equipment upgrades to comply with an uplifted speed

[3] 'Fibre Connect', and 'Full Fibre for Strata Managed Buildings'

[4] 'NBN Co announces upgrades for remaining homes and businesses on Fibre to the Node' (Media Release), 13 January 2025.

requirement, they withdraw from their role as a SIP entirely (or from a given service area). Non-nbn SIPs play an important role in the SIP regime and if they withdraw, nbn will be left to 'fill the gap' from outgoing SIPs, which will drive significant unplanned and inefficient expense due to infrastructure duplication. In addition, while nbn is the default SIP and cannot 'withdraw' from its role in the same way non-nbn SIPs are able to do, as discussed in this submission, nbn also faces commercial challenges that underpin the timeframe over which we can undertake network upgrades (including funding fibre lead-ins) and ultimately upgrade customers.

nbn considers that, no matter the nature or timing of proposed reforms to the SIP regime, the approach should be straight-forward to implement, simple to understand for industry and customers, and help ensure all SIPs are able to comply with the uplifted speed requirements in light of any necessary upgrades required to their network infrastructure and equipment. Should the Department wish to discuss the matters raised in this submission, it should contact [redacted] (General Manager, Industry Regulation and Policy), at [redacted].