

Improving the telecommunications powers and immunities framework

NBN Co submission

April 2021





Thank you for the opportunity to comment on the proposals set out in the 'Improving the telecommunications powers and immunities framework, Outcomes Consultation Paper, March 2021' and related exposure drafts.

nbn's use of the powers and immunities framework has been crucial to our ability to meet the Federal Government's expectation that all Australians have access to very fast broadband as soon as possible, at affordable prices, and at least cost to taxpayers as the rollout has progressed. **nbn** will continue to rely on these powers to ensure that upgrade paths are available as required as promised in **nbn's** most recent Corporate Plan.

nbn is largely comfortable with the Department's proposed outcomes that will be addressed under Tranche 1. This includes the additional requirement Exposure Draft of the Telecommunications Code of Practice 2021 (**the Code**) for carriers to provide notice of a requested objection referral to the TIO within 10 working days.

However, **nbn** has two significant and outstanding concerns:

- **The requirement to provide engineering certification** – particularly in situations where such a certificate would not ordinarily be required or recommended by current practice; and
- **Inclusion of depth of an underground facility in the obligation to retain records.**

Creation of a primary safety condition - Engineering certificates – Code 1A.7

As we expressed in our October 2020 submission **nbn** takes safety very seriously and has a key focus on complying with its legal obligations, including those obligations under the *Telecommunications Act 1997* (the **Act**), Schedule 3, Part 1, Division 5, clause 10, which requires carriers to protect the safety of persons and property and to act in accordance of good engineering practice. However, **nbn** has serious concerns about the proposal in the Code to require provision of an engineering certificate to landowners following the installation of a wide variety of low impact facilities. These concerns can be summarised as:

- The requirement to prepare and provide an engineering certificate for a wide variety of facilities goes well beyond measures needed to provide safety comfort to owners, of which there are numerous requirements and mechanisms already in place. For example clauses 42-44 of Schedule 1 of the Act already includes requirements to:
 - regularly inspect facilities;
 - promptly investigate dangerous facilities; and
 - take remedial action accordingly.
- Engineering is a multi-disciplinary profession. As currently worded, the type of 'certificate' required is unclear, potentially leading to a requirement to engage multiple suitably qualified engineers and issue multiple separate certifications covering various fields, to be created and provided without delivering any substantive benefit for landowners.
- For small installations such as a satellite or Wireless Network Termination Devices (**WNTD**) on an end user premises, the requirement to obtain an engineering certificate for each installation could make an 'opt out' Schedule 3 driven deployment or upgrade model unviable for **nbn**.

Further detail on these matters is set out below.

Given the range of low-impact facilities and the varying nature of properties and public utility assets carriers may seek to access, the exercise of determining the appropriate rules that apply within this overarching obligation must be balanced so that the principles of the Act are met; and can be followed in a way that is practicable for all circumstances. Unfortunately, the broad nature of the current wording of 1A.7 requirements does not adequately



strike this balance. For example, there are a number of facilities that are installed which **nbn** considers as minor works (such as the installation of a WNTD or a satellite NTD at a landowner's premises). Provision of an engineering certificate to all landowner/occupiers for installation of these devices will create significant cost and effort without delivering any proportionate or substantive benefit to landowners.

Engineering is a broad concept - what type of engineering is relevant?

The requirement under proposed Code clause 1A.7 that an "engineering certificate must be prepared by a suitably qualified engineer" doesn't acknowledge the extremely varied scope of engineering practices that could potentially be relevant, depending on the type of facility that must be installed. There are typically dozens of engineering and design standards used to govern the design and installation of a particular facility. For example, a roadside cabinet installed by one of our delivery partners must follow construction standards that are developed by our Engineering teams to meet appropriate Australian Standards, construction and design standards. A broader interpretation of engineering standards may (non-exhaustively) extend to design and construction rules and requirements for:

- cabinet and concrete structures;
- cabling and wiring;
- structure designs for environmental factors such as wind and lightning;
- electrical installation;
- pit and conduit network deployment design;
- health safety and environment standards;
- civil work specifications where relevant;
- construction standards; and
- the internal fittings and design of the specific **nbn** network equipment it is designed to house.

The form and content of engineering certificates

It is not clear whether all components and design specifications would be required to be included in the proposed engineering certificate or, alternatively, if the practical effect of the proposal would be that a carrier will be required to provide multiple engineering certificates depending on the installation activities involved. The collation of various certifications is likely to be very time consuming, costly, require renegotiations to multiple contractual arrangements with **nbn's** delivery partners that support **nbn's** fixed, fixed wireless and satellite networks; and result in delays to future deployment and upgrade programs.

Further, there is no clarity under the new proposal as to what engineering certifications would be reasonable to provide to the landowner. Most of the standards applied by **nbn** in its design and construction activities are relevant to the appropriate design and build of a telecommunications network, and not relevant to the landowner at all. While it seems as though there is some discretion left to the carrier to determine, it would be helpful for clause 1A.7 to qualify that discretion should be made by the carrier using all reasonable steps (on the basis that this is what is intended under the proposal).

Challenges in engaging suitably qualified engineers

The engineering profession is a highly specialised field. It is likely to be rare for one individual to be proficient in engineering standards in all of the potentially relevant engineering standards. It is not clear what qualifications would be required to be considered a suitably qualified engineer who would be certifying the carrier has taken all



reasonable steps in relation to health and safety, construction, public utility operations, traffic and the environment etc.

Each of the areas to be considered in such a certification could potentially require different engineering or other qualifications. Engaging the right type of engineers that would be considered “suitably qualified” would also be a complicated task. Qualifications differ depending on the type of engineering expertise sought by a carrier. For example, some fields of engineering require registration with a particular professional engineering institute and professional qualifications and requirements may also differ across the state and territory jurisdictions in Australia.

There is also an assumption that the relevant type of engineers required to provide such certification will also be readily available where the installation is occurring, which may not be the case in many regional and remote areas – the areas in which **nbn**’s end users are most reliant on wireless and satellite technologies.

For these and other reasons, a carrier’s compliance with the proposed certification requirements relating to installation of individual facilities, is again likely to be extremely challenging, time and resource intensive and costly.

Timeframe to provide an engineering certificate

Clause 1A.7 states that the certificate must be given to the landowner and the occupier within 30 days of the facility being installed. **nbn** suggests that this period of time is not achievable.

Timeframes for preparing any certification will be dependent on the specific activity carried out by the carrier. This may encompass construction, commissioning, testing, integration activities and, where required, EME compliance certification, that must be undertaken before an installation can be considered ‘complete’ or ‘installed’ as well as the availability of engineers. For example, should a low impact facility such as a fixed wireless antenna be built onto a structure, part of the installation will include testing and connection to rest of the network. The timeframe required to gather all certifications post-completion of the total activity time for end-to-end installation can be up to 12 months after the physical installation of a facility is commenced.

In many cases, while physical construction may have been completed at one site, completion of testing, commissioning and network integration of that one site is dependent on other sites also being physically completed and then tested together. Potential adjustments may need to be made, such as the alignment in the positioning, power and frequency of antennas before the full installation of a facility can be completed. This is to ensure contiguous coverage is achieved and service continuity can be maintained.

nbn suggests clause 1A.7.1 be amended to clarify that whatever additional information may be required to be given to the landowner should be “within 30 days of the facility installation being completed...”

Impact to fixed line network

nbn roughly estimates each certificate may well cost \$1,500 to \$2,000 to obtain though we note this would be subject to further qualification.

The new proposal would impact **nbn**’s deployment of roadside cabinets that service our FTTN and FTTP networks and that are installed under Schedule 3 of the Telecommunications Act.

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Impact to nbn’s fixed wireless and satellite networks

The current scope of ‘certifiable facilities’ will trigger a large number of unnecessary certification for minor scopes of work including some installation activity needed for maintenance purposes but which falls outside Part 4 of the Code.

The Department’s proposed ‘certified facilities’ includes Item 1 & 2 of Part 1 of the Schedule in the LIFD. This captures “subscriber connections deployed by radio or satellite terminal antenna or dish”. There are some circumstances where **nbn** has relied on Part 1 of the *Telecommunications (Low Impact Facilities) Determination 2018 (LIFD)* to install or maintain end user WNTDs and/or satellite NTDs in our Fixed Wireless network and satellite networks in a timely and cost-effective manner.

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There is an important distinction between the deployment of minor works such as installing a network terminating device of limited size/weight at an end user’s premises and providing assurance for a public utility or property owner that installing large network equipment on a tower or on the side of their structure. This distinction should be taken into account within the Department’s regime reform proposals.

We also note there are some instances that fall into the category under the definitions of the Code as an ‘installation’ but are in fact more akin to maintenance activities, for example where an upgrade or replacement facility does not fall into the category allowed under clause 7, Schedule 3 of the Act. Such works may also need to be undertaken urgently to ensure continuity of service and the requirement for certification will significantly impact on **nbn**’s flexibility to carry out these works quickly. **nbn** suggests an engineering certificate should not need to be provided in these instances.

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Addressing landowners’ concerns

We note there is seems to be little consensus amongst landowners as to the optimum timing in which to receive the information, either before or after a low impact facility installation. It is not clear to **nbn** what benefit an engineering certificate offers owners/occupiers and what recourse exists after the prescribed pre-construction Schedule 3 objection period is complete. As noted above, existing mechanisms under the legislative framework already require carriers to investigate and appropriately deal with safety matters.

Given the importance of the availability of telecommunications service to all Australians, **nbn** assumes the proposal is not intended to delay or prevent facilities from being rolled out or be a means for landowners to use to prevent network rollout from occurring; or provide landowners with an additional opportunity to seek compensation, as this would not be in keeping with the intent of the powers and immunities in Schedule 3.

nbn has already established a number of separate agreements with local councils and other public utility landowners who have agreed as part of alternative arrangements that they do not require specific Land Access Notices under Schedule 3 to be provided. **nbn** has also engaged with various categories of landowners that we expect would not seek or require any form engineering certificate. **nbn** suggests that, should there also be suitable agreement separately between the carrier and landowner, that there should also be scope for agreement



not to provide engineering certificates to these landowners/occupiers, and that the waiver of the right to receive a Schedule 3 notice would also operate to waive a right to receive any certificate (or alternative).

Suggested amendments to the exposure drafts

As described above, **nbn** strongly recommends that Items 1 and 2 of Part 1 of the Schedule should not be defined as ‘certifiable facilities’ and therefore should be removed from the proposed new clause 3.2 in the Exposure Draft of the Telecommunications (Low Impact Facilities) Determination 2021 (**LIFD exposure draft**).

Certifiable Facilities defined in 3.2 the LIFD exposure draft:

- (1) “The following facilities are a *certifiable facility*:
 - (a) a facility described in column 2 of Items ~~1~~ 3 to 7, 12 and 13 of Part 1 to the Schedule;
...”

Alternative approach to Code clause 1A.7

On the basis of the concerns expressed above, **nbn** suggests that the preparation of an engineering certificate and a blanket requirement to provide to all landowners and occupiers is not a suitable solution. Given the preparation of design and installation of network elements is highly regulated against a full range of technical standards, a more balanced approach would be to provide some certification or statement of compliance where there is a reasonable concern raised by a landowner that a facility has been installed in a compliant manner.

We strongly suggest this statement or certification of compliance should be made available to a landowner or occupier upon request.

nbn acknowledges that there is a need to inform landowners that this new option may be available to them and could include reference to this provision on our LAANs.

Depending on the nature of the facility being installed, provision of any compliance certification could only be available once the facility has not only been physically constructed but integrated into **nbn**’s networks. The timing will ultimately depend on what construction or installation practice is needed to be assessed and assurances of compliance made to the interested landowner.

Recording depth of fixed line underground assets – Code 1A.13

The Explanatory Statement of the exposure draft of the code states “this amendment reflects concerns from public utility stakeholders that current records do not accurately record the depth of underground facilities, which would be useful in reducing additional costs and unintended damage to those facilities during major infrastructure projects.” We note the concern expressed by one stakeholder, that “road authorities have dealt with carriers who have refused to meet depth and alignment requirements in roads as specified by road authorities, or even as specified in carriers’ own technical standards...”¹

¹ Austroads Formal Submission, Improving the telecommunications powers and immunities framework, p2



Unfortunately, we don't think the Department's proposal to add an additional requirement for carriers who own or operate underground facilities to keep and maintain records of the depth of the facility will assist in addressing this concern.

Further, it is unclear what benefit this proposal offers given:

- the vast bulk of all fixed line networks in Australia are already rolled out – these facilities have been physically deployed through various network rollouts over decades and, in many cases, prior to **nbn's** inception;
- Clause 41 of Schedule 1 of the Act already requires carriers to keep location details for eligible underground facilities.

nbn exercises its existing obligations in relation to keeping location details and already takes steps to mitigate the risks of unintended damages caused by utilities and other landowners. For example, **nbn** has arrangements with the 'Dial Before You Dig' service so that any relevant person may seek information in respect of existing facilities in the vicinity of their requested location. The information provided shows indicative plans which show general depth and alignment information but are not represented to be an exact, scale or accurate depiction of the location, depth and alignment of the fibre or telecommunications facilities shown upon request. This reflects the many physical changes that may occur over time to the topography and conditions arising from various above ground activities which may affect the accuracy of this information over time.

Landowners should continue to take all reasonable steps to ensure that they do not damage carrier infrastructure. There will still be compliance requirements with WorkSafe practices to physically locate facilities, prior to beginning destructive works. **nbn** notes that the 'Dial Before You Dig' service suggests that it is best practice to determine the existence and location of an underground facility to pothole, excavate by hand or other 'non-destructive excavation methods'². Given that it is not possible for a carrier to ensure depths of underground facilities do not change over time, which would affect the accuracy of any recorded depth data, **nbn** is concerned that public utilities (and other relevant parties) may seek to argue a lesser duty of care or diminished liability if it damages **nbn's** equipment on the basis that it is *relying* on the records contemplated by Code 1A.13(3).

nbn's technical and construction standards require **nbn's** delivery partners to deploy relevant underground facilities at specified depths. These internal construction standards are developed to encompass a range of requirements, including the Communications Alliance industry code *C524:2013: External Communication Cable Networks*, where depth of conduits is nominated. These processes are in keeping with the 'good engineering practice' that is already required under the regime. We endeavour to maintain our alignment but can be constrained with the depth of our assets due to the presence of other existing utility services in the construction corridor.

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² Dial Before You Dig, Best Practice Guide for Locating Underground Services, p9.



Given the extent of **nbn**'s underground facilities that may be installed or maintained under Schedule 3 of the Act, **nbn** urges the Department to reconsider this new proposal. Any amendment of this nature in the Code can only be prospective as there are no reasonable means for **nbn** to comply with such requirements retrospectively.

Even then the requirement to record depth under 1A.13 will have limited value. A measurement of depth, given the external factors after the fact, is subject to change due to factors beyond **nbn**'s control. This includes general erosion, weather, homeowner activity, civil works and other above ground works conducted by public utility stakeholders.

We note the Code and its clause 1A.13 relates only to those facilities installed under the Schedule 3 regime and not all underground facilities are installed under the Schedule 3 regime. Therefore a requirement in the Code to record depth, even if applied prospectively, is of limited value. The new requirement under 1A.13 only relates to network facilities built as low impact under the Schedule 3 regime rather than through other arrangements, whether Schedule 1 of the Act or via other commercial arrangements. While other sections of the Code specifically refer to "prescribed activity" or "a certifiable facility", the obligation on 1A.13 is expressed as applying "if the carrier owns or operates underground activities". It will be extremely difficult in some circumstances to distinguish which specific cables and ducts have been installed under which regime of the Act. We suggest the proposed Code clause is not likely to address this complexity either.

nbn recommends 1A.13(3)(b)(ii) be deleted. As an alternative **nbn** suggests that, in circumstances that a public utility is proposing to undertake their own works within a 3 year time period on land a carrier has indicated they intend to install underground facilities under Schedule 3 of the Act, a carrier should engage directly to negotiate a mutually acceptable outcome regarding the location of the carrier's assets. **nbn** believes this is a more appropriate solution rather than having to maintain a partial record of facilities installed under Schedule 3 where there is a limited time span in which it may remain accurate.



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