

Submission on possible amendments to telecommunications carrier powers and immunities

Thank you for the opportunity to comment on the issues set out in '*Possible amendments to telecommunications carrier powers and immunities, Consultation paper*', June 2017 (Paper). We set out our response to your queries below and would be happy to provide further information.

1 Introduction

- **nbn** supports the Australian Government's proposal to help provide Australians with better telecommunication services more quickly and cost-effectively by ensuring that appropriate changes are made to telecommunications carriers' powers and immunities.
- **nbn** notes that carriers have estimated that if the proposed changes proceed, they could result in over \$100 million per year in regulatory cost savings to industry and government and over \$50 million per year in economic and social productivity benefits to consumers.¹
- The proposed changes will assist **nbn** to install and maintain telecommunications network facilities with potentially significant time and cost savings, and improved services to the community.
- Further, the proposed changes will assist **nbn** in meeting the Federal Government's expectation that all Australians have access to fast broadband as soon as possible, at affordable prices, and at least cost to taxpayers. Further, that **nbn** will ensure upgrade paths are available as required.

2 Questions

2.1 Proposed amendments to the Telecommunications (Low-impact Facilities) Determination 1997

Definition of co-located facilities

1.1 *Are there any issues with this proposed clarification to the definition of co-location?*

nbn supports the proposal to clarify the definition of co-location.

¹ Paper, p6



2. Local government heritage overlays

2.1 Are there any issues with this clarification in relation to local government heritage overlays?

nbn supports the proposal, suggests the following amendments to the proposed drafting of section 2.5 (7A), and submits that these amendments will assist in further clarifying the interpretation of this item to ensure that local heritage items and areas (including local heritage registers in local schemes) are not inadvertently defined as AOES:

(7A) A heritage overlay or other kind of heritage map, list, schedule or other document (however described) relating to heritage under a local government by-law, rule or planning instrument or scheme is not a register relating to heritage conservation for the purposes of subsection (7).

3. Radio shrouds as an ancillary facility

3.1 Should radio shrouds be considered ancillary facilities to low-impact facilities, or should radio shrouds be listed as distinct facilities in the Schedule of the LIFD?

Shrouds are not currently deployed on nbn's fixed wireless (FW) sites. However, the proposed change may promote use of shrouding and nbn generally supports measures which could reduce time and / or cost constraints on measures used to mitigate visual impact. It may be more suitable for shrouds to be considered as ancillary, rather than specifying specific physical dimensions as distinct facilities, due to the varying nature of shrouding potentially utilised.

nbn submits that the proposed amendments to subsection 3.1(4) of the LIFD schedule should be reviewed to ensure that the entry on land for the purposes of installing shrouds does not amount to trespass. This could potentially be addressed by including the words 'to be installed'.

3.2 If listed as distinct facilities in the Schedule of the LIFD, should there be any criteria for radio shrouds, for example in terms of size and dimensions?

See comments under 3.1 above.

4. Size of radiocommunications and satellite dishes

4.2 Are there any issues with permitting other 2.4 metre radiocommunications dishes in rural and industrial areas, including those located on telecommunications structures (LIFD Schedule, Part 1, Item 5A)?

nbn's FW network relies on radio transmission to link individual sites to one another and ultimately back into the fibre network. This proposed amendment is important to nbn as 2.4 metre transmission dishes currently trigger Development Applications that add an average of 5 months to deployment timeframes of impacted sites.

This delay can affect multiple sites in surrounding communities due to the interdependent nature of the network design. This significant delay is not considered appropriate considering the minimal increase in visual amenity impacts arising from the use of 2.4 metre dishes, which are difficult to differentiate from 1.8 metre dishes that are currently low- impact.

The two photographs below are of 1.8 metre dishes:



The two photographs below are of 2.4 metre dishes:



5. Maximum heights of antenna protrusions on buildings

5.1 *Is a 5 metre protrusion height acceptable, or is there a more appropriate height?*

nbn supports the proposal to allow antennas and their mounts to protrude up to 5 metres above the building or structure to which they are attached.

5.2 *Are higher protrusions more acceptable in some areas than others? Could protrusions higher than 5 metres be allowed in industrial and rural areas?*



nbn supports the amendment as currently proposed.

8. Equipment installed inside a non-residential structure in residential areas

8.1 Should carriers be able to enter land (including buildings) to install facilities in existing structures not used for residential purposes in residential areas?

nbn supports the proposal, noting that land owners and occupiers would have the right to object to the installation of facilities inside structures. Further, that this right to object is currently the case for all types of buildings and structures in commercial, industrial and rural areas.²

9. Tower extensions in commercial areas

9.1 Are there any issues permitting tower height extensions of up to five metres in commercial areas?

nbn supports the proposal to permit tower extensions in commercial areas.

- Permitting tower extensions in commercial areas will have the benefit of enabling telecommunications facility co-locations on existing towers. This will reduce the need for carriers to install additional towers and result in an overall community benefit.
- The visual impact of tower extensions are the central reason why tower installations are not permitted under the LIFD. However, given the nature of commercial areas, there does not seem to be a practical reason why commercial areas should be treated any differently than industrial or rural areas.
- Further, **nbn** submits that multiple extensions to an existing tower should be permitted, provided that the total height of all extensions does not exceed the maximum 5 metre height (subject to the comments below regarding a 10 metre height extension under 24.1 below.). As such, **nbn** submits that section 9(b), which limits the right to extend a tower to instances where ‘there have been no previous extension to the tower’ should be amended.

10. Radiocommunications lens antennas

10.1 Is lens antenna the best term to describe this type of antenna?

nbn submits that lens antenna is the most appropriate term because it is a generic term used in the telecommunications industry.

10.2 Are 4 cubic metres in volume and 5 metres of protrusion from structures appropriate?

nbn considers that the proposed dimensions are appropriate.

10.3 Should this type of antenna be allowed in all areas, or restricted to only industrial and rural areas?

nbn submits that the installation of lens antennas should be permitted in all areas.

- Lens antennas offer the advantage of being able to replace multiple individual panel antennas at a single elevation. This will provide the opportunity for existing structures to accommodate more carriers at lower

² Paper, p16



overall elevation in some instances. As such, **nbn** submits that the ability to install lens antennas in all areas will promote co-location and minimise the need to install additional towers in cases where existing structures may be at full structural capacity.

- **nbn** submits that this will encourage the use of lens antennas in areas generally most sensitive to visual amenity concerns (i.e. residential areas).

11. Cabinets for tower equipment

11.1 *Are there any issues with the proposed new cabinet type?*

nbn supports the addition of this new type of cabinet facility. Generally, cabinets with a maximum height of 3 metres, and base area of 2 square meters, are more compact than the alternative equipment shelters which are currently permitted under item 4 of Part 3 of the Schedule. This means that the overall visual impact of facilities, where the new cabinet types are used, will be lessened.

Accordingly, **nbn** considers that this is will be a positive amendment that will assist in minimising any visual amenity impact of telecommunications facilities.

12. Size of solar panels used to power telecommunications facilities

12.1 *Are there any issues with permitting 12.5 square metre solar panels for telecommunications facilities in rural areas?*

nbn supports an amendment to enable larger renewable power installations solar panel deployments at telecommunications facilities. The current 7.5 square meter limit has been a constraint to **nbn** deploying solar panels. An additional constraint has been the low impact limitation to rural areas, as **nbn**'s focus has been on maximising the use of renewable power generally, not just in rural areas, where grid connection is impractical. In the near future, **nbn** anticipates deploying larger grid connected solar systems with batteries that take advantage of low cost renewable power, matched to the growing power demand at fixed wireless and other sites.

nbn therefore requests that:

- The rural limitation be removed or limited to residential areas only.
- The facility definition be reviewed to be technology neutral so as to enable, for example, small wind, fuel cell, compressed air, diesel, battery, or solar power generation combinations to be deployed.
- In respect of solar panels, the size requirement should permit up to 25 square metres of solar photovoltaic (PV) panels (12 panels in total).

13. Amount of trench that can be open to install a conduit or cable

13.1 *Are there reasons not to increase the length of trench that can be open at any time from 100m to 200m in residential areas?*

nbn supports the proposed amendment.

13.2 *Is 200m an appropriate length, or should the length be higher if more than 200m of conduit or cabling can be laid per day and the trench closed?*

nbn submits that an increase in length to 250 metres, as compared to 200 metres, would provide additional benefits as this is a standard engineering distance required for new build and hauling from pit-to-pit.



14. Cable & conduit installation on or under bridges

14.1 *Are there any issues with allowing cable and conduit on bridges to be low-impact facilities?*

nbn supports the proposed amendment. The ability to install conduit and cabling on a bridge as a low-impact facility would assist in avoiding construction delays.

15. Volume restrictions on co-located facilities

15.1 *Are there any issues with removing volume limits for adding co-located facilities to existing facilities and public utility structures in commercial areas?*

nbn supports the removal of the commercial area restriction, as the promotion of co-location typically results in superior visual outcomes for the community as it minimises the need to install additional towers.

15.2 *Are there any issues with permitting new co-located facilities that are up to 50 per cent of the volume of the original facility or public utility structure in residential areas?*

As above, **nbn** supports the increase to 50% of the volume of the original facility, as this will encourage co-location and lead to superior visual outcomes for the community.

15.3 *Is another volume limit more appropriate in commercial or residential areas?*

As above, **nbn** supports the increase to 50% of the volume of the original facility.

15.4 *Should alternative arrangements for co-located facilities be developed in the LIFD?*

The proposed volumetric limitations are considered appropriate

16. Updates to environmental legislation references in the LIFD

16.1 *Are there any issues with the proposed updates?*

nbn supports the updates to ensure changes to environmental laws are appropriately reflected in consequential amendments to the LIFD.

16.2 *Are there any further suggestions for updates to terms and references in the LIFD?*

nbn suggests that the reference to 'power supply' in Part 4A of the LIFD should be broadened. Currently, the LIFD covers power supply equipment used in connection with the aerial fibre rollout but it would be useful to include power supply equipment required for the Fibre to the Node (FTTN) and Fibre to the Curb (FTTC) rollouts.

2.2 Proposed amendments to the Telecommunications Code of Practice 1997

17. Clarify requirements for joint venture arrangements

17.1 *Are there any issues with making it clear in the Tel Code that only one carrier's signature is required on documents for facilities being installed as part of a carrier joint venture arrangement?*

nbn supports the proposed amendment.



18. LAAN objection periods

18.1 *Is it reasonable to end the objection period for low-impact facility activities and maintenance work according to when the notice was issued, rather than the date work is expected to commence?*

nbn supports this proposed amendment as it is impractical for construction activities to stop close to the expected commencement date without incurring significant cost in material fabrication, equipment procurement and resource mobilisation.

In addition, specific low impact activities and maintenance work are likely to be scheduled differently based on deployment requirements resulting in substantially different objection period durations which bear no relationship to the scale of the activity proposed.

18.2 *Is 5 business days from the receipt of a notice a sufficient time period for land owners and occupiers to object to carrier activities where carriers have given more than 10 days' notice about planned activities?*

nbn supports the proposed amendment, see above under 18.1.

19. Allow carriers to refer land owner and occupier objections to the TIO

19.1 *Are there any issues with allowing carriers to refer objections to the TIO before land owners and occupiers have requested them to?*

nbn considers that the proposal is appropriate to facilitate resolution of disputes in a reasonable timeframe.

nbn notes in respect of the proposed drafting changes (clause 2.36) that the right on the part of the carrier to refer a dispute is expressed to arise after an objector receives the 'carrier's response' to the objection but there is no definition of what this entails. **nbn** suggests that an option to address this lack of clarity would be to define 'carrier's response'.

2.3 Possible amendments to the Telecommunications Act 1997

21. Allowing some types of poles to be low-impact facilities

21.1 *Is it reasonable for poles in rural areas for telecommunications and electricity cabling for telecommunications networks to be low-impact facilities?*

nbn often requires the use of new and replacement power poles in rural areas to upgrade existing permanent power supplies to enable co-located facilities. These poles should be regarded as low-impact provided that they satisfy the environmental constraints of the LIFD as electricity poles are commonplace in rural landscapes.

21.2 *Should low-impact facility poles be allowed in other areas, or be restricted to rural areas?*

The low-impact nature of power poles should not be restricted, due to the existing prevalence of power poles in all residential, commercial, industrial and rural areas. **nbn** also notes the broad planning exemptions available to power utilities. For example, in NSW it appears that broad exemptions exist under the State Environmental Planning Policy (Infrastructure) 2007 to undertake development for the purpose of an electricity transmission or distribution network carried out by or on behalf of electricity supply, or public, authorities without consent on any land.

21.3 *Is the proposed size restriction of up to 12 metres high with a diameter of up to 500mm suitable?*



nbn supports the proposed amendments.

21.4 *Would the existing notification and objection processes for land owners and occupiers in the Tel Code be sufficient, or should there be additional consultation requirements?*

The existing objection process is considered adequate.

22. Portable temporary communications facilities

22.1 *Are there any issues with making portable temporary communications equipment exempt from state and territory planning approvals under certain conditions?*

nbn supports the proposal to make portable temporary communications equipment exempt from state and territory planning approvals.

nbn notes, for example, that the Paper refers to NSW and Victorian state planning laws where temporary telecommunications facilities are used to provide service or coverage during routine maintenance to existing facilities, during construction or installation of replacement facilities, or to provide additional coverage at events.

- **nbn** utilises temporary portable network infrastructure, including to expedite the reinstatement of services following, for example, unscheduled outages and in emergencies. It is important that no restrictions exist that would delay the deployment or ongoing operation of this equipment due to the unscheduled nature of these events and the importance of restoring services.
- See comments under item 22.3 in respect of the term 'portable network infrastructure' or similar to be used to incorporate the different technologies and / or approaches by different carriers and to cater for new and innovative solutions that may be developed in the future.

22.2 *Are there any suggestions for appropriate conditions for the installation of COWs and SatCOWs, such as circumstances in which they can be used and timeframes for their removal?*

nbn supports the proposed amendments.

nbn submits that a more generic term should be used, rather than COWs and SatCOWs, as these references are to carrier specific items of portable infrastructure. See comments under item 22.3 in respect of the term 'portable network infrastructure' or similar to be used.

nbn considers that adequate operational and commercial incentives exist to limit the use and duration of this equipment without further restriction.

- Practically, **nbn** has a limited number of these units and will work to remove them at the earliest opportunity so that they are available for future situations, including emergencies.
- Conditions in respect of temporary facilities that the site is not left in a substantially different condition and the facility be removed within 28 days of the end of the need for the facility appear to be reasonable.

22.3 *Should the Act be amended to remove any doubt that MEOWs can be installed using the maintenance powers or another power under Schedule 3 of the Act?*

nbn supports the proposed amendment to clarify that temporary facilities can be installed as part of maintenance activities.

nbn submits that the term ‘portable network infrastructure’ or similar should be used (rather than MEOWs) to incorporate the different technologies and / or approaches by different carriers and to cater for new and innovative solutions that may be developed in the future.

- **nbn** submits that a more generic term should be used, rather than MEOWs, as these references are to carrier specific items of portable infrastructure and would not reflect **nbn**’s fleet.
- Further, the acronyms used to identify this type of equipment may change over time so it is considered more important to clearly define the characteristics and application of these units.
- **nbn** currently utilises network on wheels (NOWs), wireless on wheels(WOWs) and is developing a Modular Temporary Network Facility or point of interconnect on wheels (MTFN or POWs).

Below are photos of a NOW unit.



22.4 Are there any suggestions for appropriate conditions for the installation of MEOWs if the maintenance powers are amended?

nbn submits that no conditions should be imposed that would require the maintenance activity to be terminated prematurely.

23. Replacement mobile towers

23.1 Is the proposal reasonable?

nbn supports this proposal as it will facilitate continuous service provision minimising disruption to end users during a structure replacement by allowing a new structure to be constructed prior to demolition of the original structure.

23.2 Is 20 metres a suitable distance restriction for replacement towers?

nbn submits that 20 metres is considered adequate but specifying the location from which the measurement is to be taken may assist in providing certainty in locating the new structure. The centreline of the original facility may be appropriate.

23.3 Is 12 weeks a reasonable maximum time period for installation of replacement towers?

nbn considers that 12 weeks from the time when the new facility commences operating is an appropriate timeframe to remove the above ground components of an original facility. **nbn** submits that the following should be considered in drafting the relevant legislative amendments:



- The replacement facility should be the 'original facility' for the purpose of future extensions.
- Drafting to facilitate inclusion of an extension of the replacement structure prior to installation – for example a 45 metre pole should be able to replace a 40 metre pole under current provisions.
- The qualification relating to volume of replacement structures should be removed, or should mirror the areas and percentages proposed in respect of co-located facilities under Part 7 of the LIFD schedule.

24. Tower height extensions

24.1 *Are one-off 10 metre tower height extensions suitable in commercial, industrial and rural areas, or only some of these areas? If they are only suitable in some areas, which are they and why?*

nbn supports measures that promote co-location on existing towers as this reduces the require to install additional towers. Accordingly, **nbn** supports this proposal.

Additional comments

nbn notes that in some circumstances, a single carrier's network may be the sole remaining communication channel for many users in areas affected by disasters and that restoring services without delay and without onerous conditions may be critical to affected communities and preservation of life.

Further to **nbn**'s comments in respect of item 22 above, **nbn** submits that Part 6, item 1 of the LIFD schedule should be amended to ensure that any temporary portable network infrastructure facilities can be installed unconditionally in an emergency so as to temporarily restore network services.

- In the most extreme cases of total loss of a facility, the restoration of the facility may not be possible in a short timeframe and it is critical that the infrastructure can remain in place to service the community.
- **nbn** must be able to deploy temporary portable network infrastructure to house both **nbn** and RSP equipment to restore services.
- **nbn** notes that sufficient commercial power may not be available to power any temporary facilities in an emergency situation and therefore power generators may be required. **nbn** considers that the use of temporary portable network infrastructure in these circumstances should be free of any constraints in respect of noise given the temporary nature of deployment. Further, that **nbn** would seek to minimise any impact on aural amenity caused by any power generating equipment.

As such, **nbn** submits that a new subpara (c) be included in item 6(1) of the Schedule, which enables the installation of temporary facilities used by nbn in emergencies.

A temporary facility installed:

(a) in an emergency; and

(b) to provide assistance to an emergency services organisation; or

(c) used, or for use, for the high speed carriage of communications, on a wholesale-only and non-discriminatory basis.

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