EXPLANATORY STATEMENT

Issued by the Authority of the Minister for Broadband, Communications and the Digital Economy

Telecommunications Act 1997

Acts Interpretation Act 1901

Telecommunications (*Low-impact Facilities*) *Determination 1997* (*Amendment No. 1 of 2011*)

Legislative authority

Subclause 6(3) of Schedule 3 of the *Telecommunications Act 1997* (the Act) allows the Minister to determine that specified facilities are low-impact facilities for the purpose of clause 6 of the Schedule 3 of Act.

On 29 June 1997 the then Minister for Communications, Information Technology and the Arts made the *Telecommunications (Low-impact Facilities) Determination 1997* and it was subsequently amended on 12 August 1999 (the Principal Determination).

Subsection 33(3) of the *Acts Interpretation Act 1901* relevantly allows the Minister to amend the Principal Determination.

Purpose

The overarching purpose of the *Telecommunications (Low-impact Facilities) Determination 1997 (Amendments No.1 of 2011)* (the Amending Determination) is to amend the Principal Determination to specify twelve new facility types as low-impact facilities to assist, where necessary, the deployment of infrastructure as part of the national broadband network (NBN) or any comparable network.

The Amending Determination has the effect that the powers and immunities under Schedule 3 to the Act can be exercised in relation to these new facilities situated in any areas classed as residential, commercial, industrial and rural and where such facilities are, or are to be, part of a national network used, or to be used, for the high-speed carriage of communications on a wholesale-only open and non-discriminatory access basis. This is intended to cover optical fibre facilities that NBN Co Limited (NBN Co) may deploy as part of the NBN and such facilities installed by any other entity as part of a comparable national network. Each reference to 'NBN Co' is intended to refer to any 'NBN corporation'.

Following commencement of regulation 11.2 of the *Telecommunications Regulations 2001* (the Principal Regulations), inserted by the *Telecommunications Amendment Regulations 2011 (No. 1)*, the Minister is now able to specify overhead lines with an external cross-section not exceeding 30 millimetres as 'low-impact facilities' for the purposes of Schedule 3 to the Act.

Background

Schedule 3 of the Act provides carriers with the power to inspect land to determine whether the land is suitable for the carrier's purpose, install a facility on the land and maintain a facility that is situated on the land, without seeking state, territory or local government planning approval.

The power to install a facility may only be exercised with respect to certain types of infrastructure, such as a facility defined in the Principal Determination, or a temporary defence facility, or if the carrier holds a facility installation permit.

On 7 April 2009, the Australian Government announced that it would establish a new company NBN Co to build and operate a new high-speed NBN. The NBN has an objective of connecting up to 93 per cent of all Australian homes, schools and workplaces with fibre broadband services and connecting other premises in Australia with next generation wireless and satellite broadband services.

Given the importance of the NBN rollout, on 20 December 2010 the government undertook to explore practical measures to facilitate the rollout of the NBN - such as changes to the Principal Determination, in consultation with NBN Co, industry and the community.

Consultation

On 10 August 2011 the Minister released the draft Amending Determination and explanatory material for public comment. 32 submissions were received and are available on the Department of Broadband, Communications and the Digital Economy's website at www.dbcde.gov.au. A detailed commentary on the feedback received is contained in the Regulatory Impact Statement.

As a result of the consultation process two key changes were made to the Amending Determination. Firstly, in response to the Energy Networks Association's (ENA) proposal that aerial cabling be required to be non-conductive, the Amending Determination now requires cabling to comply with the electrical properties set out in the relevant standard set by the Institute of Electrical and Electronics Engineers. This amendment has been made in consultation with the ENA and NBN Co. Requiring aerial cabling to meet this standard will ensure that, subject to other relevant requirements including occupational health and safety standards, it can be placed as close to existing electrical cabling as possible. Additionally, the Amending Determination now clarifies that the maximum external cross-section for aerial cabling applies to both individual cables and any bundled cable, as suggested by the Queensland Government.

The Amending Determination is a legislative instrument for the purposes of the *Legislative Instruments Act 2003*.

Details of the accompanying Amending Determination are set out in the Attachment and the Regulatory Impact Statement is set out in the next section.

REGULATORY IMPACT STATEMENT

This Regulatory Impact Statement (RIS) deals with a package of amendments to legislative instruments to facilitate the rollout of the National Broadband Network (NBN) and other national next–generation broadband networks.

1. Issues which give rise to the need for action

1.1 A new National Broadband Network

On 7 April 2009 the Australian Government announced it would establish a new company – NBN Co Limited (NBN Co) – to build and operate the new high-speed NBN. The NBN will be the single largest infrastructure investment made by an Australian Government and is accompanied by historic reforms to the telecommunications sector. The productivity gains associated with this investment will mean that the full benefits will continue to flow for decades beyond the completion of the project.

The NBN will be Australia's first national, wholesale-only, open access broadband network offering equivalent terms and conditions to all access seekers. This means NBN Co will roll out the network and sell wholesale services to retail service providers, who will then provide services to end users. This will ensure that all Australians have access to next–generation broadband and will improve retail–level competition.

1.1.1 The rollout task

The NBN will provide access to high-speed broadband to 100 per cent of Australian premises. It will connect 93 per cent of homes, schools and businesses to a high-speed fibre network capable of providing broadband speeds of up to 1 gigabit per second (Gbps). All remaining premises will be served by a combination of next-generation fixed-wireless and satellite technologies providing peak speeds of 12 megabits per second (Mbps).

Building the NBN involves an unprecedented construction task. Within the fibre footprint, NBN Co expects to pass over 12 million premises by the end of the build. In its Corporate Plan 2011-13 (the Corporate Plan), NBN Co states that it will pass up to 6000 premises per day over the nine and a half year build schedule[1]. A further 900 000 premises will be covered by wireless and satellite services[2].

On 23 June 2011, Telstra and NBN Co entered into Definitive Agreements relating to the rollout of the NBN which provide for the use of existing infrastructure, minimising duplication and allowing a greater percentage of fibre to be laid underground. As part of the Definitive Agreements, Telstra will progressively decommission its existing copper network as the NBN is rolled out.

NBN Co is actively engaging with communities and local governments as the NBN is planned and rolled out in particular areas.

[1] NBN Co Limited, Corporate Plan 2011–13, p. 16
[2] NBN Co Limited, Corporate Plan 2011–13, Exhibit 6.1, p. 77

1.2 Legislative framework for installing facilities

1.2.1 Carrier Powers and Immunities

In general, approval for the installation of telecommunication facilities is the responsibility of local, state and territory governments. Some facilities, most commonly low–impact facilities (LIFs)[3], are installed under Commonwealth legislation, specifically Schedule 3 – Carrier Powers and Immunities – to the *Telecommunications Act 1997*[4] (the Telecommunications Act).

Under Schedule 3 carriers may enter onto land to inspect it to determine its suitability for the carrier's needs and to enter land to maintain their facilities. Carriers may also enter land to install LIFs. These provisions are subject to notification requirements and a range of other protections for land holders, including compensation mechanisms in the event that the property owner or occupier suffers financial loss or damage or an acquisition of property occurs as a result of the carrier's activities.

Carriers are also provided with immunity from a number of state and territory laws, including planning laws, when undertaking work under Schedule 3. This ensures that carriers are able to deploy key elements of their networks under a streamlined nationally uniform approach.

In cases where Schedule 3 does not apply carriers must go through state and territory planning processes. While some states, such as New South Wales, have implemented streamlined processes for certain infrastructure this is generally not the case. In general, carriers must submit their plans for the facility to the relevant authority, usually the local government. These arrangements vary between jurisdictions and can take a considerable period of time. If no streamlining arrangements are in place, submitting applications on a facility-by-facility basis is not likely to be practicable when rolling out a national network, either for the carrier involved or the approving authority. The volume of approvals may also impede the approving authority's ability to process other types of applications, such as those for new residential developments, in a timely manner. This is despite the fact that individual facilities are unobtrusive and have limited impact.

In exercising their rights under Schedule 3, carriers must adhere to notification processes and other requirements such as doing as little damage as is practicable and restoring land. Further detail on these obligations is set out in the *Telecommunications Code of Practice 1997* (the Code).

Telecommunications (Low-impact Facilities) Determination 1997

Subclause 6(3) of Schedule 3 to the Telecommunications Act allows the Minister for Broadband, Communications and the Digital Economy (the Minister), to specify LIFs in a determination. The *Telecommunications (Low-impact Facilities) Determination 1997* (the Determination) sets out the facilities which are considered to be LIFs. LIFs are facilities which are considered vital to the operation of networks and are of low visual impact. Facilities which are currently listed as LIFs include certain

[3] In addition to LIFs, carrier powers and immunities also apply to installations where the carrier has obtained a facility installation permit or the facility is a temporary defence facility. It also applied to certain installation that occurred before 1 July 2000.

[4] All legislation, regulations, determinations and codes referred to in this paper are available on the Comlaw website: www.comlaw.gov.au

underground and above ground housings (e.g. pits and pillars), underground cables and some radiocommunications facilities. Free standing telecommunications towers and aerial cabling are not low-impact facilities. The Telecommunications Act restricts the inclusion of both towers and aerial cabling in the Determination. The aerial cabling restrictions can, however, be altered through the *Telecommunications Regulations 2001* (the Regulations).

The Determination specifies particular land zonings in which particular facilities are considered LIFs. Facilities cannot be deemed low-impact in an area of environmental significance, which includes certain heritage areas.

The Determination has been in place since 1997, with some minor amendments made in 1999. A number of facilities required for a national fibre network differ from those in the existing telecommunications network. Updating the Determination to include these facilities would facilitate the rollout of the optical fibre component of the NBN and other comparable networks. The areas that would require updating fall into three main categories: deploying fibre in streets, connecting premises and connecting multi-unit buildings. Figure 1 illustrates the facilities typically used to deploy fibre in streets and connect premises.

Deploying optical fibre in streets

As previously stated, NBN Co's optical fibre network is expected to pass over 12 million premises. NBN Co's Corporate Plan 2011–13[5] assumes that 75 per cent of its deployment in brownfield areas will use underground cabling; the remainder assumes the use of aerial cabling. The Definitive Agreements between Telstra and NBN Co provide access to Telstra's duct network. This will assist in maximising the amount of underground cabling which is possible.

The Corporate Plan assumes that NBN Co will have adequate powers and immunities to utilise aerial cabling. NBN Co undertook a sensitivity analysis on the impact of this not being the case and only 10 per cent of the fibre access network in brownfields being deployed using aerial cabling. It was found that if aerial cabling decreased from the projected 25 per cent to 10 per cent, it would increase costs of the rollout by $1.8 billion.[6]

The Determination currently includes a number of measures that are relevant to deploying optical fibre in streets such as pits, manholes, roadside cabinets, equipment shelters and trenching to install cable. However, facilities such as above ground optical fibre splice enclosures and aerial cabling are not covered. These facilities are crucial elements of a fibre-to-the-premises network. In order to include aerial cabling with an external cross-section greater than 13mm in the Determination a Regulation must be made (see paragraph 6(3)(b) of Schedule 3 to the Telecommunications Act). Additionally, the trenching arrangements are somewhat ambiguous as drafted as it is unclear whether carriers may have one trench or multiple trenches open simultaneously. This would benefit from clarification.

While the extent of cabling and cable thickness will not be known in individual areas until the rollout plans are complete, NBN Co has indicated that drop cables will

[5] NBN Co Limited, Corporate Plan 2011–13, p. 52
[6] NBN Co Limited, Corporate Plan 2011–13, p. 52

typically be less than 13mm and cabling in streets will typically be approximately 15mm. However, on rare occasions cabling may be up to 30mm thick.

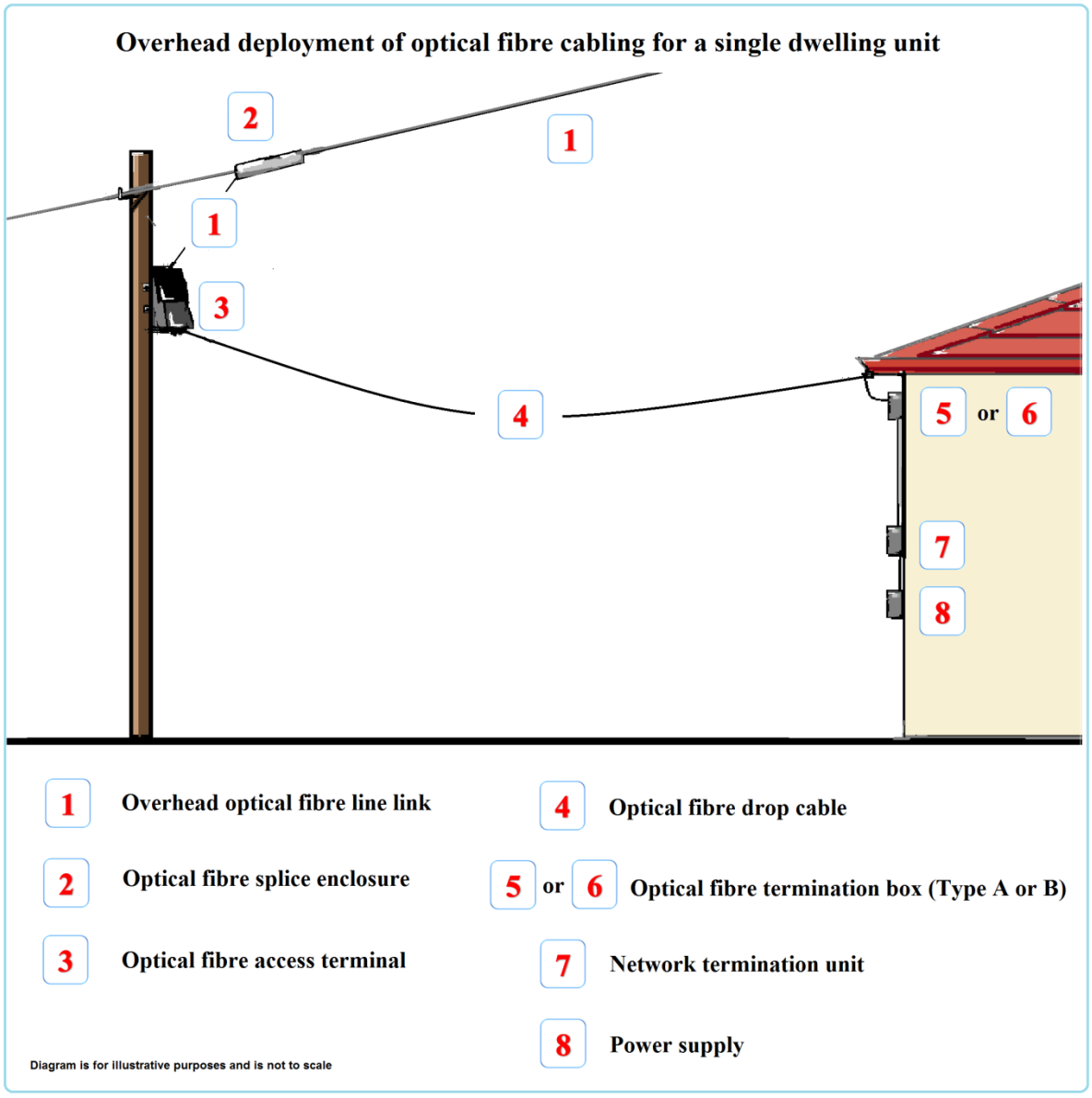

Figure 1 identifies the facilities required to deploy aerial cabling in streets and connect premises.

Connecting premises

The Determination currently covers some premises connection equipment such as satellite dishes and antennas to receive a satellite or wireless telecommunications service.

To connect customers to the NBN, it will be necessary to run an optical fibre from the street to the building. This cable, known as an optical fibre drop cable, may be above ground or underground. The optical fibre will then be terminated and the optical signal converted to an electrical signal at a network termination unit. This requires an optical fibre termination box, a network termination unit and a power supply. Optical fibre termination boxes are installed on the outside of buildings; network termination units and power supplies may be installed inside, similar to a modem, or on an outside

wall of the building. These facilities are not currently covered by the Determination. The NBN Implementation Study estimated that there are 7,155,000 single dwellings (66 per cent of all dwellings) in Australia[7].

Any amendments to the Determination would only apply to equipment installed on the outside of premises. To date all network termination units and power supplies have been located inside buildings and it is expected that the majority will continue to be located indoors. Equipment installed inside buildings is not included as it would not be subject to planning requirements.

In some jurisdictions NBN Co may be subject to local planning requirements which may prevent, restrict or delay the installation of such equipment in certain circumstances. This could result in reduced flexibility in the location of equipment or delay installations. Therefore, it would be beneficial for this equipment to be installed under a nationally uniform approach.

Multi-unit buildings

The government's Statement of Expectations to NBN Co, released on 20 December 2010, stated that NBN Co should provide fibre to the premises technology to multi-dwelling units that fall within the fibre footprint. NBN Co's Corporate Plan also assumes that it will be providing fibre to the premises technology to multi-unit buildings that fall within the fibre footprint.[8] The provision of services to different end-users in multi-unit buildings and nearby non-premises sites requires particular distribution equipment to be installed, generally in a basement or communications room.

The Determination currently contains a facility known as 'in-building subscriber connection equipment' which enables carriers to install facilities in multi-unit buildings in order to connect a subscriber. The current definition of subscriber connection equipment is problematic for wholesale carriers as it requires the subscribers to be subscribers to the carrier installing the facility. This limited definition would mean that wholesale-only carriers, such as NBN Co, would not have the same powers as other carriers.

This definition also requires that the equipment only service residents in the building containing the equipment. In certain circumstances, it may be more practical and efficient to serve other nearby buildings or non-premises sites, such as traffic lights, from a single building. For example, this may be the case at a university residential college. Schedule 3 does not currently give carriers powers to install equipment in one building and serve customers in neighbouring buildings even if there is capacity to do so. Carriers therefore install equipment in each building which requires more space in the buildings for additional equipment, and hence additional costs to the building owner. In turn this increases costs for the carrier, and potentially the building owner, which are eventually passed onto the consumers.

The NBN Implementation Study included estimates on the number of residential single and multi-dwelling unit buildings and premises within multi-dwelling units[9]:

[7] NBN Implementation Study, p. 79
[8] NBN Co Limited, Corporate Plan 2011–13, p. 49
[9] NBN Implementation Study, p. 79

Number of premises in building	Number of buildings	Total number of premises	Proportion of all dwellings
1	7,155,000	7,155,000	66%
2-5	431,000	1,135,000	11%
5-25	119,000	1,268,000	12%
25+	20,000	1,211,000	11%

The equipment that is installed in multi-unit buildings is generally able to provide connections to up to 20 individual premises within the building. Therefore, it is expected that significantly less than 23 per cent of premises will be in residential buildings requiring more than one piece of equipment.

1.2.2 Consequences of delays

In the short term, lack of a streamlined approach will result in increased rollout costs and delays for end-users in receiving the benefits of the NBN.

In the longer term, the NBN will replace Telstra's copper network as the national fixed line network. Installation of NBN equipment will facilitate the transition saving time, money and minimising inconvenience. Failure to install relevant equipment may ultimately result in customers being unable to access the NBN. As Telstra's network is decommissioned, timely installation of new equipment will mean that end-users have the benefit of a ready connection to the NBN

1.2.3 Key stakeholders

There are a wide range of stakeholders affected by the rules for infrastructure deployment. The key stakeholders are:

- NBN Co and other carriers
- property owners, occupiers and managers
- local governments
- business and consumer end-users

2. Objectives

Against this background, the government's objectives are to facilitate the rollout of the NBN and other next–generation national broadband networks by ensuring a more streamlined nationally uniform approach to the rollout, particularly in relation to:

- deploying optical fibre in streets
- connecting premises
- locating equipment in multi-unit buildings

while providing appropriate protection for land owners and occupants.

3. Options (regulatory and/or non-regulatory) that may constitute viable means for achieving the desired objective(s)

Three options have been considered:

A. maintain the current the Regulations and the Determination
B. amend the Regulations and the Determination to include facilities to deploy optical fibre in streets, connect premises and multi-unit buildings for the NBN rollout
C. create a new legislative framework under which NBN Co would install all its infrastructure.

3.1 Carriers which option B would apply to

There are three possible sub-options for Option B. These are: amending the Determination to apply to NBN Co; apply to the NBN and other similar networks (i.e. national open-access, wholesale-only high-speed broadband networks); or, apply to all carriers.

With the exception of clarifications to the trenching arrangements, restricting the scope of the changes to the NBN and similar networks is preferred as this option best balances the government's goals of facilitating the rollout of next-generation broadband networks with community expectations around planning of telecommunications networks, and this sub-option is the option that is considered in the impact analysis in this RIS.

Restricting the scope of any amendments to a limited number of carriers may reduce community concern about the proliferation of telecommunications infrastructure. While supporting the rollout of next–generation broadband, it also limits the range of infrastructure that can be rolled out under Schedule 3. However, restricting the arrangements so that they apply only to a single carrier may be seen as unfair to other carriers.

3.2 Thickness of aerial cabling

Another variable could be the size of aerial cabling allowed. However, to be worthwhile, the changes need to be able to support the types of cable NBN Co may need to deploy. This maximum size of the cable is typically less than 30mm and this is therefore the limit that has been considered.

3.3 Option A – Maintain the current Regulations and Determination

Option A is to not proceed with any amendments to the Regulations or Determination to facilitate the rollout of the NBN and retain the Instruments in their current form.

3.4 Option B – Amend the Regulations and Determination to include facilities to deploy optical fibre in streets, connect premises and multi-unit buildings

The option would include the necessary amendments in the Regulations and Determination to facilitate the rollout of the NBN fibre network by ensuring NBN Co has the right to install relevant facilities on land and providing a nationally uniform approach to the rollout. Specifically, the facilities provided for would be as follows.

Deploying fibre in streets:

- aboveground optical fibre line links and drop cables of up to 30mm external cross-section
- optical fibre splice enclosures (aboveground and underground)
- optical fibre access terminals (aboveground and underground)
- clarify trenching arrangements to make clear that more than one trench can be open at the same time

Connecting premises:

- optical fibre termination boxes
- network termination units
- power supplies

Connecting multi-unit buildings:

- 'in-building subscriber connection equipment' to capture wholesale operators
- building connection equipment and in-building network equipment

This approach would provide NBN Co and carriers rolling out comparable networks with the benefit of Schedule 3 powers and immunities in relation to these new facilities. This would mean the facilities could be installed under a uniform Commonwealth regime as opposed to varying state and territory arrangements. It would also provide access to land entry powers that could assist with the installation of such facilities to the extent the carriers may need to utilise them.

3.5 Option C – Create a new legislative regime

Under Option C, the government would create a new legislative scheme to provide NBN Co with immunity to the same state and territory planning laws and the land entry powers that are currently available under Schedule 3 of the Telecommunications Act but extend these powers and immunities to any of its facilities, including fibre access node buildings (similar to exchanges), satellite earth stations and wireless towers. There would not be any constraints on size or appearance of such facilities. A new legislative regime would be required because it would be difficult to treat such facilities as "low-impact". The legislative regime would necessarily be limited to NBN Co as allowing any carrier to install all infrastructure under these conditions would not be consistent with community expectations and would go beyond the government's objective of facilitating the rollout of next-generation broadband infrastructure on a national basis.

4. Impact Assessment

This section discusses the costs and benefits of each option for businesses, including carriers, all levels of government, property owners, including bodies corporate, and consumers. It is not possible to quantify the costs and benefits precisely as existing arrangements for installing facilities vary between jurisdictions. They will also depend on the final network design.

As noted above, NBN Co has estimated the financial cost of aerial cabling being deployed to 10 per cent of premises rather than the projected 25 per cent of premises at $1.8 billion.[10]

4.1 Option A – Maintain the current Regulations and Determination

4.1.1 Benefits

The key benefit of maintaining the current Determination is that it is understood by key stakeholders such as carriers and local governments. Depending on the consultation processes required, subjecting the rollout plans to development approval may also make communities feel more involved in the planning of the network and give property owners an opportunity to express possible concerns about the impact of the installation of facilities on their properties.

4.1.2 Costs

This approach does not advance the government's objective of facilitating the rollout of next-generation broadband. The lack of a more streamlined nationally uniform approach to rolling out a network will have different administrative and planning requirements in different areas which will increase the operational costs to the carrier. In jurisdictions where development approvals are required, the volume of applications from NBN Co is likely to place a significant burden on local councils. This will increase their administrative overheads and may delay applications for other developments as well as the NBN.

Overall, Option A may delay the rollout which will impact on consumer and business end-users. If necessary planning approvals were not forthcoming, certain areas would be unable to receive an NBN service.

4.2 Option B – Amend the Regulations and Determination to include facilities to deploy optical fibre in streets, connect premises and multi-unit buildings

4.2.1 Benefits

Option B establishes a more streamlined nationally uniform regime for the deployment of national optical fibre networks. It would provide certainty and minimise the operational burden on carriers and local governments as planning approval for these common types of infrastructure would only be required in areas of environmental or heritage significance as set out in the Determination. Additionally this approach provides regulatory certainty that network deployment in an area can be completed as facilities will not require approvals on an individual basis.

By ensuring that the common equipment is covered by Commonwealth legislation, a regulatory framework is created whereby all property owners and occupiers, including owners of multi-unit buildings, have the same legal rights and protections in relation to the installation of the relevant infrastructure regardless of their location. Currently consultation processes and other requirements are set by each jurisdiction. A nationally uniform approach ensures that these rights are clear and consistent and that the same avenues of recourse – through the Telecommunications Industry Ombudsman and the Australian Communications and Media Authority – are available to all.

[10] NBN Co Limited, Corporate Plan 2011–13, p. 52

During the consultation process, a number of respondents raised concerns about aerial telecommunications cabling remaining in place if other cabling, such as electricity cables, is moved underground. Schedule 3 includes a requirement that aerial cabling installed under a law of the Commonwealth must be removed within six months of all non-telecommunications cables being permanently removed from the poles. Under the current arrangements this provision is not activated as aerial cabling would be installed under state and territory planning laws. If aerial cabling is included in the Determination this requirement would apply.

In relation to premises connection devices and facilities to connect multi-unit buildings, the proposed amendments will facilitate the provision of connections with minimal disruption and burden on the property's owner and occupier by supporting the installation of common equipment for the building. In multi-unit buildings the changes will allow the necessary infrastructure for NBN connections to be installed as efficiently as possible This recognises that even though everyone in a multi-unit building may not want an NBN connection, the equipment needs to be in place for those who do. This is particularly important with the migration to the NBN and the decommissioning of Telstra's network. Additionally, allowing NBN Co to use its equipment as efficiently as possible by allowing it to serve nearby premises if capacity is available on equipment minimises the space required, and therefore cost to building owners, of connecting all premises.

4.2.2 Costs

As indicated in some submissions during the consultation process, some members of the community are concerned by the proposed changes, asserting that they remove power from local government and communities and the ability of property owners to express their views on rollout proposals.

The proposed arrangements do give NBN Co, and carriers rolling out comparable networks, certain rights to enter land and install facilities to connect premises to the network without the consent of the owner or occupier. This has been raised as a concern. In practice, these rights exist today for other types of facilities but in practice premises are not generally connected unless there is an economic incentive for carriers to do so. In relation to multi-unit buildings, the amendments will allow NBN Co to install equipment which will require space within the building. However, whether or not the relevant amendments are included in the Determination, this equipment will need to be accommodated to enable residents or businesses within the building to access the NBN. In many instances it would be expected to replace similar equipment that is already accommodated to provide access telephone, internet and/or pay TV services within multi-unit buildings. As noted above, less than 23 per cent of premises will be in residential buildings that are likely to require more than one piece of equipment.

In the past, concerns have been raised about the manner in which carriers have exercised their powers under Schedule 3, including by owners of multi-unit buildings. These concerns are not explicitly addressed through this regulatory change, however, Option B would require carriers to comply with the conditions set out in Schedule 3 and the Code when installing these types of facilities. Any disputes which cannot be resolved between the land owner/occupier and the carrier may be referred to the Telecommunications Industry Ombudsman. The Communications Alliance has also

created industry standards and guidelines relating to various aspects of premises connections. During the consultation process, the Residential Development Council, a division of the Property Council, suggested that revising these documents would also increase the protections for building owners.

4.3 Option C – Create a new legislative regime

4.3.1 Benefits

Option C would ensure that NBN Co is able to install all necessary infrastructure which would result in end-users, including business users, getting access to the benefits of the NBN sooner. It would minimise the operational burden on NBN Co which would, in turn, reduce its costs and therefore has the potential to result in lower wholesale prices.

Additionally Option C would minimise the administrative burden on local government as no facilities associated with the NBN would be subject to planning approvals. This will reduce costs and resource requirements significantly.

In relation to other stakeholders, the benefits would be similar to Option B. In relation to end-users who will be served by wireless and satellite it could mean that services are delivered sooner and at a lower cost to the overall project.

4.3.2 Costs

In general, the costs outlined in relation to Option B would also apply here. There are, however, some additional costs to Option C.

This approach would not give NBN Co the earlier certainty it requires to roll out its network as it would be dependent on the passage of legislation which would likely be contentious.

The new legislative regime would give NBN Co wide ranging powers that are not available to any other carrier, even those rolling out comparable networks, raising significant issues around competitive neutrality.

While Option B extends the existing regime to accommodate the rollout of an optical fibre network, effectively updating it to accommodate the best technology currently available, Option C goes well beyond these arrangements by including buildings, towers, earth stations and other large structures. Removing such infrastructure from ordinary planning processes would subject such structures to a new process displacing the existing planning processes. For example such an approach could allow NBN Co to build a large structure, such as a fibre access node, without the extensive community consultation and scrutiny of usual planning processes. Separate to the potential impact on businesses as a result of such installations, there would likely be wider community concerns about loss of visual amenity. This is likely to go beyond the NBN and increase concerns about telecommunications infrastructure more generally which may impact on the operations of other carriers operating under the existing regime. This may be counterproductive in facilitating the NBN rollout.

5. Consultation

Amendments to facilitate the rollout of the NBN were originally raised in the *National Broadband Network: Regulatory reform for 21st Century Broadband* discussion paper released on 7 April 2009. Such changes were again foreshadowed in the government's Statement of Expectations to NBN Co released in December 2010.

Draft instruments and explanatory material were released for a four week public consultation on 10 August 2011. Thirty-two public submissions were received from state, territory and local governments, carriers, industry and consumer groups, property groups and the general public.

Key issues raised in the submissions are noted below. Submissions are available on the Department of Broadband, Communications and the Digital Economy's (the department) website www.dbcde.gov.au unless confidentiality was specifically requested.

Many submitters commented only on particular aspects of the proposal. However, some commented on the overall objectives. For example the Australian Local Government Association (ALGA) commented that it supports the objective of minimising burden on councils but emphasised the need to ensure that councils are properly consulted on activities in their area. NBN Co has committed to working closely with local governments as the network is planned and rollout in their area.

A number of submitters also raised broader issues which cannot be addressed through amendment to the Determination and the Regulations. In general, proposals would require amendment to the primary legislation to implement (for example proposals to require existing decommissioned cabling to be removed), were additional activities that are not regulatory in nature (for example publicising the obligations on NBN Co when undertaking activities) or were not consistent with the objectives of this exercise (for example increasing the allowable size for certain existing LIFs). These proposals are not described below.

5.1 Deploying fibre in streets

Of the 26 submissions that commented on aerial cabling, eight opposed it under any circumstances. These submitters included some local councils, individuals and some community groups with long-standing concerns about aerial cabling since the HFC rollouts of the 1990s (e.g. Cables Downunder). These submitters oppose aerial cabling in general, rather than the specific proposal to bring certain aerial cables under Commonwealth regulation rather than state and territory planning requirements.

Five submitters – including the Onkaparinga Council and the Communications Law Centre – considered the proposed measures to support aerial appropriate as drafted. However, a number suggested amending the proposed text to clarify that aerial cabling should be deployed where it is the only feasible option.

Energy Networks Association, the peak point for energy supplies, recommended amending the proposed LIFD so that it only applies to non-conducting optical fibre cable (i.e. cable that does not conduct electricity) as this would assist ENA members in setting standards for, amongst other things, the positioning of the cable on poles

which also carry electrical cabling. This proposal has been incorporated into the text of the instrument.

There was little comment on the proposed size of aerial cabling. A number of submissions noted the thickness of the proposed 30mm cable, however, in general the strength of objections did not appear to be influenced by the proposed maximum size.

Telstra has argued that the ability to install aerial optical fibre cabling be expanded so it is more generally available. It also sought comparable treatment for aerial copper cabling, and certain other infrastructure, in rural areas where connected with the fulfillment of the Universal Service Obligation. The latter request has been noted but is considered to be beyond the scope of the objectives of this exercise which is to facilitate the rollout of national next-generation broadband networks.

5.2 Connecting Premises

The Victorian Government opposed the provisions related to connecting premises on the grounds that inclusion in the Determination gives carriers power to enter land and install facilities. The Victorian Government therefore argued that the change to the Determination would allow NBN Co to implement an 'opt out' approach to deploying the network if it chooses to do so. In contrast this aspect of the proposal was strongly supported by the Australian Communications Consumer Action Network and the Tenants' Union of Victoria as they considered that the increased powers would be beneficial for tenants wishing to connect to the NBN.

Some local governments proposed particular requirements that appeared to depend on the locality, such as requiring equipment to be in particular locations to minimise the risk of flood damage. While these are important issues for the network design they have not been included in the Determination requirements as they will vary between areas.

5.3 Multi-unit buildings

Few submissions addressed the proposed facilities for providing services to end-users in multi-unit buildings, some commented exclusively on commercial buildings while others were primarily concerned with residential buildings.

The Strata Community Australia supported the amendments as they would allow NBN Co to enter buildings to install equipment thereby reducing the risk of residents in multi-unit buildings facing delays in connection. However, Strata Community Australia also highlighted the importance of consultation with those responsible for administering the buildings. However, while supporting the overall objectives of the NBN, the Residential Development Council opposed these amendments unless stronger protections are put in place to protect the interests of the building owners and managers. In particular, the Residential Development Council sought amendments to the industry guidelines ACIF G571:2002 Building Access Operations and Installation. As these guidelines are managed by the Communications Alliance they cannot be amended by government. The governments will, however, consider raising the issue with NBN Co and the Communications Alliance.

6. Conclusion

Option B is recommended.

In comparison to Option A, Option B will ensure a streamlined approach to the rollout of next-generation broadband. This will reduce costs and delays for both carriers and local governments that would otherwise be responsible for the approval process. Unlike Option C, Option B provides opportunities for local government and property owners to express their views about the impact of deployments on their property. Given the nature of the LIFs, any negative impacts will be less significant than under Option C and it is expected that they will be outweighed by the benefits of the NBN.

By allowing next-generation broadband to be installed under Commonwealth legislation a more streamlined nationally uniform approach can be implemented. This will minimise inconsistencies between jurisdictions and provide greater clarity on which regulations apply thereby simplifying the rollout of the NBN.

Option B will also ensure that land owners and occupiers are afforded the protections that apply to installations carried out under Schedule 3. As these protections only apply to facilities specified in the Determination, Option A would result in different rights for land owners and occupiers depending on whether the facility to be installed is listed or subject to local planning requirements.

As Option C would create a new legislative regime the existing protections would not apply. At this stage it would seem Option C is not necessary to achieve the public policy objectives but this should be reviewed if there are implementation difficulties with Option B.

7. Implementation and review of the preferred option

The amendments to the Regulations and the Determination will expand the range of facilities that may be installed under Schedule 3 of the Telecommunications Act, specifically as LIFs.

The changes to the Determination will be subject to ongoing monitoring. For example, the Australian Communications and Media Authority reports annually on the telecommunications sector under section 105 of the Telecommunications Act, including on the operation of the powers and immunities regime. The department will also monitor the new arrangements from a policy perspective. The arrangements will likely be reviewed by the Productivity Commission once the NBN is rolled out and fully operational. The Parliamentary Joint Committee on the National Broadband Network has also been established to oversee the rollout of the NBN.

ATTACHMENT

Details of the *Telecommunications (Low-impact Facilities) Determination 1997 (Amendment No. 1 of 2011)*

Section 1 – Name of Determination

Section 1 provides that the title of the Determination is the *Telecommunications (Low-impact Facilities) Determination 1997 (Amendment No. 1 of 2011)* (the Amending Determination).

Section 2 – Commencement

Section 2 provides that the Amending Determination commences on the day after it is registered on the Federal Register of Legislative Instruments.

Section 3 – Variation

Section 3 provides that the *Telecommunications (Low-impact Facilities) Determination 1997* (the Principal Determination) is amended as set out in the Schedule to the Amending Determination.

Schedule – Amendments

Item [1] – Section 1.2, in the text box titled *Background to determination*

Item 1 of the Amending Determination omits the words 'overhead cabling and' from the text box which appears in the preliminary background text in section 1.2 of the Principal Determination. This item is a consequential amendment arising from the specification of overhead cabling as low-impact facilities (see the explanatory notes to Item 13 below).

Item [2] – Section 1.3, after the definition of *area of environmental significance*

Item 2 of the Amending Determination inserts a definition of 'building connection equipment' into section 1.3 of the Principal Determination. See the explanatory notes to Item 10 for detailed discussion on the specification of certain types of building connection equipment as low-impact facilities.

Item [3] - Section 1.3, after the definition of *co-located facilities*

Item 3 of the Amending Determination inserts a definition of 'co-located volume' into section 1.3 of the Principal Determination. This definition now applies to the existing facility in Part 7, Item 2 of the Schedule to the Principal Determination. This definition replicates the previous definition of 'volume' which applied prior to the commencement of this Amending Determination (see the explanatory notes to Item 9 below which omits the definition of 'volume').

This change in nomenclature is considered necessary to clearly distinguish between the concept of volume that had been used in Part 7, Item 2 of the Schedule to the

Principal Determination and the ordinary meaning of volume (where used but not defined in the Principal Determination). The ordinary meaning of volume (being the size, measure, or amount of anything in three dimensions; the space occupied by a body or substance in cubic units) applies to the existing facility specified in Part 1, Item 6 of the Schedule.

See the explanatory notes to Item 8 below for an explanation of the related new term, 'substantive volume'.

Item [4] – Section 1.3, after the definition of *emergency services organisation*

The features of Items 1 and 4 of new Part 4A include the requirement for the cable to comply with specifications for electrical properties in the Institute of Electrical and Electronics Engineers Standard – *IEEE Standard for Testing and Performance for All Dielectric Self-Supporting (ADSS) Fiber Optic Cable Use on Electric Utility Power Lines – IEEE 1222-2011*.

Accordingly, Item 4 of the Amending Determination inserts a definition of 'IEEE 1222-2011 Standard' into section 1.3 of the Principal Determination, by reference to this Standard as in force from time to time, to take into account any amendments. This specification of a technical standard is made in reliance of section 589 of the Telecommunications Act.

See the explanatory notes to Item 13 for a detailed discussion on the specification of certain above ground optical fibre cabling as meeting certain specifications of the IEEE 1222-2011 Standard.

Item 4 of the Amending Determination also inserts a definition of 'in-building network equipment' into section 1.3 of the Principal Determination. See the explanatory notes to Item 10 for detailed discussion on the specification of certain types of in-building network equipment as low-impact facilities.

Item [5] – Section 1.3, definition of *in-building subscriber connection equipment*

Item 5 of the Amending Determination substitutes the definition of 'in-building subscriber connection equipment' in section 1.3 of the Principal Determination. This change allows relevant carriers to install facilities in multi-unit buildings for the future use of subscribers on those buildings even though they themselves would not have subscribers because they are wholesale-only. Such a facility must be part of a national network used, or for use, for the high-speed carriage of communications on a wholesale-only and non-discriminatory basis.

Item [6] – Section 1.3, after the definition of *listed international agreement*

Item 6 of the Amending Determination inserts a definition of 'national network' into section 1.3 of the Principal Determination. This definition refers to a network that has each of the following attributes:

- a geographic reach into every state or mainland territory;
- a significant number of end users connected, or likely to be connected; and
- importance to the national economy.

This definition is intended to capture the NBN being rolled out by NBN Co, but is also intended to capture any other comparable networks.

Ten of the 12 new low-impact facilities have this 'national network' criterion. The purpose of this is to ensure that these new facilities can only be installed in the context of a rollout of genuine national scale and significance that warrants the powers and immunities under Schedule 3 of the Act. These specifications also limit the scope for the exercise of powers and immunities by carriers to minimise community impacts and concerns.

While a proposed network operating throughout a single state or in the central business district of a major capital city may be of importance to the national economy, such a network would not satisfy the 'national network' definition, as it does not have a geographic reach into every state or mainland territory.

Item 6 of the Amending Determination also inserts the following definitions into section 1.3 of the Principal Determination:

- network termination unit;
- optical fibre access terminal;
- optical fibre drop cable;
- optical fibre splice enclosure;
- optical fibre termination box (Type A); and
- optical fibre termination box (Type B)

See the explanatory notes to Items 12 and 13 for detailed discussion on the specification of certain types of facilities described above as low-impact facilities.

Item [7] – Section 1.3, after the definition of *planning law*

Item 7 of the Amending Determination inserts a definition of 'power supply' into section 1.3 of the Principal Determination. This definition covers devices that connect a network termination unit to a mains power supply. This consequential amendment is necessary due to the inclusion of a new facility of this kind at Item 13.

Item [8] – Section 1.3, after the definition of *subscriber connection*

Item 8 of the Amending Determination inserts a definition of 'substantive volume' into section 1.3 of the Principal Determination. This consequential amendment is necessary due to the inclusion of this term in Items 10, 12 and 13 below.

This definition covers the volume of space enclosed and the volume of any equipment that is enclosed, rather than simply the volume of materials used in the facility. For example, in the case of an optical fibre termination box, the 'substantive volume' refers to the volume of the box, the space that it encloses and any optical fibre drop cable enclosed (see Item 13 below), not simply the volume of the materials of which the box is comprised of.

Although the definition largely accords with the ordinary meaning of volume, ancillary fixings, protrusions, or other attachments of an incidental nature (such as tabs, clasps and brackets) are not used in calculating the volumes of these facilities.

The use of volume to quantify the size of facilities, rather than specific dimensions, has been adopted to provide some flexibility in actual dimensions of equipment.

Item [9] – Section 1.3, definition of *volume*

Item 9 of the Amending Determination omits the definition of 'volume' in section 1.3 of the Principal Determination. This consequential amendment is necessary because of the adoption of the term 'co-located volume' as described in Item 3 above.

Item [10] – At Part 3 of the Schedule, after Item 7

Part 3 of the Schedule to the Principal Determination specifies certain above ground housing facilities as low-impact facilities.

Item 10 of the Amending Determination inserts two additional types of facilities in Part 3 of the Schedule to the Principal Determination. Unlike existing Item 6 of Part 3 of the Schedule (relating to in-building subscriber connection equipment), these two additional facility types do not relate exclusively to subscribers within the building in which the facility is located.

Both these two new facility types include a requirement that the facility be part of a national network, for use for the high-speed carriage of communications on a wholesale-only and non-discriminatory basis. The wholesale-only and non-discriminatory access basis specified is a direct reference to the service supply rules that apply to NBN corporations as part of the NBN. This requirement also applies in respect of the new facility types described in Item 13 below.

New Item 8 of Part 3 of the Schedule - building connection equipment

New Item 8 of Part 3 of the Schedule specifies building connection equipment that provides a service to either end-users within the multi-unit building in which the equipment is installed, or end-users who are located in another nearby multi-unit building. The maximum permissible substantive volume for building connection equipment is 0.21 cubic metres.

New Item 9 of Part 3 of the Schedule - in-building connection equipment

New Item 9 of Part 3 of the Schedule specifies in-building connection equipment in a multi-unit building for a purpose other than directly supplying carriage services to end-users. Examples of such equipment may include equipment used for backhauling, metering information or mobile traffic or equipment that will supply a service to a non-addressable location as currently defined in Attachment A to the Statement of Expectations to NBN Co dated 17 December 2010.

The maximum permissible substantive volume for in-building connection equipment is 0.21 cubic metres.

Ancillary facilities

Subsection 3.1(4) of the Principal Determination provides that a facility that is ancillary to a facility described in column 2 of an Item in the Schedule is also a low-impact facility provided it is installed, or to be installed, solely to ensure the protection or safety of:

- the low-impact facility itself; or
- persons or property in close proximity to the low-impact facility.

This subsection of the Principal Determination will apply in relation to the new facility types listed in this Item 10 (Part 3 of the Schedule), as well as those described in Items 11 and 12 (Part 4 of the Schedule) and Item 13 (new Part 4A of the Schedule). For example, this subsection may be applicable to protective housings, casings or outer moulds of these new facility types inserted into the Principal Determination.

Item [11] – Paragraph (e) of Item 1, Part 4 of the Schedule

Part 4 of the Schedule to the Principal Determination specifies certain underground cable facilities as low-impact facilities.

Item 11 of the Amending Determination substitutes paragraph (e) of Item 1, Part 4 of the Schedule. This minor, technical amendment clarifies that more than one trench may be open at any one time for the purpose of installing conduit or cable in residential areas.

Item [12] – At Part 4 of the Schedule, after Item 3

Item 12 of the Amending Determination inserts two additional types of underground facilities into Part 4 of the Schedule.

New Item 4 of Part 4 of the Schedule - underground optical fibre splice enclosure

New Item 4 of Part 4 of the Schedule specifies an underground optical fibre splice enclosure. This facility type is intended to capture a passive enclosure that allows individual fibres from an optical fibre line link to be separated out and connected to an optical fibre access terminal, or otherwise be spliced to an optical fibre drop cable.

The maximum permissible substantive volume for an underground optical fibre splice enclosure is 0.046 cubic metres.

This facility type includes but is not limited to cylindrical and rectangular shaped enclosures.

New Item 5 of Part 4 of the Schedule - underground optical fibre access terminal.

New Item 5 of Part 4 of the Schedule specifies an underground optical fibre access terminal. This is intended to capture passive devices to which individual fibres separated from a cable are spliced or connected and to which the drop cable to an end user's premises can be connected.

The maximum permissible substantive volume for an underground optical fibre access terminal is 0.02 cubic metres.

Item [13] – After Part 4 of the Schedule

Item 13 of the Amending Determination inserts new Part 4A into the Schedule to specify eight new above ground optical fibre facility types as low-impact facilities. It is expected that cabling will be underground wherever possible and that aerial cabling only be restricted to circumstances where it is the only efficient (or feasible) option. In the case of the NBN, it is estimated that approximately 75 per cent of the network in brownfields areas will be underground. Taken together, along with associated ancillary facilities, the facilities specified in the new items 1-4 of new Part 4A are intended to support the aerial deployment of optical fibre networks where necessary.

A graphic depiction of key facilities is included in Item 13 are shown in Figure 1 in the Regulatory Impact Statement in the previous section.

New Item 1 of Part 4A of the Schedule - overhead optical fibre line links

New Item 1 of Part 4A of the Schedule covers non-conductive above ground optical fibre line links deployed or attached to a public utility structure, building or other structure that will be part of a national network used, or for use, for the high-speed carriage of communications on a wholesale-only and non-discriminatory basis.

This is intended to capture a core component of the above ground optical fibre network, namely optical fibre lines rolled out down streets between electricity poles as part of the NBN. This would include deployment or attachment of optical fibre lines to structures used for reticulated products or services, such as electricity services. This facility type would also extend to national networks comparable to the NBN.

The maximum permissible external cross-section of any part of the optical fibre line links is 30 millimetres (mm). The Principal Regulations have been amended by the *Telecommunications Amendment Regulations 2011 (No. 1)* to allow aerial cabling with a maximum external cross-section of 30 mm to be included in the Schedule. While this cross-section is set as a maximum, it is expected that the majority of aerial cabling deployed as part of the NBN will be smaller, with a typical cross-section of approximately 15 mm.

This facility type specified must have electrical properties that are consistent with those set out in the in the IEEE 1222-2011 Standard. That is, it is effectively cabling with a very low electrical conductivity. Requiring the electrical properties to be consistent with this Standard does not mean that cabling must meet all the

requirements set out in this Standard, rather it must exhibit the electrical characteristics set out in the Standard under the specified test conditions regardless of whether or not it is a self-supporting cable.

The IEEE 1222-2011 Standard is made by the Institute of Electrical and Electronics Engineers (the IEEE). It describes the performance characteristics and testing requirements that are appropriate for cable which is to be placed on electricity poles.

The IEEE is one of the leading standards-setting bodies worldwide. It makes standards for a range of industries, including the power and telecommunications sectors. Ensuring that an aerial cable meets the electrical performance standards set by the IEEE means it is suitable to be placed in the low-voltage corridor on power poles where permitted under relevant laws, including occupational health and safety requirements. It is expected that any above ground optical fibre line links will be located as close to existing cabling as practicable to minimise the visual impact.

While it is expected that generally a single overhead optical fibre line link would be strung between poles in any one location, to provide flexibility a carrier (such as an NBN corporation) may install two or more overhead optical fibre line links in any one location.

If two or more overhead fibre line links are bundled, the bundle as a whole, not the individual cables would need to be within the maximum permissible external cross-section (i.e. 30 mm).

New Item 2 of Part 4A of the Schedule - above ground optical fibre splice enclosures

New Item 2 of Part 4A of the Schedule covers above ground optical fibre splice enclosures that either form part of, or are integrated with a cable; or are clamped to, strung from, or otherwise mounted to a public utility structure, building or other structure.

The maximum permissible substantive volume for an underground optical fibre split enclosure is 0.046 cubic metres. This new Item largely mirrors new Item 4 of Part 4 of the Schedule to the Principal Determination described at Item 12 above, except it relates to above ground facilities under this new Part 4A, rather than underground facilities under Part 4. This facility type includes but is not limited to, cylindrical and rectangular shaped enclosures.

New Item 3 of Part 4A of the Schedule - above ground optical fibre access terminals

New Item 3 of Part 4A of the Schedule covers above ground optical fibre access terminals. This new Item largely mirrors new Item 5 of Part 4 of the Schedule described at Item 12 above, except it relates to above ground facilities under this new Part 4A, rather than underground facilities under Part 4.

The maximum permissible substantive volume for an underground optical fibre access terminal is 0.02 cubic metres. This facility type includes but is not limited to cylindrical and rectangular shaped enclosures.

New Item 4 of Part 4A of the Schedule - above ground optical fibre drop cables

New Item 4 of Part 4A of the Schedule covers above ground non-conductive optical fibre drop cables clamped to, strung from, or otherwise mounted to a public utility structure, building or other structure.

This cable facility type is typically less than 200 metres with between 1 to 8 optical fibre lines. In the case of above ground deployment, the cable may run suspended above the surface of land or submerged water from a pole and attached to a building or other structure for the purpose of subscriber connection.

The reference to 'subscriber connection' is intended to capture either an actual (impending) connection or a potential future connection of an end-user's premises to a telecommunications network for the purposes of receiving a high-speed broadband service. The criterion relates to the capability of a customer to subscribe to a service to be delivered over the cable at any point in the future.

The maximum permissible external cross-section of the drop cable is 13 mm, where the drop cable is attached to a single-unit building; or 30 mm, when attached to a multi-unit building. It is expected that drop cables to individual premises will generally be 13 mm; larger cable may be required for connecting larger multi-unit buildings.

If two or more overhead drop cables are bundled, the bundle as a whole, not the individual cables, would need to be within the maximum permissible external cross-section.

The specifications for the electrical performance requirements of this item mirror new Item 1 of Part 4A.

New Item 5 of Part 4A of the Schedule - above ground optical fibre termination box (Type A).

New Item 5 of Part 4A of the Schedule covers an above ground optical fibre termination box (Type A). This facility type is intended to capture such boxes used for the management of optical fibre drop cables, whether deployed overhead or underground, terminating at a single building or structure for the purposes of subscriber connection.

As the box can store the end of drop cable, including any pre-installed connector and spare cable, pending the provision of a service, it is not necessary for the actual occupant of the building or structure (upon which the box is installed) to actually be or intend to be subscribed to a telecommunications service.

The maximum permissible substantive volume for such a box is 0.005 cubic metres. This facility type includes but is not limited to square and, rectangular shapes.

New Item 6 of Part 4A of the Schedule - above ground optical fibre termination box (Type B)

New Item 6 of Part 4A of the Schedule covers an above ground optical fibre termination box (Type B). This facility type is intended to perform the same functions as the new Item 5 of Part 4A of the Schedule, except it relates to a box designed to service multi-unit buildings. Because the box is designed to service multi-unit buildings, the maximum permissible substantive volume for this box is 0.04 cubic metres, which is larger than a box intended to service a single building. This facility type includes but is not limited to square and rectangular shapes.

New Item 7 of Part 4A of the Schedule - network termination units

New Item 7 of Part 4A of the Schedule covers network termination units, which convert optical signals into electrical signals, attached to a building or other structure for the purposes of a subscriber connection. The maximum permissible substantive volume for this unit is 0.02 cubic metres.

New Item 8 of Part 4A of the Schedule - power supply units

New Item 8 of Part 4A of the Schedule covers power supply units, which are electrical devices that provide power to network termination devices attached to a building or other structure for the purposes of a subscriber connection. The facility includes battery backup or uninterruptable power supply units, as well as units needed for direct mains supply. The maximum permissible substantive volume for this unit is 0.005 cubic metres.

Item [14] – Paragraph (e) of Item 2 of Part 7 of the Schedule, immediately after the word *total*

Item 2 of Part 7 of the Schedule specifies features of certain co-located facilities. Prior to the commencement of the Amending Determination, paragraph (e) of Item 2 of Part 7 provided a specification of the total volume of the co-located facilities as being no more than 25 per cent greater than the volume of the original facility or the original infrastructure.

Item 14 of the Amending Determination inserts the word ‘co-location’ immediately before the occurrence of the word ‘volume’ in this paragraph. This represents a consequential change following the amendment of the term ‘volume’ to ‘co-location volume’ as described in Items 3 and 9. This is intended to avoid any confusion between the three concepts of volume used in the Amending Determination: volume (undefined), substantive volume and co-location volume.