EXPLANATORY STATEMENT

Issued by the Authority of the Minister for Communications

Telecommunications Act 1997
Acts Interpretation Act 1901

Telecommunications (*Low-impact Facilities*) *Determination 1997*
(*Amendment No. 1 of 2015*)

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 to the Act.

On 29 June 1997 the then Minister for Communications, Information Technology and the Arts made the *Telecommunications (Low-impact Facilities) Determination 1997* (the Principal Determination), and it was subsequently amended on 12 August 1999, 13 December 2011, and 20 November 2012.

Under subsection 33 (3) of the *Acts Interpretation Act 1901*, where an Act confers a power to make, grant or issue any instrument of a legislative or administrative character (including rules, regulations or by-laws), the power shall be construed as including a power exercisable in the like manner and subject to the like conditions (if any) to repeal, rescind, revoke, amend, or vary any such instrument. Subsection 33(3) of the *Acts Interpretation Act 1901* allows the Minister to amend the Principal Determination.

Purpose

The *Telecommunications (Low-impact Facilities) Determination 1997* (the Principal Determination) is made under subclause 6(3) of Schedule 3 to the *Telecommunications Act 1997* (the Act). Schedule 3 provides carriers with power to inspect land to determine whether the land is suitable for the carrier's purpose; install certain types of facilities (primarily low-impact facilities) on the land; and maintain a facility that is situated on the land; without seeking state, territory or local government planning approval or land owner consent.

The overarching purpose of the *Telecommunications (Low-impact Facilities) Determination 1997 (Amendments No.1 of 2015)* (the Amending Determination) is to amend the Principal Determination to include hybrid fibre-coaxial (HFC) and fibre-to-the-basement (FTTB) facilities installed by carriers operating a national network for the high speed carriage of communications on a wholesale-only and non-discriminatory basis. As such, the amendments will be of benefit to NBN Co Limited, but they will also be available to other carriers meeting the specified criteria. These amendments will be added to the Principal Determination (with a limited 12 month installation timeframe) to facilitate NBN Co trials of HFC in specified areas and the rollout of FTTB.

The Principal Determination is expected to be updated further, following public consultation.

Key amendments are:

- inserting a new Part 4B into the Schedule to the Principal Determination to provide for nine new categories of above ground HFC facilities - see discussion below;
- inserting a new Item 5 into Part 4 of the Schedule to the Principal Determination to provide for a new type of underground HFC facility;
- amending the definition of 'building connection equipment' to allow such equipment to be installed on the exterior of a multi-unit building; and
- increasing the maximum permissible volume measurements for 'building connection equipment' and 'in-building subscriber connection equipment' to accommodate newer style equipment designed to service a larger number of subscribers as part of an FTTB deployment.

HFC-related amendments

The items forming new Part 4B, and the new item inserted into Part 4 of the Schedule to the Principal Determination may only be installed by carriers operating national, wholesale-only, non-discriminatory broadband networks. The installation of these new HFC facilities can only occur within a defined 12 month period and in the following specified HFC trial regions:

- Merrimac (City of Gold Coast), Queensland;
- Redcliffe (Moreton Bay Regional Council), Queensland;
- Slacks Creek (City of Logan), Queensland; and
- Emu Plains (City of Penrith), New South Wales.

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, provided the specified conditions are met. Where facilities of the kind listed in the Amending Determination are proposed to be deployed outside of the specified HFC trial regions, the deployment cannot occur in reliance on Schedule 3 to the Act.

In accordance with regulation 11.2 of the *Telecommunications Regulations 2001* (the Principal Regulations) the external cross-section of any proposed HFC cable or cable bundle must not exceed 30 millimetres.

FTTB-related amendments

The Amending Determination also makes some changes to the maximum permissible volume measurements for 'building connection equipment' and 'in-building subscriber connection equipment'. A further amendment is made to allow building connection equipment to be installed on the exterior of a multi-dwelling unit, to address circumstances where older style apartment blocks, for example, do not have a basement communications room.

Background

The Australian Government is committed to the delivery of better broadband to Australians. The Strategic Review by NBN Co in December 2013 recommended that the national broadband network should be completed using a multi-technology mix to deliver fast broadband sooner and at less cost to taxpayers. In light of this, the Government issued a new Statement of Expectations to NBN Co on 8 April 2014. The

Statement instructs NBN Co to determine which technologies are to be used for the NBN in any given area on a case-by-case basis, so long as the NBN is constructed within a defined cost and in compliance with certain other criteria. The technologies that may be used by NBN Co include fibre-to-the-node (FTTN), fibre-to-the-premises (FTTP), FTTB, HFC, fixed wireless and satellite. In this context, several trials of HFC deployment are proposed by NBN Co, and it will soon roll out FTTB, which it has been trialling.

In the absence of Schedule 3 powers, carriers operating national, wholesale-only, non-discriminatory broadband networks would need to comply with state and territory planning laws and obtain explicit land owner consent to inspect, install and maintain HFC and some FTTB facilities. This would mean a long and costly process for these carriers to install facilities that are by definition, low-impact, and which, if fibre, carriers could install under Schedule 3. Given the variations in rules for overhead and other telecommunications facilities under state, territory and local government planning regimes, inclusion of these facilities in the LIFD will streamline national rollouts of these facilities.

The amendments permit the facilities to be installed in commercial, industrial, residential and rural areas, as defined in Part 2 of the Principal Determination,

The amendments are being made on a time limited, and in the case of HFC, localised basis. This will facilitate the early rollout of new infrastructure. On this basis consultation has been targeted. More extensive consultation is proposed before the amendments are made ongoing. The amendments operate for a period of 12 months from commencement (the 'Designated Installation Period' (as defined)).

Carriers installing facilities using Schedule 3 powers and immunities must, among other things, comply with requirements at Clause 12 of Schedule 3 in the Act. Specifically, the installation satisfy meet relevant industry standards, including any relevant standards for the installation of telecommunications facilities on public utility infrastructure. In addition, carriers must make reasonable efforts to enter into agreements with public utilities when engaging in activities that are likely to affect the operations of the utility in accordance with Clause 11 of Schedule 3 in the Act.

Consultation

In March 2015, the Minister wrote to state planning ministers and mayors with HFC trials in their areas, state and territory public housing ministers, and organisations with an interest in strata matters namely the Property Council of Australia, Strata Community Australia and the Real Estate Institute of Australia about the Amending Determination and invited comment. The Minister has also consulted with NBN Co Limited in the development of the draft Amending Determination. The Department of Communications also wrote to electricity companies operating in the HFC trial regions in similar terms.

The Department received feedback from one stakeholder on the draft amendments, an electricity company. It noted the importance of carriers following safety protocols and technical standards when installing telecommunications facilities on their infrastructure. It also noted the importance of carriers accessing public utility infrastructure through negotiated commercial agreements in the first instance, rather

than relying solely on carrier powers and immunities for access. It is the Department's view that these concerns are addressed by existing requirements in Schedule 3 of the Act.

Regulatory Impact Statement

OBPR has advised that a Regulation Impact Statement is not required for the Amendment Determination OBPR ID 18583. In giving this advice OBPR noted that the changes contained in the Amending Determination are time limited.

Notes on Amendments and Attachments

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 1 and the Statement of Compatibility with Human Rights for the Amending Determination is set out in Attachment 2.

ATTACHMENT 1

Details of the *Telecommunications (Low-impact Facilities) Determination 1997 (Amendment No. 1 of 2015)*

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 2015)* (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.

Section 4 – Expiry

Once the Amending Determination has come into effect, it will have fulfilled its purpose (i.e. amending the Principal Determination) which will have ongoing effect for the period specified in relation to the amendment. Therefore, the amending instrument itself can be removed from the Federal Register of Legislative Instruments. Accordingly, a self-expiry provision has been included in the Amending Determination at section 4.

Schedule – Amendments

The Schedule to the Amending Determination sets out the specific amendments being made to the Principal Determination.

Item 1 – Section 1.3, definition of 'building connection equipment'

'Building connection equipment' provides a service to end-users within a multi-unit building or in a nearby building. Under the Principal Determination, such equipment can currently be installed inside buildings by a carrier as part of a national network used for the high speed carriage of communications on a wholesale-only and non-discriminatory basis.

Item 1 amends the definition of 'building connection equipment' to enable such equipment to be installed on the outside of a multi-unit building during the 'Designated Installation Period' (that is, the specified twelve month period).

This change is necessary as older style apartment complexes (for example, those without basement parking or a communications room) may not have enough suitable space to install building connection equipment necessary for FTTB deployments. As

a result critical equipment may need to be installed outside the building in some instances. It also accommodates newer style equipment designed to service larger number of subscribers as part of an FTTB deployment.

As a matter of general industry practice, it is expected that where there is space inside a multi-unit building for the equipment, it would be installed in that interior location. All other aspects of the existing definition of 'building connection equipment' remain unchanged.

An example of a permissible facility under this amended definition would be a micronode enclosure that houses FTTB equipment, which is attached to the outside of a multi-dwelling building for use by end-users located inside the building, or a nearby building.

It is expected that a range of facilities which are ancillary to a building connection equipment may also need to be installed as part of a FTTB deployment. These include miscellaneous protective enclosures, electrical, and electrical metering equipment small in size, not warranting individual specification. As these kind of facilities are captured by section 3.1(4) (a) or (b) (as the case may be) of the Principal Determination, they do not need to be separately specified.

Items 2 and 3 – Section 1.3 (Definitions)

Items 2 and 3 of the Schedule insert two new definitions into section 1.3 of the Principal Determination.

The first new definition is 'Designated Installation Period'. The term is used in relation to the new HFC and FTTB facilities in the Amending Determination and limit the timeframe in which such new facilities are permitted to be installed (namely, 12 months from when the Amending Determination takes effect). This is being done to reflect the trial nature of the HFC installations and in acknowledgement that wider public consultation will be required to determine whether it is appropriate for facilities of this kind to be installed on a wider scale and on an ongoing basis.

Facilities that are installed during the Designated Installation Period can stay in place after the expiration of the 12 month period, and carriers may continue to inspect and maintain these facilities on an ongoing basis under Schedule 3 following expiration of the 12 month period.

The second new definition is 'HFC Trial Region' and covers the following areas:

- Merrimac, (City of Gold Coast) Queensland;
- Redcliffe (Moreton Bay Regional Council) Queensland;
- Slacks Creek (City of Logan) Queensland; and
- Emu Plains (City of Penrith), New South Wales.

These are areas where NBN Co has indicated it intends to conduct trials of the deployment of hybrid-fibre coaxial (HFC) networks.

Item 4 – At Column 2, Item 8 of Part 3 of the Schedule

Item 4 of the Schedule effectively updates the maximum permissible substantive volume for building connection equipment to 0.59 cubic metres. As noted above, the equipment provides a service to either end-users within the multi-unit building in or on which the equipment is installed, or end-users who are located in another nearby multi-unit building. 'Substantive volume' is already defined in the Principal Determination (for further explanation of this term see the explanatory statement for the *Telecommunications (Low-impact Facilities) Determination 1997 (Amendment No. 1 of 2011).*

The revised volume will allow new equipment used in FTTB deployment, such as micronode enclosures. Such an enclosure could for example measure 1360x1040x380 millimetres. The volume limit includes a 10% margin in addition to the largest known equipment size.

This increase in volume is not restricted to the HFC trial regions, but is subject to the 12 month installation limit. Under Item 8 of Part 3 of the Schedule, such equipment can only be installed using carrier powers and immunities by a carrier as part of a national network used for the high speed carriage of communications on a wholesale-only and non-discriminatory basis.

Item 5 – At Column 2, Item 9 of Part 3 of the Schedule

Item 5 of the Schedule effectively updates the maximum permissible substantive volume for in-building network equipment to 0.59 cubic metres. This equipment covers a broad class of equipment deployed in a multi-unit building for a purpose other than directly supplying carriage services to end-users. Given the need to cover a wider range of operational scenarios, the permissible volume of such equipment needs to be increased. The maximum permissible substantive volume matches that for building connection equipment.

Similar to Item 4 above, this existing facility (with an updated volume measurement) is not restricted to HFC trial regions but is subject to the 12 month installation limit. Under Item 9 of Part 3 of the Schedule, such equipment can only be installed using carrier powers and immunities by a carrier as part of a national network used for the high speed carriage of communications on a wholesale-only and non-discriminatory basis.

Item 6 – After Item 5, Part 4 of the Schedule

Item 6 of the Amending Determination inserts a new item into Part 4 of the Schedule to the Principal Determination. This new item accommodates HFC equipment installed underground and is intended to cover a broad range of underground facilities associated with a HFC network, such as optical node devices, and which must not exceed 0.23 cubic metres. This class of new underground facilities is subject to the 12 month installation limit and can only be installed in a HFC Trial Region. Such equipment can only be installed using carrier powers and immunities by a carrier as part of a national network used for the high speed carriage of communications on a wholesale-only and non-discriminatory basis.

Item 7 – After Part 4A of the Schedule

Item 7 of the Amending Determination inserts new Part 4B into the Schedule to the Principal Determination. The effect is that new above-ground HFC and related facilities are specified as low-impact facilities.

The facilities detailed in new Part 4B are intended to support the aerial deployment of HFC networks as part of the HFC trials to be conducted by NBN Co. In addition to the bespoke features of each item, there are three common and essential features of the facilities listed in new Part 4B of the Schedule (as being amended):

- they can only be deployed within the defined 12 month period (i.e. during the Designated Installation Period);
- they can only be installed in a HFC Trial Region (as defined) that is zoned for residential, commercial, industrial or rural use; and
- they must be part of a national network used for the high speed carriage of communications on a wholesale-only and non-discriminatory basis.

It is expected that a range of facilities which are ancillary to the new facilities will also be installed. These include miscellaneous protective enclosures, electrical, and electrical metering equipment small in size, not warranting individual specification. As these kind of facilities are captured by section 3.1(4) (a) or (b) (as the case may be) of the Principal Determination they do not need to be separately specified.

New Item 1 of Part 4B of the Schedule - overhead HFC cables

Item 1 of Part 4B of the Schedule will cover the aerial deployment of HFC cabling in a similar way to the aerial deployment of optical fibre cabling (Part 4A of the Schedule). Specifically, item 1 covers above-ground HFC line links (single or bundles) deployed or attached to a public utility structure, building or other structure. This item is intended to cover the distribution component of an above-ground HFC network. Consistent with regulation 11.2 of the *Telecommunications Regulations 2001,* the maximum permissible external cross-section of any single line link or cable bundle is 30 millimetres (mm).

While it is expected that generally a single overhead HFC cable would be strung between poles in any one location, to provide flexibility the instrument allows two or more overhead HFC cables in any one location. If two or more HFC cables are bundled, the bundle as a whole, not the individual cables would need to be within the maximum permissible external cross-section of 30 mm.

New Item 2 of Part 4B of the Schedule – optical node device

New Item 2 of Part 4B of the Schedule covers optical node devices. These are devices which convert optical signals from the optical fibre cables to electrical signals for transmission on the coaxial cable, and electrical signals from the coaxial cable the coaxial cables into optical signals for transmission over the optical fibre cables. The device is usually clamped to, strung from, or otherwise mounted on, a cable or structure. The maximum permissible volume for an optical node device is 0.043 cubic metres. This facility type is usually enclosed in a rectangular shaped container. It is largely analogous to the optical node device in an FTTP deployment, which is already provided for in the Principal Determination.

New Item 3 of Part 4B of the Schedule – HFC amplifiers

New Item 3 of Part 4B of the Schedule covers HFC amplifiers. These are devices which either amplify or de-amplify the signal strength on a coaxial cable. The maximum permissible substantive volume for the specified HFC amplifier is 0.013 cubic metres. This facility type is usually enclosed in a rectangular shaped container. Similar to an optical node device, these items are typically clamped to, strung from or mounted on a cable or other structure (such as a pole).

New Item 4 of Part 4B of the Schedule – HFC outdoor tap

New Item 4 of Part 4B of the Schedule covers HFC Taps. They are passive devices which allow for the connection of a main coaxial cable to a lead-in cable. They are usually affixed to or mounted on a cable or other structure. The maximum permissible volume for a HFC outdoor tap is 0.002 cubic metres. They are largely analogous to fibre access terminals in an FTTP deployment.

New Item 5 of Part 4B of the Schedule – HFC drop cables

New Item 5 of Part 4B of the Schedule covers a single aerial HFC drop cable or a bundle of aerial HFC drop cables. These cables are lead-ins used to connect premises to the main cabling for the network. The maximum permissible external cross-section of a HFC drop cable is 13 mm, where the drop cable is attached to a single-unit building and 30 mm, when attached to a multi-unit building. They are largely analogous to optical fibre drop cables in an FTTP deployment.

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.

New Item 6 of Part 4B of the Schedule – premises connection device

New Item 6 of Part 4B of the Schedule specifies premises connection devices of a particular type. This class of facility is intended to capture above-ground facilities used to connect drop cables to single dwelling premises, similar to the device already used to connect fibre lead-in cables to premises in FTTP areas.

As the box can store the end of a HFC 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 at which the box is installed to actually be, or

intending to be, a subscriber to a telecommunications service supplied by means of the facility.

The maximum permissible substantive volume for the premises connection devices installed is 0.007 cubic metres. This facility type includes but is not limited to square and rectangular shapes. This facility could for example measure 250x270x85 millimetres.

New Item 7 of Part 4B of the Schedule – HFC power supply units

New Item 7 of Part 4B of the Schedule covers HFC power supply units. They are cabinets that are installed above ground, typically mounted on a utility pole. The cabinets contain a transformer that steps down mains voltage and injects this power to the coaxial cable, which is used to power the optical nodes and amplifiers. The cabinets also contain backup batteries to maintain service in the event of a power outage. The maximum permissible substantive volume for this unit is 0.15 cubic metres. This facility could for example measure 622x615x355 millimetres.

New Item 8 of Part 4B of the Schedule – auxiliary HFC equipment (Type A)

New Item 8 of Part 4B of the Schedule covers auxiliary HFC equipment (Type A). These are devices such as directional couplers and line splitters which connect, isolate or split a coaxial cable. They allow signals to be shared across multiple cables. They are usually affixed to a cable or other structure. The maximum permissible volume for Auxiliary HFC equipment (Type A) is 0.002 cubic metres. This facility could for example measure 122x145x86 millimetres.

New Item 9 of Part 4B of the Schedule – auxiliary HFC equipment (Type B)

New Item 9 of Part 4B of the Schedule covers auxiliary HFC equipment (Type B). These are devices such as line power inserters and equalisers which inject power into coaxial cable, or balance the distribution of power and radio frequency budget of a HFC network or actively manage the operational elements of a HFC network. They are usually affixed to a cable or other structure. The maximum permissible volume for auxiliary HFC network management equipment is 0.002 cubic metres. This facility could for example measure 122x145x86 millimetres.

ATTACHMENT 2

Statement of Compatibility with Human Rights

Prepared in accordance with Part 3 of the Human Rights (Parliamentary Scrutiny) Act 2011

Telecommunications (Low-impact Facilities) Determination 1997 (Amendment No. 1 of 2015)

The *Telecommunications (Low-impact Facilities) Determination 1997 (Amendment No. 1 of 2015)* (the Amending Determination) is compatible with the human rights and freedoms recognised or declared in the international instruments listed in section 3 of the *Human Rights (Parliamentary Scrutiny) Act 2011*.

Overview of the Amending Determination

The *Telecommunications (Low-impact Facilities) Determination 1997* (the Principal Determination) is made under subclause 6(3) of Schedule 3 to the *Telecommunications Act 1997* (the Act). Schedule 3 provides carriers with the power to inspect land to determine whether the land is suitable for the carrier's purpose; install certain types of facilities (primarily low-impact facilities) on the land; and maintain a facility that is situated on the land; without seeking state, territory or local government planning approval or land owner consent.

Schedule 3 of the Act requires carriers to notify land owners of intended activities enabled by the Principal Determination. The *Telecommunications Code of Practice 1997* requires carriers to make reasonable efforts to resolve valid objections from land owners or occupiers. If the land owner or occupier is not satisfied with the carrier's proposed resolution, and no agreement can be reached, they may ask the carrier, in writing, to refer the objection to the Telecommunications Industry Ombudsman (TIO) for resolution if it wishes to continue with the activity. The carrier must comply with the request to refer the matter to the TIO. Carriers must comply with any direction made by the TIO.

The purpose of the Amending Determination is to amend the Principal Determination to include hybrid fibre-coaxial (HFC) and fibre-to-the-basement (FTTB) facilities installed by carriers operating a national network for the high speed carriage of communications on a wholesale-only and non-discriminatory basis, such as NBN Co Limited. These amendments will be added to the Principal Determination for up to 12 months to facilitate NBN Co trials of HFC and the rollout of FTTB. The Principal Determination will be updated further, depending on the outcomes of public consultation.

Key amendments include:

- inserting a new Part 4B into the Schedule to the Principal Determination to provide for nine new categories of HFC facilities as low-impact facilities;
- inserting a new Item 5 into Part 4 of the Schedule to the Principal Determination to provide for a new type of underground HFC facility;

- amending the definition of ‘building connection equipment’ to allow it to be installed on the exterior of a multi-unit building; and
- increasing the maximum permissible volume measurements for ‘building connection equipment’ and ‘in-building subscriber connection equipment’ to accommodate newer style equipment designed to service a larger number of subscribers as part of an FTTB deployment.

The items in new Part 4B and new item in Part 4 can be deployed within a defined 12 month period and in the following areas:

- Merrimac, Queensland;
- Redcliffe, Queensland;
- Slacks Creek, Queensland; and
- Emu Plains, New South Wales.

This support will trial deployment of HFC equipment by NBN Co Limited, but the powers and immunities are available to other carriers operating on a comparable basis.

No human rights issues were raised during the limited consultation undertaken in developing the draft Amending Determination

Human rights implications

The Amending Determination does not engage any of the applicable rights or freedoms.

Conclusion

This Amending Determination is compatible with human rights as it does not raise any human rights issues.