Te Kāwanatanga o Aotearoa
New Zealand Government

Attachment 1.5

Proposed provisions – Amendments to the Resource Management (National Environmental Standards for Telecommunication Facilities) Regulations 2016

National direction consultation – Package 1: Infrastructure and development

Instrument topic: Proposed amendments to the National Environmental Standards for Telecommunication Facilities (NES-TF)

- The proposed provisions are for consultation purposes and do not represent the proposed National Environmental Standards (NES) wording, which will be drafted after the consultation phase. For changes where the accompanying discussion document includes options, this document includes the Government's preferred option and the alternative option.
- No other existing provisions of the NES-TF are open to public consultation and submission.
- The NES-TF follows a different approach to other NES when referring to permitted activities and permitted activity standards. Under regulation 10 it specifies that a person must not use land for a regulated activity unless it is carried out under a permitted activity rule in the NES-TF or a resource consent is granted. This document refers to the terms used in the NES-TF.

Application	Proposal	Reason
Where will NES-TF apply?	No change. The NES-TF will continue to apply nationwide to all districts to support national consistency for telecommunication infrastructure.	The deployment and upgrade of telecommunication infrastructure will continue to be a nation-wide issue.

PART 1: PRELIMINARY MATTERS Section 4 Interpretation (definitions) Proposed amended definitions	Proposed provisions	Reasons
Ancillary equipment	Amend the definition to include 'accessory buildings (as defined in the National Policy Statement 2019), fencing, guy wires and associated anchor structures, and security devices/cameras' within scope of the definition of ancillary equipment.	The meaning of ancillary equipment has been interpreted differently across the country. The proposed change will clarify the meaning and assist in the interpretation of regulated activities and standards. Accessory buildings would enable telecommunication providers to construct shelters, necessary at remote telecommunication facilities to store equipment or provide shelter for personnel undertaking maintenance. Guy wires are necessary for taller poles in rural sites to provide stability. Fencing and security devices are necessary to reduce the risk of telecommunication facilities being vandalised and minimise the risk of disruption.
Facility	A facility in the NES-TF currently means an antenna, cabinet, telecommunication line, or small cell unit. The proposed amended definition will refer to a 'telecommunication facility' and will include a pole and ancillary equipment.	To ensure that all parts of a telecommunication facility are included in the definition.
Flange	The projecting part at the base of the pole to strengthen and secure it to the ground (see figure 8 in Attachment 1.5.1).	This new definition will accompany changes to regulation 7 to help provide greater national consistency on how the width of a pole is measured.
Headframe	Currently, a headframe means a structure attached to a pole that enables more than one antenna to be attached, and results in a notional envelope[1] of the pole being larger than 0.7 m in diameter. The proposed amended definition will increase this minimum notional envelope to 1.2 m.	This amended definition will align with the proposed increase in the permitted diameter for the notional envelope of poles in the road reserve without a headframe. The increase in notional envelope for antenna is necessary to support the roll-out of 5G services and reduce the number of consents required for low-impact upgrades.
RFG (radiofrequency generation) facility	Currently, an RFG facility is defined as an antenna or a small cell unit, if it generates radiofrequency fields or will do so when it is in operation; or a cabinet, if the equipment in the cabinet generates radiofrequency fields, or will do so when the equipment is in operation. The proposed amended definition is 'a facility that generates radiofrequency fields or will do so when it is in operation'.	The current definition limits what is captured by an RFG facility and can create confusion. The proposed change will capture all necessary equipment for a telecommunication facility that generates radio frequency fields. This will also ensure all components of a facility that generates radio frequency fields are captured by the radio frequency fields' safety standards.

[1] Notional envelope, for a pole, means the smallest notional cylindrical shape into which all non-dish antennas attached to the pole (including any shroud but not including any mount or ancillary equipment) would fit.

PART 1: PRELIMINARY MATTERS Section 4 Interpretation (definitions) Proposed amended definitions	Proposed provisions	Reasons
Small cell unit	Amend the definition by increasing the volume of a small cell unit from 0.11 m^3 to 0.33 m^3.	This increases the size of small cell units to align with changes to small cell unit technology. The telecommunication industry has indicated that the current definition is too constraining and does not allow for cabling and casing (which reduce visual impact). Small cell units are expected to become more necessary in dense urban areas to provide sufficient capacity, including for example as part of the 5G network.

Section 4 Interpretation (definitions) Proposed definitions	Proposed provisions	Reasons
D1 Area adjoining road reserve	Add a new definition to refer to the area on each side of a road and up to the legal boundary of the adjoining land.	A new definition is required to clarify that, where a road is also a boundary between two zones with distinct permitted activity standards in NES-TF, each side of the road adopts each zone's distinct rules (for example, pole heights may be taller on one side of the road in a commercial zone than the other side in a residential zone).
D2 Renewable electricity generation activity	Add a new definition for structures and equipment associated with renewable electricity generation from solar and wind energy sources for telecommunication facilities (freestanding or surface-mounted on a building). This includes any cables or ancillary equipment connecting to the facility. This new definition will accompany changes to regulation 5 to include self-contained power units as part of installing and operating a facility subject to complying with new regulated activity standards.	The NES-TF does not currently define, or make provision for, the installation and operation of renewable electricity generators for telecommunication facilities. These are often needed to provide electricity for telecommunication facilities in more remote parts of the country that are off-grid, or to provide resilience in the event of a mains power outage. The new definition will align with the definition in the proposed National Policy Statement for Renewable Electricity Generation for community generators.
D3 Sensitive activities	Add a new definition for sensitive activities that includes residential buildings (including visitor accommodation and retirement accommodation), care facilities, childcare facilities, schools, hospitals, custodial or supervised accommodation where residents are detained on site, marae, or a place of worship.	The NES-TF currently specifies that new poles outside of the road reserve in rural zones must be at least 50 m from buildings used for residential or educational purposes. There are differing interpretations of this rule by local authorities. These changes clarify what constitutes 'sensitive activities' and align with the wording and intent in the proposed National Policy Statement for Electricity Networks.

Section 4 Interpretation (definitions)		
Proposed definitions	**Proposed provisions**	**Reasons**
D4 Temporary telecommunication facility	Add a new definition for a temporary telecommunication facility that provides network coverage or capacity for the following specified timeframes and circumstances: a) during or post emergency event for up to six months from the point a local, regional, or national state of emergency is declared; b) during routine maintenance, replacement or upgrading of an existing facility, or an unplanned outage to an existing facility, for a period of up to six months, where the temporary telecommunication facility is located within 100 m of the existing facility; and c) for an event, or during high-capacity demand holiday periods, for up to three months.	A new definition is needed because temporary telecommunication facilities are necessary for telecommunication providers to provide network coverage or additional capacity in a range of scenarios. Figure 7 in Attachment 1.5.1 shows an example of a 'cell-on-wheels' attached to a trailer. Leniency provisions will enable district councils to permit temporary telecommunication facilities for a longer duration than the timeframes specified in the new definition.

AMENDMENTS PROPOSED TO REGULATIONS		
Regulations	**Proposed provisions**	**Reasons**
Regulation 5(1) and 5(2) – Installing and operating a facility	Amend regulation 5(1)(b) to include installation and operations of structures and equipment for renewable electricity generation activities. Amend regulation 5(2)(a) to clarify that a facility can include a self-contained power unit.	The current regulations regarding installing a facility exclude self-contained power units (which include renewable and non-renewable electricity generation). This regulation will be amended to enable new standards for renewable electricity generation activities and self-contained power units as back-up for renewable electricity generators and for temporary telecommunication facilities (which may include a generator).
	Clarify that installing and operating a facility includes 'upgrading, expanding, replacing, removing and decommissioning' a telecommunication facility.	There is currently ambiguity about whether the NES-TF permits several necessary activities as part of installing and operating a facility, for example, upgrading or removing. These changes clarify that these activities are captured as part of installing and operating any telecommunication facility that is a regulated activity in the NES-TF.
Regulation 6 – Meaning of baseline pole and baseline date	Amend regulations 6(1) to (4) to remove references to 'pole A', which relates to replacing existing poles in the road reserve.	Replacing existing poles in the road reserve will no longer be tied to the height and width of existing poles but to specific dimension limits set by zone (ie, a height cap). Therefore, there is no longer a need for poles in the road reserve to reference the height of existing poles at a specified date.

AMENDMENTS PROPOSED TO REGULATIONS		
Regulations	**Proposed provisions**	**Reasons**
Regulation 7 – Measurements	Amend clause 7(2) to clarify how the width of a pole is to be measured for the purpose of ensuring compliance with the NES-TF. This proposed change will clarify that the flange (new definition above) and any ancillary equipment are not part of the measurement for the width of a pole.	There is inconsistency between district plans in how this regulation is interpreted currently. There is no discernible visual effect from the flange, which is necessary for the structural integrity of a pole.

PART 2: CARRYING OUT OF REGULATED ACTIVITIES		
Proposed regulation	**Proposed provisions**	**Reasons**
R1 Leniency provisions	Insert new leniency provisions specifying that the definition of a temporary telecommunication facility can permit their operation for longer than the proposed timeframes in the new NES-TF definition.	Currently, if a regulated activity is not carried out in accordance with NES-TF standards but is a permitted activity in a district plan, it is still classified as requiring a controlled activity resource consent. This amendment will remove the need for a controlled activity resource consent for temporary telecommunication facilities permitted by some district plans for a longer duration than those in the proposed NES-TF changes, reducing consenting costs. Some councils permit temporary telecommunication facilities for up to 12 months, and so these leniency provisions will mean this longer timeframe would continue to be permitted.

PART 3: REGULATED ACTIVITIES AND STANDARDS Subpart 1 – Cabinets Amendments to existing provisions		
Regulations	**Proposed provisions**	**Reasons**
Regulations 20(3)(a) and 20(3)(b) – Cabinet not servicing antenna on building	Amend the height and dimension conditions for cabinets not servicing antenna on buildings as follows: a) *in a road reserve adjacent to a residential zone*: increasing the cabinet height from 1.8 m to 2.0 m and the footprint from 1.4 m^2 to 2.0 m^2; b) *in a road reserve adjacent to any other zone*: increasing the cabinet footprint from 2.0 m^2 to 3.0 m^2.	Cabinets need to increase in size to store additional back-up batteries and additional equipment to support new technologies (for example the deployment of 5G mobile services). Bigger cabinets also increase airflow resulting in lower temperatures and less cooling needed from fans, which in turn reduces the noise from the cabinets.

PART 3: REGULATED ACTIVITIES AND STANDARDS Subpart 1 – Cabinets Amendments to existing provisions		
Regulations	**Proposed provisions**	**Reasons**
Regulation 21(3)(a)(ii) – Cabinet servicing antenna on building	Amend the footprint dimension conditions for cabinets servicing buildings by increasing from 2.0 m^2 to 3.0 m^2.	The larger permitted groups of cabinets for multiple facility operators support co-location of equipment and network optimisation. This means mobile network operators and tower companies can roll out fewer but taller towers and reduce the footprint of the network (with a corresponding trade-off in visual and amenity effects). This would only apply outside of a residential zone, where the amenity and visual impact of larger groups of cabinets are considered low.
Regulation 22(1)(b)(ii) **Footprint rules for groups of cabinets in road reserves**	Amend the dimension conditions for groups of cabinets in road reserves by increasing the footprint of a group of cabinets from 2.0 m^2 to 3.0 m^2. Amend the dimension for groups of cabinets in the road reserve for co-location to 6.0 m^2 where the group of cabinets support two facility operators, and 9.0 m^2 for three or more facility operators.	
Regulations 22(1)(a)(i) and 22(1)(b)(i) – Group rules for cabinets in road reserves	Reduce the minimum distance that separates groups of cabinets from 30 m to 10 m. If the cabinets are to support more than one facility operator on a single facility, then no separation between the groups of cabinets for each facility operator is required.	Currently, cabinets or groups of cabinets in the road reserve need to be at least 30 m away from any other telecommunication cabinet or group of telecommunication cabinets. Changes to the cabinet grouping rules are needed to support co-location and network optimisation. As cabinets increase in size, it would be difficult to place them close enough to the cell tower under existing rules, which leads to signal and power loss.
Regulation 25 – Noise limits for cabinet not in road reserve	Amend the point of measurement for the noise of a cabinet not in the road reserve (currently set in district plans) so that it is consistent with the point of measurement that applies to cabinets in the road reserve under regulation 24.	This enables the industry to have national consistency for cabinet noise measurements. Facility operators have standardised noise assessments and reports for the various cabinet configurations of cabinets in the road reserve and have sought to apply these to cabinets outside of the road reserve.

Subpart 2 – Antennas on poles in the road reserve		
Regulations	**Proposed provisions**	**Reasons**
Regulations 26(1)(b), 27(2)(a) , 28(1)(a) and 29(6) on new or existing poles in the road reserve	Amend the regulated activity and standard to remove the current limitations on the location of new or replacement poles in the road reserve. This will enable the installation of poles with antennas anywhere in the road reserve (noting areas identified in district plans with special, natural or heritage significance as per Subpart 5 of the NES-TF would remain subject to district plan rules).	Currently, the NES-TF specifies that replacement poles in the road reserve must be within 5 m of the original pole it is replacing (regulation 27), and that new poles must be within 100 m of existing poles (regulation 28). These distance requirements impede efficient network design and optimisation. They incentivise telecommunication providers to group together new poles and, in some cases, prevent them from locating poles in areas that would have lower visual or amenity impacts.

Subpart 2 – Antennas on poles in the road reserve		
Regulations	**Proposed provisions**	**Reasons**
		Under this proposed change, telecommunication providers will be able to more freely construct new telecommunication poles in the road reserve without having to obtain a resource consent. Consequently, the placement of new poles can be based on network design requirements and commercial feasibility and not be constrained by the location of existing infrastructure. This would particularly support connectivity solutions in transport corridors (eg, state highways, local roads) where it is likely to be easier to connect fibre backhaul.
Regulations 27(5) and 29(4) on the pole height rules for new or existing poles in the road reserve	Amend the permitted standard for the maximum permitted height for poles adjoining the road reserve so that they are more permissive. There are two options under consideration to achieve this. **Option 1 [Government's preferred option]:** a) *Residential, local centre, neighbourhood centre zones* – 20 m. b) *Rural zone* – 35 m, increased from 25 m. For new poles, apply the 50 m setback from buildings used for sensitive activities on a neighbouring property (as applied for new poles outside of the road reserve in a rural zone). c) *All other zones* – 25 m. For clarity, this includes coastal settlement, commercial, mixed-use, industrial, metropolitan, open space and special purpose zones, but noting areas identified in district plans with special, natural or heritage significance as per Subpart 5 of the NES-TF would remain subject to district plan rules. **Option 2:** Permit caps to be the higher of either of those proposed above in Option 1, or building zone height plus 5 m for poles in commercial zones (capped at 30 m), industrial zones and residential zones. For both options, a further 5 m height is afforded where two or more facility operators are co-located on the same pole (excluding residential zones).	Currently, the height of new or replacement poles is tied to the height of existing poles in the road reserve. This often does not meet the operational need to provide and maintain coverage in the environment, meaning that telecommunication providers are increasingly reliant on seeking resource consents. It also makes network planning difficult, given the significant variation in legacy pole heights in different zones and parts of the country. In urban areas, the proposed changes support the housing intensification initiatives by addressing coverage gaps resulting from taller buildings being permitted. See figure 9 in Attachment 1.5.1, which demonstrates how taller buildings are limiting coverage. The proposed 35 m maximum for poles in a rural zone supports rural connectivity by addressing coverage obstacles resulting from topography and overgrown shelter belts and trees. The proposed changes and additional 5 m height also support co-location and network optimisation because taller towers have more space at the top for multiple providers to co-locate their equipment on the one pole. This means telecommunication providers can roll out fewer but taller towers and reduce the footprint of the network (with a corresponding trade-off in visual and amenity effects). This can also have other environmental benefits, with less materials required for more poles. Option 1 provides greater certainty on the proposed caps being applied consistently in zones across the country, while Option 2 provides greater flexibility in some zones to permit taller poles to meet operational need in their built environment (now and in the future). Option 2, however, would permit much taller poles in some zones (eg, in high-density residential zones that permit 22 m buildings, this would permit 27 m poles).

Subpart 2 – Antennas on poles in the road reserve		
Regulations	**Proposed provisions**	**Reasons**
Regulations 27(6) and 29(5) on the pole width rules for new or existing poles in the road reserve	Amend the permitted standard for the maximum pole width at the base to 0.9 m if the road reserve is adjoining a residential zone, or otherwise 1.5 m for all other zones.	Currently, the permitted standard for the maximum widths in these areas are complex and tied to the width of an existing pole. This amendment will simplify these standards. The proposed pole widths align with the increase in pole height to meet engineering design specifications and load requirements for poles. The pole widths also support facility operators to co-locate equipment on poles with an increased load from additional antennas.
Regulations 27(3) and 29(3) on the antenna size rules for non-dish antenna[2] on new or existing poles in the road reserve	Amend the permitted standard for the notional envelope of non-dish antenna per facility operator for poles without a headframe to be no larger than 5.0 m in length (increased from 3.5 m) and 1.2 m in diameter (increased from 0.7 m). Where the existing notional envelope of non-dish antennas on a pole is larger than these measurements, this will be the permitted maximum notional envelope.	The current NES-TF notional envelope rules for poles in the road reserve do not support the roll-out of 5G services and do not provide enough flexibility to allow for future technologies. The changes will allow for telecommunication providers to stack sets of antennas (such as co-locating 4G and 5G antennas), which will support the roll-out of 5G services. Furthermore, antennas may need to pivot to provide coverage in an area, which also increases the notional envelope. Pivot capability helps reduce mobile blackspots and maximises coverage from mobile sites. Providing a larger notional envelope width also enables telecommunication providers to install a shroud over antennas of greater size without triggering resource consent. Visually, a shroud is more aesthetically acceptable because it conceals antennas and cabling (see figure 1 in Attachment 1.5.1 for an example of a shroud on a streetlight pole).
Regulations 27(3) and 29(3) on the antenna size rules for dish antenna for new or existing poles in the road reserve	Amend the permitted standard for the maximum diameter of a new or replacement dish antenna from 0.38 m to 0.6 m. Where the existing dish antennas on a pole are larger than these measurements, the existing diameter of dish antenna will be the maximum permitted diameter. The protrusion distance for new and replacement dish antenna would also increase from 0.6 m to 0.8 m. Where the existing dish antenna's protrusion distance on a pole exceeds this, the existing dish antenna's protrusion distance will be the maximum permitted.	These increases align with the need for larger dish antenna to increase the distance a signal can be sent (eg, via Digital Microwave Radio). This is particularly relevant for rural and remote sites without fibre backhaul, but also can be used to provide resilience to telecommunication facilities in the event of damage to fibre backhaul.

[2] Non-dish antenna include panel antenna and aerial antenna.

Subpart 2 – Antennas on poles in the road reserve		
Regulations	**Proposed provisions**	**Reasons**
Regulations 27(7) and 29(2)(b) on the headframe rules for new or existing poles in the road reserve	Amend the regulated activity and permitted standards for installation of a headframe on new or existing poles in the road reserve so that these rules are more permissive. There are two options under consideration to achieve this. **Option 1 [Government's preferred option]:** Permit the installation of 1.6 m headframes (excluding antennas) on poles in the road reserve in commercial, industrial, mixed-use and rural zones where a pole is supporting co-location of multiple facility operators. See figure 4 in Attachment 1.5.1 for an example of the proposed smaller 1.6m wide headframe. **Option 2:** Permit the installation of 4.5 m wide headframes on poles in the road reserve in commercial (excluding local centre or neighbourhood), industrial and rural zones (See figure 3 in Attachment 1.5.1 for an example of a 4.5 m headframe). Permit 1.6 m headframes (excluding antennas) on poles in the road reserve in residential, local centre, neighbourhood centre and mixed-use zones where a pole is at least 15 m in height and this is to support co-location of multiple facility operators. Under both options, the NES-TF will continue to permit replacement of existing headframes on poles in the road reserve up to their existing width, if they exceed this specified width.	Currently, the NES-TF does not permit installation of headframes on new or existing poles in the road reserve, unless it is to replace an existing headframe. These proposed amendments reduce consenting barriers to install headframes on poles in the road reserve. These changes would also support multiple providers to co-locate antennas, enabling the industry to roll out fewer towers in these zones. Option 1 would limit the installation of headframes to be on poles in the road reserve in areas where this is expected to have lower visual amenity impacts (ie, commercial, industrial and rural zones). Option 2 would be more enabling and go further to support greater co-location, but may have more significant adverse visual and amenity impacts, with headframes overhanging roads and footpaths.

Subpart 2 – Antennas on poles outside of the road reserve		
Regulations	**Proposed provisions**	**Reasons**
Regulation 31(4) on the antenna size rules for dish antenna on existing poles not in the road reserve and in residential zones	Amend the permitted standard for the maximum diameter of a new or replacement dish antenna from 0.38 m to 0.6 m. Where the existing dish antennas on a pole are larger than these measurements, the existing diameter of dish antenna will be the maximum permitted diameter. The dish antenna protrusion distance would also increase from 0.6 m to 0.8 m. Where the existing dish antennas protrusion distance on a pole	As above for dish antennas on poles in the road reserve, these increases align with the need for larger dish antenna to increase the distance a signal can be sent (eg, for Digital Microwave Radio). This can be used to provide backhaul in areas without fibre, or for resilience to telecommunication facilities in the event of damage to fibre backhaul.

Subpart 2 – Antennas on poles outside of the road reserve		
Regulations	**Proposed provisions**	**Reasons**
	exceeds this, the existing dish antennas protrusion distance will be the maximum permitted.	
Regulations 32(1)(a) and 33(2)(a) on new or existing poles outside of the road reserve and not in a residential zone	Amend the regulated activity and standard to enable the installation of new poles with antennas outside of the road reserve in commercial, industrial, local centre, mixed-use and neighbourhood centre zones. New poles in local centre, mixed-use and neighbourhood centre zones will include a height-in-relation-to-boundary setback of 4 m and 60° recession plane. In all other zones covered by this regulation (ie, special purpose and open space zones), the distance that a replacement pole can be built from the original pole will increase from 5 m to 10 m.	Currently, the NES-TF does not provide for new poles that are not replacement poles outside of the road reserve or rural zones. In these zones, the NES-TF only provides for the replacement of an existing pole. This impedes network design and optimisation because it means telecommunication providers are wholly reliant on district plan rules for new poles in these zones, which often require resource consents. This proposed change will enable telecommunication providers to build new telecommunication poles in areas where it is expected to have low environmental impacts. These amendments will support more efficient deployment of telecommunication infrastructure in these zones. Greater housing intensification is also expected to occur in and around commercial and mixed-use zones. The height-in-relation-to-boundary setback will also help to mitigate environmental impacts in some zones.
Regulations 33(3)(a) and 35(2)(e) on the antenna size rules for panel antenna for new or existing poles outside of the road reserve and not in a residential zone	Amend the permitted standard for the maximum width of panel antenna from 0.7 m to 1.0 m. Where the existing panel antenna on a pole is larger than these measurements, the width of existing panel antenna will be the permitted maximum width.	To reflect dimensions of some newer antenna models for newer technologies. Some antennas are wider because multiple antenna bands are incorporated into a single antenna fixture. These proposed amendments also align the permitted standards for existing poles outside of the road reserve in rural zones with proposed changes for new poles.
Regulations 33(3)(a) and 35(2)(f) on the antenna size rules for dish antenna for new or existing poles outside of the road reserve and not in a residential zone	Amend the permitted diameter of dish antenna from 1.2 m to 2.0 m (excluding residential, local centre, neighbourhood centre and open space zones, which will remain at 1.2 m). Where the existing dish antenna on a pole are larger than these measurements, the existing diameter of dish antenna will be the maximum permitted diameter (for all zones).	As above, for dish antenna on poles in the road reserve, this increase aligns with the need for larger dish antenna to increase the distance a signal can be sent (eg, for Digital Microwave Radio). This can be used to provide backhaul in areas without fibre (particularly relevant for rural and remote sites), or for resilience to telecommunication facilities in the event of damage to fibre backhaul.
Regulations 33(4) and 33(5) on the pole width rules for new or existing poles outside of the road reserve and not in a residential zone	Amend the permitted standard for the maximum width of a pole to 6 m for replacement of existing poles in rural zones and 1.5 m for new or replacement poles in other zones covered by this regulation (or the width of the existing pole if greater). The new 1.5 m maximum will also apply to new poles in commercial, industrial, local centre, mixed-use and neighbourhood centre zones.	As above, for the width of poles in the road reserve, currently the permitted standard for the maximum widths in these areas is complex and tied to the width of an existing pole. This amendment will simplify these standards. The proposed pole widths align with the increase in pole height to meet engineering design specifications and load requirements for poles. The pole

Subpart 2 – Antennas on poles outside of the road reserve		
Regulations	**Proposed provisions**	**Reasons**
		widths also support facility operators to co-locate equipment on poles with an increased load from additional antennas.
Regulation 33(6) on the headframe width rules for new or existing poles outside of the road reserve and not in a residential zone	Extend the permitted standard for installation of a headframe of up to 6 m wide to apply to *new* poles outside of the road reserve in commercial (excluding local centre or neighbourhood centre zones), industrial, or on existing poles in rural zones. This aligns with existing rules for poles not in the road reserve and not in a residential zone under regulation 33(6). Add a new permitted standard for installation of a headframe no greater than 1.6 m wide (excluding antennas) on a new pole in local centre, mixed-use and neighbourhood centre zones outside of the road reserve, where the pole is a minimum of 15 m in height and is supporting co-location of multiple facility operators.	This will enable headframes to be installed on new or existing poles outside of the road reserve in commercial, industrial, rural and mixed-use zones. These proposed amendments reduce consenting barriers to install headframes on poles in areas where this is expected to have lower visual and amenity impacts. It also enables installation of smaller headframes on poles to support co-location in mixed-use zones. These changes would support multiple providers to co-locate antennas, enabling the industry to roll out fewer towers.
Regulation 33(7) on the pole height rules for new or existing poles not in road reserve and in commercial, industrial, rural or mixed-use zones **Note this excludes residential zones.**	Amend the permitted standard for the maximum permitted height for poles outside of the road reserve so that they are more permissive. There are two options under consideration to achieve this. **Option 1 [Government's preferred option]:** a) *Local centre or neighbourhood centre zone* – 20 m with a height-in-relation-to-boundary setback of 4 m and 60° recession plane. b) *Mixed-use zone* – 25 m with a height-in-relation-to-boundary setback of 4 m and 60° recession plane. c) *Industrial and commercial zones* – 25 m. d) *Any other zone (excluding rural)* – permit existing poles outside of the road reserve to increase by 5 m from baseline pole height (increased from 3.5 m). **Option 2:** Permit caps to be the higher of either those proposed above in Option 1, or building zone height plus 5 m for poles in commercial zones (capped at 30 m) and industrial zones (no cap).	As above, for maximum pole heights in the road reserve, the proposed changes help ensure poles can meet operational need to provide and maintain coverage in the environment. While these changes do not apply to poles in residential zones outside of the road reserve, they will support taller poles in some zones adjacent to residential zones. The proposed changes and additional 5 m height also support co-location and network optimisation because taller towers have more space at the top for multiple providers to co-locate their equipment on the one pole. This means industry can roll out fewer but taller towers and reduce the footprint of the network (with a corresponding trade-off in visual and amenity effects). This can also have other environmental benefits with less materials required for more poles. Option 1 provides greater certainty on the proposed caps being applied consistently in zones across the country, while Option 2 provides greater flexibility in some zones to permit taller poles to meet operational need in their built environment (now and in the future).

Subpart 2 – Antennas on poles outside of the road reserve		
Regulations	**Proposed provisions**	**Reasons**
	For both options, a further 5 m height is afforded where two or more facility operators are co-located on the same pole (excluding residential zones).	
Regulation 35(2)(a) on the pole height rules for new or existing poles not in road reserve and in rural zone	Apply pole height rules for existing poles outside of road reserve in a rural zone to regulation 35 (previously applied to regulation 33). Amend the permitted standard for the maximum height for new or replacement poles outside of the road reserve in a rural zone from 25 m to 35 m (see figure 5 in attachment 1.5.1 for an example). A further 5 m height is afforded where two or more facility operators are co-located on the same pole.	As above, for maximum pole heights in the road reserve, the proposed 35 m maximum for new poles in the road reserve in a rural zone supports rural connectivity by addressing coverage obstacles resulting from topography and overgrown shelter belts and trees. The additional 5 m in rural zones will also support co-location on rural sites, where in some cases it may be less commercially viable for mobile network operators to build several facilities to provide coverage.
Regulation 35(2)(d) on the minimum setback from buildings for new poles not in the road reserve and in a rural zone	Amend the 50 m setback from buildings so it only applies to buildings on a neighbouring property, not buildings within the property boundary where the pole is being installed. Note a new definition is also proposed for 'sensitive activities' that would apply to this requirement and clarify which buildings this setback applies to.	Requiring a resource consent for a 50 m setback from a building on a private property where the owner has agreed to the installation and operation of a pole on that same property is restrictive and reduces telecommunication providers' ability to effectively build new towers in rural areas. The proposed change provides more flexibility to support construction of new towers within 50 m of buildings on that same property boundary, because the land owner would have to agree to this. This will help to retain environmental protections and mitigate visual and amenity impacts of new poles for buildings used for sensitive activities on neighbouring properties.

Subpart 2 – Antennas on buildings		
Regulations	**Proposed provisions**	**Reasons**
Regulation 37(3)(a) on the size rules for panel antenna	Amend the permitted standard to change the 1.5 m^2 area limit for a group of panel antennas on buildings in all but residential zones to a 1.0 m limit on the width of individual panel antenna. For buildings in residential zones, increase from 1.5 m^2 to 3 m^2 area limit for panel antenna.	To reflect dimensions of some newer antenna models. Some antennas are wider because multiple antenna bands are incorporated into a single antenna fixture. This would also align with antenna width rules for antenna on poles.
Regulation 37(3)(b) on the size rules for dish antenna	Amend the permitted standard for the maximum permitted diameter of dish antenna from 1.2 m to 2.0 m on all buildings, excluding those in a residential zone (which remain at 1.2 m).	This increase aligns with the need for larger dish antenna to increase the distance a signal can be sent (eg, for Digital Microwave Radio). This can be used to provide backhaul in areas without fibre, or for resilience to telecommunication facilities in the event of damage to fibre backhaul.

Subpart 2 – Antennas on buildings		
Regulations	**Proposed provisions**	**Reasons**
Regulation 37(4)(a) on the attachment rules for the top of the antenna	Amend the permitted standard on the height limit for antenna on buildings in a residential zone so that these rules are more permissive and enable poles on buildings with antennas to be higher. There are two options under consideration to achieve this. **Option 1 [Government's preferred option]:** Amend the height limit rules in the NES-TF to specify that antenna height on buildings in all zones only applies from the highest point of the building (not from the point an antenna is attached to a building). Increase the height limit for antenna on buildings not in a residential zone from 5 m to 10 m above the highest point of a building. **Option 2:** Amend the maximum permitted height for the top of an antenna on a building to be the building zone height plus 5 m. Reduce the height minimum to attach antenna to a building in a residential zone to 11 m (from 15 m), to enable antenna to be attached to three-storey buildings.	In urban areas, the proposed changes support housing intensification initiatives by addressing coverage gaps resulting from taller permitted buildings next to existing buildings with antenna. Option 1 would limit height increases of poles with antennas on buildings to non-residential zones, to mitigate the visual impacts of the proposed change. While Option 2 would provide telecommunication providers with more flexibility to install taller poles on buildings for antennas to retain coverage over taller neighbouring buildings, including on three-storey buildings in a residential zone. However, Option 2 may have more significant visual and amenity impacts on neighbouring buildings in a residential zone.

Subpart 4 – Telecommunication lines		
Regulations	**Proposed provisions**	**Reasons**
Regulations 39 and 40 on customer connection lines to heritage buildings	Amend clauses 39 and 40 to include a new regulated permitted activity for the installation and operation of customer connection lines (such as fibre) to a heritage building or structure. This would exclude wāhi tapu without buildings and archaeological sites. Proposed activity standards include: a) compliance with regulation 39 and 40 of the NES-TF regarding customer connection lines, including limits on the diameter of any lines and conduit, and that the line must be supported by existing structures; b) to make use of existing entry points for customer connection lines to a heritage building (noting that an additional aerial customer connection line attached to an existing line on the same route is permitted); and c) a customer connection line and any conduit must not be attached to a primary feature or front façade of an identified heritage building or structure. Where the permitted activity standards cannot be met, the activity will either default to a restricted discretionary activity (**Option 1 [Government's preferred option]**) or controlled activity (**Option 2**). Matters of discretion for both options would be limited to effects on historic heritage values and any other reasonable alternative installation solution.	Currently, under the NES-TF, any customer connection line to a heritage building installation must be carried out in accordance with the relevant district plan heritage rules. This means that each local authority can determine the level of restriction for customer connections to manage adverse effects on heritage values. This approach has resulted in a lack of national consistency in the requirements for line installation to heritage buildings and creates a cost barrier to installing fibre. The proposed new standards will enable customer connection lines to heritage buildings while managing effects on historic heritage values. Note the scope of the proposal will not affect consent requirements for other general telecommunication network activities (eg, antenna, pole and cabinet upgrades) in places subject to heritage rules. The proposed permitted activity rule would only apply to heritage buildings and would exclude other forms of historic heritage, such as wāhi tapu and archaeological sites, where there are no buildings. Telecommunication lines companies will still need to comply with tree protection rules in district plans. Lines companies will also need to continue to comply with the Building Code under the Building Act 2004, ensuring the building remains weathertight and meets external moisture performance.
Regulation 42(2)(c) on location of the replacement structure for aerial telecommunication line along same route as existing telecommunication or power line	Amend the permitted standard for the location of replacement support structures for telecommunication lines (eg, fibre) to be a maximum of 10 m from the existing location (increased from current 3 m maximum).	This provides fixed line operators with greater flexibility when locating a replaced pole and avoids triggering resource consent when it needs to move by more than 3 m.

Subpart 4 – Telecommunication lines		
Regulations	**Proposed provisions**	**Reasons**
Regulation 42(3)(a) on the height of the replacement structure for aerial telecommunication line along same route as existing telecommunication or power line	Amend the permitted standard for the replacement support structure for telecommunication lines (eg, fibre) so the height can increase by up to 3 m (currently limited to an increase of 1 m).	This would provide fixed line operators flexibility to replace poles to match manufacturer standards (some existing poles are 9 m, but manufacturer only supplies 11 m poles).

Proposed new provisions		
Proposed Regulations	**Proposed provisions**	**Reasons**
New Regulated Activity 1: Temporary telecommunication facilities	Introduce a new regulated permitted activity for a temporary telecommunication facility for coverage or additional capacity. Refer to the new definition proposed above for *Temporary telecommunication facility*, including the specified timeframes and circumstances for their use. The proposed standard for the activity is: a) that there shall be only one temporary telecommunication facility per site in the event it is to provide coverage for an existing facility for maintenance (not applicable in emergencies); b) all temporary facilities shall cease within the specified timeframes; c) the temporary facility must be removed from the site when the operation ceases; d) temporary telecommunication facilities are permitted in areas identified in district plans with special, natural or heritage significance, as per Subpart 5 of NES-TF, *in emergencies only* (as defined in the circumstances described in (a) above in definition) but only when they can be installed without damaging or altering the protected areas; e) if the temporary facility is an RFG facility, then regulation 55 (on radiofrequency fields) must be complied with;	These new standards are intended to provide national consistency on rules to support the provision of temporary telecommunication services where they are necessary from a civil defence, emergency response or public health and safety perspective. The importance of telecommunication services was highlighted in 2023 following the effects of Cyclone Gabrielle. Telecommunications are a critical part of the emergency management system, enabling people to contact dependants and emergency services. The new standards reduce the risk of consenting delays affecting coverage for an area during routine maintenance, installing or moving a facility, or an unplanned outage. These may require resource consents under district plans. The standards also help to ensure adequate coverage and/or additional network capacity for events or high-demand holiday periods (such as a holiday park or campground).

Proposed new provisions Proposed Regulations	Proposed provisions	Reasons
	f) as soon as practicable and no later than 3 months after completion of the works, the site must be reinstated and restored to its previous condition prior to the works; g) the maximum height of a temporary telecommunication facility is 25 m and has a maximum footprint of no greater than 15 m^2.	
New Regulated Activity 2: Renewable electricity generators	Introduce a new regulated permitted activity for installation and operation of renewable electricity generators in rural zones outside of the road reserve. This would also permit installation and operation of a non-renewable electricity generator for an off-grid site as back-up where a renewable energy source is not available. Proposed standards for solar panels (see figure 6 in Attachment 1.5.1) would specify: a) the distance from the top of the array or structure to the ground does not exceed 5 m; and b) the footprint of the overall size of solar arrays (excluding any gaps between panels) for all facility operators does not exceed 100 m^2; c) ground-mounted solar panels (excluding wiring and ancillary equipment) must be a minimum of 50 m from buildings used for sensitive activities on a neighbouring property; d) note solar arrays are excluded from reflectivity, glare and colour requirements under district plans. Proposed standards for wind turbines would specify: a) a maximum height of 25 m; b) the turbine and the structure it is connected to (excluding wiring and ancillary equipment) must be set back at a minimum of 50 m from buildings used for sensitive activities on a neighbouring property;	There are no national consistent standards to support the roll-out of renewable electricity generators. This change will make it easier for telecommunication providers to install and operate renewable energy electricity generators on facilities in rural zones. This will support rural connectivity by enabling providers to build facilities in remote areas without requiring connection to the National Grid, or to build resilience into the network by using alternative sources of power. The proposed maximum 100 m^2 footprint will provide sufficient flexibility to allow for larger solar panels to support newer technologies, towers with higher capacity needs, or co-location of more antennas.

Proposed new provisions		
Proposed Regulations	**Proposed provisions**	**Reasons**
	c) noise standards for wind farm noise in the National Planning Standard (New Zealand Standard 6808:2010 Acoustics) incorporated by reference.	

Subpart 5 – Application of district and regional rules		
Proposed Regulations	**Proposal**	**Reasons**
Regulation 46 Historic heritage values: Customer connection lines to heritage buildings	Amend regulation 46 to exempt customer service lines for heritage buildings from needing to comply with district plan rules.	To align with proposed new provisions enabling customer connection lines to identified heritage buildings.
Regulations 44 to 52: Temporary telecommunication facilities in an emergency	Temporary telecommunication facilities are permitted in areas identified in district plans with special, natural or heritage significance as per Subpart 5 of NES-TF, *in emergencies only* (as defined in the circumstances as described above in the definition of *temporary telecommunication facility*) when installed and removed without damaging or altering the protected areas.	To align with proposed new provisions on temporary telecommunication facilities, where they are necessary from a civil defence, emergency response or public health and safety perspective.

Attachment 1.5.1 – Pictures related to proposed amendment to the National Environmental Standards for Telecommunication Facilities

Figure 1: Example of a 20 m light pole with shroud in the road reserve in a residential zone in Christchurch (provided by Fortysouth)

Figure 2: Example of a 25 m pole on the road reserve adjoining a commercial (business local centre) zone in Auckland (provided by Fortysouth)

Figure 3: Example of a 4.5 m headframe on a 25 m pole outside of the road reserve in a commercial zone in Auckland (provided by Spark)

Figure 4: Example of a 1.6 m wide headframe on a 20 m pole in the road reserve in a residential zone in Christchurch (provided by Fortysouth)

Figure 5: Example of a 35 m slim-line lattice tower outside of the road reserve in a rural zone (provided by the Rural Connectivity Group)

Figure 6: Solar panels on a Rural Connectivity Group site in a rural zone outside of road reserve (provided by the National Infrastructure Funding and Financing company)

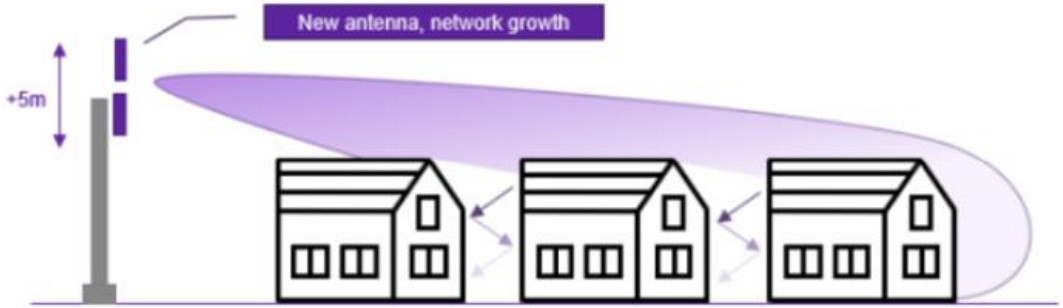
Figure 7: Example of a temporary telecommunication facility known as a ‘cell-on-wheels' attached to a trailer (provided by Spark)

Figure 8: Flange or projecting part at the base of the pole excluded from pole width measurements

Figure 9: Demonstrating how taller buildings are limiting coverage from antennas

Wireless signals do not travel easily through obstructions, and this can result in blackspots within the wider network where customers are in the shadow of taller permitted buildings.

The TowerCos and mobile network operators advise that the ideal height for an antenna is 5 metres taller than surrounding buildings and obstructions, with space for additional antennas used for sharing the mast to accommodate growth.



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