

Appendix A – Proposed National Environmental Standards for Telecommunications

Pursuant to s43B of the Resource Management Act 1991, no rule or resource consent shall be more stringent than the national environmental standards for telecommunications facilities.

1. Radiofrequency field exposures from wireless telecommunications infrastructure

Permitted activity

An activity by a telecommunications operator that generates radiofrequency fields is a permitted activity provided the following conditions are met.

1. Exposures to the radiofrequency fields generated by the activity (in conjunction, where applicable, with exposures to radiofrequency fields from existing transmitters in the vicinity) comply with NZS2772.1: 1999 Radio-frequency Fields Part 1: Maximum Exposure Levels 3 kHz – 300 GHz (“the New Zealand Standard”).
2. Prior to commencing any activity that generates radiofrequency fields, the following are sent to and reviewed by the relevant Council:
 - a. written notice of the location of the facility or proposed facility; and
 - b. a report prepared by a radio engineer/technician or physical scientist containing a prediction of whether the New Zealand Standard will be complied with.
3. If the report provided to the Council under condition 2(b) predicts that exposures will reach 25 percent of the exposure limit set for the general public in the New Zealand Standard, then, within three months of radiofrequency emissions commencing, a report from an appropriately qualified person/organisation (for example a Radiofrequency engineer) certifying compliance with the New Zealand Standard, based on measurements at the site will be provided to the Council.

2. Telecommunications equipment cabinets within road reserves

Telecommunication cabinets in road reserves shall be permitted activities subject to the following restrictions:

Limitations on cabinet size and location (Above ground level)	Adjacent area type
Maximum height: 1.8m Maximum footprint of any single cabinet: 1.4m ² Maximum footprint occupied by all cabinets: 1.8m ² Maximum number of network utility cabinets exceeding 900mm in height in any location: one ¹ Minimum separation distance from any existing utility cabinet exceeding 900mm in height: 30m (except where specific provision by way of dedicated areas has been made for utilities infrastructure within the road reserve)	Residential
Maximum height: 2m Maximum footprint: 2.0m ² Minimum separation distance from any existing utility cabinet exceeding 900mm in height: 30m (except where specific provision by way of dedicated areas has been made for utilities infrastructure within the road reserve)	Non-residential

¹ Cabinets in new subdivisions are often located in areas allocated for utilities, for example dedicated areas of road reserve are provided. In these cases it would be considered a reasonable condition of a Road Opening Notice that the cabinets be located within those areas.

All cabinets permitted by this standard shall comply with:

- Any specific performance standards contained in a plan or design guide (that forms part of a district plan) relating to design or external appearance of utility cabinets in the road reserve.

The relevant district plan rules shall prevail over this standard in the following circumstances:

- Where the cabinet is located in an area, or adjacent to a site, to which the district plan applies rules protecting historic heritage, or visual amenity values², for example:
 - Within view shafts identified in district plans (covered above)
 - Commercial areas i.e. CBD, shopping precincts (covered above)
- where any excavation work to install the cabinet needs to be undertaken within the drip line or branch spread of any tree or vegetation.
- where the cabinet is proposed to be located on the seaward side of the road centre-line, and the road abuts the Coastal Marine Area
- where any above ground power supply is not contained within the cabinet

Other considerations:

Cabinet means either an individual cabinet, or a cluster of cabinets. Provided that in the case of a cluster, these cabinets are interdependent on each other to provide a service, and that the spacing between adjacent cabinets is no more than 500mm, and that the total dimensions of all cabinets (excluding the space between the cabinets) does not exceed the maximum height and area restrictions set out in this standard.

An additional cabinet can be abutted to an existing cabinet, so long as the combined size or foot print of the cabinets does not exceed the maximum specified in this standard.

Issues to do with location of structures to ensure they do not create a safety hazard, including frangibility of structures are addressed by road controlling authorities through the provisions of the Telecommunications Act 2001. The development of a national code of practice for utilities access to the road corridor and the development of a consistent set of reasonable conditions that can be required by road controlling authorities will provide clarity and national consistency.

3. Noise from telecommunications equipment located within road reserves

Noise from telecommunication cabinets located in road reserves shall be a permitted activity provided that the following noise limits are not exceeded:

Residential, Mixed Use, Rural and Open Space/Reserve Areas

All Days	Noise Limit
Day time (0700 – 2200)	50dBA L _{Aeq} (5 min)
Night time (2200 – 0700)	40dBA L _{Aeq} (5 min) 65dBAL _{max}

Business and Industrial Areas (and any other non-residential zones)

All Days	Noise Limit
Day time (0700 – 2200)	60dBA L _{Aeq} (5 min)
Night time (2200 – 0700)	60dBA L _{Aeq} (5 min)

Noise shall be measured in accordance with NZS 6801:2008 *Acoustics – Measurement of Environmental Sound*, and the basis for assessment shall be NZS 6802:2008 – *Assessment of Environmental Sound*. This includes provision for averaging during daytime such that a maximum daytime noise level of 55dBA L_{Aeq} (5 min) in residential, mixed-use and rural zones at the

² Areas identified as historic, historic heritage, cultural sites or open space

measurement point is allowed, provided that the average noise level over the full day (07.00 to 22.00) does not exceed 50dBA LAeq. No averaging is allowed at night-time.

4 Masts and Antennas

Permitted activities

The replacement of, or addition to, any existing utility structure in the road reserve of antennas and their associated support structures by telecommunications operators shall be permitted activities subject to the following restrictions:

- the new or altered structure does not exceed the maximum diameter of the structure it replaces or modifies by more than 50%,
- in the case of antennas or any associated covering shroud, the antennas and/or shroud do not extend more than 30% or 3 metres, whichever is the lesser, above the highest point of the existing structure prior to the addition of any equipment for telecommunications purposes.
- Antennas extending above the highest point of an existing structure shall be contained within maximum dimensions of a cylindrical shape 2.0m high by 0.5m diameter, located along the centre-line of the pole.
- Dish antennas are permitted up to a maximum diameter of 380mm, protruding from the centre line of the pole by no more than 0.6m up to a maximum of two antennas per pole.

This does not apply to new or existing structures that are primarily for the purposes of supporting telecommunications antennas.

Provided that any rule in a district plan shall take precedence over this standard in the following circumstances:

1. Where the support structure or antenna(s) is located in a road reserve directly adjoining a site containing a building listed as having heritage value (this provision shall apply where a site containing the heritage building is located on the same side of the road reserve centre line as the support structure or antenna(s)).
2. Where the support structure or antenna(s) is located in a road reserve contained within or directly adjacent to any heritage precinct or area of landscape importance identified in a district plan (where the road reserve itself is not contained within the identified precinct or area, this provision shall apply where a site identified as being within a heritage precinct or area of landscape importance is located on the same side of the road reserve centre line as the support structure or antenna(s)).

Comments

- The standard includes a maximum envelope size for panel antennas and makes provision for the addition of up to two small dish antennas on any structure.
- The use of “prior to the addition of any telecommunications equipment” is intended to convey the meaning that this is a one-off height control, and any revisits must stay within the original envelope.
- Issues to do with location of structures to ensure they do not create a safety hazard, including frangibility of structures are most appropriately addressed by the road controlling authority through the legal requirement for a Road Opening Notice under the Telecommunications Act and reasonable conditions that can be attached by a road controlling authority to the notice.

Definitions:

Antenna – means any device operated by a telecommunications operator that receives or transmits radio communication or telecommunication signals.

Cabinet – means an equipment casing, operated by a telecommunications operator usually set on a concrete foundation plinth, used primarily for the purposes of operating a telecommunications network. The cabinet may contain telecommunications equipment, batteries, line terminals, and cooling systems such as heat exchangers and fans, and other such devices and equipment that are required to operate a telecommunications network. Further more: ‘**Cabinet**’ means either an individual cabinet, or a cluster of cabinets. Provided that in the case of a cluster, these cabinets are interdependent on

each other to provide a service, and that the spacing between adjacent cabinets is no more than 500mm, and that the total dimensions of all cabinets (excluding the space between the cabinets) does not exceed the maximum height and area restrictions set out in this standard.

Mast – means any pole, tower or similar structure designed to support antennas to facilitate telecommunications, radio communications and broadcasting. Operated by a telecommunications operator

Road Reserve: - means the full extent of the legal road corridor vested in either the local Council or Transit New Zealand. This includes the formed vehicle carriageway and the road berms areas between the vehicle carriageway and adjacent properties.

Telecommunications Operator: - has the same meaning as network operator in Section 5 of the Telecommunications Act 2001