

5 National Environmental Standard Assessment

5.1 National Environmental Standards for Telecommunication Facilities

The NES contains binding regulations that replace any District Plan rules relating to telecommunication radiofrequency fields, noise from telecommunications cabinets in the road reserve, and telecommunications antennas on replacement utility structures in the road reserve.

As the site that is the subject of this application is not located in road reserve, the NES performance standards are not applicable in relation to antennas and cabinets (or their noise). In respect of telecommunication radiofrequency fields, these apply regardless of the location of the facility.

Accordingly, an assessment needs to be undertaken of those clauses relating to radiofrequency fields which are applicable to the telecommunication facility.

Pursuant to clause 4(2) of the NES, a telecommunication facility is a Permitted Activity as far as radiofrequency fields are concerned if the network operator who plans and operates the facility complies with the conditions in sub-clauses 3 and 4, and the condition in sub-clause 5 if it applies. An assessment against those provisions is outlined in **Table 1**.

Table 1 | Assessment of Compliance against the Relevant NES Provisions.

Clause	Requirement	Compliance Comment
4(3)	<i>The telecommunication facility must be planned and operated in accordance with NZS 2772: Part 1: 1999 Radiofrequency Fields Part 1 – Maximum Exposure Levels – 3 kHz to 300 GHz. (NZS)</i>	Complies The proposed facility has been planned and will operate in compliance with in the current New Zealand Standard (NZS) 2772.1:1999 as demonstrated in the Assessment of Radio Frequency Report included in Appendix D .
4(4)(a)	<i>The relevant local authority must receive notice of where the facility is proposed to be located before the telecommunication facility becomes operational.</i>	Complies This application for a certificate of compliance constitutes notice as to where the proposed upgrade facility is to be located. The Site and Land Plan included in Appendix B identifies the location of the proposed facility.
4(4)(b)	<i>The relevant local authority must receive (before the telecommunication facility becomes operational) a report that:</i> (i) <i>is prepared in accordance with NZS 6609.2: 1990 Radiofrequency Radiation: Part 2: Principles and Methods of Measurement 300kHz to 100 GHz; and</i> (ii) <i>takes into account exposures from other telecommunication facilities in the area; and</i> (iii) <i>predicts whether the radiofrequency field levels at places in the vicinity of</i>	Complies The Assessment of Radio Frequency Report included at Appendix D illustrates the exposure levels for the Spark antennas, based on NZS 2772:1:1999, using the methodology outlined in NZS 6609:2:1990. Clause 4(b)(ii) relates to exposures from other telecommunication facilities within the area, but in this case there are no other facilities within close proximity that would alter the radio frequency exposure in the vicinity of the site. The facility will not have any impact on the nearby Vodafone tower. If any unforeseen interference occurs, Spark will install filters to mitigate this.

Clause	Requirement	Compliance Comment
	<i>the facility that are reasonably accessible to the general public will comply with NZS 2772: Part 1:1999 Radiofrequency Fields Part 1 – Maximum Exposure Levels – 3 kHz to 300 GHz.</i>	Given the Spark antennas are to be mounted a minimum of 15 metres above ground level, with access restricted by private ownership, compliance is achieved with clause 4(b)(iii), as the applicable NZS will not be exceeded at any point where the public can reasonably gain access.

It has been demonstrated that the proposed facility complies with both clauses 4(3) and 4(4) and that clause 4(5) does not apply. Therefore, the proposal is a **Permitted Activity** under clause 4(2) of the NES and is not required to meet the remaining standards of Regulation 4.