

28 April 2021

Kaikōura District Council  
PO Box 6  
Kaikōura 7340

Dear Sir/Madam

**Submission: Proposed Natural Hazards Plan Change 3**

This submission on Proposed Natural Hazards Plan Change 3 to the Operative Kaikōura District Plan is on behalf of Spark, a telecommunication service provider (and therefore network utility operator) in New Zealand and recognised as a Requiring Authority by the Ministry for the Environment (MfE) under the Resource Management Act 1991.

Telecommunications infrastructure is significant and essential, and the safe, reliable and efficient functioning of the network is vital for the national, regional and local economy and is in the public interest both in terms of allowing people and communities to provide for their "wellbeing", and also for assisting to ensure their "health and safety".

In terms of Spark's network, there are instances where existing infrastructure is located in what is proposed to be within a natural hazard overlay, and there are likely to be instances in the future where new infrastructure is proposed to be located within a natural hazard overlay.

Typical telecommunications equipment that may need to be installed in natural hazards overlays to serve communities include telecommunications lines and support poles, equipment cabinets, and poles supporting antennas. Linear infrastructure such as lines may need to traverse a hazard area to reach a customer group. Place based telecommunications equipment may have functional and operational requirements to be located in hazard areas (e.g. a wireless telecommunications facility needing to be close to a customer group to provide services such as fixed wireless broadband).

Much of the network equipment deployed by telecommunications companies is regulated by the *Resource Management (National Environmental Standards for Telecommunications Facilities) Regulations 2016* (NESTF) which came into force on 1 January 2017.

Under Regulation 57 of the NESTF, district plan rules in regard to natural hazard areas are specifically disapplied following a consideration of the risk profile of this type of equipment in making the regulations. Provided hazard areas are mapped in district plans, telecommunications providers can make decisions around route or site selection and any mitigation. For example, a telecommunications company may choose to place wireless telecommunications facilities in

flood prone areas, with the radio equipment cabinet placed on an elevated plinth to reduce risk of water damage to radio equipment in a flood event.

Spark's view is that telecommunications companies should be able to make their own decisions around the siting of their infrastructure rather than needing to potentially seek resource consents for such. This approach is reflected in Regulation 57 of the NESTF.

The NESTF essentially provides an exemption from the provisions of Proposed Plan Change 3 for much of the typical telecommunications infrastructure components deployed, there are some notable exceptions. From Spark's perspective, poles and attached antennas in legal road are only regulated under the NESTF when they are within 100m of another pole in legal road. If such facilities cannot meet this requirement then the District Plan regulates the activity, and as such would come under the provisions proposed in Plan Change 3 (if the site is within an overlay).

The provisions of the NESTF allow Spark to undertake its duties as a *lifeline utility* under the *Civil Defence and Emergency Management Act 2002* (CDEMA). The provision of resilient telecommunication networks during emergencies is critical, as has been highlighted recently with the Covid-19 pandemic, Kaikoura and Canterbury earthquakes. Telecommunications are recognised as Essential Infrastructure under the CDEMA, which applies to the whole network and a critical lifeline utility. As a lifeline utility Spark is required to plan for and manage the range of emergency impacts on the networks. Under section 59 of the CDEMA a lifeline utility is required to take "*all necessary steps to undertake civil defence emergency management*" and be able, under section 60, to function to the fullest possible extent, even though this may be at a reduced level, during and after an emergency. Resilience comes from a variety of sources:

- multiple networks (different providers offering alternative networks);
- multiple technologies (including fibre fixed networks available alongside mobile wireless networks);
- telecommunication facilities such as cabinets and masts are exempt from the Building Act. However, the facilities are designed and certified by certified professional engineers that design for the natural hazards within any location; and
- telecommunication providers build their own networks with resilience in mind (building redundancy into their networks so that network component failures have a minimum impact).

Submission points on Plan Change 3 are attached to this letter. We would happily discuss the submission points, either via videoconference or a workshop, and we would be happy to collaborate with other infrastructure providers for this as well.

Yours sincerely,



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Spark

Submissions on Plan Change 3 (Natural Hazards) to the Operative Kaikōura District Plan – April 2021

Note, proposed deletions are shown as *strikethrough*, and proposed additions are ***bold and underlined***.

PROVISION	SUBMISSION
<b>Chapter 4: Definitions</b>	
<p><i>New definition of Critical Infrastructure:</i>  <i>Critical Infrastructure</i>  <i>means infrastructure necessary to provide services which, if interrupted, would have a serious effect on the communities within the region or a wider population, and which would require immediate reinstatement. this includes any structures that support, protect or form part of critical infrastructure. critical infrastructure includes:</i></p> <ol style="list-style-type: none"> <li>1. <i>regionally significant airports</i></li> <li>2. <i>regionally significant ports</i></li> <li>3. <i>gas storage and distribution facilities</i></li> <li>4. <i>electricity substations, networks and distribution installation, including the electricity distribution network</i></li> <li>5. <i>supply and treatment of water for public supply</i></li> <li>6. <i>storm water and sewage disposal systems</i></li> <li>7. <i>telecommunications installations and networks</i></li> <li>8. <i>strategic road and rail networks (as defined in the regional land transport strategy).</i></li> <li>9. <i>petroleum storage and supply facilities</i></li> <li>10. <i>public healthcare institutions including hospitals and medical centres</i></li> <li>11. <i>fire stations, police stations, ambulance stations, emergency coordination facilities.</i></li> </ol>	<p>Support – this definition recognises that telecommunication installations and networks are Critical Infrastructure.</p>
<p><i>Insert new definition for hazard sensitive building as follows:</i>  <i>Hazard Sensitive Building</i>  <i>means any building or buildings which:</i></p> <ol style="list-style-type: none"> <li>1. <i>is/are used as part of the primary activities on the site; or</i></li> <li>2. <i>contains habitable rooms; or</i></li> <li>3. <i>which are serviced with a sewage system and connected to a potable water supply,</i></li> </ol> <p><i>For the purposes of clause 1, buildings such as the following are not included:</i></p> <ol style="list-style-type: none"> <li>i. <i>farm sheds used solely for storage;</i></li> <li>ii. <i>carports;</i></li> <li>iii. <i>garden Sheds; and</i></li> <li>iv. <i>any buildings with a dirt/gravel or similarly unconstructed floor.</i></li> </ol>	<p>Support with amendment – to avoid confusion, any network utility building (which could be construed on certain sites as being for the primary activity) should be excluded from the definition of a hazard sensitive building, as follows:</p> <p><i>Hazard Sensitive Building</i>  <i>means any building or buildings which:</i></p> <ol style="list-style-type: none"> <li>1. <i>is/are used as part of the primary activities on the site; or</i></li> <li>2. <i>contains habitable rooms; or</i></li> <li>3. <i>which are serviced with a sewage system and connected to a potable water supply,</i></li> </ol> <p><i>For the purposes of clause 1, buildings such as the following are not included:</i></p> <ol style="list-style-type: none"> <li>i. <i>farm sheds used solely for storage;</i></li> <li>ii. <i>carports;</i></li> <li>iii. <i>garden Sheds; <del>and</del></i></li> <li>iv. <i>any buildings with a dirt/gravel or similarly unconstructed floor; <b><u>and</u></b></i></li> </ol>

	<b>v. <u>any building used solely for network utility purposes.</u></b>
<p>Replace the existing earthworks definition with the National Planning Standards Earthworks definition as follows:</p> <p><b>Earthworks</b> means the alteration or disturbance of land including by moving, removing, placing, blading, cutting, contouring, filling or excavation of earth (or any matter constituting the land including soil, clay, sand, and rock); but excludes gardening, cultivation, and disturbance of land for the installation of fenceposts</p>	Support – it is appropriate to update the definition of earthworks in the Operative District Plan to align with the National Planning Standards.
<p>Insert new definition for land disturbance as follows:</p> <p><b>Land Disturbance</b> means the alteration of land, (or any matter constituting the land including soil, clay, sand and rock) that does not permanently alter the profile, contour or height of the land.</p>	Support – the definition of land disturbance is supported, as any trenching required as part of a telecommunication installation is clearly excluded, provided it does not permanently alter the profile, contour or height of the land.
<p>Insert new definition for operational need as follows:</p> <p><b>Operational Need</b> means the need for a proposal or activity to traverse, locate or operate in a particular environment because of technical, logistical, operational characteristics or constraints.</p>	Support – it is appropriate to have a definition of operational need in the Operative District Plan that replicates the National Planning Standards.
<b>Chapter 8: Natural Hazards</b>	
<p><b>Objective 8.2.2 Infrastructure</b></p> <ol style="list-style-type: none"> <li>1. <i>Upgrading maintenance and replacement of existing infrastructure and new non-critical infrastructure within all-natural hazard overlays is enabled where the infrastructure does not increase the risk to life or property from natural hazard events, or transfer the risk to another site; and</i></li> <li>2. <i>New critical infrastructure avoids High Flood Hazard Areas, but where this is not possible or is impractical, is designed to maintain its integrity and ongoing function during and after natural hazard events or can be reinstated in a timely manner.</i></li> </ol>	<p>Support with amendment – it is appreciated that the proposal allows for new non-critical infrastructure in all hazard areas, provided that it does not elevate the risk profile of the hazard. The risk profile to the infrastructure is a matter which should be determined by the asset owner, not the Council, and as such point 1 of the objective should be widened to include all infrastructure, and point 2 can be deleted, as follows:</p> <ol style="list-style-type: none"> <li><del>1.—Upgrading maintenance and replacement of existing infrastructure and new non-critical infrastructure within all-natural hazard overlays is enabled where the infrastructure does not increase the risk to life or property from natural hazard events, or transfer the risk to another site; and</del></li> <li><del>2.—New critical infrastructure avoids High Flood Hazard Areas, but where this is not possible or is impractical, is designed to maintain its integrity and ongoing function during and after natural hazard events or can be reinstated in a timely manner.</del></li> </ol>
<p><b>Policy 8.3.2 Risk based approach</b> Take a risk based approach to managing natural hazards commensurate with the scale of development, whereby the level of risk is assessed as the combination of the likelihood of a natural hazard event occurring and the</p>	Support – this policy is appropriate in that it recognises that infrastructure within natural hazard areas can have an effect on other parties, dependent on the likelihood of a natural hazard occurring.

<p><i>consequences of that event – for people and communities, property and infrastructure.</i></p>	
<p><i>Policy 8.3.6 Operation, maintenance, replacement and repair of all infrastructure</i></p> <p><i>Enable the operation, maintenance, replacement, repair or removal of all existing infrastructure in all identified natural hazard overlays</i></p>	<p>Support – this policy appropriately provides for any existing infrastructure in any hazard overlay.</p>
<p><i>Policy 8.3.7 New and upgrading of non-critical infrastructure</i></p> <ol style="list-style-type: none"> <li><i>1. Enable the development of new non-critical infrastructure and upgrading of existing non-critical infrastructure in flood hazard assessment overlays only where the infrastructure does not increase flood risk on another site; and</i></li> <li><i>2. Provide for the development of new non-critical infrastructure and upgrading of existing non-critical infrastructure in all other identified natural hazard overlays</i></li> </ol>	<p>Support with amendment – in line with the submission point on Objective 8.2.2 above, it is considered that Policies 8.3.7 and 8.3.8 can be combined to recognise that the risk to critical infrastructure from a natural hazard is best managed by the asset owner, but the risk from an infrastructure hazard on another party, i.e. if a new structure increases the risk on another party, it is a matter that should be regulated by Council.</p> <p><i>Policy 8.3.7 New and upgrading of <del>non-critical</del> infrastructure</i></p> <ol style="list-style-type: none"> <li><i>1. Enable the development of new <del>non-critical</del> infrastructure and upgrading of existing <del>non-critical</del> infrastructure in flood hazard assessment overlays only where the infrastructure does not increase flood risk on another site; and</i></li> <li><i>2. Provide for the development of new <del>non-critical</del> infrastructure and upgrading of existing <del>non-critical</del> infrastructure in all other identified natural hazard overlays</i></li> </ol>
<p><i>Policy 8.3.8 Critical infrastructure</i></p> <ol style="list-style-type: none"> <li><i>1 Enable the upgrading of existing critical infrastructure in Flood Assessment Overlays only where the infrastructure does not increase flood risk on another site;</i></li> <li><i>2 Provide for upgrading of existing critical infrastructure in all other identified Natural Hazard Overlays;</i></li> <li><i>3 Manage new critical infrastructure in all Natural Hazard Overlays which are outside of High Flood Hazard Areas to ensure that there is a low risk to life and property damage;</i></li> <li><i>4 Avoid new critical infrastructure in High Flood Hazard Areas unless:</i> <ol style="list-style-type: none"> <li><i>a. Avoidance is impossible or impracticable, in which case critical infrastructure must be designed to maintain, as far as practicable, its integrity and ongoing operation during and after natural hazard events, or be able to be reinstated in a timely manner; and</i></li> <li><i>b. The critical infrastructure does not significantly increase the natural hazard risk to life, or increase risk to life and property on another site</i></li> </ol> </li> </ol>	<p><i>Policy 8.3.8 Critical infrastructure</i></p> <ol style="list-style-type: none"> <li><i>1—Enable the upgrading of existing critical infrastructure in Flood Assessment Overlays only where the infrastructure does not increase flood risk on another site;</i></li> <li><i>2—Provide for upgrading of existing critical infrastructure in all other identified Natural Hazard Overlays;</i></li> <li><i>3—Manage new critical infrastructure in all Natural Hazard Overlays which are outside of High Flood Hazard Areas to ensure that there is a low risk to life and property damage;</i></li> <li><i>4—Avoid new critical infrastructure in High Flood Hazard Areas unless:</i> <ol style="list-style-type: none"> <li><i>a.—Avoidance is impossible or impracticable, in which case critical infrastructure must be designed to maintain, as far as practicable, its integrity and ongoing operation during and after natural hazard events, or be able to be reinstated in a timely manner; and</i></li> <li><i>b.—The critical infrastructure does not significantly increase the natural hazard risk to life, or increase risk to life and property on another site</i></li> </ol> </li> </ol>

<p><i>Policy 8.3.13 Debris Flow Fan Overlay and Landslide Debris Inundation Overlay</i></p> <p><i>Land use and development is avoided for Hazard Sensitive Buildings in the Debris Flow Fan Overlay and Landslide Debris Inundation Overlay which results in unacceptable risk to either life or property.</i></p>	<p>Support – these policies are supported as it provides for telecommunications infrastructure to be located in the debris flow fan, landslide debris inundation, fault avoidance, fault awareness overlays provided the risk to life and property is acceptable.</p>
<p><i>Policy 8.3.14 The Fault Avoidance Overlay and Fault Awareness Overlay</i></p> <p><i>Land use and development is:</i></p> <ol style="list-style-type: none"> <li><i>1. enabled only where there is an acceptable risk to life and property;</i></li> <li><i>2. avoided for Hazard Sensitive Buildings in the Fault Avoidance Overlay where these result in an unacceptable risk to life and property;</i></li> <li><i>3. managed for Hazard Sensitive Buildings in the Fault Awareness Overlay by locating the building away from the fault or where it can be demonstrated that mitigation measures will result in an acceptable risk to life and property;</i></li> </ol>	
<p><i>Rule 8.5.8</i></p> <p><i>All zones with the Urban Flood Assessment Overlay or Non-Urban Flood Assessment Overlay:</i></p> <p><i>New infrastructure, or upgrading of infrastructure and critical infrastructure where:</i></p> <p><i>Permitted Activities where:</i></p> <ol style="list-style-type: none"> <li><i>a. The activity does not result in permanent raising of the ground level.</i></li> </ol> <p><i>Activity status when compliance is not achieved</i></p> <p><i>Restricted Discretionary. Matters of discretion are restricted to:</i></p> <ol style="list-style-type: none"> <li><i>1. The likely extent of flooding on the site;</i></li> <li><i>2. The nature, design and intended use of the infrastructure and its susceptibility to damage;</i></li> <li><i>3. The potential for the activity to exacerbate natural hazard risk, including to any other sites; and</i></li> <li><i>4. The extent of any positive effects from proposal.</i></li> </ol>	<p>Support – the rule clearly permits new critical infrastructure or upgrades to existing critical infrastructure in the Urban Flood Assessment or Non-Urban Flood Assessment Overlays where the works do not result in a permanent raising of the ground level. Telecommunications infrastructure typically does not cause a permanent raising of the ground level.</p>
<p><i>Rule 8.5.9</i></p> <p><i>All zones with the Urban Flood Assessment Overlay, Non-Urban Flood Assessment Overlay, Landslide Debris Inundation Overlay, Fault Avoidance Overlay or Fault Awareness Overlay</i></p> <p><i>New Critical Infrastructure</i></p> <p><i>Restricted discretionary</i></p> <p><i>Matters of discretion are restricted to:</i></p> <ol style="list-style-type: none"> <li><i>1. The extent to which infrastructure exacerbates the natural hazard risk or transfers the risk to another site;</i></li> </ol>	<p>Oppose – the rule provides for all new critical infrastructure in all natural hazard overlays as restricted discretionary activities.</p> <p>Rule 8.5.9 creates confusion with Rule 8.5.8 which references critical infrastructure in the Urban Flood Assessment or Non-Urban Flood Assessment Overlays and permits it provided that the works do not result in a permanent raising of the ground level, and if this cannot be met then the activity becomes restricted discretionary (considering similar matters to those offered in 8.5.9).</p> <p>As critical infrastructure in the Urban Flood Assessment or Non-Urban Flood Assessment Overlays is provided for</p>

<ol style="list-style-type: none"> <li>2. <i>The ability for flood water conveyance to be maintained;</i></li> <li>3. <i>The extent to which there is a functional or operational requirement for the infrastructure to be located in the High Flood Hazard Overlay and there are no practical alternatives;</i></li> <li>4. <i>The extent to which the location and design of the infrastructure address relevant natural hazard risk and appropriate measures that have been incorporated into the design to provide for the continued operation</i></li> </ol>	<p>under Rule 8.5.8, those overlays should be removed from Rule 8.5.9.</p> <p>The policies directing infrastructure in the Landslide Debris Inundation, Fault Avoidance and Fault Awareness overlays clearly allow development where it does not increase the risk to property or life. Such an allowance should be provided for in the rule through the provision of a degree of permitted activity in those overlays for critical infrastructure, which could be achieved through footprint control or other mechanism, where the effect of such infrastructure will be negligible on life and property.</p> <p>As such, the following amendments are sought to Rule 8.5.9:</p> <p><i>Rule 8.5.9</i></p> <p><del>All zones with the Urban Flood Assessment Overlay, Non-Urban Flood Assessment Overlay, Landslide Debris Inundation Overlay, Fault Avoidance Overlay or Fault Awareness Overlay</del></p> <p><i>New Critical Infrastructure</i></p> <p><b><u>Permitted where</u></b></p> <p><b><u>a. the footprint of the critical infrastructure structures do not exceed 20m<sup>2</sup> [or similar relief]</u></b></p> <p><i>Restricted discretionary</i></p> <p><i>Matters of discretion are restricted to:</i></p> <ol style="list-style-type: none"> <li>1. <i>The extent to which infrastructure exacerbates the natural hazard risk or transfers the risk to another site;</i></li> <li>2. <i>The ability for flood water conveyance to be maintained;</i></li> <li>3. <i>The extent to which there is a functional or operational requirement for the infrastructure to be located in the High Flood Hazard Overlay and there are no practical alternatives;</i></li> <li>4. <i>The extent to which the location and design of the infrastructure address relevant natural hazard risk and appropriate measures that have been incorporated into the design to provide for the continued operation</i></li> </ol>
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