Updating the National Environmental Standards for Telecommunications (NESTF)

A briefing pack for those new to the issues

May 2024

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2 PURPOSE OF THIS BRIEFING PACK

This briefing provides background information on the National Environmental Standards for Telecommunications Standards (NESTF). It includes:

- Background information on what the NESTF is, what it covers, and why it is important for telecommunications.
- How updating the NESTF is needed to help the Government achieve its goals in other areas, such as fast-track consenting and housing supply.
- A deeper dive into how and why the NESTF is in need of updating.
- Examples and facts and figures to demonstrate the issue.
- Modalities - the changes needed to bring the NESTF up to date.

This briefing pack has been prepared by the members of the TCF Local Government Working Party at the request of officials.

3 EXECUTIVE SUMMARY

The telecommunications sector is calling for the National Environmental Standards for Telecommunications Facilities (NESTF) to be updated under the Resource Management Act (RMA), as part of phase two of the resource management reforms. This is needed to ensure that households and businesses have the benefit of network extensions and vital connectivity improvements.

Telecommunications network operators need to engage with the resource management system to be able to install, maintain and upgrade network infrastructure such as fibre optic cables, cell towers, poles and antennas. The NESTF - secondary legislation under the RMA - sets national standards for much of this activity, the intention being to avoid unnecessary regional variation and time-consuming resource management processes for routine activities. If something is constructed or upgraded to the permitted standards in the NESTF then a resource consent is not required for that activity. There are some exceptions, for example for locations that have heritage or outstanding natural landscapes overlays.

The problem is that the standards in NESTF are no longer fit for purpose and in urgent need of amendment. NESTF has failed to keep pace with changes to the built environment, policy and rule changes that encourage greater housing density, and an urban environment with taller buildings - which are now taller than the towers needed to service them. It has also failed to keep pace with changes in technology that improve performance and resilience. For example, increases in battery sizes will require bigger cabinets, which the NESTF does not currently provide for.

The failure to update NESTF has also created a fragmented rule set, with rules located both in the NESTF and district and regional plans. New Zealand has 11 regional councils, 61 city or district councils, and six unitary councils resulting in approximately 128 different plans that have the potential to regulate telecommunications facilities. This interlinking and overlapping array of inconsistent rules makes it difficult and confusing for everyone (planners and network operators included). This is holding back network expansion and connectivity improvements, to the detriment of households and businesses.

As migration to 5G technology increases and earlier networks are phased out, mobile network operators anticipate that approximately 3500-4000 new mobile sites will be required over the next 10 years. If the roadside antenna and pole height dimensions are not amended in the NESTF to provide for 5G equipment, each site will require resource consent approval. At an average cost of $15,000 per resource consent, **this equates to between $52,500,000 and $60,000,000 in associated resource consent fees and costs** over the next 10 years for new sites. There are further costs for the upgrade of existing sites.

There are also flow-on effects for government policies and priorities, such as fast-track consenting, resilience and housing development. Houses need utilities. There is limited utility in fast tracking a housing development if network operators do not have up to date telecommunications standards that will enable them to install the necessary telecommunications infrastructure in a timely fashion.

Mechanisms such as the Fast Track Approvals Bill and the intended package of national direction will not solve the issues associated with a NESTF that is no longer fit for purpose. While the Fast Track Approvals Bill could potentially help with some larger scale telecommunications projects, for the most part the scale of our infrastructure is much smaller than the projects that will be covered by the fast-track process.

4 WHAT IS NESTF AND WHY IS IT IMPORTANT FOR TELECOMMUNICATIONS?

4.1 NESTF PROVIDES NATIONALLY CONSISTENT STANDARDS FOR TELECOMMUNICATIONS

NESTF is a regulation made under sections 43 and 44 of the RMA. Its purpose is to provide national direction that avoids unnecessary regional variation and time-consuming and costly resource management processes. The telecommunications industry depends on NESTF to be able to carry out routine activities needed to build, maintain and upgrade network infrastructure (such as fibre optic cables, cell towers, cabinets, poles and antennas).

If something is constructed or upgraded to the permitted standards in the NESTF then a resource consent is not required for that activity. There are some exceptions to this. NESTF 2016 enables a district plan to have rules that a telecommunication facility is required to comply with under section 43B of the RMA (which deals with the relationship between national environmental standards and rules or consents). The relevant matters are set out in sub-part 5 of NESTF and concern the protection of outstanding natural features and landscapes, the protection of areas of significant indigenous vegetation, and significant habits of indigenous fauna as special areas.

The NESTF provides rules on the installation and operation of the following sorts of telecommunications facilities plus a wide range of other activities:

- Telecommunications lines (such as fibre optic cables) underground, on the ground and overhead.
- Cabinets (that contain telecommunications equipment) on road reserves and on buildings.
- Poles in road reserves and on rural-zoned land.
- Antennas and other operating equipment on poles and buildings.

NESTF also contains rules about radio frequency fields from antennas, and earthworks associated with the installation and operation of telecommunication facilities.

The rules set out where telecommunications equipment can be located (e.g. along or under roads, and on buildings). Telecommunication facilities regulated by the NESTF are exempt from natural hazards rules in district plans. This exemption does not apply to non-NESTF regulated facilities (such as a new facility in an industrial zone) or to regional plan rules.

The photos that follow show examples of poles, antennas, cabinets and cables. While NESTF uses the language of poles and antennas, the terms cell tower or mobile tower are used to refer to a pole plus antenna. Cell site can be used to refer to a pole, antenna and cabinet. Mast is another term used to refer to a pole.

Photo one: Fortysouth pole, antenna and cabinet in road reserve adjoining 180 Innes Road, St Albans.

Photo two: Spark tower with 5G antenna at 448 Devon Street, New Plymouth.

Photo three: Connexa pole with Spark antenna in Sunnynook Auckland.

Photo four: An Enable Networks roadside cabinet. Fibre from central offices is sent to cabinets around the city. Approximately 128 customers can be fed from a single cabinet.

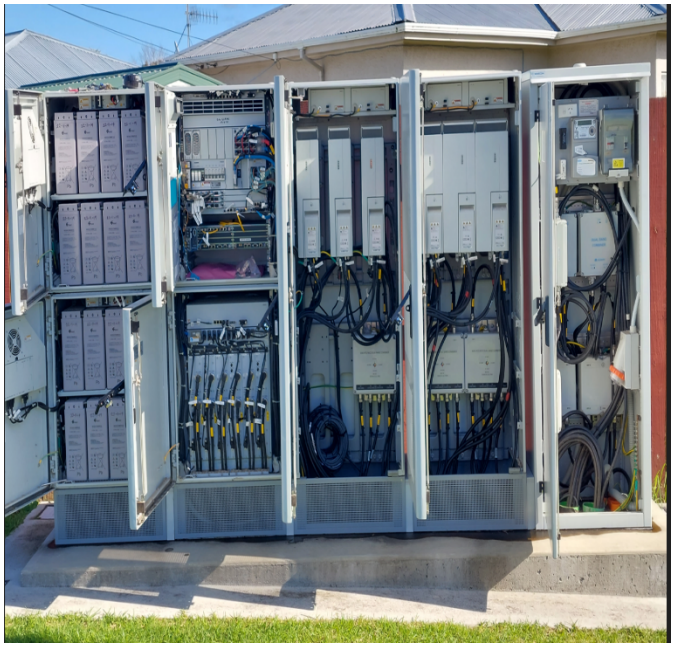


Photo five: inside of a residential roadside cabinet for a cell site.

Photo six: Enable Networks - installing duct containing fibre optic cable underground. These look like single tubes but have 24 small tubes inside.

Photo seven: Enable Networks - installing duct containing fibre optic cable under the road reserve.

Photo eight: an Enable Networks pedestal. These distribution boxes are connected to cabinets and can feed fibre to up to 24 properties.

4.2 NESTF IS NO LONGER FIT FOR PURPOSE

NESTF was first drafted in 2008, last updated in 2016, and due for a further update in 2021 (delayed due to government work on resource management reform). The standards have not kept up with technology changes, changes to the rules concerning urban intensification, and the range of build scenarios for the delivery of a resilient and comprehensive telecommunications network in 2024 and in the future. Some of the issues we are currently dealing with concern:

- An increasing number of buildings in urban environments are taller than the permitted height for poles.
- Constraints on the size and placement of cabinets which mean there is not enough space for new equipment, including back-up batteries needed for resilience purposes.
- Constraints on permitted dimensions of roadside 5G antenna arrays.
- Constraints on the attachment and upgrade of antennas on existing poles and rooftop facilities previously established within Subpart 5 landscape overlays.
- Constraints on the co-location of equipment (limited by the amount of equipment that can be installed on a single pole).
- Inconsistent interpretation, by councils, of various rules such as temporary facilities needed in emergency situations; and what matters can be considered when assessing a controlled activity for a small height increase.

We provide more detailed information on the out-of-date parts of NESTF later in this briefing pack.

4.2.1 Activities not covered by NESTF require consenting

If activities are not covered (or adequately covered) by the NESTF then the alternative is to engage in time consuming and costly resource management processes. This includes applying for resource consents and submitting on district plans when they are being developed and updated.

For example, a resource consent application to establish a roadside telecommunications facility with a 5G antenna array that exceeds the permitted NESTF dimensions costs approximately $15,000 in fees and expenses. The deposit fee for an application to Auckland Council alone costs $4,500. The remainder of the cost comprises the application planner's time, site visits, specialist reports and input from radio engineers, formation of site plans ($5000 per site) and additional processing fees and costs from the Council.

The additional time to obtain resource management approvals to deploy telecommunications infrastructure that falls outside the NESTF envelope can take up to three months for a single site.

In the “examples” section of this paper we explain how much it will cost to consent the predicted number of new cell sites that need to be built over the next ten years.

5 WHY IS UPDATING NESTF ESSENTIAL FOR ACHIEVING GOVERNMENT PRIORITIES?

Updating the NESTF isn't just important for the telecommunications industry. It matters to New Zealanders in all walks of life who expect to be able to access the internet to access government services, pay bills, make a purchase, or just text or talk to a friend or family member from wherever they live, play and do business. We call this connectivity. Without NESTF updates it will take much longer for people to get the connectivity they need. In some cases it may never happen.

NESTF updates are also needed to help the Government achieve a number of goals, including:

- **Housing supply:** NESTF is not fit for purpose to meet objectives for increased housing supply. Medium density plan changes mean taller dwellings that require telcos to install taller poles on roads and in residential zones. Poles of this height are not permitted under NESTF. For example, for a three-storey dwelling of around 12 metres we would need poles and antennas up to 17 metres high. As buildings exceed three storeys, we need 20-metre poles.
- **Fast track consenting:** the benefits of fast-tracking major housing projects will be limited if the people living in those houses do not have the connectivity they need. Other fast track projects will also rely on connectivity being available.
- **Economic growth:** telecommunications networks need to expand and upgrade to support economic growth in the regions. All sectors and businesses need high speed connectivity to innovate and reach their customers.
- **Tech sector growth**: connectivity is critical for the tech sector to operate and innovate in the areas the Government is promoting (such as artificial intelligence). Not having the basic enablers (such as internet) in place will discourage investment.
- **Education**: without internet it is not possible to learn the digital skills needed to grow the tech sector and the next generation of innovators.
- **Cost of living crisis**: being online saves people money.
- **Digitising government**: it will not be possible to realise the benefits of digitising government if all New Zealanders are not able to access essential services online.

6 A DEEPER DIVE INTO THE AREAS WHERE NESTF IS OUT OF DATE

In this section we do a deeper dive into some of the areas where NESTF has failed to keep up with changes in technology, council rules on housing intensification, and increased consumer demand.

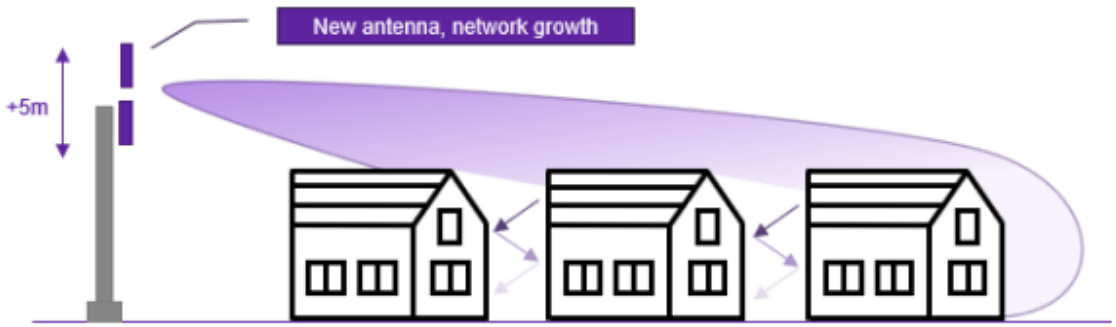
6.1 HOUSING INTENSIFICATION AND POLE HEIGHT

Medium density housing standards now allow buildings up to 12 metres (three storeys) on each site, without a resource consent. This has created a taller urban residential environment, with buildings that are taller than the permitted height for a mobile connectivity site under NESTF in a residential area. We are recommending 20 metres be the maximum permitted height. A resource consent would be triggered to go higher.

Wireless (radio) signals are obstructed by buildings, so without changes to the NESTF standards concerning pole height, we expect to see coverage blackspots appearing and an impact on the quality of mobile connectivity in urban areas. The first picture below shows the status quo. The second picture shows where we need to get to in terms of pole versus building height.

Wireless signals do not travel easily through obstructions, and this can result in blackspots within the wider network coverage areas (where customers are in the shadow of a building) and can lead to radio emission safety concerns. Tight equipment envelopes limit our ability to deploy new antenna for new growth or sharing.

The ideal height for mobile antennas is 5m taller than surrounding buildings and obstructions, with space for additional antennas used for sharing the mast and growth.

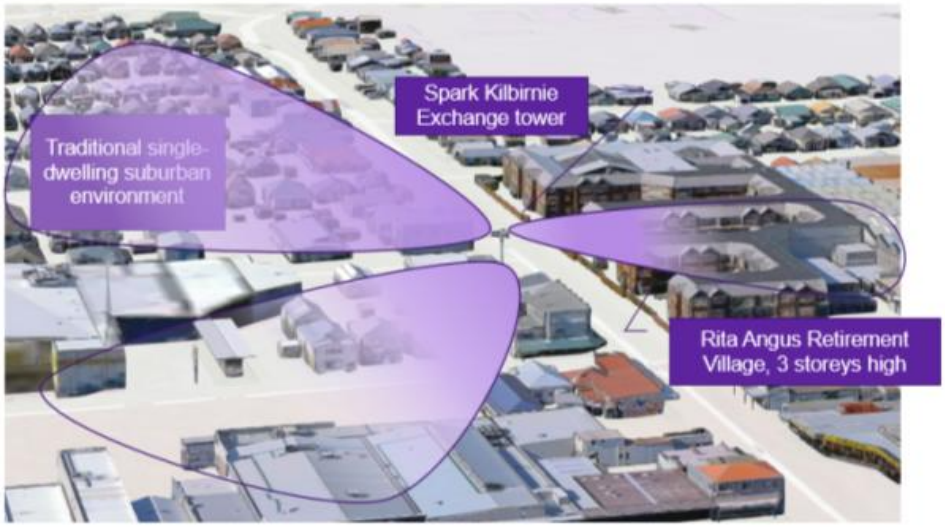


The following photo of an Auckland development shows how developers are increasing the height of the surrounding buildings. This makes it difficult to reconfigure the network to continue to provide coverage as any new tower (tall enough and with the necessary equipment attached) will fall outside NESTF rules and require the full consenting process.

The next two photos are from a Kainga Ora development being built in Northcote, Auckland. The light pole shown in the photo's measures approx. 6m tall and 155mm in width. The adjacent buildings measure 10m and 15.6m in height (four storey apartment building).

This photo shows a 6.0m LED light pole next to 15.6m (five storey) apartment building.

Below is a 3-D building example from Kilbirnie in Wellington, showing single-level dwellings and multilevel apartments and a nearby Spark tower. The Rita Augus retirement village has 3 story building which blocks the existing coverage of the Spark site. To replace the coverage an additional site is required, or the existing site rebuilt to at least 17m, the NESTF does not provide for this.



The following photo is of a Connexa Tower in Tekapo with a 15m guyed mast.

This photo is of the Connexa Tower at Kopu, a 35m guyed mast, with Spark 4G equipment.

Here we have a 15m Connexa Tower at Whitianga Buffalo Beach, with Spark antenna.

The following photos are of a 20-metre cell-site in the road reserve of Christchurch City. We propose that the NESTF standard permit masts of this nature.

Fortysouth – 20m Christchurch Roadside Telecommunication Sites

Pole height is also an issue for co-location (which we discuss later in this briefing). When mobile network operators share a site there is a need for multiple antennas on a pole. For these to work they need to be sufficient distance apart, which means that poles need to be taller.

6.1.1 Matarangi case study - drone footage that shows differences in coverage

The following images (some taken from drone footage provided by Connexa), show how taller towers provide coverage to a much larger area for minimal impact, except the costs and difficulty of consenting then. The taller towers reduce the need for additional towers. They are also more resilient to 'clutter', as a 20m tower will still be able to 'see' over a 12m house and have safe EME distances. Trees and topography clutter is easier to manage. Taller towers also enable multiple operators to co-locate, reducing the proliferation of single-operator poles.

The images are of a 15m tower on the corner of Matarangi and Kenwood Drive in Matarangi. NESTF would have permitted a pole of 11.5m, but this would have provided a much inferior coverage footprint. The District Plan permitted poles of 15m, resulting in a controlled activity resource consent, which was granted. A consent to build a 20m pole would have likely resulted in a fully notified resource consent. The images from the drone footage show how the coverage would have increased further at 20m. The 2019 versus 2023 photos show how tree clutter has increased in a few years.

Before 2019

After 2023

View from drone footage at 15m (the height of the tower). Note the houses and tree clutter.

At 20m you will be able to see this.

6.2 CABINET SIZE

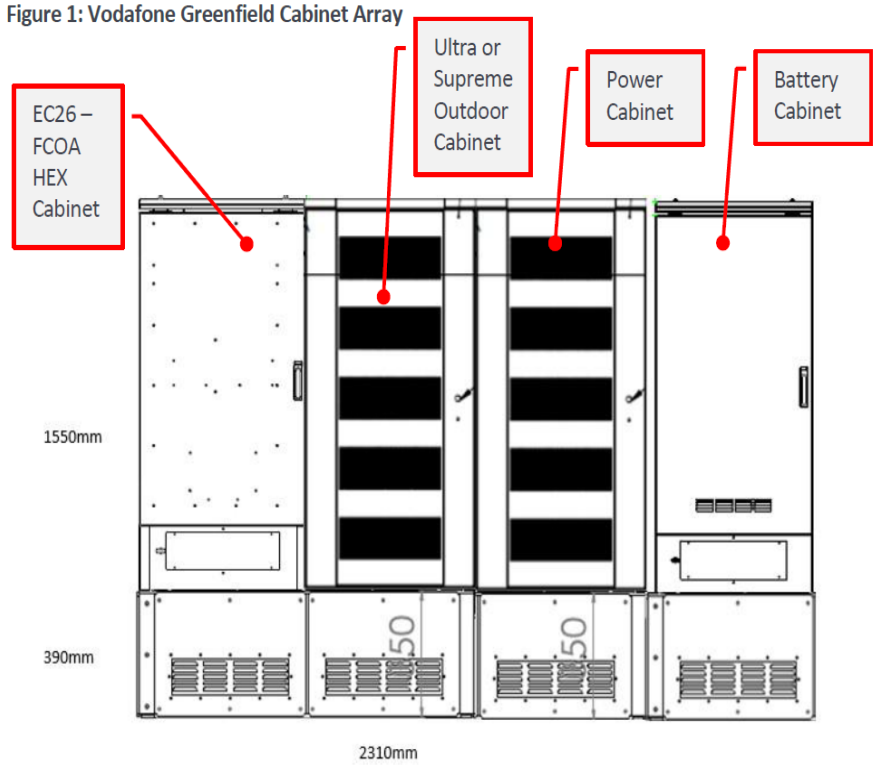
Network operators use cabinets (usually situated on the roadside) to house telecommunications equipment and keep it safe from the elements. This includes equipment such as batteries which provide backup when power fails. The size of the cabinet (width and height) dictates the amount of equipment that can be contained and consequently the capacity to enhance performance and resilience.

Outdated provisions in the NESTF have not kept up with new technology and resilience requirements. This means that consents are needed for larger cabinet setups. Small increases to the allowed height and footprint of cabinets would address this.

The following diagram shows a One NZ cabinet designed to incorporate new 5G equipment. The cabinet model includes a battery cabinet for reserve power. This cabinet measures approximately 2.0m2. It exceeds the permitted area for roadside cabinets adjoining residential zones (1.4m2) but would comply if situated in other zones.

Figure 1 shows a typical configuration including a battery cabinet.

Figure 1: Vodafone Greenfield Cabinet Array



Below is One NZ's NESTF compliant Flex 16 cabinet model, utilised for deployment in the road reserve. The cabinet measures 1.8m (height) x 1.62m (width) x 0.8m (depth) total footprint 1.29m². The cabinet has been designed to have the cooling vent at the front of the cabinet, thereby reducing the decibel level at the rear of the cabinet. Roadside cabinets are often positioned to back on to the property boundary.

1.8 m High (max) x 1.62 m Wide x 0.8 m Deep

The below picture is one of Spark's newer quieter Eaton cabinets. These cabinets work well in residential zones as they minimise noise. The size is NESTF compliant, however the allowed space is maxed out (with the cooling equipment) meaning there is no room to add additional backup power capacity and remain in the NESTF envelope.

This photo shows a Tuatahi First Fibre roadside cabinet. Similar to the above photo, the additional cooling on the front encroaches into the maximum allowable size for the cabinet, leaving No room for additional battery cabinet and capacity to the side.

The photo on the right is of a Tuatahi First Fibre Cabinet in Morrinsville. A cell tower (with cabinet) was later added to this site. Because the new cabinet was within 20 metres of the Tuatahi one, it should be within 500mm but as shown this result is visually acceptable. This is because NESTF requires that telecommunication cabinets be 20m apart or within 500mm of each other. This rule can be restrictive when there is limited space or a visual balance to meet for multiple cabinets and towers.

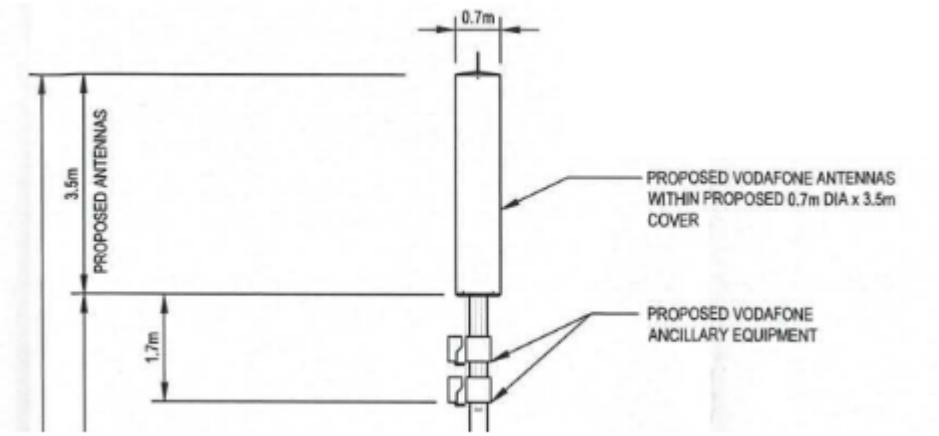
6.3 NEW TECHNOLOGY

Unlike other infrastructure providers, the telecommunications industry needs to continually upgrade its infrastructure to meet customer demand for new technology. Examples include the current roll out of 5G, the plan for 6G, future fibre rollouts and submarine cables.

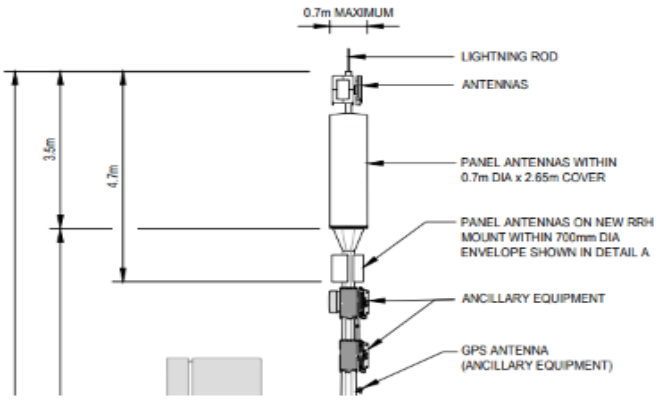
To delve a little deeper into the 5G example, the roll out is currently being constrained because NESTF 2016 was fashioned before 5G technology was produced and rolled out in the public domain. There are two issues: one concerning radio frequency fields, the other concerning the size of the antennas. These are discussed below.

6.3.1 Antenna size

The current 5G antenna requirements do not meet the permitted dimension increase in the NESTF. NESTF 2016 permits the establishment of poles with antennas in the road reserve provided they have a "notional envelope" (the antenna attachment) that does not exceed 3.5m in length and 0.7m in diameter. This is shown in the image below. These dimensions allowed for 4G technology and some 5G.



The antennas needed for 5G have a bigger notional envelope (4.7m in length and 0.7 - 0.9 in diameter). This is shown in the image below. This means that network operators need to apply for resource consents when upgrading sites to 5G and adding the new antennas.

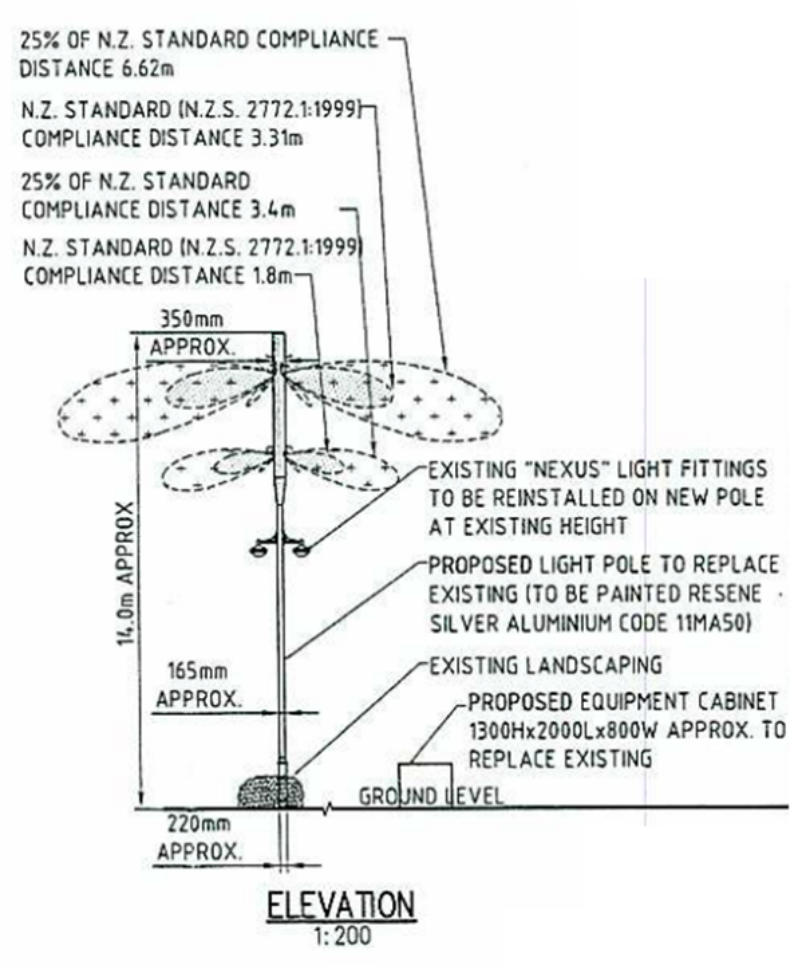


6.3.2 Radio frequencies

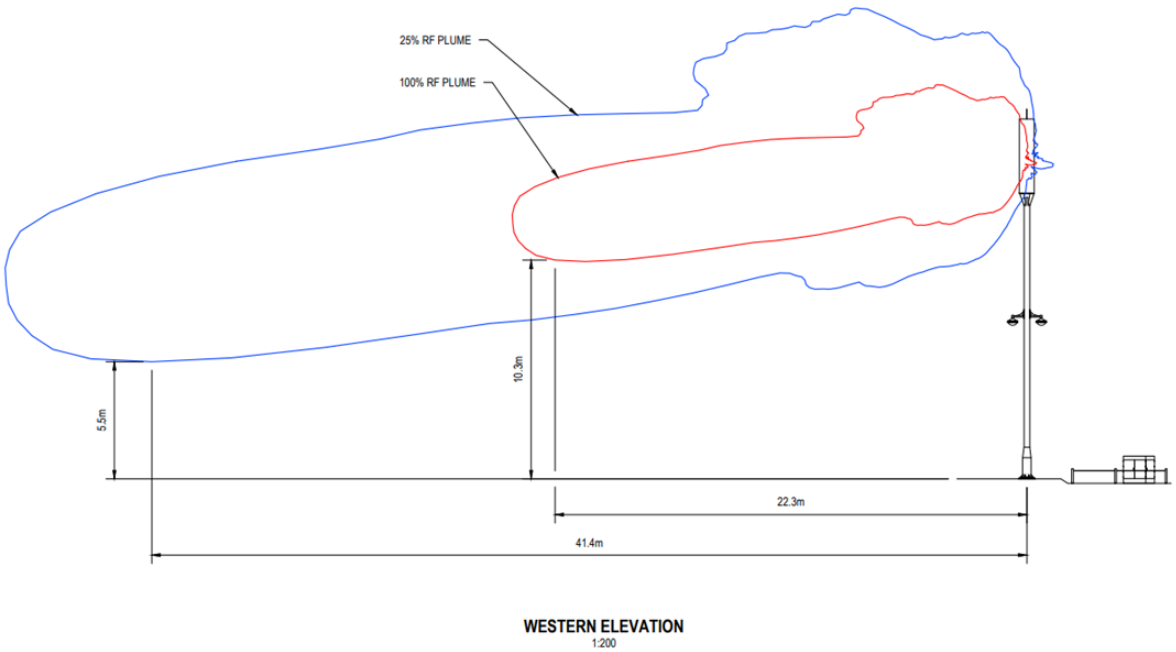
There is also an issue concerning radio frequency fields. 5G networks have higher bandwidth, allowing more data to be sent and received over an internet connection in a given amount of time. As a result the radio frequency fields emitted from 5G antennas are larger than the previous generations of technology. To avoid these fields from entering the public domain, the antennas need to be placed on higher poles. This takes us back to the pole height issue above. The NESTF needs to be updated to reflect the changes in technology dimensions.

The following diagrams show the differences in 3G versus 5G radio frequency fields at a Fortysouth site in Waimarie Beach.

3G radio frequency fields (Waimarie Beach)

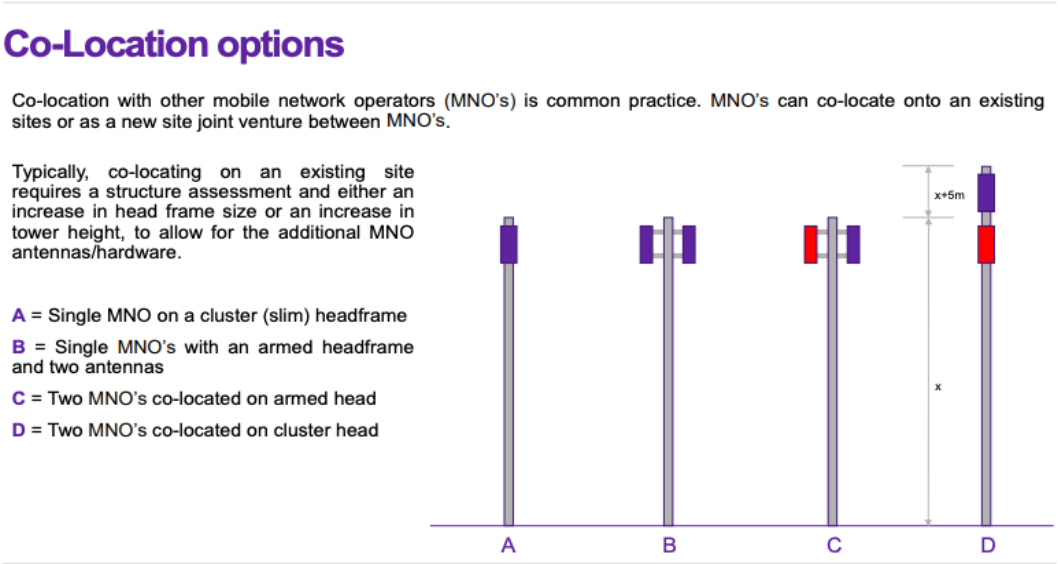


5G radiofrequency fields (Waimare Beach)

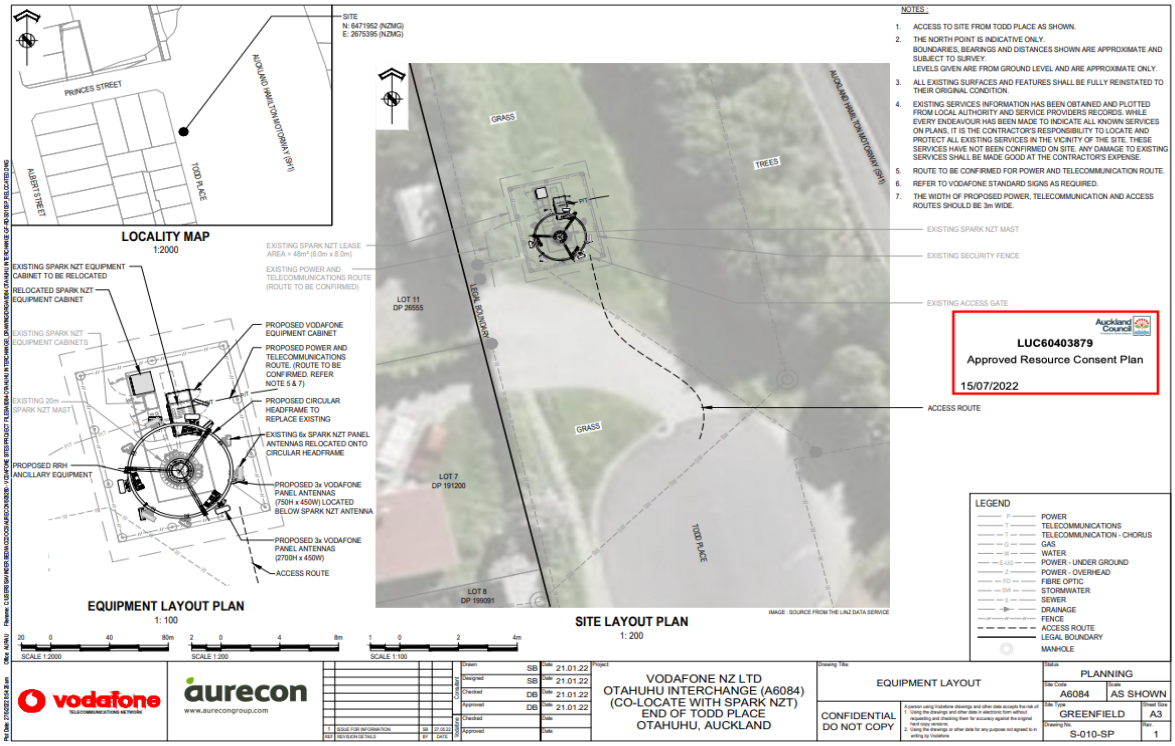


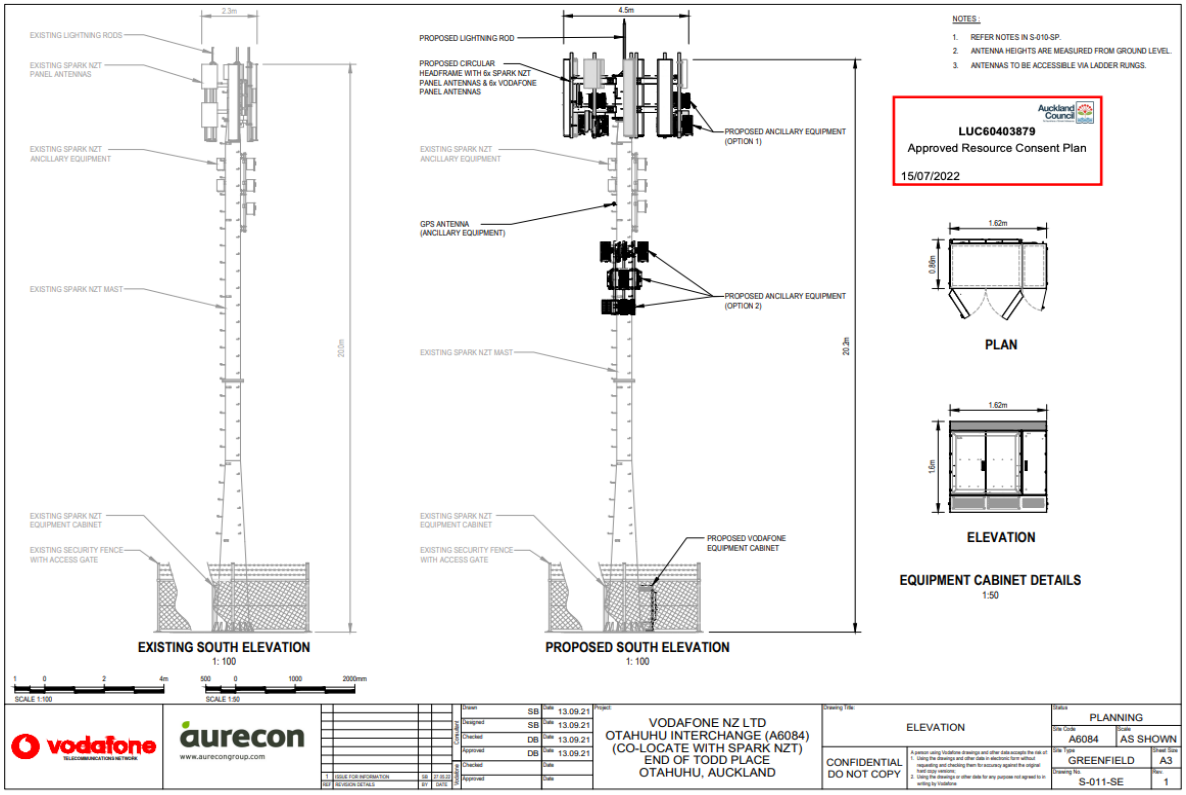
6.4 Co-location

The NESTF rules were not designed to accommodate the co-location of telecommunications facilities on the roadside. This means that co-location is often not possible because the existing permitted build dimensions are exceeded (e.g. a co-location tower will need to be taller to fit more equipment on it, a larger headframe and more cabinet space). This results in the need to obtain a resource consent and limits the ability to provide appropriate mobile coverage to an ever-changing urban environment. Co-location is also desirable from an amenity point of view, for residents who would prefer not to have multiple towers sited near each other.



Below is an example of a 4.5 headframe on a co-location roadside site in a metropolitan area. It is a Conexa tower with Spark and One NZ antenna in Otahuhu.





6.5 NESTF DOESN'T COVER ALL THE NETWORK BUILD SCENARIOS - IT'S NOT A ONE-STOP SHOP

NESTF 2016 does not cover all the network build scenarios needed for the delivery of a resilient and comprehensive telecommunications network in 2024 and beyond. Because NESTF is not a one-stop shop covering all activities undertaken in a telecommunication network, it needs to be read in conjunction with the applicable district plan.

For example, NESTF 2016 only provides for telecommunication activities in certain zones. NESTF does not deal with:

- The placement of new telecommunication poles and antennas in industrial, commercial or specific activity zones.
- The situation where operators need to connect new network equipment to existing poles.
- The exemption from natural hazard rules for all telecommunication facilities.
- Temporary facilities/cell-sites known as cell sites on wheels (CoWs) and CoPs (cell sites on pallets) which support resilience efforts and crisis response.
- Connections to listed heritage properties.
- Construction of access tracks including earthworks.
- River crossing outside the road reserve.

These matters need to be dealt with in policies and rules in district plans, which often result in different standards across regions. Policy and resource consent planners in councils find the fragmented approach confusing. The overall effect is the lack of a consistent and comprehensive rule hierarchy.

One option to address this lack of national consistency is through new national direction for infrastructure. However, the timeframe for developing and implementing national direction is too long - 2027 seems to be the earliest date for the work to complete after which it needs to be progressively implemented at the local level. Our experience with the 2016 NESTF reform is that updating the NESTF can bring about much more immediate policy change.

6.6 COUNCILS DO THINGS DIFFERENTLY

In addition to the problem of NESTF not being a one-stop shop, and not covering all necessary telecommunications activities (discussed above), there is the added problem of council discretion for some of the things that are allowed in NESTF.

The problem with councils doing things differently is that telecommunications infrastructure generally contains the same features and is of a similar size across the country. Having bespoke rules for things that need to be the same increases costs, delays and uncertainty for an industry that is constantly upgrading or rolling out new technology.

Examples of this issue include:

- **Temporary facilities**: network operators often need to install temporary facilities, for example to replace damaged sections of a telecommunications network during an emergency. At the

moment councils have quite different rules that apply in emergency situations, which makes it difficult to repair networks quickly. Updating the NESTF to clarify the definition of temporary facilities would solve this issue.

- The matters in Part 3 (**sub part 5**) of NESTF when they apply to a telecommunications activity. Sub part 5 deals with the application of district and regional rules concerning trees and vegetation, heritage, visual amenity landscapes, places adjoining coastal marine areas, and rivers and lakes.

- NESTF does not use the same language and rules framework as is used in district plans. It would be much easier to understand and administer requirements if the NESTF used the same language and definitions of district plans. For example, if we were using district plan language we would have a rule that states maximum pole height. Under the current NESTF it is necessary to identify the date when a pole was first established, then determine if there has been previous height increase, which can be very difficult.

- NESTF doesn't deal with controlled or discretionary activities, while other national environmental standards do. For example the National Environmental Standards for Freshwater and the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health both include a framework for considering a controlled or discretionary activity. This is confusing and frustrating for council planners assessing NESTF rule infringements. It has also led to each council having different approaches and information requirements. This could, for example, address the issue of councils declining an application for a pole that meets permitted height in a district plan but that is higher than that permitted under NESTF. This commonly becomes a long and expensive process.

Having these matters standardised in NESTF, and flowing through to district plans, would make it easier and faster to operate.

6.7 How to address these issues?

We discuss how the above issues can be addressed in an updated NESTF in the section of this briefing pack that deals with modalities.

7 EXAMPLES

In this section we present examples of how the failure to update the NESTF is standing in the way of connectivity upgrades and getting connectivity to new developments. The examples include:

- A case study on how NESTF has previously enabled major connectivity improvements (the RBI 2 case study).
- Estimates on the number of mobile sites that need to be built over the next 10 years and the associated consenting costs.

7.1 NESTF 2016 AND THE RURAL BROADBAND ROLL OUT

To help demonstrate how the updating of telecommunications standards under the RMA can speed up the roll out of connectivity, we can look back and see the difference made by the updating of the NESTF in 2016.

The NESTF 2016 reform resulted in significant benefit for the rollout of government led connectivity programmes, including the Ultra-fast Broadband Programme (UFB), the rural broadband initiative (RBI), the mobile black spot fund, and the rural capacity upgrade programme. We can demonstrate these benefits by comparing RBI 1 (pre NESTF 2016) and RBI 2 (post NESTF 2016):

- RBI 1 (pre NESTF 2016): consisted of 140 new sites, 30 (21.4 percent) of which required notified hearings to obtain resource consent approval.
- RBI 2 (post NESTF 2016): consisted of 540 new sites, 7 (1.4 percent) of which required notified hearings to obtain resource consent approval.

7.2 ESTIMATED TOWER NUMBERS AND ASSOCIATED CONSENTING COSTS

7.2.1 New towers

As migration to 5G technology increases and existing networks are phased out, mobile network operators anticipate that approximately 3500-4000 new mobile sites or co-locations on existing sites requiring new stronger towers will be required over the next 10 years. If the roadside antenna dimensions and associated heights of poles are not amended in the NESTF to provide for 5G equipment, each site will require resource consent approval.

At a cost of $15,000 on average per resource consent, **this equates to between $52,500,000 and $60,000,000 in associated resource consent fees and costs over the next 10 years for new sites.**

7.2.2 Tower upgrades for Fortysouth

In addition to building new cell sites, existing sites will need to be upgraded. The Fortysouth network includes 155 sites established within landscape overlays that qualify for Subpart 5 under the NESTF. Resource consent is required for any additional antennas or upgrades that increase existing antenna dimensions in a sub part 5 overlay. All of the established sites will require multiple antenna upgrades within the life of the respective site.

At an average cost of $15,000 per resource consent, **this equates to $2,325,000 in associated fees and costs to upgrade the existing sites in overlay areas.** It is our experience that antenna upgrades to existing established sites are commonly granted without issue. As the increase in antenna dimension size is generally less than 0.5m² face area. Furthermore, the majority of land use effects occur at the establishment of the site, being a tower or rooftop.

7.2.3 Tower upgrades for Connexa

Upgrades and co-locations to existing mobile towers will be a dominant activity over the next 10 years to enable customers to add, modify and change out their existing equipment on Connexa towers.

It is estimated that approximately eight to ten percent of Connexa's portfolio of towers is located within areas of sub-part 5 overlay. This results in changes or modifications requiring resource consent. At an average of $15,000 per resource consent **this equates to an estimated $3,600,000 in associated fees and costs to upgrade the existing sites in overlay areas.**

8 MODALITIES - THE CHANGES NEEDED TO BRING THE NESTF UP TO DATE

8.1 AN UPDATED NESTF CAN BE DRAGGED AND DROPPED INTO NEW NATIONAL DIRECTION THAT IS DEVELOPED LATER

TCF members are asking that the NESTF be updated under the RMA as part of phase two of the resource management reforms that are scheduled to take place this year. The changes needed are long overdue and too urgent to wait for the work on the broader package of national direction to be done (currently scheduled to be complete by the end of 2026 at the earliest, with implementation to follow).

The good news is that the work has already been done. Members of the TCF Local Government Working Group have prepared a marked up version of the NESTF that shows the changes that need to be made. A copy of this has been provided to officials. NESTF can be updated under the existing RMA and dragged and dropped into the new package of national direction when that is complete.

It would be ideal to rewrite the NESTF in a format that reads more like a district plan, so that it can be more easily understood and integrated by planners. The current drafting of NESTF is complicated (e.g. Pole A, B, C or D; antenna A, B, C, or D; or Date A, B, C or D) and needs a plain English guide to interpret it. However if PCO time is limited (and this would prevent NESTF updates taking place this year) we could accept an updated NESTF in the current format in the short term.

8.2 THE CHANGES THAT ARE NEEDED

To address the issues explained earlier in this briefing we need to expand (or amend) the range of permitted activities in NESTF to gain greater regional consistency. The areas to be addressed include:

a. New facilities on poles in urban zones.

b. Telecommunication poles in commercial and industrial zones.

c. Temporary activities.

d. Emergency activities.

e. Telecommunications within a building.

f. Customer connections.

g. Working under and through trees.

h. Earthworks.

i. Maximum height for facilities, including ancillary activities, to reflect the intensification of urban environments or have rural sites that meet the coverage challenges of rural areas.

j. Changing the notational envelope for facilities in the street.

k. Facilities in roads including where the road passes through outstanding natural landscape, etc.

l. Low small-scale facilities in areas of outstanding natural landscape and coastal environments e.g. similar to the Queenstown Lakes District Plan.

The marked-up version of NESTF 2016 that we have provided shows what is needed in more detail.

8.3 WHAT WILL NOT WORK - THE FAST TRACK BILL AND WAITING FOR NATIONAL DIRECTION

Officials may be thinking that the issues raised in this briefing can be addressed through the Fast Track Bill or a new package of national direction.

As noted earlier in this briefing, the development of a new package of national direction will take too long. And while the Fast Track Approvals Bill could potentially help with some larger scale telecommunications projects, for the most part the scale of our infrastructure is much smaller. On the mobile side it consists of thousands of separate base station facilities (cells) that make up the cellular network.

[ends]