

## NOKIA CONTRIBUTION

To the Consultation Paper on

Improving the telecommunications powers and immunities framework

**October 16<sup>th</sup>, 2020**





## 1. About Nokia

We create the technology to connect the world. We develop and deliver the industry's only end-to-end portfolio of network equipment, software, services and licensing that is available globally. Our customers include communications service providers whose combined networks support 6.1 billion subscriptions, as well as enterprises in the private and public sector that use our network portfolio to increase productivity and enrich lives.

With an end-to-end portfolio that is unique in the industry, Nokia can work in partnership with operators to deliver "real 5G". Nokia's in house 5G mmWave Small Cells and AirScale BTS provide in-building and outdoor coverage, while our Microwave Anyhaul, Cloud native RAN, antennas, and 5G cloud-native core are part of approximately half of our agreements to date. Beyond our mobile networks portfolio, Nokia has excellent FP4 network processor-based IP routers and PSE- 3 chipset powered optical networking - our customers can use the Nokia Network Services Platform to make this into full-5G-strength software defined connectivity 'smart network fabric' secured by Nokia Security Orchestration, Analytics and Response (Nokia SOAR) to ensure resilient 5G.

Nokia has been selected by both Optus and VHA as a key supplier for the network deployments of 5G, including the required radio modules, as well as a major supplier to nbn for fixed network technology solutions. Nokia is also a supplier to various enterprises which have deployed private wireless networks deployed using apparatus licenses, including for example 27 mines with 10 customers in Australia. Globally Nokia has been selected by more than 90 operators to supply 5G networks.

Through our research teams, including the world-renowned Nokia Bell Labs, we are leading the world to adopt end-to-end 5G networks that are faster, more secure and capable of revolutionizing lives, economies and societies. Nokia adheres to the highest ethical business standards as we create technology with social purpose, quality and integrity.

For more information: <https://www.nokia.com/networks/5g/>

*Disclaimer:* This response is based on Nokia's current understanding of the market dynamics and various standards bodies; these dynamics are changing and hence our views may update with these changes

## 2. Nokia View

Nokia welcomes the opportunity to comment on the proposals in the Department of Infrastructure, Transport, Regional Development and Communications (the Department) consultation paper *“Improving the telecommunications powers and immunities framework”* dated September 2020.

In addition to the following, Nokia recommends that clarity be provided that where there is no conflict, the provisions under Schedule 3 in the *Telecommunications Act 1997* (the Act) take precedence over other Federal legislation.

This submission sets out Nokia’s response to the proposals posed by the Department, within the consultation paper.

## 3. Safety and notification

### 3.1. Creation of a primary safety condition

#### **Proposal:**

**Should a new section outlining a primary safety condition be added to the Code of Practice to make clear, and reaffirm, that safety of telecommunications installations is paramount?**

Nokia generally supports the inclusion of a new section in the *Telecommunication Code of Practice 2018* (Code of Practice), outlining safety conditions to ensure the safety of the community, structures and telecommunications installations. The new section should relate to public health safety and structural integrity (both of which are referred to in the Code of Practice).

#### Public Health Safety

Pursuant to the Act, it is mandatory that Carriers comply with industry codes and standards.

The *Mobile Phone Base Station Deployment C564:2018* (the Deployment Code) is specified as an industry code. The underlying principal of the Deployment Code *‘is that public health and safety is of paramount importance. In the context of the Deployment Code, the precautionary principle therefore means that precautions are taken to minimise exposure to radio emissions by virtue of their possible association with health problems in order to protect people even though radio emissions at low levels have not been proven to cause such problems.’*<sup>1</sup>

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<sup>1</sup> [https://www.commsalliance.com.au/\\_data/assets/pdf\\_file/0013/62230/Explanatory-statement\\_PC.pdf](https://www.commsalliance.com.au/_data/assets/pdf_file/0013/62230/Explanatory-statement_PC.pdf)

The Deployment Code specifically notes the *Australian Radiation Protection Standard for Maximum Exposure Levels to Radiofrequency Fields – 3kHz to 300GHz (RPS3)* standard (RPS3 standard). As such, it is already mandatory for Carriers to comply with the RPS3 standard.

Nokia considers that Carrier obligations in respect of exposure to electromagnetic energy (EME) are adequately controlled by the Deployment Code however to improve land owner and community knowledge and confidence in telecommunications deployment, the Deployment Code requirements could be listed in a new section outlining safety conditions in the Code of Practice.

It should be made clear that Carriers hold primary responsibility for the management of health and safety risks for Carrier activities pursuant to Schedule 3 of the Act.

### Structural Integrity

Structural assessment is undertaken by Carriers for all new mobile telecommunications facilities and for all upgrades to existing facilities to ensure the structural integrity of a structure (including towers, utility structures and buildings) is not compromised. The structural assessment has regard to the regulations and requirements of the Building Code of Australia (BCA) as well as industry standards and codes.

Maintenance of private assets on which telecommunications equipment may be installed is a shared responsibility between the asset owner and Carrier/s. A Carrier is responsible for strengthening and/or repair costs resulting from the installation of telecommunications equipment however a Carrier is not responsible for changes made by the structure owner that are unrelated to the telecommunications facility.

A requirement for engineering certification for every upgrade should not be included as this would:

- significantly delay telecommunications upgrade works;
- be very costly to the Carrier;
- be very costly for the asset owner in undertaking due diligence checks for every installation; and
- engineering certification would need to be provided by the asset owner to the Carrier/s for building or structure works to reference in future upgrades. The Code of Practice is unable to regulate an asset owner.

The current arrangement provides assurance for the safe and effective implementation of telecommunications equipment however to improve asset owner and community confidence in telecommunications deployment, a new section outlining safety conditions could be included in the Code of Practice.

- The proposed primary safety condition could include:
- Listing the Acts, Codes and Standards (including Sections and Clauses) that Carriers must comply with;

- Referencing the precautionary principle;
- Referencing the consultation requirements of the Deployment Code; and
- Reinforcing the need for Carriers to comply with standards, including industry standards and codes registered by the ACMA under Part 6 of the Act.

## 3.2. Standard notifications across industry

### **Proposal:**

### **Would requiring new information to be included in a notice enhance and clarify the existing notification procedures?**

#### Land Access and Activity Notice

A Carrier already has extensive obligations under the Telecommunications Code of Practice 2018 (“Code”) when issuing a land and activity notice (“LAAN”) particularly for installation purposes. In many instances the landowner is aware of the proposed activity well in advance of the LAAN being issued to a landowner. In most cases a Carrier accompanies a LAAN with detailed design drawings, for construction drawings, outlining the proposed works. However, Nokia acknowledges there may be inconsistencies in the level of information and detail provided by each Carrier in a LAAN and is supportive of a pro-forma or prescribed form of notice included in the Code of Practice for installation LAAN, given their impact on a landowner and occupier/s may be greater than an inspection and/or maintenance activity. For an installation LAAN Nokia would support:

- A plain English pro-forma LAAN document to be used by the Carriers as the base document to include the following;
  - The works in simple language i.e. adding equipment, removing equipment, if a crane is required and the actual potential impact on the landowner, if any;
  - Detailed design drawings preferably ‘for construction’ drawings attached;
  - Indicative program of works and/or method of procedure (noting if a landowner objects the timeframe may require amendment) attached to give the landowner a more comprehensive understanding of the duration of works, whether a power outage is required, if a crane or EWP will be required on site and for what duration, road closures and traffic management, when restoration works will be completed and so forth;
  - Engineering certification of the works where possible to provide the landowner or asset owner comfort the proposed works have been certified by a qualified engineer and will not structurally impair their asset;
  - Outline compliance with industry standards such as the Building Code of Australia and other relevant codes and standards;
  - A statement outlining a landowner’s ability to object, when and what type of objection is valid and their right to ask the Carrier to refer the matter to the Telecommunications Industry Ombudsman (“TIO”); and
  - A landowner’s right to seek compensation under the Act.
- If the LAAN is being issued on a utility, additional information in the LAAN to include:
  - Road closures requirements and traffic management plan;

- If access to the utility's asset, for example a water reservoir, will be impeded by staff and the duration of the impediment; and
- EME plume diagrams, if relevant, provided to a utility to confirm access to their asset will be safe upon completion of the installation works, i.e. a water reservoir can be accessed and maintained by staff safely.

## Community consultation for new sites and upgrades to existing facilities

The existing notification and objection processes are sufficient. The Carriers have a standardised notification process which includes flexibility to consult in CBD, metropolitan, rural and remote areas.

Public notification for new sites is generally broader than notification for a development application and consultation for upgrade sites is clear, providing details of the proposal and time frames for comment or requests for additional information.

All details of the standard notifications are available in the Deployment Code.<sup>2</sup>

### 3.3. Withdrawal of notifications

Nokia would be supportive of Option 1: Industry commitment to withdraw a notice as a non-regulatory approach as opposed to Option 2: Formal requirement for a Carrier to withdraw a notice as there can be many factors that delay the planned activity including a landowners request the matter be referred to the TIO, awaiting the TIO's ruling and/or ongoing negotiations with the landowner. When a Carrier is confident the notice is to be formally withdrawn, the obligation should then be on the Carrier to provide notification of such, within a reasonable period, to the landowner and any other relevant parties.

It would be unusual the landowner is financially impacted by the lack of withdrawal of a notice given the proposed activity detailed in a LAAN is entirely at the Carriers expense. It would be difficult for a landowner to demonstrate financial impact or loss on the basis the notice was not withdrawn or withdrawn in a timely manner. In many cases, in Nokia's experience, the principal reason a landowner objects to a LAAN is generally motivated by the rent. Often there is a disconnect between the landowner's and Carriers rental expectations. In some instances, the landowner has genuine concerns on the impact of the Carriers activity on the land and/or landowners' asset particularly if the landowner is considering redeveloping the land.

Upon receipt of an installation LAAN, Nokia has seen some landowners engages consultants, at their discretion, to assist with the review of the LAAN and the impact of the activity on the land or landowner's asset. The landowner may therefore be in a position to quantify consultants' costs such as engineers, architects or legal expenses incurred as a result of the Carrier's LAAN, however, to this end, the landowner has the ability to seek compensation for such costs under Clause 42 of Schedule 3 to the Act. Given the timeframes included in a LAAN,

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<sup>2</sup> [https://www.commsalliance.com.au/\\_data/assets/pdf\\_file/0018/62208/C564\\_2018-181206.pdf](https://www.commsalliance.com.au/_data/assets/pdf_file/0018/62208/C564_2018-181206.pdf)  
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Improving the telecommunications powers and  
immunities framework

more particularly an installation LAAN, it is unlikely the withdrawal of a LAAN in a timely manner would reduce this burden.

In Nokia's experience, withdrawal of a LAAN is an uncommon event and more often the LAAN is extended or revised. In many instances the LAAN reignites negotiations with a landowner on more amicable terms and the Carrier operates on site thereafter via the terms and conditions contained in the tenure agreement. In this instance a LAAN can facilitate a speedier rollout of critical network upgrades across the board and its Nokia's experience that Carriers are generally conservative in their issuing of LAAN's in favour of negotiating a solution with the landowner.

### 3.4. Requirement to provide engineering certification

Nokia recognises that landowners need reassurance that telecommunications infrastructure is to be installed in accordance with good engineering practice and that duplication of structural assessment should be avoided. However, a requirement for engineering certification for every upgrade should not be included as this would:

- significantly delay telecommunications upgrade works;
- be very costly to the Carrier;
- be very costly for the asset owner in undertaking due diligence checks for every installation; and
- engineering certification would need to be provided by the asset owner to the Carrier/s for building or structure works to reference in future upgrades.

The administrative cost would be an ongoing burden on both the Carrier and the asset owner.

### 3.5. Extending notification timeframes

#### Notice to landowners and occupiers

If the recommendations for standard notification above are adopted, the landowner should not need additional time in which to object to a Carriers LAAN. Nokia does not support increasing notification to public utility landowners or other landowners from 10 business days to 20 business days as in most cases, the public utility landowner (and landowner) is well aware of the LAAN prior to its issuance. Carriers are already obligated to make reasonable efforts to enter into an agreement with a public utility that makes provision for the manner in which the Carrier will engage in an activity under the Act<sup>3</sup>.

As mentioned above, in the majority of instances a landowner is fully aware of the Carriers intentions to install a facility on site and more often than not in negotiations regarding such activity. Increasing the timeframe from 10 business days to 20 business days will create additional burden (including financial) on Carriers to deliver network upgrades in a timely manner. In this instance, Nokia would support a non-regulatory approach to encourage all

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<sup>3</sup> Schedule 3 Part 1 Division 5 (11) of the Act "Agreements with public utilities"

Carriers to consistently engage with public utility landowners and landowner to consult earlier in the design process on the proposed Carrier activity on site that maybe subject to a LAAN at a later date. In Nokia's experience, this is consistent with the current approach most Carriers and vendors adopt.

Nokia support consistent timeframes to all landowners. Different timeframes between landowners and public utility landowners will only generate confusion and inconsistent application of the rules.

Under the Act, the current timeframes, can be extensive if a landowner objects and can result in 40 business days prior to a matter being referred to the TIO<sup>4</sup>. The Carrier then has to wait for the TIO's ruling which may take another 20 business days or longer. Overall the process, as it stands now, could take 3 plus months prior to the Carrier being able to proceed with its planned activity notified in the LAAN. It is therefore in the Carriers best interest, based on the potential delays a Carrier can experience by issuing a LAAN, to negotiate a suitable outcome with the landowner in favour of a LAAN. To impose further restrictions and delays on a Carrier will undoubtedly impose financial burden and delays in network upgrades.

### Community consultation for new sites and upgrades to existing facilities

Community consultation timeframes are considered reasonable for new sites and for upgrades to existing facilities.

For new sites, Councils are provided with 10 business days to comment on the Consultation Plan before formal consultation commences. The consultation process provides 15 business days for the community and interested and affected parties to comment on the proposal and Council is provided with 20 days to make comment. Carriers will grant an extension period of an additional 5 business days to provide comment if requested in writing

For upgrades to existing telecommunications facilities, Councils and the community are provided with at least 10 business days to make comment.

## 4. OBJECTIONS AND PROTECTIONS

### 4.1. Clarifying the objections process for landowners

Nokia considers the objections process as set out in the Code of Practice can be clearly understood by landowners and occupiers.

Carriers must meet the Code of Practice requirements. If the Powers and Immunities Reference Group considers landowners and occupiers' do not have enough information and

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<sup>4</sup> Installation LAAN 10 business days' notice (objector has 5 business days to object), Carrier has 5 business day's to respond, then both parties have 20 business days to resolve the matter. The objector then has another 5 business days to request the Carrier refers to TIO (Schedule 3 of Act)



guidance about the objection process, a factsheet could be developed and made available via a link in the notification correspondence.

## 4.2. Allowing Carriers to refer objections to the TIO

Nokia supports a regulatory change that would allow Carriers to refer objections to the Telecommunications Industry Ombudsman (TIO) for resolution without waiting for a landowner to request the objection be referred.

The cost to resolve disputes via the TIO is borne by the Carrier regardless of who refers the dispute so there is an incentive for Carriers to attempt to resolve disputes within the existing objections process.

There are instances where objectors do not actively engage in the resolution of an objection. Where an objection cannot be resolved within the mandated timeframe, the opportunity for a Carrier to refer the objection to the TIO provides a balanced objection resolution pathway for both the landowner and Carrier.

## 4.3. Removal of redundant equipment

Nokia recognizes that the Deployment Code includes a requirement for Carriers to make sure that equipment no longer in service does not transmit or is removed.

Nokia has no comment to make on any policy reform that would require Carriers to remove redundant equipment from infrastructure.

# 5. FACILITATING SERVICES IN LINE WITH COMMUNITY EXPECTATIONS AND TO SUPPORT ECONOMIC GROWTH

## 5.1. Improve coverage outcomes through better infrastructure, where safe

### Allow antenna protrusions to be extended to a height of 5 meters

The increase in height for antennae protrusions provides a balance between the provision of reliable network coverage and visual amenity. An increase in height from 3 meters to 5 meters in all areas will extend coverage from a facility, reducing the need for additional facilities.

Particularly in CBD and metropolitan areas, the increase in height will assist in EME compliance and public safety when accessing rooftop and utility installations.

To minimize visual impact, the Telecommunications (Low-impact Facilities) Determination 2018 (LIFD) already requires that low-impact facilities are color-matched to their background or in a color agreed by the relevant local government authority.

Nokia suggests that a tower extension of 10 meters is permitted in Industrial and Rural areas

## Allow satellite dishes of 2.4 meters in diameter to be deployed in industrial and rural areas

Nokia supports an increase in the maximum diameter size of satellite dishes in industrial and rural areas to 2.4 metres as this will reduce the potential need for repeater sites.

To minimise visual impact, the LIFD already requires that low-impact facilities are colour-matched to their background or in a colour agreed by the relevant local government authority.

## Specify radiocommunications lens antennae as a new low-impact facility

Nokia supports the classification of radiocommunications lens antennae as a low-impact facility in all areas because lens antennae have the potential to replace multiple individual panel antennas at a single elevation. This will provide the opportunity for existing structures to accommodate more Carriers at potentially lower elevations. The ability to install lens antennae as low-impact in all areas will promote co-location and minimise the need to install additional towers in cases where existing structures are at full structural capacity.

The low-impact classification of lens antennae will encourage their use in areas most sensitive to visual amenity concerns (i.e. residential areas).

### 5.2. Improve coverage outcomes through tower extensions

Nokia supports the inclusion of tower extensions up to 5 meters in height in Commercial areas (currently the LIFD only allows such extensions in Industrial and Rural areas) as it would increase network coverage and reduce the potential need for additional facilities.

Where a tower has previously been extended by less than 5 meters in height, an extension up to 5 meters in (total) height should be permitted in the LIFD.

The increase in height of tower extensions in Commercial areas provides a balance between visual amenity and the need to provide telecommunications services

### 5.3. Allowing deployment on poles rather than on utilities

Nokia supports the classification of smart or slim line poles up to 12 metres in height as low-impact in all areas. This will assist in the deployment of 5G technology where there is no existing infrastructure or, where infrastructure is available, it may have no spare capacity.

Significant economic benefits may be realized if smart or slim poles are specified as low-impact facilities because deployment could be undertaken in a nationally consistent way.

The LIFD should specifically restrict siting of new poles to protect road crossings and existing access for pedestrians, prams/strollers and wheelchairs.

Siting should not be restricted to public land as this may result in poorer community outcomes.

#### 5.4. Encourage the co-location of facilities

To encourage low-impacting on existing infrastructure, Nokia considers the 25 per cent volumetrics restriction should be removed in Commercial areas and that the 25 per cent volumetrics restriction in Residential areas be lifted to 50 per cent.

To protect sensitive uses, Residential areas could have two controls;

- 25 per cent volume increase with no limitation in distance to residential development
- 50 per cent volume increase with a minimum separation of 50 metres to residential development, heritage listed items, heritage conservation areas and community sensitive locations.

Structural assessment should be undertaken to protect the structural integrity of existing infrastructure.

Clear guidance should be provided for volumetrics calculation based on visual impact.

Nokia thanks the Department for the opportunity to comment on its consultation paper *“Improving the telecommunications powers and immunities framework”* dated September 2020.

## ACRONYMS

Department	Department of Infrastructure, Transport, Regional Development and Communications
Act	Telecommunications Act 1997
Code of Practice	Telecommunication Code of Practice 2018
Deployment Code	Mobile Phone Base Station Deployment C564:2018
RPS3 standard	Australian Radiation Protection Standard for Maximum Exposure Levels to Radiofrequency Fields – 3kHz to 300GHz (RPS3) standard
EME	Electromagnetic energy
BCA	Building Code of Australia
TIO	Telecommunications Industry Ombudsman
LIFD	Telecommunications (Low-impact Facilities) Determination 2018