

# The City of Hobart’s submission to “Improving the telecommunications powers and immunities framework”

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City of **HOBART**

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## Improving the telecommunications powers and immunities framework?

The City of Hobart has always been supportive of carriers' requests to install communications infrastructure. However, the prospect of multiple new large or densely-placed assets in public spaces concerns us as a planning authority, regardless of installation quality.

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## Introduction

In the past, carriers have installed moderate infrastructure at ground level in CBD locations. This has been possible since 3G and 4G are relatively long-range technologies, with equipment usually installed on high buildings or hill tops. As pointed out in “Improving the telecommunications powers and immunities framework” (the Proposal):

*Most aspects of carrier powers and immunities have been in place since 1997. Since then, communications technologies have evolved rapidly, and demand for services and data has increased dramatically.<sup>1</sup>*

We agree, but draw a different conclusion about what this means for public amenity. The conditions under which “low-impact” installations were understood was very different in 3G, 4G or earlier technology, when telecommunications transmitters were widely spaced and generally quite far from pedestrian spaces.



Figure 1: Typical 3G / 4G tower locations in outer suburbs and fringes of Hobart

5G antennas, by contrast, tend to be located close to the ground in a “mesh”, near to users. They are quite densely spaced, as each node is required to be just a few hundred metres from its neighbours. Furthermore, squeezed between any two of carrier A’s nodes, we would expect to see a node for carrier B and carrier C etc.

As technology develops we also expect to see new types of entities operating as carriers, including multinationals such as Amazon, Google, autonomous vehicle companies and others, who will all wish to maintain communications and spatial services in our cities. It is extremely concerning that all such carriers would gain the power to install even the equipment deemed “low-impact” today (i.e. requiring no planning approval or landholder permission) let alone some of the even broader range of “low impact” infrastructure that the Proposal suggests.

The City is concerned that 5G is accelerating the rollout of “low impact” development, which will be required at a vastly increased density within CBD locations. While each installation may be reasonably “low impact”, in the aggregate this equipment will represent a significant number of clumsily-located cabinets and poles in the City’s most important and iconic pedestrian and tourist locations.

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<sup>1</sup> <https://www.communications.gov.au/have-your-say/improving-telecommunications-powers-and-immunities-framework>

Telecommunications carriers are extremely keen to place 5G equipment in the most densely populated pedestrian areas (where their customers are) and are now keen to have poles similarly designated as low impact installations.

### Poles and other support infrastructure

A 5G transmitter, while not aesthetically pleasing, is a relatively small device, and the City of Hobart has never objected to the placement of these, as we understand they are necessary to achieve telecommunications outcomes.

However, according to the carriers we have spoken with, the ancillary infrastructure to support 5G infrastructure can include cabinets (Figure 1), wiring, brackets, backup power infrastructure (i.e. generators) and many other installation types.

Our Elizabeth St pedestrian mall carries no electrical infrastructure except for light-poles and (by design) there is not much more installed there except trees, artworks, furniture, bike racks and bins. Council has worked hard to place services underground to make it a neat, pedestrian-friendly space with patterned paving, all fitting an overall design scheme:

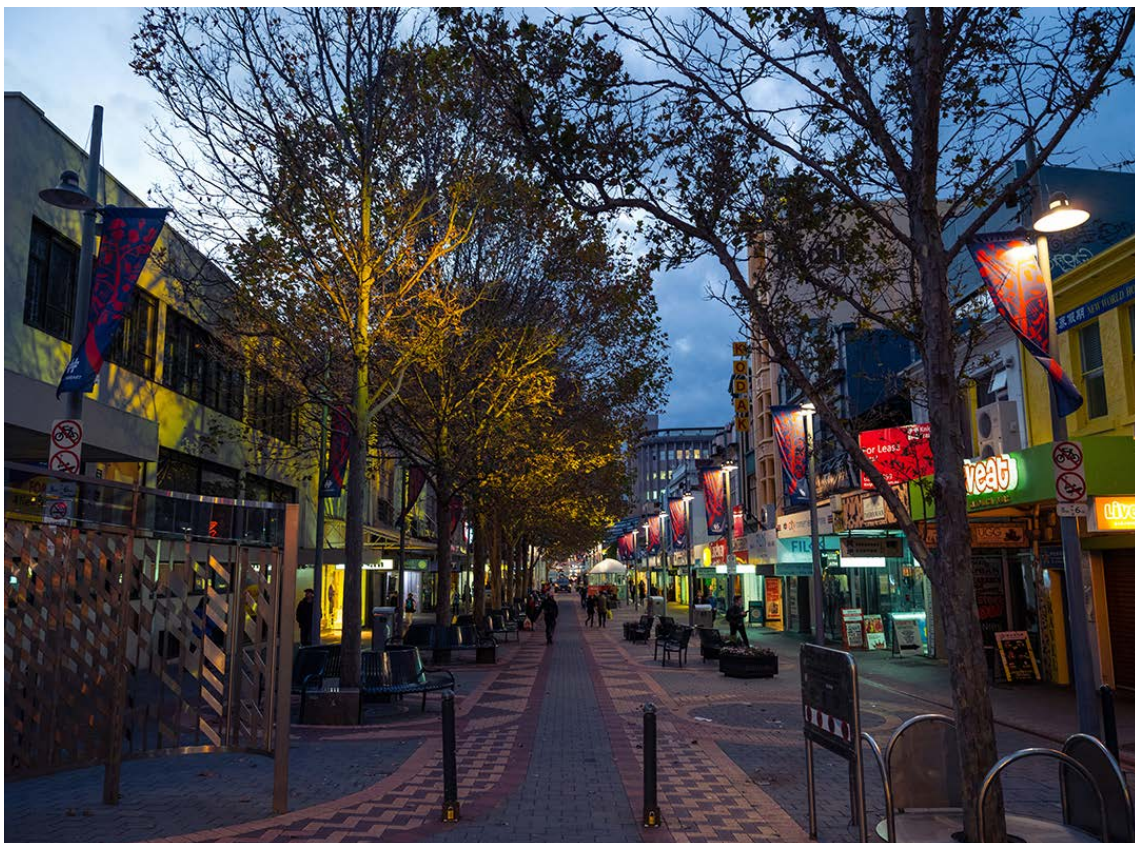




Figure 2: Two views of Elizabeth St Mall in central Hobart. Poles carry lights and banners and the pavement is decoratively patterned throughout. There is no electrical infrastructure visible above ground.

In order to install a 5G antenna on one of the Elizabeth Mall light poles (to which we don't object) a carrier in the past few months has said they would also need to install a reasonably large cabinet (like the one below) next to any pole that carries a 5G antenna:



Figure 3: Carrier-provided image of required 5G cabinet required to sit beside any pole carrying 5G equipment in Elizabeth St Mall. Note that in the left hand image, the transmitter on the pole is barely visible, but the cabinet is a large piece of infrastructure, 1.3 m high, 0.5 m deep and 0.8 m wide

The same carrier has also expressed to us that their preferred model is to adopt full control and rights over the entirety of any pole once they choose to mount 5G equipment upon it, so that we would need to ask their permission before using our own pole for our own purposes.

If every pole in the mall was eventually used to house a 5G antenna (and there is every reason to suspect they will) then we could see at least 10 such cabinets installed in the mall. It is possible to install the required services underground, but it is more expensive to do so. Placing them above ground transfers the future cost to the City, since we lose public space, we are prevented from upgrading the space and we must maintain the cleanliness of the cabinet and the ground surface around it.

The carrier has agreed that the use of a smart pole could avoid the requirement for the cabinet, but has not offered to contribute to its installation, so the City would be required to remove our existing pole and pay for the new pole and its installation – likely a \$50,000+ project. To do this for every pole in the one-block mall would cost the City in excess of half a million dollars. Our options presently are to find that money and hope other carriers accept a smart-pole solution, or to accept whatever “low-impact” development the carriers determine is necessary within our mall. (The Proposal points out that even smart pole solutions may still require cabinets beside them.)

The Proposal includes the following phrase (our highlight), with which the City agrees:

*Poles and towers are not low-impact facilities and are subject to local planning obligations, meaning a development approval is required. These obligations ensure that significant infrastructure is subject to safety and visual amenity oversight.*<sup>2</sup>

However this text is immediately followed by the suggestion to *include* poles as low-impact infrastructure in future (i.e. to remove the safety and visual amenity impact referred to above):

*Specifying smart or slim poles as low-impact facilities could have the effect of reducing capital costs involved in acquiring and rolling out 5G infrastructure. It means that carriers could roll out new, better mobile services in more locations where it would have been unfeasible to do so previously. Significant economic benefits may be realised if smart or slim poles are specified as low-impact facilities as deployments could be undertaken in a nationally consistent way.*<sup>3</sup>

We cannot be misled by marketing terms. “Slim-line” poles or “Smart” poles are no different to other poles except that infrastructure can be hidden inside them (often requiring them to be thicker, not thinner. Most “slim” poles are actually significantly thicker than the poles already installed by the City in Elizabeth Mall.) Smart/Slim poles still require significant civil works, trenching, conduit, power, fibre and foundations, and they have the same visual amenity impacts and take up at least as much ground area and total volume as any other pole.

That said, we have no objection whatever to “slim” or “smart” pole technology and we are actively pursuing several installations of our own. However, for our own development on public land (including for poles) the City is required to apply to its own planning division for a development application or landlord consent, and gives the public the opportunity to object and comment.

Regardless of the benefits of new communications technology, there is a great risk in allowing our most precious and desirable public spaces to be redefined by the technological requirements of carriers, particularly when there are far more sensible ways of proceeding that achieve the same outcome. (See one suggested model below.)

If adopted in its entirety, the Proposal would see very significant negative changes to the nature of our cities and the control city authorities have over clutter and ugly pole and cabinet development.

## Costs

The document states that the costs of new infrastructure will be largely the carriers’ to bear:

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<sup>2</sup> Improving the telecommunications powers and immunities framework September 2020 p.24

<sup>3</sup> Improving the telecommunications powers and immunities framework September 2020 p.24

*The rollout of 5G requires a new wave of infrastructure investment, the costs of which will largely be absorbed by telecommunications carriers. This infrastructure investment will be different to the previous wide scale rollouts of mobile communications and will use a much more diverse range of technology solutions.<sup>4</sup>*

We do not believe it is true that carriers will largely bear the cost.

Some initial capital expenditure may be covered by carriers. This does not remotely cover the total lifetime cost of the asset.

There are very significant upfront and ongoing financial and amenity costs to the City when third parties create a new layer of civil and electrical infrastructure above and below our streets and footpaths. These costs include:

- managing the city around construction work;
- hosting large amounts of new infrastructure which needs to be cleaned, and cleaned around;
- planning and constructing our own infrastructure when prime above and below ground locations have been taken by carriers;
- losing control of expensive and community-approved design schemes for key locations;
- losing prime public space that was previously available for people and public amenity;
- losing the ability to plan and redevelop our own public assets because doing so might disturb carrier assets or affect network connections;
- giving away prime public space that would otherwise be available for civic use or have revenue-earning potential;
- having smooth and manicured footpath surfaces destroyed and replaced with a patchwork of pits and asphalt lines covering trenches;
- being legally and financially responsible for re-setting pits and trenches that sink and cause trip hazards.

Furthermore,

- when the City has made an infrastructure investment carriers utilise our infrastructure without paying us; and
- when a more suitable technology choice is suggested (instead of the cheapest one, which may require ugly and thoughtless development), carriers are happy to accept that option, so long as we pay for its installation.

The Proposal also states:

*The powers and immunities framework reduces the costs for carriers, which in the competitive market are passed on to consumers in the form of lower prices and improved services.<sup>5</sup>*

This ignores the corollary, which is that reduced costs for carriers are directly absorbed as *increased* costs for cities, which are passed on to ratepayers in the form of **higher** prices and **reduced** amenity and services.

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<sup>4</sup> Improving the telecommunications powers and immunities framework September 2020 p.5

<sup>5</sup> Improving the telecommunications powers and immunities framework September 2020 p.7

## Safety and best practice

The document states:

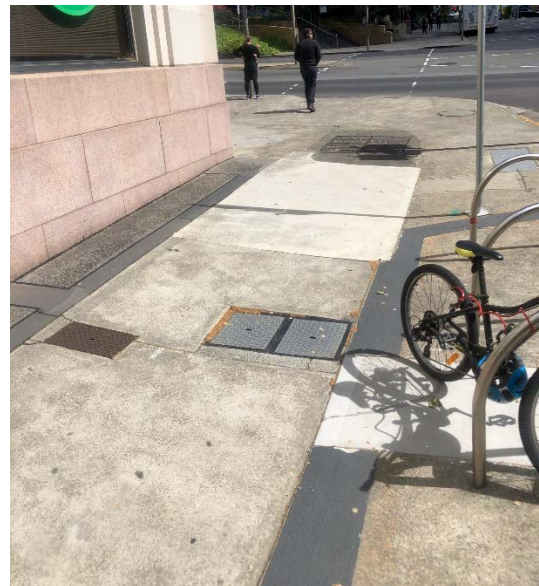
*It is paramount that facilities are installed safely and operate in accordance with best safety and engineering practices. Clear notification processes assist in decision making for landowners, the community and carriers. The paper seeks views on how safety and notification processes can be strengthened.<sup>6</sup>*

It is extremely clear that safety is not enhanced by multiple parties installing multiple new pieces of infrastructure, digging multiple trenches and installing multiple pits.

New installations disturb older ones, trench lines sink and footpaths are turned into extremely challenging surfaces for elderly and disabled people to navigate.

Despite the claim to best practice engineering, in reality, carriers take no responsibility for the actions of the contractors they hire to install this infrastructure and the contractors themselves are generally impossible to pursue (or will claim their work was best practice but a subsequent installation damaged their installation).

Hence the City is time and again left to pay to resurrect a footpath to make it safe from the mess left by multiple competing carriers and other agencies.



*Figure 4: Typical Hobart CBD footpaths which were built in perfect condition but have sunk, cracked, been left with trip hazards and been artificially degraded by multiple carriers (and others) competing for limited space. Carriers and their contractors take no responsibility for these works as poor engineering is usually not revealed until later when they can claim subsequent events have degraded their installation. Often, no single installer/contractor can successfully be pursued for poor engineering practices since each will blame issues on other contractors. We do not have the resources to pursue every instance or take these issues to court, so ratepayers are left to repair streets and essentially subsidise poor quality work. The overall effect is an ugly, unsafe surface and a poorly-designed space. 5G will see orders of magnitude more requirement for CBD infrastructure in already overcrowded sub-surface space.*

<sup>6</sup> Improving the telecommunications powers and immunities framework September 2020 p.8



## Responses to prompt questions

### In response to the Safety prompt questions on page 11

1. Do the current safety arrangements provide assurance for the safe and effective implementation of telecommunications equipment?
2. If no, what additional regulatory mechanisms may provide that assurance?
3. Would the addition of a primary safety condition to the Code of Practice provide that assurance?

No, our experience is that a carrier will employ a contractor to do work on their behalf. If the contractor provides a solution that does not provide a safe and well-engineered product, our experience is that the carrier takes no responsibility. Proving that the contractor is responsible for safety issues (for instance, if works subside some time later) is generally impossible, so it becomes the City's responsibility to continually repair and make safe footpaths that have been degraded by multiple installations, for which no party will take responsibility.

- One rectification for this may be to contribute to shared conduit space under the footpath or in public open space as suggested in "**Preferred Model**" below.
- Another might be to require inspection, photography and signoff of works to Council's satisfaction by a relevant qualified professional, at the carrier's expense.

### In response to the Notification prompt questions on page 13

1. Is there any other information that could be included on a notice would provide clarity on the installation process and timeframes?
2. What benefits, either financial or non-financial would additional notice and information bring to landowners?
3. If possible, to what extent would the inclusion of a standardised notification process increase or decrease regulatory burden, and at what cost per notification?

The wording on page 12 "however the provision of this information as part of the notification would only apply if the landowner is a public utility" is frustrating. It is of paramount importance to this City to know the technical details of what is being installed in public spaces. We create and maintain our own networks, smart city assets, transmitters and other devices and require technical details of the installations being placed on our poles or near our equipment.

A timeline of 10 days is significantly too short for community consultation.

Additional information and increased notification time is crucial for cities. In many cases we would happily co-invest in the digging of a trench in order to lay our own conduits or in the installation of smart poles or other assets if we had time to plan these activities. Presumably carriers are aware quite far in advance of many installations and the more time we have to assess the more likely it is we can get a better and more efficient outcome for all parties.

Notification forms should be standardised and, by 2020, should have long been managed entirely through an online portal, designed for easy upload of files and spatial viewing (i.e. a map location of the proposed works). Presently, emails and attachments are sent around and it becomes extremely difficult to piece everything together, particularly when someone has left their position and their emails are not accessible.

Before, during and after photographs should be easy to upload to the site (by all parties) to give comfort to all parties that the site is restored to at least the starting condition at the end of the job and provide some evidence of how works were finished.

The communications, files and imagery in the portal should be maintained as an auditable record of interactions between the landowner / authority and the carrier or their contractors. The spatial view of all assets should be retained and made available for ingestion into digital twin models of cities.

It is not possible to know the regulatory burden to users of a standardised system without seeing it, but it could presumably be properly designed in a way that was low-burden for users.

### In response to the Withdrawal prompt questions on page 14

1. How often has a lack of withdrawal of notice created a financial, or non-financial burden to a landowner? Please provide context to help explain your response.
2. To what extent would a notice of withdrawal, provided in a timely manner, reduce this burden?
3. What methods have carriers used to notify landowners that a proposed activity would not take place, or was cancelled? How effective are these methods?

4. How often would a withdrawal notice be required, and to what extent would this great an additional regulatory burden? If so, what is the anticipated financial regulatory burden each year?  
This

No specific response except to say that if the notification form was formalised online as suggested above, it would be a simple process to withdraw the notice and hence close off an application.

#### **In response to the Engineering Certificate prompt questions on page 15**

1. What benefits would landowner or occupiers see in the provision of an engineering certificate within 30 business days after the certification has been received?
2. Would the provision of an engineering certificate to landowners increase the regulatory burden on carriers? If so, what is the estimated regulatory financial impact per year?

This would be useful and should be provided as a matter of course.

A clear photographic record of before, during and after works should also be required.

#### **In response to the Timeframe prompt questions on page 16**

1. What are the benefits (financial and non-financial) of a non-regulatory approach in providing a longer notification timeframes?
2. What are the benefits (financial and non-financial) of a regulatory approach in providing a longer notification timeframe?
3. Should longer notification timeframes apply to all landowners, and not be limited to landowners that are public utilities and road authorities?
4. What would be the benefits (financial and non-financial) of providing a longer timeframe for objections to be made to carriers about proposed activities?
5. What other factors should be considered when considering whether to extend notification or objection timeframes?

As explained above, it is quite likely the City has smart city or other goals that require upgrades to underground and above ground communications and power assets. Acting reasonably, the carrier should give landowners as much notice as possible.

Given that we generally have no power (and usually no desire) to stop an installation, our only driver in seeking more notice and cooperation from carriers is to provide better amenity and value to our residents. In this vein, should a suitable "portal" be available to register such works, the City of Hobart, at least, would also be very happy to provide advance notice to carriers of upcoming works that may create opportunities for carriers to reduce / share costs on upcoming projects.

#### **In response to the Objections prompt questions on page 17**

1. Is the objections process as set out in the Code of Practice clear and easily understood by landowners and occupiers? If no, what parts of the process need further explanation?
2. Does the information provided by carriers when giving notice of a proposed activity outline the objections process, or only the first step, that is, to make the objection in writing to the carrier?
3. How could the objection process be better communicated to landowners and occupiers?

If the notification form was formalised online as suggested above, it would be a simple process to initiate an objection and then to elevate it through to the TIO. It would not be possible to elevate to the TIO before the previous step was completed, so there would be no confusion. The TIO would be given access to the case in the portal, which would minimise additional overhead and double handling in reporting cases to the TIO.

#### **In response to the Objections prompt questions on page 18**

1. What benefits or disadvantages are there in including a carrier as a party that can initiate dispute resolution with the TIO?
2. To what extent would this inclusion increase, or decrease, the financial and non-financial burden on carriers or landowners during a dispute?
3. What financial or non-financial burden, if any, would the inclusion of a deadline on carriers to lodge an objection with the TIO have?
4. If there is support for the proposal to include a deadline on carriers to lodge an objection with the TIO, what timeframe should apply?

So long as there was a reciprocal requirement for carriers to attempt to reach a resolution with the landowner with reasonable timelines attached prior to elevating the dispute to the TIO we have no objection to carriers having the power to elevate.

The requirement for a deadline to elevate an issue to the TIO is not a major issue, but wording such as “as soon as practical, acting reasonably” would generally suffice, as there will always be cases where a strict time limit given as a certain number of days would be difficult for a carrier (or a landowner) to adhere to.

### **In response to the Removals prompt questions on page 20**

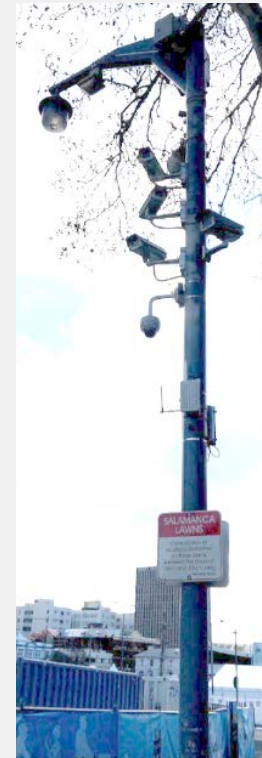
1. What level of enforcement would provide the best solution to the issue of redundant equipment?
2. What regulatory burden (financial or non-financial) would occur if these options were enacted?
3. Are there other non-regulatory ways to better enforce the policy position that equipment is removed if not used?

If equipment is no longer used and there is no visual amenity or safety risk to it remaining in place, it should be relatively simple to reach an agreement for the carrier to leave the equipment in place.

If there is a reasonable objection from a landowner to the equipment staying in place, it is not reasonable for a carrier to leave it in place simply because it is “impractical” to remove it. As the cleaner of last resort left to tidy up after other agencies, we can confirm that it is almost always quite impractical to remove old equipment. It is not reasonable to expect that a local government should have to pay to remove equipment simply because the carrier argues it is impractical to do so.

For reference, at right is one of our poles, stacked with largely redundant equipment (not our own assets) of various types that various installers have found it impractical to remove. Where ownership or status is unclear, we cannot remove it, yet it is unreasonable that the owners have left it in place.

Better wording would be in this spirit: a carrier can only leave redundant equipment in place when it is unreasonable to expect the carrier to remove it or it is unsafe to do so. The level of enforcement would depend on the reasonableness or otherwise of the act of leaving it in place.



### **In response to the Satellite and Antennae prompt questions on page 23**

1. Are there alternative options that would reduce impacts to visual amenity while providing necessary coverage for a modern telecommunications service?
2. Would these options strike a balance between visual amenity and the need to maintain telecommunications services?
3. What benefits or disadvantages (financial or non-financial) would occur as a result of implementing these options?

We have no objection to carriers seeking increased coverage / backhaul capability using any of the examples suggested, but greater avenues of negotiation should be available if equipment was to be mounted in sites of particular heritage or other cultural significance (for example, if the equipment blocked a view of a significant public artwork, was placed on a particular class of heritage building or adversely impacted sites of religious or cultural significance). In general, we rarely object to (and fully support) providing carriers access to rooftops or similar space in our city and understand the requirement to reach higher for increased coverage. Visual amenity issues are adequately covered in this section.

### **In response to the Tower Extensions prompt questions on page 24**

1. Would the extension to 5m maintain a balance between visual amenity and the need to maintain telecommunications service?
2. What benefits or disadvantages (financial or non-financial) would occur as a result of implementing this option?
3. Are there any other conditions or issues that should be considered if this proposal was to proceed

We have no objections to the issues raised in this section of the Proposal.

## In response to the Poles prompt questions on page 26

1. Should smart or slim line poles, under certain conditions, be considered as low visual impact? If so, what should those conditions be?

Under no circumstances could we countenance this suggestion. There is no generalisable condition under which we would support poles of any type being classed as low impact installations.

2. What other suggestions would help to categorise a smart or slim pole as of low visual impact?

We will very happily work with carriers to replace existing pole infrastructure with “smart poles” and will happily co-invest with carriers to install the above and below ground infrastructure that provides them with the required transmission equipment, on the basis that the pole would remain a public asset on which the carrier maintains the rights they require to provide currently available 5G services.

We will not do so under the conditions suggested to us in conversations with carriers, which insist that poles they choose to use (our own existing poles or newly installed poles) are controlled by the carrier (maintenance is left to the city), and our use of the pole would be at the whim of the carrier, where the carrier has unspecified rights to use the pole for whatever purposes it requires into the distant future.

3. What alternatives to this option better meet the need for a national approach to telecommunications infrastructure investment that balances the need for visual amenity?

Smart poles have no particular impact on visual amenity. We install our own smart poles where possible and we are comfortable with the aesthetic of them.

However, the condition outlined in the Proposal that a new pole only be permitted if it replaces “existing public infrastructure” is flawed, particularly when read against the conditions carriers have attempted to negotiate or impose on our city in their bids to install 5G equipment.

In summary:

- a. Carriers who remove a city-owned pole and replace it with a smart pole have no intention of leaving that pole as a public asset. They wish the new pole to become their own private asset and the city would lose its valuable public assets one by one as the carriers picked the spots of the city that most appealed to them.

The public (i.e. the city) despite having now lost a long-held asset in a prime location:

- i. would almost certainly be prevented from using the new asset to transmit radio frequencies of any kind;
- ii. would not be permitted to use the asset for any purpose that did not suit the carrier, and
- iii. even if allowed to use it, would likely be required to pay the carrier to use the asset for any purpose at all (e.g. for lighting, banners, CCTV etc.)

- b. Carriers who remove a city-owned pole and replace it with a smart pole will very likely not share that pole with another carrier. Even if the Act required them to share where possible, 5G is generally poorly amenable to co-located transmission. Therefore even if the first carrier replaced a city-owned pole, the next carrier will not have this option, and will install their new pole, arguing it is a low-impact installation that is now (due to the fact that the public infrastructure was removed and replaced with private infrastructure) not in close proximity to “public infrastructure”.

We will then see carrier after carrier claiming the same exemption, until the most valuable public spaces in our cities are peppered with poles and criss-crossed with cables and conduits, so that the public loses both the above and below ground amenity of its most treasured places.

4. What benefits or disadvantages (financial or non-financial) would occur as a result of implementing these options?

It is difficult to conceive of a worse outcome for public space than to allow carriers to install poles without going through a DA and public consultation process.

It is extraordinarily costly from both a financial and amenity perspective for the public and cities to lose access to their public spaces.

A network of privately-owned trenches and conduits, connecting privately-owned poles which house “Act-protected” carrier equipment in public space, effectively dooms that space to never be redeveloped.

No city can afford to individually replace the overlapping underground assets of multiple carriers. Nor can a city provide temporary transmission infrastructure while upgrading a space if that upgrade disturbs the network of underground cabling owned by carriers, who will trench the shortest distance to their poles rather than following a route to allow efficient use of underground space.

We point to a recent redevelopment of the Salamanca precinct undertaken by the City of Hobart. This area is largely open space, and is arguably Hobart’s most popular major public gathering space, day and night. It is a very likely candidate for significant 5G infrastructure upgrades in the near future. It was redeveloped to meet amenity and (particularly) security goals and requirements for the City. If this area had already been developed for 5G in the way the Proposal outlines, with multiple private poles and multiple private underground services, it is likely we could not have undertaken this upgrade.

We strongly advocate that public spaces be future-proofed for 5G installation. But we cannot afford to install the infrastructure alone. Co-investment by cities, carriers and other stakeholders could provide a single high capacity backbone of underground services in CBD areas (i.e. multiple redundant conduits in a large single trench with conveniently placed pits). No single carrier will install redundant conduits for its competitors to use and cities cannot afford to provide this backbone. Given the importance of telecommunications infrastructure, this must be installed as a shared investment. This will only happen if the Act mandates it.

Rather than acting as separate agencies and investing inefficiently (creating a mess for future generations to deal with) we suggest the Act be amended to require co-investment in shared, co-located infrastructure both underground and above-ground to meet the increasing need for close-proximity, meshed networks such as 5G and whatever follows it.

The shared infrastructure should be designed for minimum impact on amenity, e.g.

- neatly spaced pits
- conduits in large shared trenches running in convenient locations leaving the bulk of the underground area clear
- services wherever possible placed inside poles
- cabinets by exception when no other option is available

Once completed, these should be publicly-owned assets. Carriers who co-invested in the installation would be granted permanent access for agreed services. Carriers who did not invest would pay a fee for use of the assets.

The outcome would be far better managed public space and a lower cost of installation for all parties.

### **In response to the Co-location prompt questions on page 28**

1. Would a consistent approach to measuring co-location volume assist or hinder the co-location and visual amenity of equipment?
2. What methodologies could be used by carriers to determine co-location volume? Are any of these methodologies agnostic regarding equipment type?
3. With safety as a primary consideration, which would be a preferred approach to co-location and why?

4. What benefits or disadvantages (financial or non-financial) would occur as a result of implementing these options?

Co-location is a far better solution than the alternative (which is proliferation of poles).

Where it is technically possible to co-locate, then we have no objection to the raising of the limits as suggested in the Proposal.

However, it is not made clear in the text or the photos whether two utilities sharing a single pole would then each require their own cabinet at the base of the pole. Indeed it has not been made clear (despite several requests to carriers for this information) why cabinets are required at all, and it would be very much appreciated if a technical document could be produced that explained the equipment being installed in our streets. Much is made of the small size of the pole-mounted equipment, but it is generally not explained “in the brochure” that the pole mounted equipment requires a small shed to be mounted next to the pole, nor why.

If three carriers were able to share the equipment inside the cabinet and hence install one cabinet instead of three, then the trade-off for a more loaded pole would be worth it. However if a more heavily loaded pole necessitated multiple cabinets at the base, then it would be a retrograde step to have shared the pole in the first place.

## Preferred model

The City of Hobart is very much in favour of new telecommunication technologies and supports carriers’ rights to provide services using new technology. The City recognises there will be significant costs to all players in rolling out this technology. However, these costs will be increased (and public amenity will be decreased) if all players act individually.

The USA experience since 5G rollouts began suggests that a very significant amount of infrastructure is likely to be installed in our streets over the coming half-decade. Much of it will be ugly and (in the US) it has been installed in a “land-grab” as carriers try to secure the best above and below ground locations for their own networks.

The City of Hobart suggests that a preferable model for development is:

- 1) Carriers and cities (and other stakeholders) co-invest in **shared** underground infrastructure with significant empty conduit space available for stakeholders to use (terminating in well-placed pits) to allow a structured rollout of 5G and similar data-intensive technologies. Because no single agency can afford to create a large network of underground conduits, each agency is today essentially developing their own small networks, block-by-block.

This present method (individual block-by-block network development):

- i. is significantly more expensive in the long term;
- ii. creates disastrous outcomes for public safety as footpaths become uneven and dotted with randomly-placed pits and sinking trenches;
- iii. risks outages and electrocution as more and more cable criss-crosses the city (even today these are frequently hit by contractors digging the next trench);
- iv. frequently obstructs passage along streets and footpaths ;
- v. ruins the aesthetics of footpaths;
- vi. is naively short-term (since there is very limited underground space available and this method uses it in the most inefficient manner);
- vii. is highly carbon intensive, since the civil works are performed over and over again;

- viii. gives no view on the overall aggregated scope of the development when several carriers install in the same location one after another;
- ix. gives little or no chance for community consultation for potentially significant amounts of new infrastructure in public spaces;



Figure 5: Image from Miami Herald showing existing poles and utility preparations (in permanent paint) for new ones to support 5G infrastructure (January 2020). The article quotes Miami-Dade County Commissioner Eileen Higgins: "These companies have the right to put their 5G poles pretty much anywhere they want, which has launched a major 'sidewalk grab' by the competing telecoms," Higgins said. "If one company gets their pole installed in a spot, the others have to be a few feet down the street. It also means we will have construction on our sidewalks every 250 to 300 feet in Miami-Dade. In order to work, 5G needs lots of nodes located very closely together."

- 2) Carriers and cities co-invest in **shared** above-ground infrastructure, installing networks of smart poles that carriers and cities can both use, for lighting, CCTV, telecoms equipment etc. These poles can be designed to house the 5G equipment inside, and should not require extra cabinets beside them.

Cities cannot afford to swap out their existing poles en-masse for smart poles. Yet, rather than having each carrier install dozens (or more) of their own poles wherever they choose on public land, it is clearly a more efficient and better use of public space for carriers to contribute to the installation of a network of publicly-owned poles in desirable locations connected by a network of conduits. This way, rather than seeing the City's lighting poles augmented by a forest of Optus poles, Telstra poles, Vodafone poles, Google poles etc. we could achieve the same result with a fraction of the poles, using a shared network of poles placed in locations that suit the design of the city, connected by a shared network of trenches and cables.

- 3) Carriers be required to share digital spatial maps of new and existing underground and above-ground services for inclusion in digital twin models of cities. This may be shared with cities that have the capability to host them, or with a centralised player, for instance CSIRO's

Data-61 platform. It is crucial for city planning that we have access to the extent of networks placed in our streets.

Cities are facing an unprecedented grab for underground and above-ground land to house new communications infrastructure.

This rollout will take place.

It is crucial we start looking towards shared development models that lead to safe and well-designed public spaces with fewer unsightly, inconveniently-placed installations, lower service costs and a better use of underground space.

We are certain that an efficient, shared and well-designed network of publicly owned assets housing carrier's equipment is the model that the public expects local governments and telecommunications providers to adopt. It is also the model that will provide the best value for money for all stakeholders in the long term, and even in the short term.



Appendix: The original Proposal: “Improving the telecommunications powers and immunities framework”



Australian Government

Department of Infrastructure, Transport, Regional Development and Communications

# Improving the telecommunications powers and immunities framework

September 2020

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## Introduction

Telecommunications services play an important and expanding role in how people in the community go about their daily lives and how businesses operate. The Government is committed to Australians having ready access to high-quality, reliable and affordable telecommunications services.

Digital connectivity is a key enabler of Australia's social and economic activity. The mobile and fixed telecommunications networks that provide this connectivity are critical to our lives. Mobile services have long outnumbered fixed services, although fixed services carry greater volumes of data. In June 2019, there were 7.82 million fixed-line phone services in operation and approximately 16.4 million Australians had a smartphone.<sup>1</sup>

The direct contribution from the technology sector in Australia is around \$69 billion while the broader total contribution from the technology sector is around \$122 billion (including both direct and indirect contributions).<sup>2</sup>

In April 2018, the Department's Bureau of Communications and Arts Research (BCAR) examined publicly available sources on the likely costs and benefits of 5G in order to model the impact of the technology on productivity and economic growth. Based on this evidence, the BCAR estimated 5G could provide an additional \$1,300 to \$2,000 in gross domestic product per person after the first decade of the rollout.<sup>3</sup> The sooner 5G networks are deployed, the sooner these economic opportunities are likely to be realised.

5G represents a step change in mobile communications, with several characteristics that differentiate it from 4G. In particular, 5G will offer significantly greater capacity and faster data speeds, significantly lower signal latency or delay, and will support much larger numbers of devices in a given area.

5G also promises better outcomes in terms of spectrum efficiency, energy usage (both in the network and in devices), mobility at high speed and reliability.

It has been designed to deliver greater capabilities to support improved and new applications, not only for the mass market, but also industrial and enterprise users. As such 5G is seen as a general purpose technology that can underpin a range of industrial, agricultural and other commercial applications.

The rollout of 5G requires a new wave of infrastructure investment, the costs of which will largely be absorbed by telecommunications carriers. This infrastructure investment will be different to the previous wide scale rollouts of mobile communications and will use a much more diverse range of technology solutions.

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<sup>1</sup> Australian Communications and Media Authority, Communications Report 2018-19, pg. 5, available at <https://www.acma.gov.au/sites/default/files/2020-04/Communications%20report%202018-19.pdf>

<sup>2</sup> AlphaBeta, September 2019, Australia's Digital Opportunity: Growing a \$122 billion a year tech industry, Page 12, [www.alphabeta.com/wp-content/uploads/2019/09/australias-digital-dividend-final.pdf](http://www.alphabeta.com/wp-content/uploads/2019/09/australias-digital-dividend-final.pdf)

<sup>3</sup> BCAR, 2018, Impacts of 5G on productivity and economic growth: Working paper, Page 1, [www.communications.gov.au/departmental-news/impacts-5g-productivity-and-economic-growth](http://www.communications.gov.au/departmental-news/impacts-5g-productivity-and-economic-growth)

5G services will use a mix of different frequency bands that include higher frequency bands with different properties, and different deployment models.

- Where high frequency bands are used there may be a need to deploy a relatively dense network of equipment to account for its inability to propagate over longer distances. Where these frequency bands are used there may be a greater number of small cells that will be deployed in closer proximity to one another in high traffic areas, such as metropolitan areas and CBDs.
- Where mid-band spectrum is used there may be deployments more similar to previous generations of mobile networks. 5G infrastructure will work in conjunction with the existing telecommunications network that already uses a mix of macro cell towers and small cell technologies. The design of 5G networks will respond to the demand for telecommunications services as well as the suitability of network architecture for the environment in which it is deployed. In regional areas 5G small cells may be deployed in town centres, but will be supported by macro towers to make sure sufficient coverage is provided over larger distances. Alternatively, 5G services in metropolitan or suburban areas can use small cells deployed on public infrastructure in a way that reduces visual impact, such as light poles, supported by 4G and 5G macro cells.

Backhaul needs will also differ depending on the location of the rollout. For rollouts in metropolitan or suburban areas, backhaul could be provided by fibre networks. However, in regional areas, backhaul could be provided by microwave radiocommunications links making a number of hops before connecting to a fibre network backbone or via satellite. The design of 5G networks has a new range of trade-offs compared to previous generations of mobile technology that will need to be taken into account in network design and configuration.

## The need to improve the powers and immunities framework

Since 1997, laws at the Commonwealth level<sup>4</sup> have allowed carriers to deploy equipment classified as 'low-impact' in a nationally consistent way across Australia. These laws are known as the 'powers and immunities framework'.

Powers and immunities are important as they provide a nationally consistent framework for the deployment of telecommunications facilities that both reduces cost for carriers and ensures carrier powers are used appropriately and landowner interests are protected.

When rolling out low-impact facilities, carriers have to act in accordance with good engineering practices and interfere as little as practicable with the landowner's use of the land. Carriers are required to notify landowners and land occupiers if they are planning to undertake upcoming works. This includes telling landowners and occupiers about plans to install telecommunications infrastructure. A notice should be sent at least 10 business days before the carrier starts any activity on the land. Landowners can use the 10 business days to raise concerns with the carrier.

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<sup>4</sup> Schedule 3 of the *Telecommunications Act 1997*.

Carriers have to advise landholders of:

- their right to object
- the available grounds for objection (for example, the use of the land or the location of the facility on the land)
- the right to have a decision reviewed by the Telecommunications Industry Ombudsman (TIO), and
- timeframes for lodging objections.

The powers and immunities framework reduces the costs for carriers, which in the competitive market are passed on to consumers in the form of lower prices and improved services. Equally important, the framework means that carriers are more readily able to provide services in regional and rural Australia, where the costs to provide services would otherwise be prohibitive.

Telecommunications are often regarded as a vital input to essential services—for example, water, electricity and transport. The utilities sector has a long history of using telecommunications to deliver cheaper and more reliable services to the communities they serve.

The upcoming scale and level of investment in 5G networks requires a review of the framework to ensure it is efficient and effective in today's operating environment. This paper seeks stakeholder feedback on how to balance both deployment and landowner needs.

In 2017, the Government consulted on 24 proposed reforms to the powers and immunities framework requested by mobile carriers and NBN Co. The reforms sought to:

- allow some new types of facilities to be specified as low-impact facilities,
- make changes to some existing facility types subject to the framework, and
- streamline land owner notification and objection rules.

Of the 24 proposals, the Government at the time implemented 10 reforms in 2018 and agreed to consult further on the remaining reform proposals.

To improve the operation of the existing powers and immunities framework, the Department established the Powers and Immunities Reference Group (PIRG), comprised of carriers and property owner stakeholder groups including the Property Council of Australia, the Australian Local Government Association, rail and road authorities, and water and energy utilities.

The Powers and Immunities Reference Group has met eight times since its formation in 2018 and has recommended six reforms to the powers and immunities framework that are included in this paper.

In 2019, workshops were held with carriers on proposed improvements to the powers and immunities framework and resulted in four proposals being nominated that would benefit network deployments. These proposals are also included in this paper for consideration.

## Ideas presented in this paper

The ideas in this paper have been drawn from the public submissions to the 2017 consultation process, discussions held at the Powers and Immunities Reference Group and carrier workshops.

This paper outlines each reform area, key issues for consideration and possible implementation approaches. Many of the proposals could be implemented in a variety of ways; ranging from non-regulatory intervention through to legislative change. Your feedback on these reforms is important to



assist Government in considering what reforms are required to achieve a powers and immunities framework that meets the needs of modern Australia.

The Department welcomes your views on these proposals. Each proposal is accompanied by a series of prompt questions to help guide your response. These are not definitive questions and we welcome views on all aspects you consider relevant to the proposals.

The proposals are categorised into three themes.

## Themes discussed in this paper

### Safety and notification

- It is paramount that facilities are installed safely and operate in accordance with best safety and engineering practices. Clear notification processes assist in decision making for landowners, the community and carriers. The paper seeks views on how safety and notification processes can be strengthened.

### Objections and protections

- The existing framework includes processes for objections and protections. The paper seeks feedback on whether these safeguards provide the correct balance between addressing community concerns and meeting deployment needs.

### Facilitating services in line with community expectations and to support economic growth

- Telecommunications services are increasingly critical to both economic and social activity. For example, telecommunications services have played an important role during the COVID-19 pandemic to enable the continued functioning of Australia's economy with many people working, studying and operating businesses remotely. The paper seeks feedback on proposals to improve coverage and backhaul outcomes to continue providing the modern telecommunications services on which the community relies.

Table: Summary of proposals presented in this paper, arranged by discussion theme

Safety and notification	Objections and protections	Services in line with community expectations
Creation of a primary safety condition	Clarifying objections processes for landowners	Improving coverage through better facilities, where safe
Standard notifications across industry	Allowing carriers to refer objections to the TIO	Improving coverage through tower extensions
Withdrawal of notifications	Removal of redundant equipment	Allow small cell deployments on poles rather than on utilities
Requirement for engineering certification		Encourage co-location of facilities
Extension of notification timeframes		

## The consultation process

The Department welcomes your views on these proposals. Each proposal is accompanied by a series of prompt questions to help guide your response. These are not definitive questions and the Department welcomes views on all aspects you consider relevant to the proposals.

The Department would welcome written submissions on the proposals outlined in this paper and is available to meet with stakeholders to discuss the proposals. Instructions on how to make a submission are provided at the end of this paper. If you have any questions on the proposals set out in this paper or the consultation process, or would like to arrange a meeting with the Department, please send an email to [powersandimmunities@communications.gov.au](mailto:powersandimmunities@communications.gov.au) or contact:

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# 1. Safety and notification

Stakeholders who interact frequently with the powers and immunities framework include larger landowners, such as public utilities, road authorities and local governments. The proposals set out in this section of the paper are intended to address the concerns of larger landowners while also clarifying the framework for smaller landowners, including residential landowners, who may be less frequently impacted.

It is paramount that facilities are installed safely and operated in accordance with best practice. This was a strong theme in submissions to the 2017 consultation process and has been reinforced in subsequent workshops with stakeholders.

In this paper, safety is referred to in the following context:

- compliance with engineering standards and practices, and
- ensuring the structural integrity of infrastructure or assets that telecommunications equipment may be installed on.

Issues related to potential health and safety of electromagnetic energy (EME) emitted by telecommunications installations are outside the scope of this paper. There is a separate work program being undertaken in relation to EME.

In December 2019, the Government announced a program to provide more accessible information to the community about, and more research into, EME from telecommunications facilities. With this funding, the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) will deliver targeted research and measurement studies. The Department of Infrastructure, Transport, Regional Development and Communications is responsible for the delivery of clear and accessible information for the public about EME from telecommunications technologies.<sup>5</sup>

## A. Creation of a primary safety condition

### Issue

The powers and immunity framework gives a carrier rights to install certain kinds of 'facility' on another person's land and exemption from compliance with relevant State or Territory planning laws. This means the consent of the landowner (who could be a utility owner) is not needed, which can create concern that safety obligations will not be met.

Within the current framework, carriers are subject to a number of existing safety obligations. Reasonable safety measures, in line with expert advice, should be in place for any activity undertaken by a carrier. There are existing provisions in the powers and immunities framework that require carriers to ensure installations do as little damage as practicable, comply with good engineering practice, interfere as little as possible with the operations of public utilities, roads, traffic and the use of the land, and complies with industry standards recognised by the Australian Communications and Media Authority (ACMA).<sup>6</sup> It is also the case that carriers must comply with the occupational health

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<sup>5</sup> Further information on EME is available at <https://www.communications.gov.au/what-we-do/spectrum/electromagnetic-energy-eme>

<sup>6</sup> Division 5 of Part 1 of Schedule 3 of the Act sets out the conditions carriers must comply with when carrying out activities using the powers and immunities framework.

and safety legislation in each state and territory, and that carriers can also be found negligent under common law.

It is important that equipment is deployed in a safe way. It is particularly important that carriers deploy facilities in a way that does not interfere with the operation of essential utilities. These services need to operate in tandem to produce the greatest benefit to the community.

## Proposal

We seek your views on whether a new section outlining a primary safety condition could be added to the Code of Practice to make clear, and reaffirm, that safety of telecommunications installations is paramount. As discussed above, the focus would be on maintaining the structural integrity of infrastructure or assets on which telecommunications equipment may be installed. For example, the proposed primary condition could:

- make more explicit the existing safety obligations carriers must comply with,
- apply to other areas of the Code of Practice, such as in agreements between carriers and public utilities regarding inspection, installation and maintenance activities, and
- reinforce the need for carriers to comply with standards, including industry standards and codes registered by the ACMA under Part 6 of the Act.

Industry codes that are not registered by the ACMA could also be used to provide operational guidance and co-ordination for the safe installation of telecommunications facilities on sites or infrastructure managed by utilities and other landowners. Compliance with these types of industry codes is unable to be enforced by the ACMA.

The Code of Practice would need to be amended to include the new primary safety condition. The content of the proposed amendment would be consulted on before the Minister amended the Code of Practice.

### Prompt questions

1. Do the current safety arrangements provide assurance for the safe and effective implementation of telecommunications equipment?
2. If no, what additional regulatory mechanisms may provide that assurance?
3. Would the addition of a primary safety condition to the Code of Practice provide that assurance?

## B. Standard notifications across industry

### Issue

Stakeholders, including those representing landowners in the Powers and Immunities Reference Group, have raised the need to have access to deployment information in a consistent and timely manner. This assists with making decisions on how to manage their land and operations during deployment and their rights to objection processes.

The legislation underpinning the powers and immunities framework already provides for a notification process, whereby carriers are required to give a notice, referred to by industry as a land access and activity notice (LAAN), to landowners and occupiers before undertaking an inspection, installation or

maintenance activity. The notice should inform the landowner about the activity proposed to be undertaken and relevant details associated with the proposed activity.

Specific feedback from stakeholders about the current process is that information provided in notices:

- can be different in each case,
- provides no certainty for the landowner or occupier about how long an activity could take,
- does not provide information about certification or what standard the activity will be certified to, or
- the timeframe to assess the proposed activity and request additional information, if needed, is often too short.

Standardising information in a notice required to be given by a carrier could help landowners make more effective decisions about the potential impact of proposed activities on their land, assets or operations.

## Proposal

We seek your views on whether requiring new information to be included in a notice could enhance and clarify the existing notification procedures.

The Powers and Immunities Reference Group recommended the following information, or similar, could be specified for inclusion in a notice given by a carrier:

- indicative timeframes for proposed activities, such as when the activity will commence and how long the activity would usually take once commenced,
- for landowners that are public utilities, including road authorities, a statement explaining the proposed activity supplemented with technical drawings or plans, and the standards applicable to the activity, and
- for all other landowners, a plain English explanation of the proposed activity and the equipment to be installed or maintained. Landowners may request information from carriers about the technical plans or standards applicable to a proposed activity, however the provision of this information as part of the notification would only apply if the landowner is a public utility.

Including these requirements in the notice given by a carrier is intended to provide clarity to landowners about the process, and could reduce the need for landowners and occupiers to use the objections processes to gather further information about a proposed activity.

These changed information requirements could be incorporated into the Code of Practice.

The Powers and Immunities Reference Group also recommended that a template notice used by all carriers would be useful. While a template notice could contain the minimum information required to be provided about a proposed activity, it would not prevent carriers from including any additional information that could assist landowners' consideration of a proposed activity.

One option to implement this recommendation could be to develop an industry code that can be registered by the ACMA under Part 6 of the Act.

Alternatively, a condition could be included in the Code of Practice that the ACMA must prescribe the form of a notice. This type of approach was adopted in the United Kingdom where its communications regulator, OFCOM, prescribes the form of a notice to be given by carriers under each provision of the UK's land access code.

### Prompt questions

1. Is there any other information that could be included on a notice would provide clarity on the installation process and timeframes?
2. What benefits, either financial or non-financial would additional notice and information bring to landowners?
3. If possible, to what extent would the inclusion of a standardised notification process increase or decrease regulatory burden, and at what cost per notification?

## C. Withdrawal of notifications

### Issue

Stakeholders have expressed concern that there is no specific requirement in the notification process for carriers to advise landowners and occupiers if a proposed activity is cancelled or indefinitely delayed. At the same time, the framework does allow for a carrier to notify landowners of a delay or cancellation of the proposed activity and agree to different arrangements in consultation with the landowner.

Discussion in the Powers and Immunities Reference Group highlighted the confusion that can be caused in situations where carriers issue a new notice to a landowner specifying a similar activity as a previous, or current, notice. This confusion arises especially in situations where the landowner is unaware that the carrier did not proceed with the proposed activity.

The Powers and Immunities Reference Group recommended that carriers be required to withdraw a notice when the proposed activity is cancelled or indefinitely delayed to provide certainty and transparency for landowners and occupiers. This proposal is operational and designed to effect behavioural change by carriers encouraging greater interaction and engagement with the landowner or occupier.

### Proposal

We seek your views on whether the level of carrier engagement sought by landowners and occupiers could be achieved by either of the following non-regulatory or regulatory options.

#### Option 1: Industry commitment to withdraw a notice

The behavioural change recommended by the Powers and Immunities Reference Group could be achieved if industry provided a commitment to withdrawing notices, where possible, in the event that a proposed activity is cancelled or indefinitely delayed.

This would be a non-regulatory approach and would not be part of the legislative framework underpinning the powers and immunities framework. Industry could consider whether this commitment could be demonstrated in any way, but it would be the responsibility of industry to do so.

### Option 2: Formal requirement for a carrier to withdraw a notice

Alternatively, new requirements could be introduced either in an industry code registered by the ACMA or in the Code of Practice requiring carriers to follow a procedure to withdraw a notice when the proposed activity is cancelled or indefinitely delayed. Information about the procedure could include:

- minimum timeframes for the notice to be withdrawn, such as at least two business days before the planned activity is expected to begin,
- reference to the date of the original notice, and
- information explaining why the notice is withdrawn.

If the Code of Practice is identified as the appropriate location for this requirement, the content of the proposed amendment would be consulted on before the Minister amended the Code of Practice.

#### Prompt questions

1. How often has a lack of withdrawal of notice created a financial, or non-financial burden to a landowner? Please provide context to help explain your response.
2. To what extent would a notice of withdrawal, provided in a timely manner, reduce this burden?
3. What methods have carriers used to notify landowners that a proposed activity would not take place, or was cancelled? How effective are these methods?
4. How often would a withdrawal notice be required, and to what extent would this great an additional regulatory burden? If so, what is the anticipated financial regulatory burden each year?

## D. Requirement to provide engineering certification

### Issue

The powers and immunities framework requires carriers, when undertaking an activity under Schedule 3 of the Act, to do so in accordance with good engineering practice. Feedback from some public utilities operators is they would like greater visibility and certainty that the equipment on their land or assets has been installed in accordance with certified practices, including the relevant standards the equipment is installed under.

Some landowners indicated that, in the absence of having certification from the carrier, they had independently sought their own engineering certification for equipment to provide assurance the telecommunications facility has been, or in some cases will be, constructed in accordance with good engineering practice. This is duplicative, and should be avoided if possible.

While both utilities and carriers have standards with which they must comply, it is the utility owner that bears primary responsibility for maintenance and safety of the overall infrastructure—electricity pole, water tower or bridge. Providing engineering certificates about the telecommunications facility mitigates risk for all parties, especially as carriers are liable to pay compensation for financial loss or damage resulting from installation or maintenance of a facility.<sup>7</sup>

<sup>7</sup> Section 42, Schedule 3 of the *Telecommunications Act 1997*.

The Powers and Immunities Reference Group recommended a requirement be included in the framework that carriers are to provide engineering certificates about the telecommunications facility. Industry has advised that, in some cases, carriers may receive engineering certificates up to two months after the installation or maintenance activity has been completed and assessed.

## Proposal

We seek your views on whether providing a copy of the engineering certificate to the landowner or occupier would add significant administrative cost or burden to the existing process.

The proposal would rest on industry commitment to provide the engineering certificate to a landowner or occupier, if requested, as soon as possible after the installation of the facility. This would be a non-regulatory approach and would not be part of the legislative framework underpinning the powers and immunities framework.

Alternatively, new requirements could be introduced in either an industry code registered by the ACMA or the Code of Practice requiring carriers to provide an engineering certificate to a landowner or occupier within 30 business days after the certification has been received. If implemented via a change of the Code of Practice, the content of the proposed amendment would be consulted on before the Minister amended the Code of Practice.

### Prompt questions

1. What benefits would landowner or occupiers see in the provision of an engineering certificate within 30 business days after the certification has been received?
2. Would the provision of an engineering certificate to landowners increase the regulatory burden on carriers? If so, what is the estimated regulatory financial impact per year?

## E. Extending notification timeframes

### Issue

As noted above, feedback from stakeholders highlighted notifications received from carriers often did not include sufficient information so the impact of the proposed activity to day to day operations, or on land, infrastructure or assets could be understood. This situation means public utilities need to request additional information from carriers to make such an assessment. Some landowners noted situations where delays in receiving additional information from carriers has prevented them from being able to make an objection in time.

Public utilities landowners have suggested that extending the notification time for public utilities and road authorities from 10 business days to 20 business days would provide sufficient time for this information to be considered in detail without the need to use the objection provisions. The Powers and Immunities Reference Group did not make any recommendations regarding this proposal.

A submission from the Telecommunications Industry Ombudsman (TIO) in 2017 recommended that uniform timeframes should be applied across activities. The TIO recommended the:

- minimum notification timeframe be extended from 10 to 20 business days, and
- timeframe to provide a written objection to a carrier be extended from 5 to 10 business days.



Clause 19 of Schedule 3 of the Act provides that notice must be given to utilities and road authorities at least 10 business days before the carrier begins to engage in an installation or maintenance activity. While the Act provides a minimum timeframe for notification, a carrier could still provide a notice well in advance of 10 business days or engage informally with public utilities well before the proposed activity is expected to take place. This behaviour is encouraged wherever possible.

The minimum notice period of 10 business days provided in Schedule 3 to the Act provides industry with a safeguard for those installation and maintenance activities that sit in between 'routine' and 'urgent'. These are the activities that are unable to be planned for and must be undertaken, but are not urgent. For routine installation and maintenance activities, it is more likely these activities would be subject to work planning exercises and resource allocations by industry, meaning that landowners and occupiers could be engaged with earlier in the process, even in an informal way.

## Proposal

We seek your views on whether a legislative amendment to Schedule 3 of the Act to extend the minimum notification timeframe for utilities and road authorities from 10 business days to 20 business days would provide additional assurance to public utility landowners that they can meet the objection timeframes.

We also seek your views on alternative options that could achieve the same outcome. For example, the following activities intended to provide greater interaction and engagement from carriers could be included in an industry code registered by the ACMA:

- commit to greater engagement with landowners and occupiers in its business practices, and
- initiate or reinstate regular meetings with public utilities and road authorities, in particular, to share information about proposed deployments.

Informal engagement could be as simple as an email or letter outlining the proposed deployment, before the carrier gives a notice in accordance with the Act.<sup>8</sup>

### Prompt questions

1. What are the benefits (financial and non-financial) of a non-regulatory approach in providing a longer notification timeframes?
2. What are the benefits (financial and non-financial) of a regulatory approach in providing a longer notification timeframe?
3. Should longer notification timeframes apply to all landowners, and not be limited to landowners that are public utilities and road authorities?
4. What would be the benefits (financial and non-financial) of providing a longer timeframe for objections to be made to carriers about proposed activities?
5. What other factors should be considered when considering whether to extend notification or objection timeframes?

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<sup>8</sup> Clauses 17 and 19 of Schedule 3 to the Act set out requirements regarding giving notice to landowners and occupiers.

## 2. Objections and protections

It is important that the framework includes robust safeguards so that the interests of landowners and the community are taken into account and protected.

### A. Clarifying the objections process for landowners

#### Issue

The Powers and Immunities Reference Group identified the need for more detailed information to be provided regarding landowners' rights and grounds for objection to a proposed activity. Consistent, accurate information is necessary to facilitate landowners' rights to natural justice.

#### Proposal

We seek your views on whether the current notice requirements under the Code of Practice provide enough clear information on the objection processes. Analysis of notices given by carriers shows that Code of Practice requirements are being met, yet landowners and occupiers remain concerned that the information in the notice does not provide necessary guidance about the objection process.

Factsheets about the powers and immunities framework could be developed including information about the objections processes. Factsheets could be developed for different audiences, such as landowners, councils and the community, and made available in a number of ways. For example, carriers could include a reference or link to the factsheets in the notice given to the landowner or occupier.

#### Prompt questions

1. Is the objections process as set out in the Code of Practice clear and easily understood by landowners and occupiers? If no, what parts of the process need further explanation?
2. Does the information provided by carriers when giving notice of a proposed activity outline the objections process, or only the first step, that is, to make the objection in writing to the carrier?
3. How could the objection process be better communicated to landowners and occupiers?

### B. Allowing carriers to refer objections to the TIO

#### Issue

The objections process set out in the Code of Practice provides a complaint can only be referred to the Telecommunications Industry Ombudsman (TIO) by a carrier where a landowner has made a request for the carrier to do so.

Carriers are seeking a regulatory change that would allow carriers to refer objections to the TIO for resolution without waiting for a landowner to request the objection be referred. Such referrals would occur in cases where carriers consider it is unlikely to resolve matters directly with the landowner or occupier who are objecting to the proposed activity. This proposal was endorsed by the Powers and Immunities Reference Group which noted that the cost to resolve disputes via the TIO are borne by the carrier, regardless of who refers the dispute, so there would remain an incentive for carriers to attempt to resolve disputes within the existing objections process.

## Proposal

We seek your feedback on whether the Code of Practice should be amended to allow carriers to refer objections directly to the TIO. The inclusion of such a clause would mean that both parties to the notification process—carriers and landowners and occupiers—are able to refer objections to the TIO for resolution.

In its feedback to the 2017 consultation process, the TIO suggested that existing clauses in the Code of Practice requiring a carrier to lodge an objection after receiving a request from a landowner or occupier to do so could be strengthened by including a deadline for a carrier to lodge the objection.<sup>9</sup> The TIO submission did not provide an indicative timeframe for such a deadline, however we are interested in stakeholder views on what timeframes, if any, would be useful.

### Prompt questions

1. What benefits or disadvantages are there in including a carrier as a party that can initiate dispute resolution with the TIO?
2. To what extent would this inclusion increase, or decrease, the financial and non-financial burden on carriers or landowners during a dispute?
3. What financial or non-financial burden, if any, would the inclusion of a deadline on carriers to lodge an objection with the TIO have?
4. If there is support for the proposal to include a deadline on carriers to lodge an objection with the TIO, what timeframe should apply?

## C. Removal of redundant equipment

### Issue

Redundant equipment is any part of a telecommunications or radiocommunications network that is no longer used to deliver a service, and is not likely to be used to deliver services in the future. The *Mobile Base Station Deployment Code C564:2018* (the Deployment Code) includes a requirement for carriers to make sure that equipment no longer in service does not transmit, or is removed.

Although the extent of the problem has not yet been established, there is some evidence that redundant equipment has been turned off, yet left in situ on the infrastructure and assets of landowners and occupiers.

The presence of redundant equipment has a range of effects on different landowners and may make the management of critical infrastructure more difficult for operators of public utilities. It can also have a visual impact and occupy space that could otherwise be used by other operators, causing competition issues.

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<sup>9</sup> Clauses 2.36, 4.36 and 6.36 in the Code of Practice provide information about carriers lodging an objection with the TIO after receiving a request from a landowner or occupier.

The Powers and Immunities Reference Group identified the need for policy reform to be considered that would require carriers to remove redundant equipment from infrastructure. Utilities providers also made the case for this reform in the Standing Committee on Communications and the Arts' Inquiry into 5G in Australia.<sup>10</sup> In its final report, the Committee made the following recommendation:

**The Committee recommends that the Australian Government facilitate discussions between carriers, network operators and utility and infrastructure owners for managing redundant and/or ageing telecommunications equipment.**

Regardless of whether the facility is operating or not, it is an offence under section 474.6 of the *Criminal Code Act 1995* to tamper or interfere with a facility owned or operated by a carrier. As such, landowners and occupiers are unable to remove or relocate a redundant telecommunications facility without seeking prior consent from the carrier that owns the facility, except in very limited circumstances (such as a serious emergency).

## Proposal

We seek your views on how prevalent the problem of redundant equipment is, and what issues this equipment causes your business practice.

If stakeholder feedback indicates this is a systemic problem, then a range of options are available. These options set the expectation that equipment should be removed when it is no longer used, either from the operator's own initiative or following a request by a landowner or occupier, unless removal would be impractical to do so. An example would be the removal of underground cabling.

We also seek your views on what maximum timeframe should apply for carriers to remove redundant equipment following a request by a landowner or occupier, and what dispute resolution mechanisms could apply in the event that carriers and landowners are unable to agree on whether the proposed removal of equipment would be impractical.

### Option 1: Inclusion in a registered Industry Code

This option proposes the requirement for carriers to remove redundant equipment from infrastructure or assets of public utilities, including road authorities, and local governments be included in an Industry Code registered by the ACMA. For example, the existing requirement in the Deployment Code could be strengthened by removing the option to remove the equipment no longer in use, and making it a mandatory requirement.

Where a carrier failed to comply with a provision in a registered industry code, the compliance options available to the ACMA could include issuing a formal warning notice to the carrier, or issuing a direction to comply with the industry code. The failure to comply with such a direction may amount to an offence under the Act.<sup>11</sup>

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<sup>10</sup> Information about the 5G inquiry, submissions and the final report can be accessed [here](#).

<sup>11</sup> Information on ACMA's compliance and enforcement policy is available at <https://www.acma.gov.au/compliance-and-enforcement-policy>

### Option 2: Inclusion in the Code of Practice

This option proposes a new section be included in the Code of Practice so that the removal of redundant equipment by a carrier becomes a legal requirement and part of the powers and immunities framework. Clause 15 (2) of Schedule 3 to the Act requires carriers to comply with the Code of Practice.

Where a carrier failed to comply with a requirement set out in the Code of Practice, the compliance options available to the ACMA could include issuing a formal warning notice to the carrier, giving a remedial direction which may include requiring rectification strategies, or accepting an enforceable undertaking from a carrier.

For either of the options above, a carrier or other operator would not be expected to remove redundant equipment where it is impractical to do so.

#### Prompt questions

1. What level of enforcement would provide the best solution to the issue of redundant equipment?
2. What regulatory burden (financial or non-financial) would occur if these options were enacted?
3. Are there other non-regulatory ways to better enforce the policy position that equipment is removed if not used?

### 3. Facilitating services in line with community expectations and to support economic growth

Telecommunications services are increasingly critical to both economic and social activity. For example, telecommunications services have played an important role during the COVID-19 pandemic to enable the continued functioning of Australia's economy with many people working, studying and operating businesses remotely.

The current framework sets out technical descriptions on what is considered a low-impact facility and therefore not subject to owner permissions or state and territory planning laws. Industry has expressed concern that descriptions in the LIFD are outdated and are not flexible enough to support the deployment of new technologies. Other stakeholders, including landowners and occupiers and communities, are concerned that changes to these descriptions could lead to safety issues, or lack of visual amenity in the surrounding environment.

The proposals in this section seek your views on how to strike an appropriate balance between the rollout of modern technology and visual amenity.

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

##### Issue

Coverage for mobile services, particularly in regional and remote Australia, is largely dependent on the ability of carriers to deploy towers of sufficient height so that coverage can be provided to the whole community. However, submissions to the Government's 5G inquiry show there is community concern about the visual impact of increasing amounts of telecommunications equipment being deployed.

Increasing the height of existing infrastructure, such as antenna protrusions and existing towers, could potentially reduce the visual impact because fewer antennae may need to be deployed overall. Likewise, new antenna technologies, such as radiocommunications lens antennae, could reduce the visual impact of towers as the number of panel antennas needed are reduced, while still providing efficient and effective coverage outcomes. Larger radiocommunications and satellite dishes can support stronger signals, increase reliability and provide a much needed option for backhaul ultimately improving services to a wider range of areas of Australia.

##### Proposal

We seek your views on whether the below technical amendments to equipment classified as a low-impact facility strikes the right balance between visual amenity and access to improved mobile coverage.

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

Item 4 in Part 1 of the Schedule to the LIFD provides that the maximum protrusion for a panel, yagi or other like antenna from a structure is 3 metres. It is proposed that the maximum protrusion height be extended by 2 metres to 5 metres in total. Increasing the height of the protrusions will improve coverage outcomes. The visual amenity issues could be addressed by making sure the antenna is colour-matched to its background, or in a colour agreed in writing between the carrier and the relevant local authority.

**Figure 1: Antenna protrusion****Allow satellite dishes of 2.4 meters in diameter to be deployed in industrial and rural areas**

Item 7 of the LIFD already specifies satellite dishes with a diameter of up to 1.8 metres as low-impact facilities that can be deployed in industrial and rural areas. It is proposed to increase the maximum diameter size of satellite dishes in industrial and rural areas to 2.4 metres. The visual amenity issues could be addressed by making sure the antenna is colour-matched to its background, or in a colour agreed in writing between the carrier and the relevant local authority.

**Figure 2: Satellite dish in rural area****Specify radiocommunications lens antennae as a new low-impact facility**

It is proposed that radiocommunications lens antennae could be specified as a low-impact facility in industrial and rural areas. The use of this type of antenna can reduce the number of panel antennas used on the pole or tower. If there is support for this proposal, the dimensions of lens antennae that would be permitted would be consulted on as part of any exposure draft of amendments and installation would be subject to safety objectives. The visual amenity issues could be addressed by making sure the antenna is colour-matched to its background, or in a colour agreed in writing between the carrier and the relevant local authority.

**Figure 3: Radiocommunications lens antenna**

Subject to stakeholder views, the Schedule to the LIFD would need to be amended to give effect to the proposals outlined above. The content of the proposed amendment would be consulted on before the Minister amended the LIFD. These proposals would be subject to the primary safety condition outlined earlier, and the other safeguards outlined in this paper and in the powers and immunities framework more generally.

### Prompt questions

1. Are there alternative options that would reduce impacts to visual amenity while providing necessary coverage for a modern telecommunications service?
2. Would these options strike a balance between visual amenity and the need to maintain telecommunications services?
3. What benefits or disadvantages (financial or non-financial) would occur as a result of implementing these options?

## B. Improve coverage outcomes through tower extensions

### Issue

Coverage for mobile services, particularly in regional and remote Australia, is largely dependent on the ability of carriers to deploy towers of sufficient height. Submissions to the 2017 consultation process highlighted concern about the potential impact to visual amenity if a proposal to allow tower extensions in commercial areas was implemented to help improve coverage outcomes.

Item 12 in the LIFD already provides that the height of towers located in industrial and rural areas can be extended, subject to conditions, to a maximum of 5 metres. The proposal in 2017 sought to apply the same provisions to towers in commercial areas (which may be on the outskirts of regional towns).

While there may be some impact to visual amenity from higher structures, the improved coverage and co-location of infrastructure that could result from height extensions means less telecommunications infrastructure—towers and antennae—need to be deployed overall. A reduced infrastructure footprint could be considered a net benefit when considering impacts to visual amenity.



## Proposal

We seek your views on whether tower heights (Item 12 in the Schedule to the LIFD) should be amended to allow height extensions up to a maximum of 5 metres in commercial areas in the following circumstances:

- the height of the extension does not exceed 5 metres (as in current LIFD)
- there have been no previous extensions to the tower (as in current LIFD), or
- the tower was previously extended by less than 5 metres (new suggestion).

If this amendment were supported, it would require a change to the LIFD. The content of the proposed amendment would be consulted on before the Minister amended the LIFD.

This proposal would be subject to the primary safety condition outlined earlier, and the other safeguards outlined in this paper and in the powers and immunities framework.

### Prompt questions

1. Would the extension to 5m maintain a balance between visual amenity and the need to maintain telecommunications service?
2. What benefits or disadvantages (financial or non-financial) would occur as a result of implementing this option?
3. Are there any other conditions or issues that should be considered if this proposal was to proceed?

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

### Issue

There are different regulatory regimes that apply depending on whether a carrier deploys on a building or chooses to deploy on a pole or a tower. Poles and towers are not low-impact facilities and are subject to local planning obligations, meaning a development approval is required. These obligations ensure that significant infrastructure is subject to safety and visual amenity oversight.

5G, and in particular millimetre wave technology, will rely on small cells deployed on existing public infrastructure, including electricity poles. However, there are some locations where there is no existing infrastructure or, where infrastructure is available, it may have no spare capacity. Telecommunications carriers have developed a new type of telecommunications facility for these circumstances—a smart pole, or a slim pole. Smart or slim poles are slimline in design and able to physically accommodate equipment and antennas on or within the structure.

The costs to plan and provision a telecommunications deployment in an area of low volume or traffic density where a full development approval is required can make some deployments unfeasible.

Specifying smart or slim poles as low-impact facilities could have the effect of reducing capital costs involved in acquiring and rolling out 5G infrastructure. It means that carriers could roll out new, better mobile services in more locations where it would have been unfeasible to do so previously. Significant economic benefits may be realised if smart or slim poles are specified as low-impact facilities as deployments could be undertaken in a nationally consistent way.

There is also the potential that smart or slim poles, without limitations on type and application, could go against the low visual impact policy rationale of the powers and immunities framework. Low-impact facilities are generally telecommunications equipment that:

- are essential to the efficient operation of telecommunications networks
- have low visual impact, and
- are unlikely to cause significant community disruption during installation or operation.

While smart or slim poles may meet this criteria, clause 6(5) of Schedule 3 of the Act provides that towers, including poles or masts, cannot be specified as low-impact facilities unless certain conditions are met. None of the existing conditions outlined in clause 6(5) are applicable to the deployment of smart or slim poles.

Carriers have provided feedback they would prefer that smart or slim poles be specified as low-impact facilities provided that they are of a suitably discrete design, blending in with the surrounding environment or as a feature, such as an art installation for example. Smart or slim poles have been deployed in the Sydney Botanic Gardens to provide small cell coverage and other services to users the area. An example of a slim line pole in the Botanic Gardens is provided below.

**Figure 4: Slim line pole in Sydney Botanic Gardens, Australia**



## Proposal

We are seeking your feedback on whether existing planning arrangements provide enough certainty for the community, landowners and carriers in creating an effective 5G network that is of low visual impact.

Alternative arrangements, such as early engagement with and leveraging support from local governments about planned smart or slim pole deployments may lead to positive development application outcomes.

We also seek your views on whether the benefits offered by the deployment of smart or slim poles are significant enough to include as a low-impact facility; or whether the risk to potential lack of visual amenity means this infrastructure should remain within the current planning processes.

If smart or slim poles were specified as a low-impact facility, a legislative change to the Act would be needed. An amendment would need to outline conditions for the deployment of smart or slim poles.

If you agree that a smart or slim pole could be classified as a low-impact facility, we are further seeking your feedback on what conditions for deployment could be useful to ensure it remains of low visual impact. For example,

- a pole could only be used to support small cell telecommunications facilities
- the height of the pole cannot exceed 12 metres
- a pole can only be installed on public land
- a pole cannot be installed in close proximity to existing public infrastructure, it must replace that item of public infrastructure
- the pole may be supported by an equipment cabinet installed at ground level
- the installation of a pole is subject to consultation in accordance with industry codes and standards, as recognised by the ACMA.

### Prompt questions

1. Should smart or slim line poles, under certain conditions, be considered as low visual impact? If so, what should those conditions be?
2. What other suggestions would help to categorise a smart or slim pole as of low visual impact?
3. What alternatives to this option better meet the need for a national approach to telecommunications infrastructure investment that balances the need for visual amenity?
4. What benefits or disadvantages (financial or non-financial) would occur as a result of implementing these options?

## D. Encourage the co-location of facilities

### Issue

The introduction of 5G and other similar technologies into the future will result in more small cells being deployed in areas of high use. To reduce the impact of more deployments and to continue to meet the community's expectations regarding visual amenity, co-location on existing infrastructure and urban furniture, such as utility poles, is desirable.

Figure 5: Example of co-located facilities



Submissions to the 2017 consultation process raised concerns about a proposal to remove the 25 per cent co-location limit in commercial areas, and lift the co-location limit from 25 per cent to 50 per cent in residential areas. Landowners were concerned about the potential impact the proposal would have on the structural integrity of infrastructure with larger co-located facilities on assets, as well as the impact on visual amenity. These risks are acknowledged and suitable mitigations should be put in place.

The LIFD applies a volume restriction on co-location of 25 per cent in residential and commercial areas which some stakeholders have identified as limiting the opportunities for co-location, especially for small cell infrastructure. The limitations of co-location can have the perverse result where the deployment of new towers and facilities are needed, increasing both visual impact and cost. The alternative is to lift the existing volume restriction to allow for greater co-location on existing facilities.

Encouraging co-location can help minimise the impact on visual amenity. Telecommunications technology is constantly evolving. It is possible that future equipment to be installed on public infrastructure may be smaller and less obtrusive while still operating efficiently.

## Proposal

We seek your views on whether co-location volume limits should be updated and have suggested options below.

Some carriers suggest the volume restriction in commercial areas should be entirely removed. This would mean that commercial areas would be treated in the same way as industrial and rural areas in the LIFD.

Recognising there is a case for some restrictions to continue to apply to co-location volumes in residential areas, we are seeking views on whether the restriction in residential areas should be lifted from 25 per cent to 50 per cent.

### Option 1: Co-location volume to be lifted to 50 per cent in residential and commercial areas

Item 2 in Part 8 of the Schedule to the LIFD could be amended to lift the total co-location volume of co-located facilities from 25 per cent to 50 per cent in residential and commercial areas.

There are no volume restrictions for co-location in industrial or rural areas and there is no expectation for this to change.

### Option 2: Co-location volume lifted to 50 per cent in residential areas, no limit in commercial areas

Item 2 in Part 8 of the Schedule to the LIFD could be amended to lift the volume of co-located facilities to 50 per cent in residential areas, and remove the reference to commercial areas.

Item 1 in Part 8 of the Schedule to the LIFD could be amended to include reference to commercial areas. This would mean there would be no volume restrictions for co-location of facilities in commercial, industrial and rural areas.

Submissions to the 2017 consultation process indicated that higher co-location volume limits may be more acceptable to landowners in commercial areas if conditions are applied to deployments. For example, local councils suggested that higher co-location volumes may be more acceptable if co-location only occurred on existing telecommunications towers, or not positioned close to residential areas.

It is also noted that co-location volume can be measured in different ways and no standard methodology has been developed. For example, some carriers measure it on visual amenity while other carriers consider the impact of the weight and other dimensions of the infrastructure on the integrity of the overall structure.

### Prompt questions

1. Would a consistent approach to measuring co-location volume assist or hinder the co-location and visual amenity of equipment?
2. What methodologies could be used by carriers to determine co-location volume? Are any of these methodologies agnostic regarding equipment type?
3. With safety as a primary consideration, which would be a preferred approach to co-location and why?
4. What benefits or disadvantages (financial or non-financial) would occur as a result of implementing these options?

## Next steps and conclusion

The proposals in this paper seek to improve the powers and immunities framework by addressing concerns of landowners and occupiers and supporting the deployment of telecommunications equipment in a balanced way.

A modernised deployment framework will provide greater certainty and transparency to landowners, occupiers and communities, while allowing industry to deploy telecommunications equipment to support new and expanded uses of mobile technologies.

The Department welcomes your views on these proposals. Each proposal is accompanied by a series of prompt questions to help guide your response. These are not definitive questions and the Department welcomes views on all aspects you consider relevant to the proposals.

The consultation period will be open for four weeks and submissions will be accepted up until **Friday, 16 October 2020**. To provide a written submission, please email [powersandimmunities@communications.gov.au](mailto:powersandimmunities@communications.gov.au). When making a submission, please include:

- Contact name
- Organisation name, if applicable
- Contact details, including telephone number, postal and email addresses
- Confirmation whether or not your submission can be made public—published—or kept confidential.

All submissions to be made public need to meet the Digital Service Standard for accessibility. Any submission that does not meet this standard may be modified before being made public. If your submission is to be made public, please ensure you do not include any personal information that you don't want to be published. If your submission is confidential, please ensure each page of the submission is marked as confidential.

If you have any questions on the exposure draft or the consultation process, or would like to arrange a meeting with the Department, please send an email to [powersandimmunities@communications.gov.au](mailto:powersandimmunities@communications.gov.au) or contact:

Rachel Blackwood  
Assistant Secretary  
Spectrum & Telecommunications Deployment Policy Branch  
Department of Infrastructure, Transport, Regional Development and Communications  
Telephone (02) 6271 1591

The outcomes of the consultation process will inform the progression of the proposals included in this paper. As noted earlier, the approach towards some of the proposals is graduated ranging from non-regulatory intervention through to legislative change.

The Department expects to publish the outcomes to this consultation process at least four weeks after the consultation period closes outlining the forward approach to be taken for the various proposals set out in this paper.

## Glossary

### Glossary of terms

Terms	Meaning
ACMA	Australian Communications and Media Authority—the telecommunications-specific industry regulator dealing with carrier powers and immunities issues ( <a href="http://www.acma.gov.au">www.acma.gov.au</a> ).
The Act	Telecommunications Act 1997
Carrier	The owner of a network unit used to supply carriage services—such as telephony or internet—to the public. Must hold a carrier licence from the ACMA in accordance with the Act.
Code of Practice	Telecommunications Code of Practice 2018
Commercial area	Referred to in the LIFD, an area where its designated use is for commercial purposes.
The Department	The Department of Infrastructure, Transport, Regional Development and Communications.
Industrial area	Referred to in the LIFD, an area where its designated use is for industrial purposes.
Mobile Base Station Deployment Code	Mobile Base Stations Deployment Code C564:2018 ( <a href="http://www.commsalliance.com.au/Documents/all/codes/c564">www.commsalliance.com.au/Documents/all/codes/c564</a> ).
LAAN	Land Access Activity Notice—a notice issued by telecommunications carriers seeking entry to land to conduct activities authorised by Schedule 3 to the Act.
Landowners	The owner of a site or an asset where a telecommunications facility is proposed to be deployed. There are many types of landowners including government, utilities, road authorities, commercial entities and homeowners.
LIFD	Telecommunications (Low-impact Facilities) Determination 2018.
NBN Co	NBN Co Limited, the company building the National Broadband Network, a high-speed broadband network being constructed for the Australian Government ( <a href="http://www.nbnco.com.au">www.nbnco.com.au</a> ).
Residential area	Referred to in the LIFD, an area where its designated use is for residential purposes, and parts of built-up areas that cannot otherwise be described as a commercial, industrial or rural area.
Rural area	Referred to in the LIFD, an area where its designated use is for rural purposes, and areas not part of built-up areas that cannot otherwise be described as a commercial, industrial or residential area.
Schedule 3	Schedule 3 to the Telecommunications Act 1997, which sets out the carriers' powers and immunities framework.
TIO	Telecommunications Industry Ombudsman—the independent dispute resolution service for telecommunications consumers, which also covers some powers and immunities issues ( <a href="http://www.tio.com.au">www.tio.com.au</a> ).

## Attachment A: Outline of the powers and immunities framework

Carriers' powers and immunities are provided in a regulatory framework set out in legislation and an industry code registered by the Australian Communications and Media Authority (the ACMA).

### Schedule 3 to the Telecommunications Act 1997 (the Act)

Schedule 3 to the Act provides carriers with powers to enter land, including public areas of buildings, for inspection and to install and maintain certain types of facilities. Schedule 3 also covers the installation of 'low-impact facilities', which are specified further in the LIFD. It also provides certain immunities from a range of State and Territory laws when carrying out those activities, such as laws relating to land use, planning, design, construction, siting, tenancy, environmental assessments and protection. These are collectively referred to as 'planning laws' in this paper.

Where Schedule 3 does not cover a particular telecommunications facility, carriers need to comply with applicable State and Territory planning laws and obtain landowner consent.

### The Telecommunications Code of Practice 2018 (the Code of Practice)

The Code of Practice sets out the notification and objection procedures for carriers using powers and immunities authorised by Schedule 3 to the Act, as well as obligations for carriers when undertaking activities—inspecting land, installing and maintaining facilities—using their powers. Compliance with the Code of Practice is a carrier licence condition.

### The Telecommunications (Low-impact Facilities) Determination 2018 (LIFD)

Schedule 3 to the Act gives the Minister for Communications and the Arts the ability to specify facilities as 'low-impact facilities' which can be installed using Schedule 3 powers and immunities. They are the most common type of carrier facilities installed under Schedule 3 and are specified in the LIFD.

The types of facilities that are currently specified in the LIFD as low-impact are those considered to be essential to the effective and efficient operation of telecommunications networks in providing services to the public, but are considered to be of low visual impact and unlikely to cause significant disruption to the community during installation or operation.

Low-impact facilities can be radiocommunications facilities, underground and above-ground housing, underground and some aerial cables, public payphones, emergency and co-located facilities. For example, mobile phone network facilities installed on existing towers and buildings can be low-impact facilities listed in the LIFD.

As well as specifying the types of facilities, the LIFD can designate the areas in which carriers can install low-impact facilities such as residential, commercial, industrial and rural areas.

### The Mobile Base Station Deployment Code C564:2018 (the Deployment Code)

The Deployment Code sets out additional processes and conditions carriers are required to follow when installing mobile phone base stations. The Deployment Code was developed by Communications Alliance and is registered with the ACMA. The ACMA can warn or direct sections of industry to comply with the Deployment Code.