

Austrroads Formal Submission

Improving the telecommunications powers and immunities framework



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Submission: This submission can be published.

1 General comments

Austrroads welcomes the opportunity to comment on these proposed changes to the telecommunications framework.

Austrroads and its members have been advocating for a more balanced approach to the powers and immunities between telecommunications carriers and road authorities for over a decade.

As the bulk of telecommunications infrastructure is deployed in road corridors and reserves, road authorities regularly interact with carriers proposing to install and maintain their assets, beside, above or under state, territory or locally controlled roads and on road infrastructure. Road authorities assess carrier proposals to ensure works do not compromise the safety and integrity of the road network. Despite this vital role, the telecommunications legislative framework does not always meet the safety and operational needs of road authorities. The current framework for road authorities and carriers to manage telecommunications infrastructure has sometimes resulted in poor outcomes for public roads.

Road authorities understand the need for carriers to meet certain levels of service by streamlining the deployment of modern communications technology and reducing their administrative burden. However, the commercial interests of carriers to reduce administrative processes, costs and timeframes have at times impacted the safety of public roads. It is in the public interest to bring balance to these commercial interests and public needs, to ensure the efficient management of road assets and limit impacts on road safety.

Overall, Austrroads considers most of the proposed changes to the framework to be positive steps toward rebalancing the framework.

2 Responses to the Consultation Questions

2.1 Safety and notification

2.1.1 *Creation of a primary safety condition*

Summary of Proposed Change

- *A primary safety condition would be added to the Code of Practice to highlight the safety requirements of telecommunications installations.*

- *Non-legally binding industry codes could be used to provide operational guidance and co-ordination for the safe installation of telecommunications facilities on sites managed by public utilities (such as roads).*

Response

This proposal is strongly supported. Further regulatory change is sought to make it a more effective change.

1. Do the current safety arrangements provide assurance for the safe and effective implementation of telecommunications equipment?

No. Road authorities have dealt with carriers who have refused to meet depth and alignment requirements in roads as specified by road authorities, or even as specified in carriers' own technical standards. Carriers have on occasion made decisions regarding the location of their assets without explicit oversight by a road safety professional or compliance with agency- specific technical specifications and standards.

Poor application of road safety and structural engineering standards have on occasion led to safety concerns, additional inspection and rectification works for road authorities, and exposure of road authorities to substantial risks, delays and costs for future road works. Telecommunications facilities that have not been installed in accordance with 'good engineering practice' cannot be rectified by road authorities, as interference with telecommunications facilities is a criminal offence under section 474.6 of the *Commonwealth Criminal Code Act 1995*.

Safe installation is not just about mandating standards and codes, although this would be an enhancement from a road safety perspective, it also requires professional expertise to apply those codes effectively. For instance, being able to provide professional judgement when standards have different requirements, such as requiring a conduit to be installed at a depth of 600mm rather than 450mm parallel to a state controlled road to avoid being damaged when road authorities use particular road upgrade equipment.

For instance, in Queensland, what is considered to be expert advice in this context is regulated by the *Professional Engineers Act 2002* which was put in place "to protect the public by ensuring professional engineering services are provided by a registered professional engineer in a professional and competent way". There is a legislated requirement to have an appropriately qualified registered professional in the engineering discipline (e.g. structures, civil, electrical) carry out professional engineering services such as engineering designs and plans that require, or are based on, the application of engineering principles and data, or to a construction or production activity, relating to engineering. This is particularly pertinent to telecommunications assets which usually require a number of engineering contexts to be considered when being installed and maintained in road corridors.

There is a requirement for all other public utilities operating in roads to follow the road authority's standards and obligations. Requiring this for installation and maintenance of telecommunications assets will minimise potential negative impacts to road assets (bridges, streetlights, roads etc.), minimise road safety risks and protect road asset integrity.

2. If no, what additional regulatory mechanisms may provide that assurance?

One possible solution is to revise Clause 10, Schedule 3 to incorporate road technical standards into the Code of Practice in a way that empowers the Australian Communications and Media Authority (ACMA) to enforce them. Road authorities would support this by providing the standards.

The term 'good engineering practice' needs to be defined to encompass national, State/Territory and local standards applicable to the circumstances of works if it is to be effective in protecting public safety. Further, the legislation could require that

deviation from those standards would be subject to penalties to emphasise the seriousness of non-compliance.

Road authorities could nominate standards that apply nationally and in their jurisdiction. This would provide clarity for engineers about what is considered good engineering practice in different contexts and provide clarity to carriers.

3. Would the addition of a primary safety condition to the Code of Practice provide that assurance?

No, but it would be a welcome addition to the framework as a necessary first step.

To reinforce the need for carriers to comply with a new safety condition in the Code of Practice there is a need for a simple way for landholders to report non-compliance by carriers. The burden of pursuing the impact of poor safety behaviour should not be borne by the landholder, as for small local roads authorities, it is often beyond their financial capacity. Further, for smaller breaches, road authorities need to weigh the cost-effectiveness of pursuing such action.

Safety on roads is for the very serious purpose of protecting the public. Noncompliance by carriers with the safety condition should have serious implications for the telecommunications carrier. Ideally compliance with engineering and safety standards should be financially and reputationally more appealing than noncompliance. If breaches were pursued by the regulator, it would ensure the safety condition would give meaningful comfort to road authorities and the general public. Negative impacts would not be anticipated for those carriers already undertaking appropriate, good engineering practice, and this approach would identify those carriers that needed to improve their safety systems.

2.1.2 Standard notifications across industry

Summary of Proposed Change

The notification for carriers to undertake inspections, installations and maintenance on land they do not own to be enhanced by providing:

- *indicative timeframes for proposed activities, such as when the activity will commence and how long the activity would usually take once commenced*
- *public utility landholders, including road authorities, would have a statement explaining the proposed activity supplemented with technical drawings or plans, and the standards applicable to the activity, and*
- *a template notice be implemented under the Code of Practice (COP) and adopted by all carriers.*

Response

This proposal is strongly supported. Further detail would be needed to achieve the greatest benefits.

1. Is there any other information that could be included on a notice that would provide clarity on the installation process and timeframes?

Yes. In addition to the statement explaining the proposed activity supplemented with technical drawings or plans, and the standards applicable to the activity the following would provide clarity on the installation and/or maintenance activities:

- i. Construction design drawings with location dimensions of the assets to an accuracy tolerance of +/-50mm using the cadastral boundaries of the road.
- ii. All designs affecting the road (carriageway and reserve) signed by an appropriately qualified engineer and the qualifications of the engineer noted on those plans or supplementary material in a format acceptable to the road authority (for example, complying with specified drawing standards)
- iii. Technical specifications of the equipment to be installed.

- iv. Where impacting on road assets such as signs or streetlights an engineering assessment of the impact (for example, structural, maintenance, fitness for original purpose, safety, sightlines for vehicle access to adjoining properties) of the telecommunications installation.
- v. The actual dates and times the carrier is proposing to undertake the specific work on the road. Some carriers indicate works will be undertaken within a month, quarter or part of a year. Few provide specific dates and times. Indicative times are not acceptable from other utilities as it prevents road authorities from being able to be informed about what is occurring in the roads and manage roads effectively – particularly in an emergency. Carriers may want to undertake works during peak road use periods. This can substantially affect road users and increase safety risks, as these risks are exacerbated on high speed and high traffic roads. This change would also enable road authorities to undertake inspections and audits of works.
- vi. Identification of the standards and specifications that have been applied when developing the plans and construction design including those applicable to roads, electrical or telecommunications. An example of a relevant road standard is the *Austrroads Guide to Road Design Part 6: Roadside Design, Safety and Barriers* and *Part 6B: Roadside Environment*. Some state and territory jurisdictions may also have state/territory standards or specifications that apply for their specific road environments and to certain telecommunications installations, including specifications for Construction Surveying, Road Lighting or codes of practice that manage all utilities in roads.
- vii. Details of the extent of civil works that will be required, for example, if trenching or machinery is required.
- viii. What equipment will be stored in the road reserve to facilitate works and for how long.

Austrroads supports both proposed implementation options, namely the development of an industry code registered by the ACMA under Part 6 of the Act or ACMA prescribing the form of a notice under the COP. The latter option would be most effective if the COP was enhanced to provide explanatory information about details required in the template.

2. What benefits, either financial or non-financial would additional notice and information bring to landowners?

The COP states that notices must specify the purpose of the activity, details of the activities the carrier intends to perform, the proposed dates of the activities, a statement advising that compensation may be payable if a person suffers financial loss or damage to the property, and an explanation of the arrangements for making an objection to the activity. The COP provides no further stipulations as to what a notice must contain.

Road authorities typically have their own guidelines setting out the information needed to undertake a proper assessment of third-party works. Much of the required information is routinely missing from notices. Carrier notices received by road authorities are often vague, light on detail, and do not specify the infrastructure involved so that an assessment of whether it falls into the low-impact category or not cannot be made.

Some examples of poor notices include:

- Notices with multiple schedules on the single application
- Blanket notices covering multiple locations, suburbs and regions just indicating 'maintenance' or generic works are being undertaken
- Notices covering vast work areas with very limited location details

- Inadequate legends on supplied drawings
- Drawings that are 'snips' or 'print-screens' with no route locations, alignments or installation methodologies.

The accuracy, quality and amount of information, or lack thereof, accompanying notices is often a serious issue for road authorities. Complications arise when the locations of telecommunications infrastructure are not communicated in detail so that a comprehensive assessment of their impact to existing road assets, current road projects and road safety can be undertaken. Telecommunications works can pose significant safety risks to road users and road infrastructure, which are difficult to identify and manage when road authorities do not know the exact locations of works and what activity is being undertaken. It is crucial for road authorities to be provided with enough information by carriers so that they can manage their responsibilities as coordinators of roads, traffic and safety.

Currently the only option for road authorities is to object. This can cause delays in carrier projects, and imposes an undue administrative, resourcing, reputational and financial burden on both carriers and road authorities. Road authorities would prefer a collaborative, consent-based approach to installations to mitigate the above issues. Despite this, this proposal to increase the information required on notifications is supported.

Benefits would be to better manage negative impacts of carriers' activities to roads, for instance carriers trenching road surfaces rather than under-boring roads to install conduits. This action brings forward maintenance work and associated costs and poses safety risks to road users.

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?

Standardised notices which include adequate information from carriers would decrease the road authority and carrier burden as inadequate notices can lead to objections to works that might have otherwise been acceptable to the road authority.

It would assist road authorities to make better decisions to support carrier access to roads and minimise risks to all parties.

The cost of assessing the notices from carriers on road authorities is expected to reduce as time spent undertaking research and checks by road authority staff will be reduced through improved information. This would be expected to provide a decrease in the administrative cost to taxpayers.

It is not possible to quantify this regulatory cost as road authorities do not collect such information nationally, and currently state, territory and local governments absorb the costs associated with managing telecommunications on roads.

2.1.3 Withdrawal of notifications

Summary of Proposed Change

Carriers be required to withdraw a notice when the proposed activity is cancelled, or indefinitely delayed, to provide certainty and transparency for landowners. It would be implemented either by a telecommunications industry commitment to withdraw a notice or a formal requirement for a carrier to withdraw a notice.

Response

This proposal is supported. Option two, formal requirement for withdrawal, is preferred.

- 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.**

The frequency of the lack of withdrawal notices creating a burden is difficult to measure as road authorities do not routinely collect this information nor report on it nationally. It is very difficult for road authorities to establish what activities are occurring in the road if the telecommunications works are not going ahead. This can impact the scheduling of other third-party works or road works. This lack of clarity contributes to administrative (and therefore financial and systems) burden on the road authority to track activities which may not be occurring.

Road authorities would prefer that a formal requirement be pursued as this gives certainty to both the landholder and carrier about the required obligations.

2. To what extent would a notice of withdrawal, provided in a timely manner, reduce this burden?

It would provide clarity about what activities are occurring in the road corridor (carriageway and reserve), and when, so road authorities can better manage third-party and their own works.

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?

Occasionally a road authority may receive an email indicating that works will not be proceeding or the withdrawal of a notice.

These withdrawals can be difficult to match with notices on the road authorities' systems if the carrier notice number, 'unique identifier', is used across multiple notices so the method is not reliable but may be made effective with the right framework in place.

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

This question is for carriers to address as it is difficult to gauge as the recipients of notices, however withdrawal notices would decrease the road authority administrative burden. It would also assist road authorities to minimise interruptions or lost opportunities to their own works or other third parties operating in the road corridors.

2.1.4 Requirement to provide engineering certification

Summary of Proposed Change

Carriers providing a copy of the engineering certificate to the landowner after asset installation. Proposing either a voluntary, industry approach or regulatory approach through an industry code/changes to the Code of Practice.

Feedback is sought if this would add significant administrative cost or burden to the existing process.

Response

This proposal is strongly supported. A requirement as part of a legally binding code is preferred. The question of cost should be considered in the context of benefit to public safety, and asset integrity where the telecommunications asset is installed on a third-party asset.

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?

This is directly linked with the response to 2.1A(1-4). There are three key points when specialist engineering input is required for telecommunications asset installations, and this is linked directly to the safety and longevity of assets being managed in the road corridor:

- during the design of the telecommunications asset and how it will interact with the land and existing and future assets
- while the asset is being installed to ensure the design criteria are met
- after the installation, so there is assurance provided that the installation was undertaken correctly, through inspection.

Further, during asset installation, it is critical all the 'as constructed' surveying information is collected, particularly for sub-surface assets, as this can significantly impact road authorities' upgrade or maintenance of the road and is needed to reduce the risks to carriers.

Provision of an engineering certificate would give comfort to road authorities that the carrier had undertaken the work to the relevant engineering requirements and standards to ensure road safety and that the installation would not negatively impact the expected road structure asset life. Unfortunately, road authorities have many examples where good engineering practice has not been undertaken, so an engineering certificate would assist road authorities by verifying an appropriately qualified professional had been involved in the installation. The outcome of not having an engineer involved in all three stages, design, installation and inspection can have significant impacts on safety and costs for road authorities.

Some photographic examples of poor engineering by carriers show why certification of good engineering practice is important:



Figure 1: Telecommunications conduit installed through a water pipeline bracket attached to a bridge.



Figure 2: Telecommunication conduit resting on a transverse stressing bar of a bridge, increasing oxidization of the bar, and preventing the road authority from undertaking bridge maintenance (replacement of the bar). This bar is critical to the bridge integrity and safety.



Figure 3: Overhead telecommunications cable installed by a carrier's contractor into a tree. The cross indicates where the cable was attached to the tree and the arrow shows the extended pole that was modified for additional attachment.



Figure 4: The orange telecommunication cable at the culvert opening has restricted debris resulting in a blocked drain. The road authority is unable to clear the culvert or undertake scheduled culvert extension works (addressing a road safety hazard) without removing the cable.



Figure 5: Telecommunications conduit installed directly beneath the footpath and not to the minimum depth required by good engineering practice in the road reserve negatively impacted footpath replacement costs and timeframes.



Figure 6: A telecommunications cable affixed to a farmer's fence in the road corridor.



Figure 7: Elevated joints are a common problem, especially in agricultural areas. Elevated joints are usually repaired cables that are not re-buried, they often do not comply with road clear zone requirements. When road verge becomes overgrown then road authorities can impact these joints during roadside vegetation slashing and fire management.

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?

Road authorities contend that good engineering practice would already require the certification of installations. If that is not occurring, particularly in high risk environments such as public roads, then that is of concern as a failure to meet fundamental responsibilities.

It is already a requirement that carriers provide 'as constructed' survey information to road authorities, usually within 30 days, so providing a copy of the engineering certificate should pose little extra regulatory financial impact.

Landholders are unable to correct carriers' poor engineering. If they were to do so, it would be a criminal offence under section 474.6 of the *Commonwealth Criminal Code Act 1995* which prohibits interference with telecommunications facilities. Road authorities and road users bear the negative safety impacts of poor engineering. The cost benefit would be substantial for road authorities and the general public if the

assurance of the engineering certificate, for design, construction and inspection of telecommunications works was provided. Road authorities do not believe providing copies of engineering certification is an unreasonable burden, as most carriers conduct communication via email, and particularly considering carriers receive the benefit of using publicly owned roadside land at no cost.

2.1.5 Extending notification timeframes

Summary of Proposed Change

A legislative amendment to Schedule 3 of the Telecommunications Act 1997 (Cwth) (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.

Alternative greater engagement by carriers with landholders and regular meetings with road authorities.

Response

The proposed legislative amendment is strongly supported.

For clarity, the notice period would require a minimum of 20 business days before the proposed carrier installation or maintenance, with an objection period of at least 15 business days, that is, objection by the landholder permitted up to 5 days before the carrier proposed installation date.

The alternative arrangement is supported but in addition to, not instead of, the legislative amendment.

1. What are the benefits (financial and non-financial) of a non-regulatory approach in providing a longer notification timeframes?

The non-regulatory approach would be unlikely to affect change because this change is needed not to deal with carriers who are acting collegially with road authorities, as many already do, but to seek better behaviour from those carriers who are not.

Further, the non-statutory approach to improve planning discussion and relationships will not obtain the desired outcome which is to grant road authorities, and other landholders, sufficient time to seek the additional information where required or properly consider the proposed works in the complex environment of a road. General planning information does not provide the necessary detail needed to assess the suitability of an installation in the road corridor, including, specific location, equipment specifications, explicit timing of the activity and so on.

Road authorities support the increased communication, planning and engagement with carriers and many are already pursuing this with individual, willing carriers to assist with mutual long-term planning.

4. What are the benefits (financial and non-financial) of a regulatory approach in providing a longer notification timeframe?

A regulatory approach provides certainty for all parties. All carriers and landholders would know their obligations. It would be expected that those carriers who already undertake professional approaches to planning would find minimal negative impact, and would likely see a reduction in the number of objections as road authorities would have time to seek additional information to properly assess the proposed activities. This would assist to remove some of the financial and administrative burdens of either having to object to incomplete notices or an installation that occurs due to the road authorities' lack of capacity to respond to the volume of notices – that negatively affects road operations and/or safety.

It would go somewhat toward bringing the timeframes in line with all other utilities operating in the road corridor.

5. Should longer notification timeframes apply to all landowners, and not be limited to landowners that are public utilities and road authorities?

Yes. Road authorities support consistency, transparency and equity for all landholders and asset owners being impacted by carrier activities. It also ensures carriers can put in place consistent practice and systems to support a single framework and reduces complexity.

6. What would be the benefits (financial and non-financial) of providing a longer timeframe for objections to be made to carriers about proposed activities?

Under the Telecommunications Code of Practice (COP) the road authority has the right to lodge an objection within the following timeframes:

- for installation and maintenance, within 5 business days after the notice is received before the carrier engages in the activity (with notice to be issued at least 10 days prior to commencing the proposed activity)
- for inspections, one (1) business day from the date of receiving written notice (with notice to be issued at least two (2) business days prior to commencing the proposed activity).

The statutory notice periods are insufficient to determine the impact of proposals on road operations, especially given the issues with incomplete notices. The two-day notice period for inspections is particularly inadequate as this activity category includes traffic control and closing a road or bridge.

The objection period is often impossible to meet by road authorities due to the volume of notices received from carriers. Such short legislative timeframes can result in road authorities automatically objecting to carrier activities, or safety risks if they cannot respond in time. This can lead to poor outcomes for telecommunications and road networks with the potential to incur extra costs, project delays or safety risks.

The objection period is particularly challenging for large organisations such as State and Territory government departments that are responsible for many complex areas requiring input from multiple parties. Based on the benchmarks of other State/Territory authorities, processing timeframes for many industries to access public land is 40 business days.

For other utilities operating in roads, such as electricity and water, instead of one to five business days to respond, statutory timeframes range from 10 to 30 business days. It should be noted that a key difference between telecommunications and other utilities operating in roads is that access is not made available to other utilities until the road authority actively consents to it but telecommunications works are granted default access if the road authority cannot respond within five business days. Additionally, statutory timeframes apply once a proposal by the utility has been properly made (i.e. is complete/has sufficient information), which is not the case for telecommunications. With highly complex proposals road authorities and other utilities usually discuss the proposed installation and the timeframe is extended by agreement.

Some of the benefits to increasing the time to 20 business days include:

- providing road authorities time to undertake sufficient assessment of the impact of carrier works with reference to specialist advice to ensure that the overall use of public land is managed safely and efficiently
- reduction in the number of notices missed due to the volume overwhelming authorities and therefore prevent installation of assets in roads that have a negative safety or operational impact

- bringing carriers in line with other utilities regarding statutory response timeframes to improve consistency and fairness, and
- encouraging all carriers to enact more collegial processes and enhance their understanding of what landholders need.

Please note, road authorities believe an increased notice period should be implemented to require a minimum of 20 business days for submission of carrier notices prior to the proposed carrier installation or maintenance commencement date, with an objection period permitted up to 5 days before the carrier proposes to engage in the activity (rather than 15 days from the date of the notice). This prevents carriers proposing installations months in advance, as conditions can change dramatically in a road over a few months and the road authority may need to object to works as a result of these changes.

7. What other factors should be considered when considering whether to extend notification or objection timeframes?

An additional solution would be to update the Telecommunications Code of Practice, in addition to statutory change to the *Telecommunications Act 1997* (Cwth), to include a matrix of types of works, with varying timeframes depending on the type of works. Certain activities by carriers, compared to others, may not require additional time to be assessed by the road authority – for example, hauling cable through conduits may not require as much time for the road authority to plan for, compared to excavating trenches beside the road or under boring roads, which is more onerous. Therefore, providing such a matrix would allow flexibility of timeframes and enable the road authority to plan accordingly. It is noted that this may introduce a level of complexity that is undesirable to carriers.

It is also recommended a table is put in the front of the Code of Practice explicitly stating the process timeframes for inspection, installation and maintenance to support clarity for all parties regarding timeframes.

2.2 Objections and protections

A. Clarifying the objections process for landowners

Summary of Proposed Change

More detailed information provided regarding landowners' rights and grounds for objection to a proposed activity in the Code of Practice (COP).

Response

Road authorities support this proposal.

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?

No. The COP is organised in a way that separates out inspection, installation and maintenance, but it is very common to have all three types of activity. It is organised in a way that makes it difficult to understand the timeframes for objection, the grounds for objection and how to follow the consultation process.

The TIO Land Access Guidelines provides more detail, but it is not legally binding. Further, the grounds for objections themselves are insufficient to adequately protect the safety and integrity of road corridors.

The COP allows road authorities to object to a proposed authorised activity on one or more of the following specific grounds:

- a. using the objector's land to engage in the activity
- b. the location of a facility on the objector's land
- c. the date when the carrier proposes to start the activity, engage in it or stop it

- d. the likely effect of the activity on the objector's land
- e. the carrier's proposals to minimise detriment and inconvenience, and to do as little damage as practicable, to the objector's land.

The TIO Land Access Guidelines explain what types of issues are covered under each of the above grounds for objection and provide common issues that are not covered and therefore cannot be raised as an objection nor resolved by the TIO. The code of practice doesn't go into the necessary detail and the TIO guideline is not legally binding.

The guidelines acknowledge that grounds a) and b) can be used only under limited circumstances where there is an alternative location that could be used to install the proposed facility either, for ground a), outside the road authority's land (i.e. outside the road reserve in this case), or, for ground b), within the road reserve. In either case, the road authority is expected to point out the actual alternate location that is suitable and justify why the original location is inconvenient or problematic.

Ground d) can be used if the proposed activities will have an impact on the condition of the land itself. While this ground allows a road authority to object if the proposed activities create an ongoing risk to the land (such as compromises to the structural integrity of road structures), it cannot be used for temporary impacts that will be resolved once the activities are completed. This ground also does not allow a road authority to object on the basis that the facility may affect the use or intended use of the road corridor or road reserve. Therefore, road authorities have no power to prevent proposed infrastructure that would impact on the road authority's plans for the road corridor, such as future upgrades to the road. This seriously compromises their duty to efficiently upgrade road networks in accordance with the government's strategic transport plans and interests.

Ground e) can be used if the carrier has not implemented sufficient measures to minimise detriment and inconvenience, and to do as little damage as possible, to the land. However, it does not allow road authorities to object where the proposed activities will in fact cause detriment, inconvenience or damage to the land. A carrier's failure to enter into an agreement with the road authority prior to notice being given (or failure to take reasonable steps to do so) is not a valid ground of objection. As such, there is no effective legal recourse to prevent the carrier from continuing their activities in the absence of any agreement with the road authority.

In the absence of any effective deterrent, road authorities can be left with the burden of dealing with unsafe systemic issues, such as telecommunications assets not being installed at sufficient depth or road safety specifications not being followed. In most cases, the only practical effect the objection process has is to allow the road authority additional time to assess a carrier's proposal and attempt to obtain further details of the proposal. Ultimately, however, the process works in the carriers' favour and carriers have virtually no legally-enforceable obligations to cooperate with the road authority's requests. Court cases pursuing road authority rights would likely be lengthy, very uncertain and expensive.

The COP would be greatly enhanced by a process table with timeframes and what needs to occur at each step and greater explanation about what can/and cannot be included as an objection. For instance, it is quite unclear in the code regarding inspection timeframes as notices can be served with 48 hours of notice but there is either 1 or 9 days to respond.

Standardisation of activity terms into commonly understood descriptive terms used throughout would increase clarity. For instance, the term 'installation' seems to be used interchangeably with low-impact facility activities in some circumstances. There should also be a term for installations which are excluded from the Act and COP, such as mobile towers, because 'non-low impact facility installations' is an obscure and really difficult to understand term.

An example of duplication and terminology confusion in the COP is below:

For carrier 'land entry activity' (inspections of land and doing 'anything on the land that is necessary or desirable for that purpose') the COP states:

2.30 Time for giving objection to carrier

(1) For a notice to which paragraph 2.22 (4)(a) applies, the objection must be given to the carrier within 9 business days after the notice is received.

(2) For a notice to which paragraph 2.22 (4)(b) applies, the objection must be given to the carrier within 1 business day after the notice is received.

Note The objection periods of 9 business days and 1 business day in section 2.31 reflect these notification requirements in clause 17 of Schedule 3 to the Act.

For carrier low-impact facility activity (installation) the COP states:

4.31 Time for giving objection to carrier

The objection must be given to the carrier at least 5 business days before the carrier proposes to engage in the low-impact facility activity.

For a carrier maintenance activity, the COP states:

6.30 Time for giving objection to carrier

The objection must be given to the carrier at least 5 business days before the carrier proposes to engage in the maintenance activity.

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?

Carriers usually provide some information about how to undertake an objection in their notices, but do not specify the timeframes for the process. Further, some carriers routinely dismiss road authority objections as invalid, despite the objection validity not being within their powers to decide. This can create confusion for road authority's officers about how to progress the objection, as consultation is not of assistance in cases where the carrier refuses to acknowledge the road authority's rights.

3. How could the objection process be better communicated to landowners and occupiers?

Ideally, a one-page process summary of the objection process with the rights, obligations and timeframes for each party would substantially clarify the COP for landholders and carriers alike. This should routinely be included with carrier notices so that notice recipients are informed of their rights, and if there are changes to timeframes, it is clear from the notice what applies.

Further, reducing the multiple sections in the COP to one section for inspection, installation and maintenance for road authorities/public land holders, and another section for everyone else would reduce duplication and increase clarity – particularly as most carriers issue one notice for one or more activities.

B. Allowing carriers to refer objections to the TIO

Summary of Proposed Change

A Code of Practice amendment 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.

Response

Road authorities are largely neutral regarding this proposal.

Currently, road authorities have to request the carrier to refer a matter to the TIO. If a carrier declines, technically road authorities do not have the right to refer the matter themselves.

Giving carriers the ability to refer to the TIO on their own behalf would not affect road authorities providing the road authority was kept informed at the same time as the TIO of the

objection, and natural justice remained in place for the TIO to invite the road authority to make its case regarding the proposed referral.

The two main concerns are that:

- road authorities have no statutory power to refer a matter directly to the TIO
- the TIO does not have the road engineering expertise to assess when there is an operational impact or potential for detriment/high safety risk to a road, which may lead it to make decisions which do not fully encompass the technical justification for a road authority to object to carrier works such as the design not complying with the professional engineering act or standards required

1. What benefits or disadvantages are there in including a carrier as a party that can initiate dispute resolution with the TIO?

No comment.

2. To what extent would this inclusion increase, or decrease, the financial and non-financial burden on carriers or landowners during a dispute?

No comment.

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?

No comment.

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?

One that is consistent with the current process where the landholder requests the carrier to refer to the TIO.

C. Removal of redundant equipment

Summary of Proposed Change

Carriers to remove redundant equipment that was 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.

Response

Road authorities support this proposal. Only the regulatory option is likely to be effective in achieving the desired outcomes as those carriers who would usually comply with industry responses would make changes, but those carriers who are less informed or only follow regulatory requirements would not.

There is currently no requirement for carriers to remove redundant equipment and this impacts road authorities who have to treat it as live and pay for its removal when upgrading a road. Also, when installed on a road asset, redundant equipment impacts the maintenance, decommission or removal of road infrastructure. It is a particular problem in highly constrained/small road reserves in public road corridors which have little room for road and other utility infrastructure as redundant assets are not being identified or moved to free up space.

It is very difficult for road authorities to identify what equipment is redundant.

1. What level of enforcement would provide the best solution to the issue of redundant equipment?

It is recommended a multi-pronged solution to this matter is sought so that it does not rely on any one party.

The first step is to have all carrier assets that are installed on public utility assets, such as roads, have a requirement to be clearly labelled and a good record of the location of that asset kept with the responsible carrier. If the assets aren't labelled, then if they have

been installed on a road asset incorrectly or are suspected to be redundant, it is difficult for road authorities to identify.

A process should be in place so that if a carrier cannot be identified, the matter can be easily referred to the ACMA or other federal body to be identified and failing any identification within a reasonable period (for example, a total of 3 months), the ACMA can issue a waiver to the landholder to remove the asset from their land without invoking the interference with telecommunications facilities criminal offence clause under section 474.6 of the *Commonwealth Criminal Code Act 1995*.

There would need to be a grace period of no more than two years for carriers to make their equipment compliant with labelling requirements and undertake their own programs to deal with redundant assets.

If a carrier was identified that did not remove the redundant asset within a three-month period, the landholder could apply to the ACMA or other federal body to provide an order for removal. This would allow landholders and carriers to identify potential redundant assets and incentivise carriers to proactively deal with their redundant assets.

Additionally, for assets installed on road infrastructure, if carriers are to claim that the asset is not redundant, then an engineering certification providing evidence of the telecommunications asset being safe, in operational condition, not negatively impacting the road infrastructure and how to manage it (for example, turning it off safely) when undertaking road maintenance activities should be provided to the road authority.

2. What regulatory burden (financial or non-financial) would occur if these options were enacted?

Currently the full financial and administrative burden falls to landholders, which is not an equitable arrangement, particularly as most carrier installations are installed on third-party land and infrastructure free of charge and the landholder does not benefit. On the contrary, carrier installations can affect the ability of road authorities to undertake maintenance or make it more costly (see 2.1D) and affects road upgrade project timelines and costs. Therefore, this burden is currently borne by the taxpayer (or landholder), rather than the commercial telecommunications companies taking responsibility for all their assets.

3. Are there other non-regulatory ways to better enforce the policy position that equipment is removed if not used?

If there was an annual cost associated with the use of land or, more crucially, road infrastructure by carriers to install and maintain telecommunications assets, then there would be an incentive for carriers to remove redundant assets to eliminate such costs.

For underground assets, this is less of an issue unless the road authority comes across direct buried cables when undertaking a road project that have been left in situ.

Any effective change would likely require a regulatory change. To be fair and place the costs with the owner of the redundant asset, carriers should wear the burden of managing the negative impacts of these assets. Landholders currently wear this burden and as road authorities are taxpayer funded this is not the desirable outcome of regulatory environments when the beneficiaries of ignoring the issue are commercial entities (telecommunications carriers).

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

A. Improve coverage outcomes through better infrastructure, where safe

Summary of Proposed Change

Technical amendments to equipment classified as a low-impact facility in the Telecommunications (Low-impact Facilities) Determination 2018 (LIFD):

- a. *Allow antenna protrusions to be extended to a height of 5 meters (currently 3 meters)*
- b. *Allow satellite dishes of 2.4 meters in diameter to be deployed in industrial and rural areas (currently a maximum diameter 1.8 metres for low impact)*
- c. *Specify radiocommunications lens antennae as a new low-impact facility*

Response

Austrroads does not support this proposal to further expand assets classified under the LIFD.

It is requested instead that a review of the LIFD and relevant parts of the *Telecommunications Act 1997 (Cwth)* (Act) be undertaken to:

- make classifications clearer and simpler
- revise definition of low-impact facilities to reflect what has a genuinely low impact on land uses such as roads
- define what is not low impact (and therefore managed through State and Territory law). For example, any works in the roads requiring a traffic management plan that affects level of service, traffic speeds or lane closures, or that may cause potential damage to road infrastructure, should be not be considered as low impact.

In determining what is or is not low-impact, the LIFD should consider the key principles that are important to the road authorities in managing their road reserves. In particular, public safety and operational impacts on the road reserves need to be considered paramount when defining what is or is not low-impact.

1. Are there alternative options that would reduce impacts to visual amenity while providing necessary coverage for a modern telecommunications service?

Austrroads has the following road safety concerns:

- Radio shrouds take up more space than antenna creating a visual impediment for road users.
- Wind shear and loading impacts on the integrity of any host structure being used to support additional telecommunications infrastructure would not have been included in the original design and therefore an un-scoped risk exists that the addition of telecommunication assets could exceed the designed capacity of the structure.

2. Would these options strike a balance between visual amenity and the need to maintain telecommunications services?

No comment on visual amenity.

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

The definition of low-impact facility determines which types of carrier facilities are authorised under Schedule 3 and are exempt from certain State/Territory and local legislation. Any facility that is not deemed to be low-impact (except a facility permitted under a facility installation permit or a temporary defence facility) is subject to all State/Territory and local authority laws.

The LIFD specifies what is and what is not considered a low-impact facility. This instrument is unnecessarily complicated and makes asset identification difficult. Carriers regularly assert assets are low-impact when they are not. It is then up to road authorities to find discrepancies in carrier assessments, if sufficient detail has been supplied. The LIFD is subject to ongoing change and is highly complex to work through. Its complexity places an unnecessary administrative burden on both carriers and road authorities. This matter is exacerbated by notices that are often issued with limited detail on the assets being installed.

Addressing disputes between carriers and road authorities over such matters would need to be pursued through the courts as the TIO is an adjudication body for Schedule 3 matters. This is not an ideal situation for either the carrier or the road authority. In the absence of clear and effective guidelines, carriers may end up installing assets which are not compliant with low-impact definitions and thereby not authorised under the LIFD or Act. Assets which are not authorised under the Act fall under State and Territory law and are therefore not permitted to be installed in road corridors in absence of the road authority's consent. Road authorities have limited powers to prevent these unauthorised installations, and none to have them removed.

The process of determining what facilities are defined as low-impact could be rationalised and simplified to improve the understanding of classification of carrier assets for road authorities and carriers. The obligation of determining what is or is not considered low-impact should be with the carriers. However, there can still be the risk of receiving incorrect assessments unless a clearer process of determining low impact facilities is introduced, as well as a procedural recourse with the ACMA or other federal adjudicating body, where incorrect assessments are identified by road authorities.

Many of the facilities listed as being low-impact under the LIFD should not be defined that way – particularly in the road environment. Low-impact facilities are those which, due to their size, construction and location (type of land), are considered to have a low impact on safety and visual amenity, and be less likely to raise significant planning, land use, heritage or environmental concerns. The LIFD includes telecommunications assets that fall outside that scope and does not adequately consider the impact facilities can have on roads, road structures, road network planning or safety of road users.

For instance, low-impact facility work includes maintenance work. Maintenance works may extend the life of a carrier asset that is in an unsuitable location affecting road safety or future works. Further, there can be significant safety considerations for any maintenance works on a bridge, from asbestos impacting worker safety, to damage to bridge bearings, joints, pits or road safety infrastructure. This means any work on bridges, culverts and tunnels, whether through existing carrier infrastructure or new infrastructure, should be excluded from the LIFD for all carriers.

The LIFD could be strengthened to exclude works which had a high impact on roads and legislation enacted to ensure road authorities are empowered to set robust conditions regarding safety, access, security and engineering standards for works which are genuinely of low impact to the road environment. Many items already included as low impact do not conform with their name and have a substantial impact on road authority operations and project costs.

Aside from putting strain on already congested roadside environments, any further inclusions of this nature concern road authorities as more assets of larger size will also mean increased costs to relocate these assets during road upgrades – an inappropriate shifting of costs from the commercial sector to the taxpayer. For instance, increasing the size of satellite dishes in industrial areas can cause sightline impacts to vehicles exiting properties adjacent to the road and for cyclists and pedestrians using pathways.

These telecommunications assets do not have to be included in the LIFD to gain access to the road corridor via commercial agreement, something which carriers have in place for mobile towers, which is a more appropriate way to manage the costs and impact of commercial assets on public land.

B. Improve coverage outcomes through tower extensions

Summary of Proposed Change

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).

Response

Austrroads does not support this proposal to further expand assets classified under the LIFD.

1. Would the extension to 5m maintain a balance between visual amenity and the need to maintain telecommunications service?

No comment on visual amenity.

2. What benefits or disadvantages (financial or non-financial) would occur as a result of implementing this option?

See response to 2.3A(3) above. Further, expanding carrier powers to install more and larger assets in road corridors puts the costs of moving these bigger, more expensive assets on road authorities when upgrading roads – increasing the cost of road upgrades to the taxpayer.

3. Are there any other conditions or issues that should be considered if this proposal was to proceed?

Commercial areas experience significantly higher traffic volumes and experience higher demand from public utilities for the allocation of space in the road corridor. Consequently, additional construction or maintenance activities in these areas presents a greater risk of negative impact on road user safety.

An engineering assessment should be made to determine the impact of the addition height on the structure to which it is attached and if that would pose any additional safety risks to road users. If it were on an existing mobile tower in the road corridor the change would need to be noted as part of the agreement with the road authority.

The installation of additional telecommunications assets on any structure could exceed the original design limits of that structure and therefore create an un-scoped risk that the structure could not safely accommodate.

Tower extensions do not have to be included in the LIFD to be included in a commercial agreement. Many carriers have commercial agreement with road authorities for mobile towers. This is a more appropriate way to manage the costs and impact of commercial assets on public land.

C. Allowing deployment on poles rather than on utilities

Summary of Proposed Change

Feedback on the current regulatory framework for carriers installing poles to house small cells in areas where there are no appropriate, existing third-party poles available for installation.

This regulatory framework for carrier owned poles is different from the framework to access third-party poles such as streetlights and electricity poles (which is covered under the LIFD).

Feedback is being sought 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.

Response

Austrroads does not support permitting smart or slim poles as a part of the LIFD or changing the legislation to support this proposal. This is not primarily a consideration of visual impact, but one of road safety. Permitting carrier owned poles is the opposite direction to what has been advocated by road authorities regarding the deployment of small cell/5G.

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

Visual impact is not a substantial consideration for road engineering and safety except where sight lines are impacted, although it is understood many adjacent landholders find it to be of significant concern. Road authorities consider, road safety including the deployment of non-frangible and electrified assets in road clear zones, impacts on sight lines for road users, particularly vehicles entering the road and cyclists using the roadside, to be key issues in this circumstance.

A clear zone is an area next to the road where more non-frangible installations significantly increases risks to motorists if they are involved in an incident.

It is possible, that with four carriers, a 5G asset could be installed every 50m-100m in urban areas.

The issues for road authorities are not focused on visual amenity, instead the proliferation of poles, particularly in urban areas and in the clear zone would have the following impacts:

- Increasing the risks to road users by substantially increasing the non-frangible built assets in the road clear zone
- Blocking sightlines and impacting pedestrian and cyclist safety, particularly in congested urban roads.
- Substantially increasing the cost of road projects due to road authorities bearing the cost of relocating those poles.

Generally, the telecommunications industry has been adversarial in nature and reluctant to work cooperatively with road authorities. There is a perception within the telecommunications industry that they have an absolute right to access transport infrastructure regardless of the road authority's safety, operational and strategic interests. 5G / small cell telecommunications pose an increased risk to road projects by requiring road authorities to relocate an increased number of telecommunications assets, which will affect road project timeframes and costs for road widening and realignment projects due to a proliferation of 5G / small cell telecommunications assets.

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

As per 2.3(C)1 above.

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

As per 2.3(C)1 above.

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

Austrroads has significant concerns with proposed changes to telecommunications carriers' powers and immunities. This was highlighted in a number of road authority responses to last year's Standing Committee on Communications and the Arts 'Inquiry into 5G in Australia'.

Austrroads does not accept that proposals such as including smart/slim poles in the LIFD will save the government and community the regulatory savings often suggested by industry, but rather transfers additional costs to taxpayers. If adopted, the proposals contained in this paper would fundamentally change the existing framework under which telecommunications carriers interact with all other infrastructure owners, without a

Regulatory Impact Statement, and for the purpose of gaining unverified cost savings sought by telecommunications carriers.

It is Austroads' position that any perceived cost savings for the telecommunications industry usually results in higher direct and indirect costs for road authority construction and maintenance of infrastructure.

Austroads and its members are committed to working with telecommunications carriers to facilitate safe access to road corridors. It is anticipated that most of the 5G / small cell network will be rolled out in road corridors across Australia.

By its nature such infrastructure will be required to be installed in one of the following ways on:

- carrier owned poles,
- other utility poles (such as electricity), or
- road infrastructure.

There should be one approach for all of these installation types in roads. Ideally, that would be a single multi-site agreement between the road authority and carrier, and when there is a third-party such as an electricity entity, a tripartite arrangement.

This need not delay deployment or increase overall costs, in fact once in place, such arrangements would give planning certainty to all parties – a great administrative cost saving.

Part of the concern that many road authorities have expressed is that statutory instruments in this space have made assumptions about the suitability of road infrastructure, particularly in high speed environments, that does not reflect good engineering considerations. Small cell installations on street lighting, traffic lighting, signs and other road infrastructure assets can impact road safety, the structural integrity of the asset, electrical safety for the public in the event of the installation being impacted by an errant vehicle and the safety of operational staff undertaking ongoing maintenance.

For example:

- Split installations, with antenna on poles and cabinets on ground introduce new roadside hazards into safety clear zones near road carriageways.
- All in one installations introduce a 50+kg weight mounted on roadside poles that represent a significant risk to road users in run-off-road crashes. This crash type is responsible for many fatal and serious injury crashes in Australia each year.
- If insufficient diligence is applied to the placement and design of the installations (as detailed in road authorities' relevant specifications and design guides).



Figure 8: Example of what an aboveground cabinet for a small-cell split installation is expected to look like in a road. Dimensions for a small cell cabinet are expected to be approximately 1300mm high x 800mm long x 520mm wide. (Images © Creative Commons)



Figure 9: Example of an all in one installation (Image © Creative Commons)



Figure 10: Example of what a below ground cabinet small-cell split installation is expected to look like in a road. Note that the streetlight pole has been drilled into (damaging the pole) to facilitate electricity and fibre connections to the installation on the pole.

This matter also directly relates to Austroads' response to proposal 2.1A and 2.1D regarding the need for improved engineering certification and compliance with road authority standards. Careful and detailed safety and technical consideration of proposed small cell / 5G installations on road safety assets, and other roadside infrastructure, is required for 5G small cell installations. A proliferation of these assets located on road infrastructure pose a significant impact to road authority administration, costs, operations and maintenance of assets, and public safety (road safety and electrical safety), irrespective of how they are classified under regulation.

Further, it is appropriate for road authorities to receive reasonable return when any of its land and assets are used for commercial purposes, such as advertising and other third-party asset installations. This ensures fair and equitable use, and that cost burdens are not transferred to the taxpayer via the state, territory or local road authority. This was required for mobile towers, but 5G /small cell installations are currently using publicly owned land and assets for commercial purposes for free.

As such, rather than either option being adopted, it is recommended that small cell installations in roads be excluded from the LIFD. Master facilities agreements between each road authority and the handful of carriers who are installing 5G/Small cell infrastructure would ensure that carriers could be held to the relevant road engineering and safety standards in that state, territory or local road network – and the taxpayer

would not be responsible for the relocation costs of a commercial asset should the road authority need to upgrade the road or the asset on which the small cell is located.

This would also give carriers further incentive to undertake forward planning in consultation with road authorities and help to prevent delays to the small cell roll out because the terms and conditions of access would already be clear and give certainty to all parties.

This approach may increase the costs to carriers, but any perceived cost savings for the telecommunications industry usually results in higher direct and indirect costs for road authorities undertaking construction and maintenance of road infrastructure.

Any proposed amendments to the telecommunications LIFD and legislative framework should also include provisions that:

1. Make clear that any telecommunications assets are to be placed in a location permitted by the road authority. For example, regardless of road authority future transport planning, some telecommunications carriers will trench and place conduit in a location that will require the road authority to pay excessive relocation costs when transport infrastructure is to be built. This is very pertinent to split small cell installations.
2. The placement of telecommunications facilities road infrastructure should not be considered a right in perpetuity as road infrastructure has an end of life and may be replaced in different locations and with specifications that are no longer fit for purpose.
3. Carriers should not be able to refuse to remove its infrastructure within a reasonable timeframe, and this should be at the carrier's cost, else road authorities would be required to undertake regular relocation costs just to maintain its assets or undertake road projects – taking on a new, unfunded burden for commercial entities using road assets and land to operate their business. The paradigm for asset relocation substantially shifts with 5G/Small cell as relocations of carrier assets cannot be avoided as they were when located in pits and conduits because the assets being used by carriers have an end of life while pits and conduit installed underground could technically be left in place for many road projects.
4. Provide a reasonable and responsive framework for road authorities to notify a telecommunications carrier that telecommunications infrastructure is required to be relocated due to road infrastructure works. Historically the telecommunications carriers have often refused to participate in the relocation of assets in a timely and cost-effective manner. Such delays can cost taxpayers substantial road project delay costs.

In summary, Austroads members have the following engineering and road safety concerns:

- a. The installation of additional telecommunications assets on any structure could exceed the original design limits of that structure and therefore create an un-scoped risk that the structure could not safely accommodate. In addition, many roadside structures, such as road signs or wooden poles, have a shorter functional life than telecommunications infrastructure and are inappropriate as a host structure unless the carrier is willing to assume all costs, including administrative costs from the road authority, associated with removal of carrier assets at the end of the host infrastructure life.
- b. Structural certification of existing poles must be undertaken by the telecommunications carriers for each installation on road infrastructure unless other arrangements have been made directly with the road authority.
- c. Road infrastructure is often required to be frangible for the safety of road users. The installation of telecommunications assets on road infrastructure would reduce the

frangibility of the structure, or result in an infrangible device, significantly compromising the safety of road users (not compliant with AS/NZS 3845.2:2017 Road safety barrier systems and devices – Road safety devices).

- d. Many members do not permit installations on road signs or traffic lights due to safety concerns and because road signs are relocated several times during major road projects increasing the risk of damage and/ or disruption to the services of any telecommunications infrastructure attached. Each jurisdiction has different infrastructure and conditions (for instance, being in a cyclone affected area when considering wind shear).
- e. Electrical safety on powered road infrastructure, such as traffic lights, could be compromised if the telecommunications carriers are not required to comply with state, territory and local government standards for electrical connections such as fuses and 'disconnect switches' when utilising power for telecommunication assets.
- f. A significant increase in the telecommunications asset footprint within the clear zone increases the number of potential impact points within this critical zone impacting adversely on the safety risk to road users.
- g. The distance defining co-location rule is not specified.

Austroads members have the following concerns regarding cost transfer:

- h. The proposed changes could result in new telecommunications facilities inside the travelled way and clear zone. The proposed changes are likely to significantly increase the cost and complexity of road projects and operations. Relocations for road projects could cost significantly more for each project, as the road authorities would be required to move additional telecommunications assets in order to undertake upgrade projects. Road authorities are neither funded for, nor can they absorb, the additional work and costs the proposed changes would require. Therefore, road authorities need telecommunications carriers to absorb the additional costs associated with these proposed changes.
- i. above would also apply to electricity poles and any other aboveground third-party assets in the road corridor, further complicating relocations due to road upgrade projects.
- j. Maintenance would likely be made significantly more complicated, as coordination with telecommunications carriers would now be required prior to access, and more expensive where for example a road sign requires upgrade or replacement.
- k. Increased compliance costs would be likely, for example, ensuring safety requirements are met due to radiation hazards and other considerations within road infrastructure.
- l. There are tenure and commercial agreement risks if telecommunications carriers consider billboards as signs that could be used for relocation.

Austroads members have the following concerns regarding communication:

- m. One barrier to streamlining processes and access is the reluctance of carriers to share information on 5G assets and specifications on how they would be installed on road safety assets. Specifics regarding installations specifications (weight, size, materials etc.), structural engineering considerations for each pole asset type and assessments on the wind loading, standardisation of electrical safety, metering of electrical supply and impact on road safety are required to facilitate access and ensure road safety for the public.

Rollout of small cell 5G technology is expected to occur in a relatively short timeframe of a couple of years and require clear processes. This could be facilitated through:

- early planning with road authorities so the total impact of installations can be considered

- agreeing on standard terms and conditions for access
- carriers engaging in forward planning sessions to deal with a group of proposals together to give certainty for road authorities and the carrier about design of asset location, and
- agreed technical requirements to be met by carriers

In summary, Austroads members are concerned that:

- their abilities to fulfil their obligations, as government bodies to manage road infrastructure for the safe and efficient movement of goods, people and services will be compromised including the ability to manage workplace health and safety legislation by current statutory processes and incremental increases to such processes that carriers have been able to advocate.
- the life of host road infrastructure will at best be shortened and maintenance requirements increased and at worst the infrastructure will be rendered unfit-for-purpose through the addition of telecommunication devices thereby requiring the host infrastructure be redesigned or replaced.
- additional telecommunications assets will be relocated inside the clear zone of roads. The introduction of additional infrastructure into the clear zone significantly increases the risk to motorists, cyclists and pedestrians by increasing visual impacts to sightlines and risks from impacts by vehicles where the infrastructure is non-frangible and/or powered.
- unfunded direct and indirect costs from commercial entities (carriers) being transferred from the corporate sector to the taxpayer.

D. Encourage the co-location of facilities

Summary of Proposed Change

More small cells being deployed on existing infrastructure and urban furniture, such as utility poles.

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

Co-location volume can be measured in different ways. 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.

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.

Response

Austrroads has significant issues with this proposal. Consideration of either option implies that third-party assets are suitable for one or more installations and that the current approach of having small cell installations under the LIFD is appropriate. It also discounts the concern about the cumulative impact of mass proliferation of small cell assets would have in roads under current frameworks.

Any methodology which considers co-location must consider the engineering, road safety and structural engineering first else risk structural failure of host poles. Proliferation of 5G assets which don't consider this is of serious concern for safety and road integrity reasons.

See response to 2.3C(4) above for the rationale and proposed solutions.

1. Would a consistent approach to measuring co-location volume assist or hinder the co-location and visual amenity of equipment?

Any methodology which considers co-location must consider the engineering, road safety and structural engineering first else risk structural failure of host poles. See response to 2.3C(4) above for the rationale and additional information.

2. What methodologies could be used by carriers to determine co-location volume? Are any of these methodologies agnostic regarding equipment type?

Any methodology which considers co-location must consider the engineering, road safety and structural engineering first else risk structural failure of host poles. Methodologies which consider the engineering should be agnostic of equipment type.

3. With safety as a primary consideration, which would be a preferred approach to co-location and why?

See response to 2.3D(1) above.

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

See response to 2.3C(4) above for the substantial cost, administrative, safety, operational and engineering disadvantages to road authorities.

3 Next steps for consideration to enhance and rebalance the telecommunications framework

Provisions in the telecommunications statutory framework do not currently incentivise cooperation between the carrier and the road authority, nor place adequate obligations on carriers to abide by reasonable terms and conditions of road authorities or appropriate penalties for non-compliance. Road authorities would like to see existing regulatory bodies have stronger compliance powers to enable faster, cost-efficient remedies for issues, and ensure compliance. A number of proposals in the 'Improving the telecommunications powers and immunities framework paper' contemplate approaches to correct this situation.

The opportunity to provide additional suggestions and raise issues with the Department of Infrastructure, Transport, Regional Development and Communications is valued by Austroads. A summary of areas of key Austroads consideration, with possible solutions, have been provided below for the Department's consideration. These are provided in the spirit of enhancing and rebalancing the telecommunications framework over time.

1. **Definition of low-impact facility poses an unreasonable burden on road authorities as per 2.3(A).**
2. **Applying road authority legislation:** Carriers are entitled to engage in certain authorised activities despite some State or Territory laws. State or Territory laws that can operate concurrently with the Act still apply to carriers. Nonetheless, carriers frequently refuse to follow what road authorities consider to be reasonable terms and conditions that road authorities are entitled to apply under State and Territory legislation.

It is recommended that Clause 37 and 38, Schedule 3 of the Act be reviewed to:

- clarify the definitions of exempt matters listed, particularly the term 'use of land'
- include a provision which empowers all State/Territory and local road authorities to regulate over certain matters including road safety, traffic management and engineering standards.

3. **Defining and making reasonable efforts to agree:** Carriers are required to 'make reasonable efforts to enter into an agreement' with road authorities if the activity might 'affect the operations' of the road authority. The term 'reasonable' is subjective and not clearly defined, which means some carriers can argue that any efforts they make are reasonable to satisfy this condition – irrespective of the outcome or the intent of the legislation.

It is recommended the terms 'reasonable efforts' and 'likely to affect the operations' be clarified (either under Clause 11, Schedule 3, or through guidance provided under the COP) and the definition of 'public utility' under Clause 11, Schedule 3 of the Act, be revised to specifically refer to a 'road authority'.

4. **Indemnity and insurance cover:** Many carriers have refused to enter into agreements that provide indemnity protection for the road authority over risks associated with property or persons posed by carriers' activities in roads. While the Act entitles road authorities to claim for loss or damage associated with property, risk or loss associated with persons is not covered. Road authorities can therefore only rely on common law protections putting the onus on road authorities to insure against claims caused by carrier works and assets.

It is recommended Clause 42, Schedule 3 of the Act be extended to cover risk or damage to persons caused by carriers' activities and facilities on the road reserves.

Sections 2.22(3), 3.38(3) and 4.23(3) of the COP could be broadened to require carrier notices to state that potential risk and damage to persons are indemnified by the carrier.

5. **Acting in accordance with good engineering practice:** Carriers are obliged under the Act and COP to act in accordance with 'good engineering practice' and adhere to ACMA-recognised industry standards when carrying out authorised activities. Despite

this, carriers often do not comply with specific engineering requirements and standards of road authorities which ensure good engineering on road corridors and infrastructure.

See response to 2.1(A) and 2.1(B) above.

It is recommended Clause 10, Schedule 3 of the Act be revised to incorporate transparent and identifiable engineering standards, including whole-of-life cycle management and decommissioning of carrier assets. The term 'good engineering practice' needs to encompass national, State/Territory and local standards applicable to the circumstances of works if it is to be effective in protecting public safety. Further, the legislation could require that deviation from those standards would be subject to penalties to ensure the seriousness of non-compliance is emphasised.

- 6. Standards of reinstatement:** After carrying out authorised activities, carriers must take all reasonable steps to restore land 'similar to its condition before the activity began'. No guidance is provided on what this phrase means in practice, leading to issues with enforcing appropriate standards for road and road asset reinstatements. The road authority is then responsible for rectifying roads and road assets that become deteriorated or damaged due to poor reinstatement works.

It is recommended Clause 9, Schedule 3 of the Act be revised to clarify the definition of 'similar to its condition' or provide guidance on its meaning. The provision needs to include an obligation that reinstatement works must comply with relevant national, State/Territory or local reinstatement standards.

Carriers should be responsible for their reinstatement work for a period of at least 12 months following completion of the reinstatement. This is in line with many warranty periods in relation to other utilities.

Additionally, a post-notification process could also be implemented whereby the carrier gives notice and provides evidence of all completed reinstatement works to post construction survey standards. Under this process, the road authority (or a nominated party) could have the option to undertake pre- and post-construction inspections of reinstatement works at their discretion. The road authority could sign off on the inspections where reinstatement works meet the standards, removing the need for carriers to be responsible for any defects in the work. Under this framework, carriers would pay a mutually agreed fee for the road authorities' inspection costs.

The legislation needs to include an easy and quick-to-use mechanism to seek redress for poor road reinstatement outcomes. This proposed solution provides an incentive to carriers to ensure satisfactory reinstatement of road assets to road authority standards.

Alternative solutions are:

- the legislation provides an option whereby the road authority negotiates to carry out the reinstatement on the carrier's behalf and recover the reasonable costs incurred at mutually- agreed rates (thereby exempting carriers from responsibility for reinstatement or warranty period)
- a pre-qualification scheme be developed whereby pre-approved contractors undertake work on carriers' behalf. The scheme, including the funding arrangement for managing the scheme, would need to be developed in consultation with relevant industry participants.



Figure 11: An example of poor reinstatement on a footpath creating a hazard for pedestrians and cyclists.



Figure 12: This reinstatement failed due to poor compaction of the subgrade layers and the top layer of asphalt. Resulting in a large lip against pit, causing a severe tripping hazard.



Figures 13: This was a site that was caught during the works and was noted that; Bedding layer was not compacted, insufficient amount of mesh used, no bar chairs used and no expansion joint material was used. Without these elements the reinstatement will fail in due time, and become a hazard.



Figure 14: Pit is located at a bus stop. This reinstatement failed due to poor compaction of the subgrade layers and the top layer of asphalt. Resulting in a large lip against pit, causing a severe tripping hazard.



Figure 15: This reinstatement failed due to poor compaction of the subgrade layers and the top layer of asphalt. Resulting in a large lip against pit, causing a severe tripping hazard.



Figure 16: Footpath left in crushed rock without any compaction, it is council standard to use cold mix as a temporary reinstatement. Leaving this in crushed rock causes rocks and dirt to be spread across the footpath causing a slip and trip hazard to anyone using the footpath.



Figure 17: Trench was left in a temporary condition, in cold mix asphalt. Too much cold mix was used resulting in a hump being formed along the footpath, as well as leaving loose cold mix scattered along the footpath. This results in a slipping hazard to all pedestrians that use the footpath.



Figure 18: Reinstatement failed causing tripping hazard along footpath. Cracking along reinstatement works indication that insufficient compaction was applied throughout layers of reinstatement.



Figure 19: Site was reportedly left in this condition for a week, before crews came back to finish off the works. There was no notice regarding these works and no correct signage indication footpath is out of use.



Figure 20: Placement of pits are too close to one another. Not allowing correct compaction to be made between pits. Resulting subgrade failure.

7. **Record-keeping requirements:** Although the Act imposes a duty on carriers to ‘keep and maintain records’ of the location of their assets, the standards for such record keeping are not defined and the right of road authorities as landholders to access these records is unclear. This can lead to safety, cost and timing issues for road authorities in having to accurately identify assets while carrying out road operations and upgrade works.

It is recommended record-keeping requirements be explicitly defined to ensure consistency across the industry, given there are multiple carriers within each State/Territory, and nationally, all operating under varied standards.

To facilitate appropriate record keeping, carriers could provide road authorities with ‘as constructed plans’/‘work as executed’ (or equivalent) following the completion of works for verification of what has been installed.

The legacy of poor record keeping regarding asset management could also be addressed through a national program with regulated updates and audits required on a regular schedule (for example, every three years).

8. **Notification:** See above responses under 2.1, particularly 2.1(B).
9. **Lack of consent requirement:** Carriers do not need to obtain the road authority’s consent prior to undertaking an authorised activity. Unless the road authority objects to a notice, the carrier is entitled to continue with the proposed activity. This process is adversarial in nature and disempowers road authorities attempting to manage activities in public roads.

It is recommended that a consent-based process be introduced.

The statutory framework could still facilitate a fast-track for genuinely low impact activities, prioritising fibre-based direct customer connections that have a low impact on the road and road safety. It could also provide a facilitative regulatory environment for carriers to use temporary facilities to immediately connect customers while negotiating permanent asset installations on roads.

If introducing a consent-based process is not initially supported by all industry participants, then an intermediate solution could be to revise the Act to require approval from road authorities specifically where traffic management or road assets are affected.

10. **Objection period:** Road authorities have five business days to object to installations or maintenance works before the carrier commences the activity, or one business day to object to inspections after receiving a notice from the carrier. This timeframe is often insufficient to seek specialist technical advice or deal with the complexity of multiple parties accessing the road. Without sufficient time to properly assess the proposed activities, staff may miss issues and road authorities may have to object to activities to better understand their effect on road operations.

See above responses under 2.1(E).

11. Grounds for objection: Road authorities can object to authorised activities on limited grounds. The five criteria of objection do not include where activities may affect the use or intended use of the road corridor or reserve. Nor can an objection be made on the basis that the carrier failed to attempt to enter an agreement with the road authority. The objection process therefore fails to act as a deterrent for those carriers who do not genuinely engage with road authorities to reach agreements and comply with reasonable terms and conditions.

The COP allows road authorities to object to a proposed authorised activity on one or more of the following specific grounds:

- a. using the objector's land to engage in the activity
- b. the location of a facility on the objector's land
- c. the date when the carrier proposes to start the activity, engage in it or stop it
- d. the likely effect of the activity on the objector's land
- e. the carrier's proposals to minimise detriment and inconvenience, and to do as little damage as practicable, to the objector's land.

It is recommended the grounds for objection be broadened to provide sufficient scope for road authorities to meet their obligations under relevant road authority legislation. To achieve this, it is proposed that:

- ground (e) be extended to circumstances where the carrier has failed to attempt to reach an agreement with the road authority based on reasonable terms and conditions
- ground (c) be expanded to include 'time of the day' and not just the 'date'. This is because peak traffic periods and the elevated level of public-safety risks relate to time-of-day considerations, not merely a 'date' issue
- ground (d) be clarified to require the carrier to have regard to the use or intended use of the objector's land.

Further context is provided under section 2.2(A) above.

12. Relocating carrier assets: The Act contains no provisions relating to the relocation (or protection in place) of telecommunications facilities required by road authorities to undertake road projects, or the regulation of the costs of asset relocation. Carriers have no obligations to comply with road authority requests to undertake works within any set or agreed timeframes leading to increased costs to taxpayers, and carriers refuse to disclose the breakup of costs charged to road authorities to move assets.

Schedule 3 of the Act should regulate the relocation of carrier assets on public entity land and include the following types of provisions:

- Road authorities to only be responsible for the actual cost of telecommunications asset protection and relocation works, not profit for those works.
- Carriers to be responsible for all betterment costs (costs accounting for the remaining life of the asset and any upgrade to it).
- The cost of asset relocations for aboveground telecommunications assets such as small cells, mobile towers, overhead lines and assets on other road assets (such as bridges) would be the responsibility of the carrier to acknowledge that the primary use of road corridors is for transport and that carriers as commercial entities should not be a burden on taxpayers.

The COP could be amended to provide clear guidance on how to assess and determine reasonable relocation and betterment costs, by considering any financial gain from betterment and any deferral of asset renewal. The mechanism could be supplemented with asset lifecycle tables published in a code annually to ensure shared understanding between carriers and public entities.

It is also recommended that carriers' quotes for relocation works be made contestable from a panel of authorised suppliers, providing road authorities with the option of choosing an alternative, competitively priced supplier who is paid directly to undertake the road works program and liaise with the carrier. This would mean network cutover is the only requirement for carriers to undertake themselves and roads can be delivered more efficiently. This would also minimise impact to carrier internal human resources to manage network relocations.

- 13. Carrying out road operations:** Road authorities can be held criminally liable for unintentionally damaging or interfering with telecommunications facilities, even when the road authority has undertaken all due diligence in attempting to locate assets in the road and the responsible carrier has failed to record the facility in sufficient detail, or at all, in the online Dial Before You Dig service. Road authorities' duties in undertaking day-to-day road operations can be inhibited and there is public exposure to uncontrolled risks.

It is recommended carriers bear liability for any damage caused to their telecommunication facilities because of their inadequate record keeping. This would incentivise cooperation to ensure carrier records are sufficiently detailed and maintained.

- 14. Dispute process:** The TIO has limited scope to resolve issues based on the listed grounds for objection. The process of making a complaint to the ACMA including possible outcomes, resolution timeframes and penalties for continuous poor behaviour are not well regulated or understood. This does not support the Commonwealth's objective to ensure compliance with the Telecom Act and subordinate instruments.

The ACMA could:

- provide a guideline for the complaints process for any alleged breaches of Schedule 3 of the Act or COP
- provide categorisations of breaches by the carriers, so that road authorities can clearly identify the severity (e.g. safety versus non-safety) of the alleged breach that the carrier has made, and a fit for purpose step-by-step complaints pathway for each breach category
- introduce a form which supports making a compliant complaint
- articulate possible outcomes and timeframes for resolution

In addition, an option for legal recourse could be introduced, whereby critical matters under the Act can be escalated to a federal minister or nominated delegate.

- 15. Penalties provision:** Limited compliance or penalty provisions are provided under Schedule 3 of the Telecom Act to protect road authorities and therefore carriers are not subject to any real consequences for poor behaviour.

Effective application of financial penalties and infringements would improve the appropriate exercise of powers and compliance with requirements under the Act, COP and LIFD. If carriers were to continue to be non-compliant, suspension or cancellation of carrier licence could be an option to act as deterrent.

A stop-work provision could be introduced in the Act, whereby carriers would be required to cease works when complaints about public safety have been raised by road authorities to the ACMA under the complaints mechanism described above (see Issue 14 above), and the ACMA issues a direction to the carrier to stop work. This would provide an incentive for carriers to negotiate and act in good faith with road authorities.

Road authorities understand the need for carriers to meet certain levels of service by streamlining the deployment of modern communications technology and reducing their administrative burden. However, the commercial interests of carriers to reduce administrative processes, costs and timeframes impact the safety of public roads and proposals to give carriers greater powers and immunities further erodes road authorities' ability to mitigate this

impact. It is in the public interest to bring balance to these commercial interests and public needs, to ensure the efficient management of road assets and limit impacts on road safety.