



**MINISTRY OF BUSINESS,
INNOVATION & EMPLOYMENT**
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Regulatory Impact Statement

**Land access for telecommunications to support the
deployment of Ultra-Fast Broadband**

Agency Disclosure Statement

- 1 This Regulatory Impact Statement has been prepared by the Ministry of Business, Innovation and Employment (MBIE).
- 2 It provides an analysis of options to address access rights to private land by telecommunications network operators for the purposes of installing and maintaining fibre-to-the-premises infrastructure for telecommunications. Four specific problems are addressed:
 - a. Access rights to enable network operators to install fibre-to-the-premises in situations requiring the consent of multiple parties;
 - b. The use of existing utility infrastructure to facilitate the deployment of fibre for telecommunications;
 - c. Ongoing access rights to enable network operators to maintain fibre-to-the-premises networks; and
 - d. An effective disputes resolution process.
- 3 The analysis is limited by the inability to accurately quantify certain impacts, for which qualitative estimates have been provided. For example, we assess the impact on New Zealand's economy and society based on the assumption that access to fibre is an input into realising social and economic outcomes for New Zealand. We acknowledge that the realisation of these outcomes depends on external factors which cannot be influenced by the options analysed here, such as the affordability of services and digital literacy.
- 4 This document also analyses the impact of particular installation experiences on end users. It is difficult to quantify the impact of experiences and/or perceptions of the various options outlined below, as these impacts do not apply equally across all end users. For example, we are unable to estimate the number of end users persuaded not to connect to fibre because they were influenced by the observations of the installation process from a single end user. This assessment is based on an assumption about the causal relationship between the experience of end users and reluctance to connect to fibre.
- 5 The analysis is limited by the data which quantifies the extent of the existing problem. This data has been collected from various parties within the telecommunications industry; as such, the data has not been provided in a single consistent form and may not have been measured or collected in the same manner. In some cases, such as estimates of the percentage of installations which fall within certain classifications, data has been collected from one network operator, and there may be variances between network operators and areas served by network operators. However, as the proposed classification of various installation methods will be given effect through delegated legislation, an opportunity exists to collect more comprehensive data from industry on the methods utilised during the development of those regulations. This data will be reflected in the regulatory impact analysis of those regulations at the time their promulgation is proposed.
- 6 Estimates of the financial costs of particular options to network operators have been provided by various industry sources. While industry has arranged for an independent review of this information, MBIE has not sought its own assurance to verify these findings.
- 7 We are unable to obtain accurate data on the number of different types of property ownership which fall within the scope of the problem. We identify within the document the most common forms of property ownership which require the consent of multiple parties in order to install fibre-to-the-premises, however there may be alternative forms of property ownership which meet the criteria but are less common.

- 8 This analysis is based on the assumption that, with the fibre build under the Ultra-Fast Broadband (UFB) initiative just over halfway, the problems outlined above will apply equally in areas scheduled to be passed by fibre-to-the-premises infrastructure under phase one of UFB.
- 9 The analysis informing Problem Two is limited by the lack of firm evidence that there will be widespread uptake by industry of the different options presented. This is largely due to industry not being in a position to invest the resources required to undertake a business case for the use of this right without knowing the details of the policy which would be implemented in practice.
- 10 MBIE's preferred policy options have been informed by consultation with the stakeholders who will be affected by their implementation, via a discussion document. While we received submissions from both the telecommunications and electricity industries and from individuals, submissions from members of the public were largely made up of those individuals who desire a fibre connection. Despite efforts to include affected property owners who do not want fibre installed in this consultation, this group was under-represented in submissions received. We acknowledge therefore that we may not be aware of the full range of reasons why affected property owners do not wish to grant consent to the deployment of fibre.
- 11 Although these problems are being addressed in order to make the mass market rollout of UFB more efficient, we have made the assumption that the following options would apply to all regulated network operators involved in the deployment of fibre access networks for telecommunications, unless specified otherwise. This is to assure both end users and industry that a single consistent regime will be applied across the country.

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Executive summary

- 12 This Regulatory Impact Statement analyses options to address access rights to private land by network operators to install and maintain fibre-to-the-premises infrastructure for telecommunications. The Government's mass market rollout of Ultra-Fast Broadband (UFB) to at least 80 percent of the population by 2022 is a large-scale infrastructure project worth over \$1.5 billion with an eleven-year timeframe. Inefficiencies in the fibre-to-the-premises installation process have been identified and should be addressed to maximise the value of the Crown's investment to New Zealand.
- 13 This document addresses four policy problems related to the overall access rights framework to install and maintain telecommunications. In our view the current framework impedes the improvement and extension of future-proof connectivity for all New Zealanders. The current access rights framework does not produce the most fair and effective outcomes for all affected groups and furthermore lacks consistency in its application between legacy and future-proof technologies. This does not improve connectivity outcomes for New Zealanders, in particular in regards to the accessibility of UFB. Resolving each problem in turn will ultimately amend the overall access regime for telecommunications to ensure greater consistency of a modern, fair and effective access rights regime, and that fibre deployment, in particular the Government's UFB rollout, is more efficient and considers the impacts for all parties involved.
 - a. Problem One: Difficulties for network operators to secure access rights to private property in order to install fibre-to-the-premises in situations requiring the consent of multiple parties;
 - b. Problem Two: The inability to use existing utility infrastructure to facilitate the deployment of fibre for telecommunications and extend telecommunications networks further into rural New Zealand;
 - c. Problem Three: The need for ongoing access rights to enable network operators to maintain and protect fibre-to-the-premises networks in situations requiring the consent of multiple parties; and
 - d. Problem Four: The need for an efficient, fair, accessible and independent disputes resolution process to provide end users, network operators and affected property owners with an avenue to address grievances arising from land access issues.
- 14 Each option analyses the potential costs and benefits for all populations affected by each problem and who will be affected by each option. Both regulatory and non-regulatory options have been identified for each problem; in all cases, we have assessed that a regulatory option achieves the best outcome.
- 15 Problem One considers eight options, including three non-regulatory options. Our analysis indicates that combining several approaches in a mixed model, which applies different access regimes based on the impact of the installation method, would realise substantial benefits which balance the costs of more complex implementation.
- 16 Problem Two considers five options, of which one is non-regulatory. We assess that a statutory right for network operators to deploy fibre on existing utility infrastructure they already own has the potential to achieve positive outcomes for rural connectivity while having a minor negative impact on the affected parties; however the extent of any potential positive outcomes are uncertain.
- 17 Problem Three considers three options, two of which are non-regulatory. The option which enables an ongoing statutory access right is preferred because while it is capable of

realising similar positive impacts compared to a non-regulatory option, it is assessed to be more likely to achieve the benefits.

- 18 Problem Four considers both a regulatory and a non-regulatory option to address disputes resolution for land access. The preferred option would create legislative provisions for a disputes resolution process, which we consider essential given that successful implementation of the policies to address the preceding three problems relies upon an effective means of dealing with disputes.

Status quo and problem definition

- 19 The Government's Ultra-Fast Broadband (UFB) initiative will provide high-speed broadband connectivity for at least 80 percent of New Zealanders by 2022. The first phase of this initiative (UFB1) is providing UFB to 75 percent of New Zealanders by 2020. Deployment of the second phase (UFB2), which is expected to commence in 2016, will see at least an additional five percent of the population with UFB. Uptake of UFB is expected to lead to significant long-term economic and social benefits; the use of high-speed broadband applications is estimated to have economic benefits to New Zealand of \$32.8 billion over 20 years.
- 20 The Government's co-investors in UFB are local fibre companies and Chorus. UFB involves fibre-to-the-premises technology, which requires the connection of fibre cables between the distribution network (the fibre infrastructure in the street) and end user premises. The connection between the two is known as the fibre lead-in. Under UFB1, local fibre companies and Chorus have obligations to roll out the UFB distribution network until December 2019, and to connect premises passed by this network at the request of end users.
- 21 Network operators have a statutory right of access to the road reserve for the installation of distribution networks; however there is no such right to access private land for the installation of fibre lead-ins. The current regime for land access for telecommunications was developed in the context of the legacy copper network to suit government-built networks and incremental upgrades. The regime is no longer suitable for the public-private partnership model of UFB which involves private companies deploying mass market networks and new connections being made on a mass scale.
- 22 Four interrelated issues arise from the need for network operators to access private land to meet their obligations to install and maintain fibre networks under the existing regime. These are outlined below.

Problem One: Authorisation of land access in instances where the consent of more than one party is required

- 23 To connect end users to fibre-to-the-premises, network operators require the consent of the legal owners of the access corridor through which the fibre lead-in will be deployed. In most cases the end user requesting a fibre connection is the sole property owner and granting access rights is straightforward. Complications arise when the end user is not the sole party with an ownership stake, in situations where installing lead-in fibre requires access to another property or shared property. These cases require the consent of multiple parties.
- 24 Property ownership types which require the consent of multiple parties include, but may not be limited to, the following:
 - a. *Unit titles and company share arrangements*: unit titles are held in multi-unit complexes such as apartment buildings. Unit owners are required by law to form a body corporate with duties over the common areas that the owners hold as tenants in common, including access corridors required to install fibre lead-ins. Although less common, company share arrangements where apartment owners hold shares in a company that owns the land and buildings (instead of a title) also raise similar consenting issues as unit titles. Of approximately 1.6 million registered properties in New Zealand, approximately 500,000 are held either as unit titles or registered as a cross-lease.

- b. *Cross-leases*: owners hold separate titles of equal share on one parcel of land. Access corridors are shared and the consent of all property owners is required in order to install fibre.
 - c. *Access lots*: each owner of subdivided land owns an individual share in an access lot (the part of the subdivision which provides legal access to the dwelling), such as the driveway. An owner can undertake work in the access lot subject to the provisions under the Property Law Act 2007, which enables deemed consent if no objection is registered.
 - d. *Maori freehold land*: Maori freehold land has multiple owners and stewardship is provided by the Maori Land Court. This sets a precedent for dealing with Maori freehold land for the options outlined below, in that the steward would act as a consenting authority in the options proposed.
 - e. *Easements and other rights over land*: an easement provides a legal right for a third party to access or pass over another party's private property. A problem occurs when a party holds an easement over another person's land for telecommunications purposes, and the terms of the easement allow the easement-holder exclusive use of the easement area. The easement-holder can prevent other parties who own the easement area from using the area in a manner which would restrict the rights of the easement-holder. This means that if one utility network operator has an easement to use the area, the owner(s) of the easement area may be constrained from granting an access right to another network operator if the use of that second right would impede the right enjoyed by the initial easement-holder. In order to obtain access for fibre installation, consent would have to be obtained from the easement-holder. Other instruments such as registered or unregistered leases and licenses may result in similar constraints on the granting of access rights requiring the consent of the beneficiary of those instruments.
- 25 Under current arrangements, failure to obtain all necessary consents from all relevant parties results in installations being cancelled or delayed indefinitely. Parties may not actively give consent for various reasons. Some of these are reasonable grounds for concern on the part of affected parties, such as concerns over the impact of the installation on aesthetics or property values, or the possibility of physical injury should someone trip over a poorly reinstated installation. However, industry tells us that often consent is withheld due to grounds which are either unreasonable, such as personal grievances with neighbours seeking connections, or which are preventable, such as the inability to contact property owners who are absent for extended periods, or lack of response from property owners who have received the notice requesting access but who have not responded in a timely manner. Industry estimates that the majority of instances where consent is not given are due to such preventable grounds; letters written to the Minister for Communications largely support this view. Given that many of these reasons for denying access are not reasonable justification for preventing a neighbour from accessing a UFB connection, in the majority of cases a more effective consenting process would enable a greater number of end users to connect, while at the same time protecting the rights of neighbouring parties to object on reasonable grounds.
- 26 Based on data collated between August 2014 and January 2015, the telecommunications industry has assessed that approximately 13 percent of UFB orders require some form of permission for access to private land from affected parties with an ownership stake. Industry estimates that 25 percent of the UFB orders requiring the consent of multiple parties are cancelled due to difficulties obtaining this permission. Based on these

estimates, approximately 44,000 connections would fail, or three percent of all potential connections under the first phase of the UFB programme.

- 27 These estimates are conservative and likely underestimate the magnitude of the problem. Firstly, only the first order in a group of orders requiring consents for access is recorded as a consenting issue. For example, the first order to fail in a multi-unit complex due to one or more refusals to provide consent is recorded as one failed order, even though all subsequent orders in the same complex will fail. Secondly, we are unable to quantify the number of orders which are not placed because of perceptions that the connection process is difficult.
- 28 We have no knowledge of network operators bargaining to obtain consent by offering affected property owners financial incentives, and consider it unlikely that they would do so given that it further increases transaction costs and provides an incentive for a greater number of property owners to deny permission in order to obtain this financial incentive.
- 29 The status quo impedes the uptake of UFB and prevents the expected social and economic benefits from being realised for individual end users and for New Zealand's economy and society. Given further Crown investment of up to \$210 million to extend UFB to at least an additional five percent of the population under UFB2, it is at significant cost to the Crown that up to three percent of end users may be excluded from accessing UFB when there are avenues to address this problem.
- 30 There are significant costs to industry also. Industry has estimated that the cost of failed orders resulting from consenting issues would be \$18 million by 2020, based on a projected uptake of 48 percent by 2020, and assuming that 13 percent of all UFB orders require multiple consents and that 25 percent of multiple consent orders fail. At 100 percent uptake, the cost to industry would be \$40 million. These are sunk costs which are not recovered by industry, and do not take into account the additional costs to industry of delayed orders.

Problem Two: Facilitating the deployment of fibre using existing utility infrastructure

- 31 There is an opportunity to improve the efficiency of fibre deployment by utilising existing utility infrastructure to enable a greater number of New Zealanders to benefit from improved resilience and performance of regional telecommunications networks. The Government has set a target of achieving at least 50 megabits per second (Mbps) peak speeds for 99 percent of New Zealanders by 2025. Achieving this will require new ways of thinking beyond continuous Government investment in broadband programmes and Government needs to consider policy settings which make it more attractive for industry to improve rural connectivity on their own terms. Innovative and cost-effective deployment methods have the potential to contribute towards improving rural connectivity.
- 32 It is currently difficult to realise efficiencies from the use of existing infrastructure as this deployment method requires access to a considerable amount of private land. Existing utility infrastructure deployed aurally already crosses private property, yet the infrastructure owners are unable to add fibre to these networks without entering into negotiations with each property owner passed by the network. MBIE surveyed a sample of four electricity lines companies which were selected on the basis of having a high proportion of rural lines on their network. For these companies, an average of 65 percent of rural lines crossed private land, which illustrates the potential scope of this issue.

- 33 Electricity network operators have statutory rights of access to private land to maintain electricity utilities if these were built prior to 1 January 1993. This covers the majority of electricity networks throughout New Zealand. However, these rights are restricted in purpose and do not allow for telecommunications to be added. Access to electricity lines constructed after 1 January 1993 is negotiated through easements, which are generally restricted to electricity purposes.
- 34 The process of securing individual easements for each property passed over by a utility network can be costly and time-consuming. One electricity lines company has commented that the process of securing a single easement can take up to 18 months and cost up to **[WITHHELD: COMMERCIAL IN CONFIDENCE]** to transact (including surveying, legal fees for property owners and network operators, internal project management, registration, disbursements and mortgagor fees), excluding the cost of any compensation payable which varies between each property affected. The same source provides a case study which estimates that the cost of an 83 kilometre length of fibre deployed under the status quo would amount to a total of \$2.44 million, with only \$1 million of this cost comprising the physical deployment of the lines. In this instance, the transaction costs imposed under the status quo, excluding the cost of any compensation payable to individual land owners, increase the costs of deployment by 170 percent.
- 35 Allowing for fibre to be added to these electricity networks could shift the business case to make private sector investment in commercially challenging areas more attractive while simultaneously reducing the cost of the Government's broadband programmes. In either instance, the benefits predominantly fall to rural New Zealand but some trade-offs need to be made.

Problem Three: Ongoing rights of access to installed fibre infrastructure

- 36 Network operators require ongoing access to private property for inspection, maintenance and replacement of fibre infrastructure on end user premises to protect the life of the network and guarantee an acceptable level of service to consumers. Telecommunications connections differ from other utilities in that network operators, rather than property owners, own the lead-in on end user premises. Under the UFB initiative, local fibre companies and Chorus fund the cost of end user connections, with the expectation that they will generate a financial return from connections over time. Unless ongoing access rights to private land are guaranteed, this reduces commercial incentives to invest in connecting premises where installation and maintenance may be difficult, as the network operator may be left with stranded assets if the fibre lead-in is installed but cannot be maintained.
- 37 The Telecommunications Act 2001 confers statutory rights of access to private land on network operators for "existing lines" (those installed prior to 1989). The policy rationale for confining these rights to infrastructure in existence prior to 1989 was that existing lines were publicly funded infrastructure. These rights do not extend to accessing private land for new fibre-to-the-premises infrastructure, although the UFB network has also had Crown investment. Where property owners grant access to private land for fibre installation via a negotiated license, the terms of access are not registered with the land title and do not carry with the transfer of property. This is not an issue if a property only has one owner, as if the property changes hands and the new owner does not wish to have a fibre connection, the network operator will be unable to revisit property in any case. However, in cases where multiple parties have an ownership stake, network operators would have to attempt to obtain consent from any new owner. Network operators may

lose their existing contacts for gaining consent and will not necessarily have oversight of property changing hands.

- 38 If the lead-in part of the UFB network is not maintained, this diminishes the value of the Crown's investment in the infrastructure. The fibre network will pass over 1.1 million premises by the end of the first phase of the UFB programme, enabling 1.35 million connections. If interest in those connections that were secured with the consent of multiple parties transfers over time, this creates uncertainty for the network owner regarding the rights they have to maintain the network to the expectations of consumers and the Crown.

Problem Four: No effective means of dispute resolution

- 39 There is currently no effective means of dispute resolution in the event that a property owner refuses to allow network operators access to install and maintain fibre, or if a property owner wishes to raise a grievance. Without an effective means of dispute resolution, parties with an ownership stake in the access corridor required to install a lead-in have an effective veto over fibre connections regardless of whether the grounds for objection are valid.
- 40 The only avenue available under the Telecommunications Act is for a network operator to apply to the District Court for an access order. This process is costly and time-consuming for the network operator; as such, we have no record of dispute cases involving land access for fibre which have been lodged with a District Court.

Objectives

- 41 The primary objective of addressing land access for telecommunications is to maximise the number of New Zealanders able to connect to fibre services efficiently in areas where it is being deployed, in order to help realise the long-term social and economic benefits of high-speed fibre broadband. The use of high-speed broadband applications has an estimated worth of \$32 billion to New Zealand over 20 years.
- 42 With respect to fibre installations, objectives which contribute towards this primary objective are to:
- a. Minimise the impact on affected property owners who do not want fibre by:
 - i. minimising the enduring physical impact of the installation on property
 - ii. respecting individual property rights
 - iii. providing an opportunity to raise reasonable objections where installations would unreasonably impact the use and enjoyment of their property
 - b. Make it easier for network operators who install fibre by:
 - i. reducing avoidable time and resource costs involved in the installation
 - c. Support uptake for end users who want fibre by:
 - i. providing a satisfactory installation experience which is predictable, responsive and timely
 - ii. achieving a satisfactory broadband experience
 - d. benefit New Zealand economy and society by:
 - i. enabling New Zealanders to achieve the intended social and economic benefits of fibre use in the long-term

- ii. maintaining and protecting fibre infrastructure in the long-term

Options and impact analysis

40. The following key is used to assess the impacts of each option on the affected populations:

Key:	
✓✓	Significant improvement relative to status quo
✓	Improvement relative to status quo
–	No change from status quo
✗	Deterioration relative to status quo
✗✗	Significant deterioration relative to status quo

Problem One: Authorisation of land access

43 In addition to the status quo (Option One), the following options are identified to address land access consents in situations requiring the consent of multiple property owners:

- Option Two: Require improved engagement processes between network operators and property owners
- Option Three: Use existing copper technology for end user premises infrastructure
- Option Four: Implement a deemed consent model
- Option Five: Automatically proceed with installation methods prescribed to be low impact
- Option Six: Use the Public Works Act to allow network operators to access land
- Option Seven: Grant network operators a statutory right to access all private property for telecommunications
- Option Eight: Implement a mixed model, whereby different access regimes are applied according to the level of physical impact the installation will create (**preferred option**)

Option One: Status quo

44 In situations where installing fibre lead-ins requires access to shared property and the end user is not the sole owner, or other instances where more than one party needs to consent, network operators may be prevented from completing UFB orders if affected parties with an ownership stake do not authorise access. Failure to obtain all necessary consents results in the installation being cancelled or delayed indefinitely. Approximately three percent of all UFB orders fail due to consenting issues.

45 For multi-unit complexes (MUCs) such as apartment buildings, where the consent of either a body corporate or multiple owners is required to deploy fibre along an access corridor, the Telecommunications Act contains a framework which facilitates access to MUC units after all other options have been exhausted. This provides a solution of last-resort: the Multi-Unit Complexes Code (MUCs Code) requires network operators to have served two notices of 20 working days to each owner in the complex before access can be obtained; if any one owner actively refuses consent, the network operator’s only recourse is to address the matter through the District Court.

46 Industry has indicated that the MUCs Code is unworkable, as it places significant time and resource costs on the network operator with no certainty of outcome. For example, in order to provide sufficient information about the installation activity in the second notice served, network operators must first undertake scoping and design work, without any guarantee that the installation will proceed. Network operators therefore have little incentive to invest resources in MUCs installations which involve significant effort but may yield little gain. For these reasons, we have no record to date of any instances where the MUCs Code has been applied.

Option One: Impact analysis

Affected property owners who don't want fibre	There are no impacts on property rights and property as no work can be undertaken without the active consent of all affected owners. Property owners can deny consent for any reason and ensure that their persons and property are adequately protected. The transaction costs for property owners of dealing with network operators are zero, as their level of engagement is at their own discretion.
Network operators who install fibre	Transaction costs for network operators are wasted time and resources on delayed, failed or cancelled installations. Delayed consenting processes for premises affected by land access issues in turn reduce operators' ability to complete installations efficiently for other premises not affected by consenting issues. Industry estimates that the cost of failed orders resulting from consenting issues would be \$18 million by 2020, based on a projected uptake of 48 percent by 2020, and assuming that 13 percent of all UFB orders require multiple consents and that 25 percent of multiple consent orders fail. At 100 percent uptake, the cost to industry would be \$40 million. These are sunk costs which are not recovered by industry, and do not take into account the additional costs to industry of delayed orders.
End users who want fibre	A number of end users within the UFB build programme will be prevented from connecting to UFB (approximately 175,000 installations under UFB1 would require multiple consents, and 25 percent of these, or 44,000, are expected to fail). End users consider this unfair, as the reasons for prevention may not be reasonable or genuine. Failed or delayed installation experiences increase the time to connect, ultimately reducing the end user experience. Individual end user installation experiences may influence other end users not to order a fibre connection because of the perceived complexity of the installation process. As phase one of the UFB build is just over halfway, a greater number of UFB installations are likely to be affected by land access issues in future. At the rate at which demand is increasing (August 2015 was the highest month on record for new UFB orders), the impact will be exacerbated over time.
New Zealand economy and society	The fact that up to 44,000 (three percent) of UFB orders fail under this access regime means that the Government's investment in this infrastructure is not extracting maximum value and achieving connectivity for all premises passed. Given Crown investment in the network it is at significant cost to the Crown that a percentage of users will be prevented from accessing fibre when there are avenues to address this problem.

Conclusion

47 While this benefits property owners by respecting property rights, it is ultimately ineffective for both network operators and end users and does not maximise the number

of end users able to connect to UFB. The consenting regime under the status quo has a net cost to New Zealand overall.

Option Two: Change guidelines for consenting process to require network operators to engage directly with affected property owners

- 48 Under this option, an industry code for fibre network operators would require business processes around consenting to involve the despatch of a field force to engage directly with property owners to obtain the necessary consents. This option could also involve network operators offering incentives, such as cash or vouchers, in their negotiation with property owners. We have no knowledge of network operators doing this currently, and consider it unlikely that they would do so, given that it further increases transaction costs and incentivises parties to hold out on granting consent until financial incentives have been offered.
- 49 This would differ from the status quo approach as it would enable a contracted field force to actively manage the end user experience and expectations beyond passively issuing a notification. This approach would involve direct engagement with and greater information resources for property owners regarding the intended installation activity and potential impacts.
- 50 Network operators would be responsible for reinstating any damage to property at their own cost to the satisfaction of the property owner.

Option Two: Impact analysis

Affected property owners who don't want fibre	*	<p>This would enable affected property owners to be informed of the impacts to their property and their rights. As per the status quo, this option minimises the impact on property rights and on property as it ensures no work is undertaken without the consent of affected owners, regardless of the grounds for objection. This enables property owners to protect their person and property to the degree they deem suitable. Property owners could also benefit financially in return for granting consent to network operators, which could serve as compensation to offset any concerns they may have regarding the impact of the installation on their person or property.</p> <p>However, this option imposes greater disruption in that direct contact from field force teams may be considered a disturbance, in particular if this contact is carried out in a persistent manner over multiple visits.</p>
Network operators who install fibre	*	<p>Ensuring that property owners are made aware of and respond to requests for access would speed up the process of obtaining consent in cases where consent is not given due to lack of response. However this would increase transaction costs for network operators in requiring a field force to engage directly with property owners in all cases where active consent is not granted immediately. Expecting network operators to bargain for permission by offering financial incentives to property owners would increase transaction costs. Network operators would be unlikely to welcome this approach, as it further reduces the revenue gained from investing in a connection, and a greater number of property owners would be incentivised to deny permission until they had received this offer of financial incentive.</p> <p>It would also increase the sunk costs borne by network operators in comparison to the status quo, in the event that property owners continue to deny access and the installation is cancelled.</p>
End users who want fibre	-	<p>This option would not necessarily result in efficiencies and is likely to prolong the consents process in many cases. For example, if an affected property owner is absent from their residence for an extended period of time and</p>

		cannot be contacted, or if property owners deny access on unreasonable grounds, including for reasons of personal grievance. Inefficient installation experiences may also influence other end users not to order a fibre connection because of the perceived complexity of the installation process.
New Zealand economy and society	–	Ultimately this is unlikely to significantly increase the number of end users able to access fibre beyond the status quo and therefore achieve the maximum benefits of high-speed broadband use to New Zealand.

Conclusion

51 While this has the potential to reduce the problem of some owners' lack of response to notifications, which is why the majority of land access consents fail, there is no guaranteed improvement. The option does not address the issue of property owners actively denying access for other reasons. The overall benefit in the number of end users with the ability to connect to fibre compared to the status quo is marginal and is therefore of limited positive impact. Overall, the costs to end users, network operators and New Zealand outweigh the benefit to property owners.

Option Three: Use existing copper technology for end user premises infrastructure

52 This option would involve using existing copper lead-ins as a replacement for the fibre lead-in required for a fibre-to-the-premises connection, for premises affected by land access issues. This would be an approach of last resort subsequent to exhausting the status quo consents process. It would not be appropriate for network operators to presume which premises will have complex consenting issues and proceed with the use of existing copper lead-ins, given that it is not known which premises will have property owners object to granting access.

53 The majority of premises being passed by the UFB distribution network have existing copper lead-ins. Chorus owns these copper lead-ins and other network operators would have to negotiate access from Chorus. The use of copper lead-ins by network operators other than Chorus would require an agreement between the two parties and the revision of existing contracts between the Crown and UFB network operators to allow the latter to service premises with a lower specification product.

54 This option could be applied by using emerging technologies which enable higher speeds over copper lead-ins comparable to those attainable over fibre lead-ins. For example, the technology G.Fast involves connecting copper lead-ins to fibre distribution points in the street, and can achieve peak speeds upwards of 100 Mbps. However, this technology is not yet commercially available in New Zealand. This option would add further differentiated products to those sold by retail service providers and would require the development of new business processes to retail the technology.

Option Three: Impact analysis

Affected property owners who don't want fibre	✓	This maintains property rights in their current state due to existing statutory rights to access copper lead-ins held by Chorus. There is minimal physical impact as copper lead-ins exist on the majority of affected premises and no further work would be required, which eliminates any concerns regarding the impact of the installation on the value of their property, aesthetics, or on their person. No consultation is required and therefore there are no transaction costs for property owners.
Network	✖✖	This reduces the cost of the physical installation as no new lead-ins are

operators who install fibre		<p>required. However, it would not reduce the transaction costs in terms of time and resources invested in failed connections, given that the consents process would have to be exhausted before this solution was applied. Furthermore, network operators would have to negotiate access to the copper lead-ins from Chorus on a case-by-case basis in order to gain access only to the premises where this was required, which would add inefficiencies.</p> <p>As fibre networks are passive between the customer’s house and the regional exchange, the ongoing operating costs of fibre tend to be less than those for copper lead-ins which require signal amplification and other active infrastructure. This is especially true for emerging copper technologies which enable fibre-like performance, such as G.Fast and active distribution boxes which would need to be installed to cover only a handful of households. This option is therefore likely to require similar capital investment for network operators but with greater operating costs.</p>
End users who want fibre	✓	<p>The use of copper lead-ins would not achieve a comparable fibre-to-the-premises service for end users (minimum 100 Mbps peak download speeds under UFB specifications), although the experience of a lower specification service would be improved from that of a standard copper connection under the status quo.</p> <p>UFB performance specifications may be achieved if emerging high-speed copper access technologies were used. However, it may be difficult for end users to obtain access, as retail service providers would be required to develop new processes and services, which may not be considered commercially viable given its scale.</p> <p>This option increases delays for end users desiring a fibre connection, given that the consents process must be exhausted before this avenue is available.</p>
New Zealand economy and society	✖✖	<p>A significant number of end users would be unable to access the benefits of a full fibre-to-the-premises connection (approximately three percent of all UFB orders, or roughly 44,000 households under UFB1). The Crown’s investment in fibre-to-the-premises infrastructure would not achieve the maximum value for the cost. The experience of end users who receive a sub-standard service comparable to that experienced over a full fibre connection could have adverse flow-on effects in influencing other end users not to connect, as the performance may be reported as of marginal or no improvement from non-fibre services. There is also a cost to the Crown in renegotiating contracts if the Crown agrees to allow lower-specification infrastructure to be deployed.</p>

Conclusion

55 This option enables connections to the fibre in the street for the majority of premises (those with existing copper lead-ins) affected by land access authorisation issues, but potentially at a lower specification which does not achieve UFB policy objectives and at a higher cost. This option has the benefit of respecting property rights but this comes at a net cost overall.

Option Four: Implement a deemed consent model

56 This option would require network operators to notify all affected property owners of the installation activity to be carried out. If active permission is given, installation can proceed immediately. If neither permission nor objection has been received at the end of the notice period, consent would be implied.

- 57 A notice period of fifteen working days is proposed as this allows property owners sufficient time to register an objection while being of shorter duration than the average delays to the installation process posed by consenting issues.¹ A fifteen working day notice period is also broadly consistent with the period of notice under the Fencing Act 1978 and for negotiating improvements between tenants in common for land registered as an access lot under the Property Law Act 2007.
- 58 Property owners could object to granting land access according to a specified list of reasonable and genuine grounds. Grounds for objection include disputed ownership of affected property and the material impact on property value or enjoyment of the property.² The validity of these grounds could be tested through a dispute resolution scheme.
- 59 The following conditions would apply:
- a. Amended access rights to private property for the installation of fibre would be time-limited by a sunset clause to expire in 2025. This assures property owners that amended property rights are temporary, proposed in response to a specific need and will cease once the communal infrastructure for the UFB network is largely built;
 - b. Network operators would be responsible for reinstating any damage to property at their own cost to the reasonable satisfaction of the property owner; and
 - c. Network operators would have to work with local government to access ratepayer information in order to identify and notify all affected property owners with ease and accuracy.

Option Four: Impact analysis

Affected property owners who don't want fibre	*	This enables property owners to object on reasonable grounds on the basis that the installation will have a negative enduring impact on their person or property, while at the same time ensuring that access is not denied due to the lack of response or unreasonable objections. Physical impacts to property are minimised as network operators must reinstate or compensate for damage to property. There is some chance that consent may be deemed without property owners being fully aware of the issue; for example if affected property owners are absent from their residence for longer than the notice period. Transaction costs for property owners are reduced relative to the status quo in the event that they wish to consent, however this option
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¹ Currently, industry aims to resolve consenting issues within 30 days but often this takes longer; for example, Chorus' average time to obtain all consents for a shared right and to design the installation is understood to be 42 calendar days of which the majority is spent obtaining consent.

² The full list of grounds for opting-out would include:

1. The person whose consent is required disputes ownership of any surface or fixture that the proposed installation will make use of or disturb;
2. The person whose consent is required has an ownership stake in the land affected and can demonstrate that the UFB installation will materially negatively impact on the value of the land or their property. Examples could include impact of the installation on specific selling points of a property, or reducing the ease of access for those with limited mobility;
3. The person whose consent is required has an ownership stake in the land affected and can qualify ways in which the proposed installation will impact on their enjoyment of the land, or exacerbate an existing problem with the land, in manners other than visual impacts only;
4. The person whose consent is required has an ownership stake in the land affected and can demonstrate that the proposed installation method will impede their plans for development; or
5. The person whose consent is required has an easement over the land affected and can demonstrate that the proposed installation will have an enduring impact on the terms and conditions of that easement.

		incurs greater transaction costs for property owners who wish to deny access, as instead of passively refusing consent, they must actively object on specified grounds which may be tested through a dispute resolution process.
Network operators who install fibre	✓	This option reduces delays both in the event that permission is actively given and if consent is deemed at the end of the notice period, as the notice period is of a shorter duration than average delays to installation. Overall, transaction costs are reduced in cases in which consent is deemed. However, as some installations are very low impact (such as methods involving trenching of soft surfaces), grouping these low impact installations into a deemed consent model can slow down connections overall relative to other options.
End users who want fibre	✓✓	This increases efficiencies for end users and enables them to enjoy the benefits of fibre. This avoids installations failing due to lack of responses or invalid objections from property owners.
New Zealand economy and society	✓✓	An overall improvement in the end user experience enhances the reputation of network operators conducting fibre installations and is likely to encourage other users to connect and realise the social and economic benefits of fibre. Enhancing the rate at which end users connect to fibre increases revenue for network operators, which in turn both hastens the rate of return on the Crown's investment in UFB and increases the ability of network operators to make ongoing investments in infrastructure.

Conclusion

60 This option limits the number of premises unable to connect to UFB to situations where valid objections from affected property owners are raised. Overall, the benefits to affected populations outweigh the minor costs to property owners.

Option Five: Automatically proceed with installations prescribed to be low impact

61 Under this option, network operators would be required to notify affected property owners of the installation activity and state whether such activity is low impact.³ Approximately 36 percent of installations affected by land access authorisation issues involve installation methods which have a low impact. For these installations, activities would proceed without the consent of affected property owners other than the end user requesting a connection. For all other installation types (the remaining 64 percent), the status quo consenting process would continue, requiring affected property owners to actively grant consent.

62 The following conditions would apply:

- a. Amended access rights to private property for the installation of fibre would be time-limited by a sunset clause to expire in 2025. This will assure property owners that amendments to property rights are temporary, proposed in response to a specific need and will cease once the communal infrastructure for the UFB network is largely built;

³ Low impact installations would be defined in the Telecommunications Act as those which may cause minor disruptions such as temporary restrictions on vehicular access, but have no enduring impacts on land. Methods which are low impact would be prescribed through regulation and may include aerial installation, trenching or excavation on soft surfaces, and underground activities where the entry and exit points for installation are less than one square metre.

- b. Network operators would be responsible for reinstating any damage to property on a like-for-like basis to the satisfaction of the property owner. No cost for this reinstatement is to fall on the property owner; and
- c. Network operators would have to work with local government to access ratepayer information in order to identify and notify all affected property owners with ease and accuracy.

Option Five: Impact analysis

Affected property owners who don't want fibre	*	Automatic consent to low impact installations is estimated to override the property rights of affected property owners for approximately 36 percent of installations requiring multiple consents. This option therefore continues to allow owners to deny access in instances where the installation could have enduring physical impacts on their person or their property. It reduces the instances in which property owners object on unreasonable grounds or because they have not bothered to respond to non-low impact installations (up to 64 percent of installations requiring multiple consents), relative to the status quo. Transaction costs are reduced as property owners do not have to provide active consent, unless they choose to raise a grievance regarding the impact of the installation after this has occurred, which would have to be tested through a dispute resolution process and therefore incur greater transaction costs.
Network operators who install fibre	✓	This increases efficiencies for low impact installations and minimises the avoidable costs involved in a failed or delayed connection. Based on cost modelling of consenting issues under the status quo and assuming 48 percent uptake at 2020, this option could save industry \$6.5 million if it addressed 36 percent of multiple-consent installations, compared to the \$18 million in sunk costs of consenting issues under the status quo at 2020. At 100 percent uptake, this would equate to cost savings of \$14.4 million. However, for installations resulting in greater impacts (estimated to be in the range of 60 to 65 percent but dependent on confirmation of the installations to be prescribed to each category), the time and resources put into delayed or failed installations would be consistent with the status quo.
End users who want fibre	✓	End users would benefit from improved efficiencies in low impact installations. However, in installations resulting in moderate to high impacts, some end users will continue to be prevented from connecting to fibre.
New Zealand economy and society	✓	This option enables approximately 36 percent of affected users to receive fibre connections, resulting in a minor improvement in the achievement of long-term benefits to New Zealand. A minor improvement in the rate at which end users connect to fibre would increase revenue for network operators to a minor degree, which would have an associated increase in the rate of return on the Crown's investment in UFB and the ability of network operators to make continuing investments in infrastructure.

Conclusion

63 This option enables premises affected by land access issues to connect to fibre in cases where an installation is considered low impact, which solves land access authorisation issues for less than a quarter of affected installations. Although the marginal benefits of this option outweigh the costs, the option does not facilitate the connection of premises where installations may have a greater impact on property. For these remaining installations some end users are still likely to be prevented from accessing fibre.

Option Six: Use the Public Works Act to allow network operators to access land

- 64 Under the Public Works Act, Crown entities can access private property for public works purposes. An exception to this enables private utility network operators to become “requiring authorities” with the right to access to land if authorised by the Minister for the Environment under the Resource Management Act. Network operators have the ability to use legislative provisions to seek the agreement of the Minister for Land Information to acquire or take land on the requiring authority’s behalf. Chorus already has requiring authority status for the purposes of constructing and operating its copper telecommunications network.
- 65 Requiring authorities must typically obtain all required consents before undertaking works, which involves the negotiation of easements. Once requiring authorities have exhausted the consents process and can demonstrate that they have made all reasonable efforts to obtain consent, access can be compulsorily acquired. Property owners have the right to object to this acquisition through the Environment Court.
- 66 The following conditions would apply:
- Network operators’ status as requiring authorities would be time-limited by a sunset clause to expire in 2025. This assures property owners that the ability of network operators to acquire property rights is temporary, proposed in response to a specific need and will cease once the communal infrastructure for the UFB network is largely built;
 - Network operators would be responsible for reinstating any damage to property on a like-for-like basis to the satisfaction of the property owner. No cost for this reinstatement is to fall on the property owner; and
 - Network operators would have to work with local government to access ratepayer information in order to identify and notify all affected property owners with ease and accuracy.

Option Six: Impact analysis

Affected property owners who don't want fibre	**	Compulsory acquisition of land would override property rights and would not allay concerns regarding the potential for installations to result in enduring physical impacts on their property or their person. Property owners would have recourse for objection to their land being acquired via the Environment Court, however going through this process would likely be costly and time-consuming. Although there could be some financial benefit as owners may receive compensation for the use of land of little value, ultimately this option endangers property rights to a significant degree by allowing network operators to take ownership of the access corridor required for the fibre installation, merely because property owners have not given active consent.
Network operators who install fibre	**	While network operators would become a requiring authority by law, they would have to exhaust the status quo consents process before being able to acquire land. The transaction costs of acquiring land after attempting to obtain consents would be significant for network operators and could create reputational damage.
End users who want fibre	✓	This option would reduce the number of failed or cancelled installations, but its inefficiency would not benefit end users, particularly if the prolonged consents process served as a disincentive for network operators to continue with installations perceived to be complex.
New Zealand	*	Compulsory acquisition would enable a greater number of end users to

economy and society		connect to fibre and has the potential to achieve the intended benefits to New Zealand's economy and society in the long term. However, the inefficiency of the process on a large scale is likely to reduce the rate of return on the Crown's investment. Furthermore, it ultimately overrides individual property rights to a significant degree and therefore endangers a foundational right of New Zealand society.
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Conclusion

67 This option has the potential in theory to enable premises affected by land access issues to achieve fibre connections, but in practice its inefficiency would be unlikely to achieve policy objectives. Furthermore, allowing network operators to forcibly acquire property for the purpose of accessing property to install fibre goes too far in its impact on property rights. The option therefore has an overall cost.

Option Seven: Grant network operators a statutory right to access all private property for telecommunications

68 This would involve amending the Telecommunications Act to grant all regulated network operators involved in the deployment of fibre for telecommunications a blanket statutory right of access to private property for fibre installation.

69 Network operators would be required to comply with default requirements for property reinstatement or compensation to the property owner.

70 Network operators would be limited to installing fibre lead-ins only to premises where an order had been placed, so as to avoid trespass issues.

Option Seven: Impact analysis

Affected property owners who don't want fibre	**	This provides a broad statutory right which overrides individual property rights to a significant extent without discrimination to the type of premise or installation. No recourse is available for reasonable objection by property owners. Although network operators are incentivised to minimise physical impacts on property due to requirements that they reinstate or compensate for damaged property, this does not adequately address owner concerns that the installation will impact the aesthetics or value of their property or their person. It does however mean that access cannot be denied on unreasonable grounds or because of lack of engagement from the owner. The transaction costs of this option are minimal, as no engagement with property owners is required.
Network operators who install fibre	✓✓	This increases the efficiency of the connection process and minimises the transaction costs of obtaining consents.
End users who want fibre	✓✓	This increases the efficiency of connections and guarantees that end users can enjoy the benefits of fibre in a timely manner.
New Zealand economy and society	*	This option maximises achievement of the intended benefits of fibre to the New Zealand economy and society as a whole. However, it ultimately overrides individual property rights to a significant degree and therefore endangers a foundational right of New Zealand society.

Conclusion

71 This option enables all premises to access a full fibre-to-the-premises connection, but does so in a way which has high costs in terms of overriding property rights. This is not only a

cost to affected property owners, but also to New Zealand society and therefore this is not a viable option.

Option Eight: Implement a mixed model, which applies different access regimes according to the level of physical impact the installation creates (preferred option)

- 72 MBIE's preferred option is to combine two or three different access regimes, which could include the deemed consent, status quo and low impact approaches. A mixed model would prescribe the various installation methods used in instances requiring the consent of multiple property owners as falling under one of two categories depending on its impact, and apply an access regime accordingly.
- 73 For all installation types, the following conditions would apply:
- a. Amended access rights to private property for the installation of fibre would be time-limited by a sunset clause to expire in 2025. This will assure property owners that amendments to property rights are temporary, proposed in response to a specific need and will cease once the communal infrastructure for the UFB network is largely built;
 - b. Once consent is obtained, network operators are required to reinstate or compensate for any property damaged in the process of installation at their own cost;
 - c. Network operators would have to work with local government to access ratepayer information in order to identify and notify all affected property owners with ease and accuracy.
- 74 We consider that the mixed model regime could be implemented one of two ways:
- a. A two-tier regime combining the low impact methods approach for installations prescribed as Category One, and the deemed consent approach for all other installations (the telecommunications industry's preferred option); or
 - b. A three-tier regime combining the low impact methods approach for installations prescribed as Category One, the deemed consent approach for installations prescribed as Category Two, and the status quo regime for all other installations.

Three-tier regime

- 75 Category One methods would enable installations to proceed immediately:
- a. Category One installations (those with the lowest level impacts) would be prescribed through delegated legislation under the Telecommunications Act 2001.⁴ An estimated 36 percent⁵ of installations affected by land access authorisation issues might be prescribed to fall under Category One.

⁴ Installations which cause minor disruptions, such as temporary restrictions on vehicular access, but have no enduring impacts on land. Methods which are considered low impact include aerial installation, trenching or excavation on soft surfaces, and underground activities where the entry and exit points for installation are less than one square metre.

⁵ Industry has provided data, based on a random sample of 100 complex fibre installations over a two-day period, which reveals the type and distance of each installation method used. This data has informed analysis of what would fall under Categories One and Two based on current definitions. On this basis, industry has assessed that 36 percent of installations might fall within the scope of activities prescribed under Category One, 51.5 percent of installations might fall within the scope of activities prescribed under Category Two, and the remaining 12.5 percent of installations would fall outside the scope of activities prescribed under either Categories One or Two. As the proposed classification of various installation methods will be given effect through delegated legislation, an

- b. Network operators would notify property owners of the intended activity and its classification, with a notice period of five working days. Installations can proceed without the active consent of affected property owners other than the end user requesting the connection. This is to ensure that installation activities judged to have a low impact can proceed efficiently without further need for assessment and consultation beyond initial scoping work, so that the amended access right can achieve its intended purpose of facilitating fibre installations.

76 Category Two installations would follow the deemed consent model:

- a. Category Two installations (those which may create enduring impacts on the resale value of the property) would be prescribed through delegated legislation under the Telecommunications Act. An estimated 51.5 percent of installations affected by land access authorisation issues might fall within this prescribed category.
- b. Network operators would be required to notify affected property owners with a fifteen working day notice period. If active permission is given, the installation can proceed immediately. If neither permission nor objection is received at the end of the notice period, consent would be deemed.
- c. Property owners could object according to a specified list of reasonable and genuine grounds, including the desire to change the date of installation, disputed ownership of affected property, the likelihood of physical damage to people, and the material impact on property value or enjoyment of the property.⁶ All installations in unit titled developments could sit within this category and specific grounds to object could be devised that best respect the autonomy of bodies corporate and the additional liabilities they have. For instance, the requirement to preserve the façade of heritage buildings or to adhere to existing telecommunications contracts. The validity of objections could be tested through a dispute resolution scheme.

77 The status quo consenting regime would apply to all other installations:

- a. Installations not prescribed as Category One or Category Two will continue to require active consent from all affected parties. An estimated 12.5 percent of installations might fall outside of these categories depending on the Government's view of their impacts, which is to be considered separately.

opportunity exists to collect more comprehensive data from industry on the methods utilised during the development of those regulations. This data will be reflected in the regulatory impact analysis of those regulations at the time their promulgation is proposed.

⁶ The full list of grounds for opting-out includes:

1. The person whose consent is required disputes ownership of any surface or fixture that the proposed installation will make use of or disturb;
2. The person whose consent is required has an ownership stake in the land affected and can demonstrate that the UFB installation will materially negatively impact on the value of the land or their property. Examples could include impact of the installation on specific selling points of a property, or reducing the ease of access for those with limited mobility;
3. The person whose consent is required has an ownership stake in the land affected and can qualify ways in which the proposed installation will impact on their enjoyment of the land, or exacerbate an existing problem with the land, in manners other than visual impacts only;
4. The person whose consent is required has an ownership stake in the land affected and can demonstrate that the proposed installation method will impede their plans for development; or
5. The person whose consent is required has an easement over the land affected and can demonstrate that the proposed installation will have an enduring impact on the terms and conditions of that easement.

Two-tier regime

- 78 Under a two-tier regime, installations would be classified as Category One or Category Two. Category One installations would follow the same process for Category One installations prescribed under the three-tier model. For all other installations (Category Two), the deemed consent model would apply, as per the conditions of deemed consent outlined under the three-tier model. This would cover the remaining premises affected by land access issues in situations where the consent of more than one property owner is required.
- 79 The two-tier model differs from the three-tier model by eliminating the high impact categorisation and corresponding status quo consents regime. This would increase the efficiency of the consents process, but removes the ability to continue the status quo approach for installation methods that have a high impact on property owners and for which active consent is more appropriate.
- 80 Overall, the two-tier model increases the efficiency of the consenting process for a greater number of premises than the three-tier model. However, the counter-effect is that it may reduce the opportunity for property owners to object, but does ensure that where objections are made, these are made on valid grounds. The three-tier option, in allowing property owners to deny consent for high impact installations, supports objections which may not be valid such as personal grievances with neighbours, but allows for some installation methods to be excluded from the deemed consent model if appropriate. This also incentivises network operators to use the lower impact installation methods that are prescribed in Categories One and Two.

Option Eight: Impact analysis

<p>Affected property owners who don't want fibre</p>	<p>*</p>	<p>Under the three-tier option, property owners do not have the right to deny access in Category One installations (36 percent of installations requiring multiple consents), which is considered to be justified on the basis that these installations have a minor, non-enduring impact. They are able to object on fair and reasonable grounds to Category Two installations and object outright to installations not covered under Categories One or Two. The time-bound nature of amended access rights minimises the long-term impact that overriding individual property rights may have.</p> <p>This option addresses the reasonable concerns that property owners may have regarding damage to their property and person through the application of different access regimes based on the impact the installation will have. At the same time, it minimises the risk that access will be denied on unreasonable grounds or because an owner has not bothered to grant consent in the majority of cases. There may be minor to enduring physical impacts on property depending on the installation method, but affected property owners would be able to dispute the quality of property reinstatement through the disputes resolution process. The initial scoping work required to be undertaken by network operators ensures that property owners have accurate information regarding likely impacts on the property. The variance in impact on property owners under the two-tier regime is that there is no ability to object outright to installations which may have a greater enduring impact, and an increased risk that consent may be deemed in the event that property owners are absent from their residence for longer than fifteen working days.</p> <p>Both models minimise the transaction costs for property owners to give consent in the event of Category One or Category Two installations, however they must still invest time to consider and consent to installations which fall</p>
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		outside of either of these categories. However, in the event that property owners wish to register their objection to Category Two installations, the transaction costs increase as objections must be active, and may be tested through the disputes resolution process.
Network operators who install fibre	✓✓	<p>The three-tier regime increases the efficiency of the connection process for network operators and reduces the avoidable transaction costs invested in a failed or delayed connection for the majority of premises affected by land access authorisation issues (an estimated 87.5 percent). In the majority of cases, consent can be passively obtained without significant direct engagement on the part of the operator. Based on the cost modelling of consenting issues under the status quo, industry has estimated that with an uptake rate of 48 percent at 2020, a three-tier access regime could have cost savings for industry of \$12 million (assuming that 91.7 percent of installations requiring multiple consents are resolved under the three-tier model), in comparison to the sunk costs of \$18 million incurred by industry under the status quo. At 100 percent uptake, the cost savings of the three-tier regime are estimated to be \$27 million, compared to the sunk costs of \$40 million incurred by industry under the status quo.</p> <p>The difference in impact under the two-tier regime is that efficiency is increased for almost all premises affected by land access authorisation issues, assuming that all Category One installations and 90 percent of Category Two installations (57.6 percent of installations requiring multiple consents) proceed (93.6 percent of all installations requiring consents).</p> <p>A mixed model regime imposes new costs because it requires network operators to begin scoping activity for installations at the start of the installation process, which may become a sunk cost if consent is not obtained. However, a mixed model approach reduces the number of instances in which consent cannot be obtained (this number is reduced further under a two-tier regime), and therefore the efficiency gains justify this new cost.</p>
End users who want fibre	✓✓	<p>A mixed model regime enables end users to enjoy the benefits of a fibre connection in a timely manner for the majority of premises affected by land access authorisation issues under the three-tier model, and for a greater number of premises under the two-tier model. Industry estimates that 91.7 percent of UFB installations requiring multiple consents would be resolved by the three-tier model, assuming that a) all Category One installations proceed; b) 90 percent of Category Two installations proceed (or 46.3 percent of installations requiring multiple consents); and c) 75 percent of other installations proceed (or 9.4 percent of all installations requiring multiple consents).</p> <p>The two-tier model is expected to resolve consenting issues for 93.6 percent of all installations requiring consents, assuming that all Category One installations and 90 percent of Category Two installations (57.6 percent of installations requiring multiple consents) proceed.</p>
New Zealand economy and society	✓✓	<p>An overall improvement in the end user experience enhances the reputation of network operators conducting fibre installations and is likely to encourage other users to connect and realise the social and economic benefits of fibre. Enhancing the rate at which end users connect to fibre increases revenue for network operators, which in turn both hastens the rate of return on the Crown's investment in UFB and increases the ability of network operators to make investments in infrastructure.</p>

Conclusion

- 81 Both mixed-model approaches have a net benefit to all target populations and reduce the costs to property owners in comparison to other regulatory options.
- 82 The three-tier model facilitates the connection of premises affected by land access issues in cases where installation has low to medium impacts (an estimated 87.5 percent of connections), but has no improvement for high impact installations compared to the status quo and would be more complex to administer.
- 83 The two-tier model improves the ability of premises affected by land access issues to connect to fibre beyond the number able to connect under the status quo for all installation methods. It would be easier to administer but would provide less protection for affected property owners.

Conclusion and recommendation

Option	Affected property owners	Network operators	End users	New Zealand
1: Status quo	–	–	–	–
2: Engagement	*	*	–	–
3: Copper	✓	**	**	**
4: Deemed	*	✓	✓✓	✓✓
5: Low impact	*	✓	✓	✓
6: Public Works	**	**	✓	*
7: Broad right	**	✓✓	✓✓	*
8: Mixed model	*	✓✓	✓✓	✓✓

- 84 Based on this analysis, the low impact and deemed consent options have benefits which appear to outweigh the costs. As such, MBIE considers that combining these options into a mixed model regime balances the achievement of policy objectives at the least cost to affected property owners, end users and network operators.
- 85 In weighing up the benefits and costs of the three-tier and two-tier mixed model approaches, we consider that the three tier regime is most appropriate to solve this problem. There is marginally less benefit for network operators under the three-tier regime as compared to the two-tier regime, yet greater protection for affected property owners without trading off benefits for end users and New Zealand as a whole.

Problem Two: Facilitating the deployment of fibre using existing utility infrastructure

- 86 This proposal is centred on ways to improve connectivity in economically challenging areas of the country by enabling better use of existing electricity infrastructure to lower the costs of fibre deployment.
- 87 The following options have been identified to facilitate the deployment of fibre using existing utility infrastructure:
- Option One: Status quo
 - Option Two: Create a statutory access right to allow utility network operators to deploy fibre alongside existing infrastructure
 - Option Three: Create a statutory access right to allow any network operator to deploy new fibre infrastructure across private property
 - Option Four: Change the process for obtaining easements
 - Option Five: Use the Public Works Act to compulsorily acquire land

Option One: Status quo

- 88 Network operators of utilities such as electricity have a right to access private land for the purpose of maintaining and upgrading electricity lines built before 1 January 1993. The policy rationale for restricting electricity operator access rights in such a manner was similar to the rationale for restricting a statutory right of access for telecommunications operators to existing lines built before 1989: the access right was restricted to publicly funded infrastructure. For electricity lines built after 1993, the right of access is secured through easements negotiated with each land owner passed over by the network.
- 89 Some electricity network operators have already deployed fibre alongside electricity lines for network monitoring purposes (fibre used for Security Control and Data Acquisition [SCADA]). However, the status quo limits the use of this fibre only to electricity purposes. This prevents best use of the infrastructure by enabling electricity operators to lease spare capacity on SCADA fibre to telecommunications operators.
- 90 Should electricity lines companies wish to deploy fibre for telecommunications alongside their existing lines, the current regime requires operators to negotiate individual easements with each property owner the network passes over. This approach is consistent with standard practice for all utilities and respects property rights as it allows each party to transact on their own terms. Therefore, the status quo does enable the use of existing electricity assets to reduce fibre deployment costs; however in practice this comes at the cost of negotiating easements with each individual land owner. This cost impacts on the feasibility of extending telecommunications networks, using existing lines, into areas where there is demand but the revenue opportunities are low.
- 91 One electricity lines company has commented that that the easement process currently takes up to 18 months and can cost up to **[WITHHELD: COMMERCIAL IN CONFIDENCE]** to transact per easement (including surveying, legal fees for property owners and network operators, internal project management, registration, disbursements and mortgage fees), excluding the cost of any compensation payable which varies between each affected property. The same source provides a case study which estimates that the cost of an 83 kilometre length of fibre deployed under the status quo would amount to a total of \$2.44 million, with only \$1 million of this cost comprising the physical deployment of the lines. In this instance, the transaction costs imposed under the status quo, excluding the cost of

any compensation payable to individual land owners, increase the costs of deployment by 170 percent.

- 92 MBIE surveyed four electricity lines companies which were selected on the basis of having a high proportion of rural lines on their network; of these networks, an average of 65 percent of rural lines crossed private land, which illustrates the potential scope of this issue.

Option One: Impact analysis

Property owners whose land is crossed by electricity infrastructure	The requirement for easements or other individually-negotiated agreements to be obtained to deploy fibre means property owners must actively consent and are able to transact on their own terms. This alleviates any concerns property owners may have regarding the impact of the fibre on their enjoyment of the property or their access to existing utilities.
Infrastructure owners (electricity network operators)	Electricity lines companies are unable make better use of their assets by leasing spare capacity on existing SCADA fibre to telecommunications network operators. All network operators are prevented from the right to access private property to deploy fibre; therefore no network operator enjoys an advantage above another.
Telecommunications network operators	This increases the costs for fibre network operators to make ongoing investments in infrastructure and provides less incentive to encourage the market to extend investments due to the greater resources required to negotiate access. Since no network operators enjoy a right to access private property to deploy fibre or the ability to lease fibre deployed on utilities infrastructure, no network operator has an advantage above another.
New Zealand economy and society	This does not increase the availability and quality of broadband and mobile services in areas beyond existing fibre deployment. This may impede achievement of the Government’s target of 50 Mbps peak speeds for 99 percent of New Zealanders by 2025.

Conclusion

- 93 The status quo presents a missed opportunity to facilitate the deployment of fibre to improve connectivity across New Zealand.

Option Two: Grant a statutory right to utility network operators to deploy fibre alongside existing infrastructure

- 94 This option would amend the Electricity Act 1992 to grant a statutory right to electricity lines companies to allow fibre to be deployed alongside their existing lines which cross private property.
- 95 If this right is used, it may generate benefits for electricity lines companies and the New Zealand economy and society. There is also a possibility that land owners would benefit through being able to connect to a better telecommunications network than they had access to previously. The case for this option is that, of a selection of electricity lines companies with a high proportion of rural lines, an estimated 65 percent of electricity lines cross private property and could accommodate fibre with very little aesthetic or operational impacts on the land. This right could be used in several ways, including to make fibre-to-the-premises available to landowners, to provision wireless sites, and to increase the capacity of regional fibre transmission links.

- 96 However, the extent to which this right would be used by industry is uncertain, meaning the potential benefits are also uncertain. Only one electricity lines company has outlined specific ways in which it would use this right to enhance connectivity. While electricity lines companies in general consider the right would be a useful tool, most have not provided a commitment to how, where and when it might be used. Some of the factors raised by electricity lines companies and telecommunications providers which could inhibit use of the right, even if it was made available, include:
- a. The comparably low cost per metre of putting fibre underground rather than overhead, and the lower ongoing operating cost of this deployment method given it is less susceptible to weather events;
 - b. The ability for microwave technology to provide backhaul to wireless sites that in many cases can provide equivalent speeds to fibre services, and provide sufficient capacity to service that site in the medium term.
- 97 This option would come at a cost to the landowners whose land is currently crossed by electricity infrastructure. The visual impacts of an additional fibre cable are minimal and outside of the initial installation the presence of the cable is unlikely to result in any material disruption to the operation of the land. These impacts will be minimised through the restrictions outlined in paragraph 99 below. However, land owners will be losing the ability to negotiate for this access to their land on their own terms. Essentially, landowners will bear the costs of this proposal through diminished property rights, with electricity lines companies receiving the direct benefit, and the community benefiting to some extent through improved telecommunications service.

Specifications of the proposal

- 98 The right would be limited to electricity lines companies that own existing assets to minimise disruption to landowners and provide a single point of accountability. The amended access right would apply to electricity lines for which access is covered under Electricity Act 1992 provisions, as well as to lines not covered by these provisions, for which access is secured via easements or other agreements. For clarity, the right would apply only to electricity lines in existence at the time that any legislation arising from this proposal is given Royal Assent. This approach is inconsistent with policy in the Electricity Act 1992 which restricts the statutory right of access to existing publicly-funded infrastructure, as fibre deployed alongside existing utilities would not necessarily be funded by the Crown. However, we consider the potential benefit of improving connectivity across New Zealand, if this right is used, would justify this approach.
- 99 The proposed right would be limited to fibre only and not include copper, as copper conducts electricity and so must be strung 1.6 metres below electricity lines for safety reasons. Therefore, the visual impact of aerially-deployed copper is much greater.
- 100 To minimise any impacts on landowners the proposal would be restricted to instances where a fibre line is inserted between existing electricity lines on the crosstree. The fibre line should not exceed the diameter of the existing electricity line, or a diameter of 30mm, whichever has the least visual impact. No new support infrastructure, such as poles or any other structures which impact the ground, and therefore may result in any material disruption to the operation of the land, should be provided for. All relevant conditions of entry to the land governing access to electricity lines, either deemed under the Electricity Act 1992 or negotiated through easements, would carry over to access of that land for the installation or maintenance of the fibre.

- 101 Network operators could only deploy fibre alongside utilities infrastructure they already own, although they could license the use of this fibre to telecommunications network operators. Due to the impact on competition that this may have in terms of a single operator holding this access right in any one area, the infrastructure owner would be required to make any fibre installed as a result of the access right available to access seekers on the following conditions:
- a. Where an infrastructure owner intends to use the right to provide active fibre services, these must be made available on a non-discriminatory basis; and/or
 - b. Where an infrastructure owner intends to use the right to provide dark fibre services to access seekers, the owner must make these available to access seekers on a non-discriminatory basis.
- 102 A non-discrimination open access standard is sufficient to promote competition by ensuring that the terms of access, including price, are the same for all access seekers.
- 103 We have considered a variation on this option which would grant the existing asset owner the right to use existing utility infrastructure to make open duct access available. This option would enable asset owners to deploy an aerial telecommunications duct on existing utility infrastructure, and other operators to install fibre cables inside these ducts. However, we consider that this is not a viable option as it imposes a significantly greater impact on land owners: such a right would enable multiple companies to access private land for the maintenance and repair of fibre cables, rather than restricting this right to a single company with existing land owner relationships. We do not consider the potential benefit of improving connectivity across New Zealand, if this right is used, would justify this approach.
- 104 This proposal impacts on land owners as they would lose the ability to choose the terms on which they transact with electricity lines companies. In practice, this is not expected to result in a material loss of revenue for land owners as under the status quo; network operators are unlikely to construct fibre lines using land owners' property without this right, as the revenue from investment in these areas is low relative to the costs of deployment. However, this does not mean there will be no impacts on property owners. We have grouped our analysis of these impacts below in terms of operational costs and externalities.

Operational costs

- 105 As fibre will be strung between existing lines, its addition is unlikely to significantly impact on farming activities or other uses of the land. At the time that the electricity network was installed land owners would have been required to make allowances in regards to both how close to the electricity asset they can fence, and the movement of machinery to prepare or harvest crops. We do not consider that this proposal exacerbates these concessions regarding the routine use of land.
- 106 Land owners can expect some additional disruption from the physical installation of fibre lines. To minimise this, the proposed right is limited to the existing electricity lines company to exercise in accordance with the terms of entry they already comply with in the electricity context. While electricity lines companies may need to enter property more often for maintenance purposes should fibre be installed alongside electricity lines, any natural event that requires additional fibre maintenance is equally likely to impact on the electricity network. For this reason, it is unlikely that maintenance of fibre will significantly increase the frequency or duration of site visits over and above the status quo.

Externalities

107 In the electricity context, negative externalities are generally considered in regards to impacts on the aesthetics of the land (to both the land owner and, in limited instances, neighbouring properties) and also on impacts to health caused by electromagnetic fields. Both these perspectives have been considered in the context of this proposal. The proposal restricts the maximum diameter of the fibre cable to 30 millimetres in order to align with the proposed permitted activity in the Resource Management National Environmental Standard for Telecommunications, once amended.

108 However, in reality the actual cables used would be significantly less obstructive than this because in rural areas the length of spans between poles is significantly greater than in urban areas where the 30 millimetre requirement is justified. In effect, the loading values of a 30 millimetre cable are likely to be too heavy to be supported in the rural context without compromising the integrity of the electricity network. The table below shows the diameter of fibre optic cabling likely to be deployed using this right relative to the size of the electricity cables already in operation:

Cable Type	Diameter
Electricity 11kv	35mm
Electricity 400v	18mm
72 Fibre Cable	12 - 14mm
96 Fibre Cable	15.6 – 17.8mm

109 Noting that installed fibre will be less visually obstructive than the existing electricity lines, we consider it unlikely that installing fibre will significantly impact on residents’ enjoyment of views.

110 Given that fibre is non-conductive, considerations around whether electromagnetic fields could impact on land owners are not relevant as they are with the placement of electricity lines on private property.

111 Negative externalities aside, this proposal has the potential to bring significant benefits to the communities surrounding affected property through making upgrades to both fixed line and wireless connectivity possible and in some instances, providing UFB-like connections to areas that would otherwise not receive them.

Option Two: Impact analysis

Property owners whose land is crossed by electricity infrastructure	*	<p>This option would not allow property owners the right of objection to the deployment of fibre for telecommunications or the ability to negotiate access rights on their own terms. The transaction costs of granting or denying consent are non-existent as no engagement is required of the property owner.</p> <p>The option does leave property owners worse off than the status quo, however the impacts on property owners’ enjoyment and use of their property are considered to be low. Reasons why property owners might choose to deny consent, including potential visual impacts, health concerns, limitations on the ability to use land for farming, and impacts on the use of existing utilities are addressed in the substance of the proposal.</p>
Infrastructure owners (electricity)	✓✓	Electricity companies could increase their revenue opportunities relative to the status quo by making better use of their existing assets. This would

network operators)		reduce the transaction costs of obtaining consents compared to the status quo, which would require costly negotiation of easements with property owners. By ensuring that new fibre is installed only by the existing infrastructure owners, any potential impacts on the effective functioning of existing utilities are minimised.
Telecommunications network operators	✓✓	If used widely, this right has the potential to reduce the cost of extending fibre networks and increase the attractiveness of private investment in telecommunications for underserved areas, however the probability of this is uncertain. This could allow network operators to more easily supply fibre to non-fibre-based rural telecommunications infrastructure, such as cabinets and wireless towers, to increase performance capabilities. This option may impact telecommunications network operators in allowing for the cheaper deployment of fibre backhaul networks by electricity network operators, which creates a competitive advantage for the latter. However, it also means that with open access requirements applied to newly installed fibre, all telecommunications network operators could have the opportunity to benefit on a non-discrimination basis and enjoy the potential flow-on benefits of this competitive advantage enjoyed by existing infrastructure owners.
New Zealand economy and society	✓✓	This option could increase the availability and quality of broadband and mobile services in areas beyond existing fibre deployment, with an overall benefit to New Zealand end users, however the probability of this is uncertain. This possible benefit is both a) indirect in that it provides greater resilience in backhaul networks and enhances the performance of broadband services in rural areas (by expanding the capacity of rural broadband networks such as wireless sites and rural cabinets); and b) direct in that it could also provide access points to connect end users to fibre-to-the-premises (where network operators consider it commercially viable to offer these). Proposed open access requirements for fibre deployed alongside utility infrastructure could increase the choice of competitive services available to rural end users. This option could ultimately make a significant contribution to the achievement of the Government's targets for connectivity of 50 Mbps broadband speeds to 99 percent of New Zealanders by 2025. However, the benefits are not guaranteed as widespread use of the right is uncertain. While the option can be viewed as an enabling proposal, if it is not used widely the cost of implementation may not be justified.

Conclusion

112 Assuming government is able to tolerate a level of uncertainty about how widely this right might be used, this approach does have the potential to improve connectivity in areas where fibre may not be available. The greatest costs of this option are to property owners whose land is passed by electricity infrastructure, a cost which is minimised if the right is legislated for but not used. The limited benefits resulting from limited take-up may not justify the implementation costs.

Option Three: Create a statutory access right to allow any network operator to deploy new aerial fibre infrastructure across private property

113 This option would create a statutory right to allow any network operator to deploy new aerial fibre infrastructure across private property, including new standalone support infrastructure to facilitate the deployment of fibre for telecommunications. Deployment of fibre would not be limited to existing infrastructure or owners of existing infrastructure.

This option would include enabling network operators to use the poles of existing asset owners to deploy fibre cables. Restrictions around the conditions of access would be the same as for Option Two but with no corresponding restriction on the type of infrastructure that could be deployed. Although all network operators would have the right to deploy fibre infrastructure regardless of whether they owned existing utility infrastructure, in the interests of promoting competition any new fibre would be required to be made available to access seekers on an open access basis, as per the conditions outlined in Option Two above.

Option Three: Impact analysis

Property owners whose land is crossed by electricity infrastructure	***	<p>This would override property rights without placing a limit on the amount or type of infrastructure deployed and would go beyond existing access regimes for other utilities. This would not necessarily minimise the enduring impact on property, as such a broad access right would enable new utility infrastructure to be built which touches the ground or requires digging activity. Without any restriction on the type or quantity of the infrastructure deployed, property owners are likely to continue to have concerns regarding potential visual impacts, health concerns, limitations on the ability to use land for farming, and impacts on the use of existing utilities.</p> <p>The transaction costs of consenting are non-existent as no engagement is required of the property owner.</p>
Infrastructure owners (electricity network operators)	-	<p>This would allow owners of existing utility infrastructure to deploy fibre alongside existing electricity lines, or to build new support infrastructure for the purpose of deploying fibre. An impact may occur in instances where a network operator deploys telecommunications cables across private property using infrastructure owned by another network operator; the new infrastructure may impede the existing asset owner's right of access to and ability to maintain its assets. There is a possibility that this option may deter electricity network operators from investing in new pole infrastructure.</p> <p>This would reduce the transaction costs of obtaining consents under the status quo, which requires negotiating easements with property owners.</p>
Telecommunications network operators	✓✓	<p>This would allow network operators to choose the most efficient means of deploying fibre across private property, whether this be leasing fibre on existing infrastructure or building new support infrastructure. It is unlikely that network operators would choose to build new support infrastructure where this was already in existence as this would increase costs, but would mean that fibre network operators did not have to secure access via the infrastructure owner and could instead own the asset themselves.</p>
New Zealand economy and society	✓	<p>This could increase the availability and quality of broadband and mobile services in areas beyond existing fibre deployment, with an overall benefit to New Zealand end users. This benefit could be both a) indirect in that it provides greater resilience in backhaul networks and enhances the performance of broadband services in rural areas (by expanding the capacity of rural broadband networks such as wireless sites and rural cabinets); and b) direct in that it could also provide for break-out points to enable end users to access a fibre-to-the-premises connection.</p> <p>However, the gain in benefit above limiting this right to the deployment of fibre alongside existing infrastructure would be marginal. For example, if network operators were to deploy aerial fibre on private property by constructing new support infrastructure, this would not have any net benefit to the end user above using existing utilities infrastructure.</p>

		Furthermore, restricting property rights in such a way would negatively impact New Zealand society by creating a lack of trust in the Crown.
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Conclusion

114 Option Three facilitates the deployment of fibre for telecommunications in areas where fibre may not be available to support other infrastructure or for end user connections. While this option has significant benefits to most affected populations, the cost of restricting property rights to such a broad extent would ultimately have a detrimental impact to New Zealand society, meaning this is not a viable option.

Option Four: Change the process for obtaining easements

115 An easement is a legal right that allows a third party to access or pass over another person’s private property. Easements provide property owners with the opportunity to negotiate access rights on their own terms. Individual easements often vary widely between operators and property owners so that terms of access, including compensation clauses, can be tailored to a standard acceptable to the property owner.

116 Under this option infrastructure owners would have to obtain an easement for each property passed by fibre deployed along existing utilities infrastructure. Infrastructure owners would only be able to deploy fibre alongside utilities infrastructure they already own, although infrastructure owners could license use of this fibre to telecommunications network operators.

117 The process of obtaining easements is costly and time-consuming for network operators; for example, one submission to the discussion document released on this issue comments that the surveying work required to negotiate a single easement can cost up to **[WITHHELD: COMMERCIAL IN CONFIDENCE]**. This option would streamline the process of obtaining easements to achieve greater consistency and reduce the cost of obtaining easements for network operators. The legislation specifying pre-requisites for obtaining easements would be amended to remove the requirement to survey every easement area. This option would also involve creating a uniform easement template which specified a single set of rights and obligations, to reduce the amount of time invested in individual negotiations.

Option Four: Impact analysis

Property owners whose land is crossed by electricity infrastructure	*	This option allows property owners the ability to object outright to the granting of an easement, and therefore places the burden of transaction upon the property owner. However, a more streamlined, uniform process which uses a template easement and eliminates requirements for every area to be surveyed is less likely to reach the agreement of all property owners passed by fibre. This option removes the process of consultation with individual property owners and therefore strips easements of their ability to create tailored rights and obligations to align with the specific requirements of property owners. Eliminating standard surveying requirements would deprive property owners of adequate information on the impact the installation would create. Concerns regarding the impact of the installation on the property owners’ views, health, use of land for farming, and enjoyment of existing utilities are therefore likely to continue for property owners, which would in turn influence them to deny access as a way of resolving these concerns.
Infrastructure owners (electricity)	✓	This option has the potential to reduce the transaction costs involved in obtaining easements, which in theory allows infrastructure owners to

network operators)		deploy fibre for telecommunications more efficiently. However, given that it is unlikely that all owners of properties proposed to be passed by fibre would grant consent, for the reasons outlined above, we consider it unlikely that infrastructure owners would achieve significant cost reductions.
Telecommunications network operators	✓	This has the potential to facilitate the ability of telecommunications operators to provide fibre or fibre-fed services in underserved areas. However, if a single property owner along the proposed fibre route refused, this would prevent the network operator from operating a contiguous fibre network to provide backhaul infrastructure to support broadband and mobile services. This would impact the network operator's ability to offer services cost-effectively in these areas.
New Zealand economy and society	✓	This has the potential to increase the availability and quality of broadband and mobile services in areas beyond existing fibre deployment and contribute to the achievement of the Government's targets for connectivity of 50 Mbps broadband speeds to 99 percent of New Zealanders by 2025. However, given our assessment of the likelihood that all property owners passed by this fibre would consent to granting easements, this option does not necessarily support a significant improvement in telecommunications infrastructure in non-urban areas.

Conclusion

118 Option Four has the potential in theory to make the deployment of fibre more efficient and in doing so improve connectivity throughout New Zealand. However, in practice this option does not guarantee access rights, and the benefit to network operators of simplifying the easements process comes at a cost to property owners which is likely to influence property owners to exert their right of refusal. Overall this option has a net cost.

Option Five: Use the Public Works Act to compulsorily acquire land

119 Under the status quo, private companies have the ability to acquire land under the Public Works Act. The Public Works Act allows Crown entities, and under certain circumstances, private utility network operators, to acquire land if they apply and are approved to become "requiring authorities". Requiring authorities must typically attempt to obtain all necessary consents before undertaking works. Once requiring authorities have exhausted the consents process and can demonstrate that they have made all reasonable efforts to obtain consent, access can be compulsorily acquired. Property owners have the right to object to this acquisition through the Environment Court.

120 Under this option electricity lines companies could become requiring authorities as a last resort, meaning that lines companies would still be required to attempt to negotiate easements for each property. It would solve for the issue whereby a single landowner withholds consent and derails an entire fibre network extension. However, it would provide only a marginal improvement on the requirement to negotiate easements under the status quo. The transaction costs of negotiating easements for both parties would persist for the majority of instances.

121 This option would ensure that land owners received adequate compensation as per the compensation standards prescribed in the Public Works Act. However, this would be at the expense of acquiring property owners' land merely because they have refused consent.

Option Five: Impact analysis

Property owners	✖✖	For instances in which property owners grant consent to the use of their
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whose land is crossed by electricity infrastructure		land to deploy fibre for telecommunications alongside existing utility infrastructure, these property owners would have the opportunity to negotiate the terms of access, including compensation, on their own terms. However, if property owners do not actively grant consent in the first instance, private companies are able to override private property rights by compulsorily acquiring land. Property owners would be compensated for the acquisition.
Infrastructure owners (electricity network operators)	✓	This option would require infrastructure owners to attempt to negotiate access to land in all cases as per the status quo, but would enable them to compulsorily acquire land in instances where negotiation was unsuccessful. This therefore improves the ability of electricity network operators to extend fibre networks as it eliminates the risk of a minority of land owners derailing deployment. However, this greater access comes with trade-offs for infrastructure owners as the process of acquiring land comes with increased transaction costs compared to the status quo, on top of the negotiations to access land. The concept of property being compulsorily acquired for fibre deployment would create reputational damage to infrastructure owners, which would likely dissuade infrastructure owners from resorting to this option. This would result in very little change from the status quo.
Telecommunications network operators	–	There would be no improvement in telecommunications operators' ability to provide telecommunications services compared to the status quo.
New Zealand economy and society	* *	Given that companies have informed MBIE that the transaction costs associated with negotiating easements currently impede the business case for the expansion of fibre networks, this option would be unlikely to result in significant expansion of networks by industry. With this in mind, this option would be unlikely to enhance industry investment in improving the availability and quality of broadband and mobile services in underserved areas. Furthermore, by enabling compulsory acquisition merely to aid fibre deployment, it ultimately overrides property rights to a degree which is unjustifiable in this instance, and therefore endangers a foundational right of New Zealand society.

Conclusion

122 This option provides a very marginal improvement compared to the status quo in terms of the level of access existing utility owners have to private property for the deployment of fibre. The greater transaction costs associated with this option would likely impede the chances of the option resulting in material benefits for New Zealand. Allowing private companies to acquire land merely because property owners have not given their consent to the use of their land for the deployment of fibre would override property rights to a degree which is not justified.

Conclusion and recommendation

Option	Property owners	Infrastructure owners	Telecommunications operators	New Zealand
1: Status quo	–	–	–	–
2: Existing utilities	* *	✓✓	✓✓	✓✓
3: Broad right	** **	–	✓✓	✓

4: Easements	*	✓	✓	✓
5: Public Works	**	✓	-	*

123 The greatest cost of Option Two is to property owners whose land is passed by electricity infrastructure, however this cost is significantly less than that experienced by property owners under Option Three. The difference in benefits between Options Two and Three is marginal, but Option Three has a higher cost in its negative impact on the rights of affected property owners. On balance, the benefits to industry and to New Zealand overall outweigh the minor impact on property owners' enjoyment of their property. If Option Two results in the implementation of a new statutory right, it is the option with the most potential to achieve the greatest benefits for the least cost if there is widespread take-up by industry. The potential extent of take-up by industry is uncertain. If there is limited take-up, the benefits to New Zealand will be limited, but the costs will be lowered accordingly. However, the cost of implementing legislation and setting up mechanisms to ensure compliance, while minor, may outweigh the benefits of creating a new right if there is limited take-up, which would point towards maintaining the status quo.

Problem Three: Ongoing access rights to installed fibre infrastructure

124 In addition to the status quo (Option One), the following options have been identified to address the provision of ongoing access to installed fibre infrastructure on private land:

- Option Two: Create a statutory provision for UFB network operators to enable an ongoing right of access to private property in instances where the consent of more than one party is required to inspect, maintain, upgrade or repair fibre lines (**preferred option**)
- Option Three: Require network operators to negotiate individual easements for each property with a fibre connection

Option One: Status quo

125 Network operators must cross private land in order to access fibre lead-ins for maintenance, upgrades and inspections. Network operators currently have a statutory right of access to private property to maintain existing copper infrastructure (installed prior to 1 April 1989), however this right does not extend to fibre.

126 Under the current access regime, access is obtained primarily through a negotiated contract or licence between the network operator and affected property owners, the terms of which are not registered with the land title. Access rights are therefore not automatically transferred when property rights are transferred.

127 Network operators may alternatively choose to obtain easements, which provide a legal access right registered with the property title which is transferred when the property changes hands. It is not common practice for fibre network operators to obtain easements, as individual easements are costly to obtain and therefore impractical for the mass connections required under the UFB programme.

128 The commercial model of the UFB initiative requires network operators to fund the cost of end user connections, with the expectation that these connections will generate a financial return over time. Because a network operator's right to access private land on an ongoing basis is not guaranteed under the status quo, this reduces the commercial incentives to invest in connecting premises where both installation and ongoing access may be difficult. Ongoing access may incur challenges in instances where the consent of multiple parties was required for the initial fibre installation. In these cases, should the property of one of those affected parties be sold and transferred to new owners, the consent to access land for the ongoing maintenance and repair of the installed fibre becomes void. This impacts on the parties to the affected property who rely on this consent for the maintenance of their connection. Network operators may lose their existing contacts for gaining consent and will not necessarily have oversight of the transfer of title, with the result that they may end up trespassing. Approximately 13 percent of all UFB installations require multiple consents, meaning that potentially 175,000 end user connections for UFB1 could be affected.

Option One: Impact analysis

Affected property owners who don't want fibre	Property owners must be consulted in the negotiation of licenses or easements, or to gain approval for each site visit, thus property rights are protected. This involves active engagement and time invested on the part of the property owner, but is an optional investment only where property owners choose to consent.
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Network operators who install fibre	This requires the network operator to continually negotiate agreements as and when property ownership is transferred in situations requiring the consent of multiple parties. This requires significant transaction costs invested in negotiating multiple agreements over time and this is multiplied on a mass scale as required by the UFB rollout. This puts the network operator's ability to access the lead-in infrastructure, which they own, at risk, which reduces the incentive to invest in connecting premises where access may be difficult. Putting the effort into connecting a premise for which the consent of multiple property owners is required may not be considered an economically sound investment if network operators must negotiate multiple agreements for all affected property owners now and into the future. If fibre connections cannot be maintained for up to 175,000 end users where multiple consents are required, this puts UFB network operators' ability to meet Crown-contracted service agreements at risk and may make the operator liable to pay penalties to the Crown.
End users who want fibre	If installed fibre connections cannot be maintained and upgraded for future use for connections requiring the ongoing consent of multiple property owners, end users cannot be guaranteed a minimum level of service.
New Zealand economy and society	If installed fibre connections cannot be maintained, over time this will impact the value of the Crown's investment in the infrastructure.

Conclusion

129 The status quo does not provide ongoing rights to access private property for the purposes of upgrading, maintaining and inspecting installed fibre infrastructure on end user premises in situations requiring the consent of multiple property owners, except where easements can be obtained.

Option Two: Create a statutory right for UFB network operators to enable an ongoing right to access private property for connections requiring multiple consents (preferred option)

130 MBIE's preferred option would see a provision made in the Telecommunications Act 2001 to provide UFB network operators with a statutory right to enter land to repair, upgrade or maintain fibre infrastructure for properties where a fibre connection has been installed, and its installation required the consent of multiple property owners.

131 The proposed right will apply only to UFB network operators. This legislative response is warranted given the scale of the deployment of this utility. For fibre deployed under private initiatives, easements remain the best mechanism to negotiate ongoing access.

132 The proposal to grant ongoing access rights would not extend to all fibre installed under the UFB initiative, but only in situations where the consent of multiple parties was required for initial installation. We do not consider there is sufficient justification for extending this right to all installed fibre. For connections where the consent of only a single property owner is required, if the property changes hands and the new owner does not elect to maintain a fibre connection, the network operator should not have the right to revisit property to maintain a connection which is not desired by the owner. This proposal resolves a discrepancy whereby telecommunications network operators can revisit private land to maintain the legacy copper network, a right which was bestowed because this legacy network was publicly funded prior to the privatisation of telecommunications networks. This proposal is therefore consistent with access rights for existing publicly-

funded telecommunications infrastructure. Network operators using the right would be required to comply with the same conditions in place for publicly-funded legacy copper networks under Section 125 of the Telecommunications Act.

133 The network operator would be responsible for remediating any damage to property arising out of the maintenance of fibre infrastructure on end user premises as per the conditions of access for existing copper lines.

134 The proposed right will need to apply to any premise connected to fibre, since the commencement of the UFB programme, where the consent of more than one party is needed to enter land to inspect, maintain, upgrade or repair it. This is because the problems with ongoing rights of access are the same irrespective of whether the initial consent for the installation was obtained through the proposed amendments to the access regime, or earlier in the UFB programme under current arrangements. However, the right of access proposed will not legitimise any network infrastructure that was installed without the appropriate permissions in the first instance. The proposed legislation would therefore only be retrospective in application to infrastructure which was installed with the correct consents required at the time, and would not legitimise, for example, past trespassing by network operators in cases where multiple consents were required but not obtained.

135 The proposed right of access should not overturn access arrangements already secured through easements. In instances where a network operator has negotiated an easement to secure its fibre network, the terms of access contained in that easement should prevail.

136 MBIE has considered whether current and prospective property owners should be made aware of this right of access such as through notification on properties' Certificate of Title. We have concluded that the costs of individually amending each Certificate of Title greatly outweigh the marginal benefit of this approach.

Option Two: Impact analysis

Affected property owners who don't want fibre	*	This approach overrides the right to consent or object for affected property owners who have acquired property after the fact of the initial installation of the fibre. Property owners currently have this right under the status quo. However, this effect on property rights is consistent with the impact on property rights of existing access rights in place to protect publicly-funded copper infrastructure installed before 1 April 1989. The physical impact on property would be minimised as network operators would be required to reinstate any affected property and/or compensate property owners. Relative to the status quo, this reduces the transaction costs of providing consent for fibre maintenance for subsequent property owners in the future, as they are not required to actively engage and provide consent.
Network operators who install fibre	✓✓	This would increase the efficiency of ongoing maintenance and reduce transaction costs as network operators would not be required to negotiate new agreements when property ownership is transferred for connections where multiple parties have an ownership stake. Network operators do not have to maintain visibility of changes in property ownership and subsequently negotiate new arrangements when this occurs, which reduces the likelihood of trespass where network operators do not have this visibility. This protects the network operator's investment and means a return can be made.
End users who want fibre	✓✓	This ensures that all installed fibre connections can be maintained and upgraded for future use to the satisfaction of end users.
New Zealand	✓✓	This enables the fibre network to be maintained to ensure its effective

economy and society		operation, thereby maximising the benefits of fibre to New Zealand.
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Conclusion

137 MBIE’s preferred option ensures that network operators can access private property for the purpose of upgrading, maintaining and inspecting installed fibre infrastructure on end user premises. The primary cost is to property owners; however we do not consider this cost outweighs the benefits, as the impact on property rights does not go beyond the impact of existing access rights for the publicly-funded copper network.

Option Three: Require network operators to negotiate individual easements for each property with a fibre connection in situations requiring multiple consents

138 This is a non-regulatory option which would require network operators to obtain easements for each property with an installed fibre connection in situations requiring multiple consents to ensure that the access right is registered with the land title and transferred when the property changes hands.

139 One variation to this approach is regulatory, and would involve amending the process for obtaining easements to make this more efficient for network operators. This could be achieved, for example, by implementing a deemed consent model for easements similar to that identified in Problem One, Option Four. This would require property owners to actively opt out according to specified grounds in the Telecommunications Act. Alternatively, the legislation specifying pre-requisites for obtaining easements would be amended to remove the requirement to survey every easement area as identified in Problem One, Option Four. This would involve creating a uniform easement template which specified a single set of rights and obligations, to reduce the amount of time invested in individual negotiations.

Option Three: Impact analysis

Affected property owners who don’t want fibre	*	As per the status quo, property owners would have to be consulted and agree to easements being secured in the first instance. However, the transaction costs of providing consent are reduced for subsequent property owners in the future, who would not be consulted on providing access. If easements were obtained by deemed consent, property owners could object on reasonable grounds. There is a slim chance that property owners would not be notified, in the event that they were absent for longer than the notice period.
Network operators who install fibre	**	The transaction costs of negotiating individual easements for properties where the consent of more than one property owner is required are significant and would be multiplied on a mass scale as required for the 13 per cent of UFB1 connections which require multiple consents (approximately 175,000 under UFB1, which would require 175,000 easements), even if this process was streamlined. While the cost is unworkable in practice, there would be some benefits of this approach for network operators. As new property owners would have a clear record of the location of the fibre infrastructure on their property they would arguably be less likely to unintentionally damage it which could have the effect of reducing costs for network operators.
End users who	*	This option is mostly neutral from the end user perspective. At the time of

want fibre		requesting a new fibre connection an end user would be asked to agree to the terms of an easement. For existing connections an end user might be approached and asked to agree to an easement for the fibre equipment on their property. Either of these eventualities would require an investment of an end user's time. This option could create a financial impact on the end user, as it is unclear whether the fees associated with transacting an easement would need to be met or shared by the end user.
New Zealand economy and society	–	This enables the fibre network to be maintained to ensure its effective operation in the long-term, thereby ensuring that New Zealanders continue to benefit from fibre connections over time. However, the number of end users unable to access these benefits due to objections from affected property owners is likely to be the same as under the status quo, unless changes were made to the easements process to make it more efficient to obtain easements via deemed consent.

Conclusion

140 While it preserves property rights, Option Three has a net cost to affected populations overall that renders the option inadvisable.

Conclusion and recommendation

Option	Affected property owners	Network operators	End users	New Zealand
1: Status quo	–	–	–	–
2: Statutory right	*	✓✓	✓✓	✓✓
3: Easements	*	**	*	–

141 We conclude that Option Two achieves the greatest benefit for the least cost. The effective implementation of the various solutions to Problems One and Two and the realisation of policy outcomes relies on access rights being made available on an ongoing basis, and for this reason the status quo is dismissed as a viable solution.

Problem Four: An effective disputes resolution scheme

142 In addition to the status quo (Option One), the following option has been identified to establish an effective disputes resolution process:

- Option Two: Create an alternative disputes resolution process modelled off that in place for the electricity and gas industries whereby network operators are required to belong to an approved disputes resolution scheme to deal with disputes arising from land access consenting processes for fibre networks (**preferred option**)

Option One: Status quo

143 There is currently no effective means of dispute resolution in the event that property owners refuse to grant consent to install fibre lead-ins. Property owners have an effective veto over fibre connections regardless of whether the grounds for objection are valid. This is not a fair outcome for end users who want fibre.

144 In the event that access is denied by a neighbour with shared rights over a property, the avenue available under the Telecommunications Act is for a network operator to apply to the District Court for an access order. A separately run dispute resolution mechanism exists for MUCs, which also relies on the District Court for resolution. This privately-run scheme has jurisdiction over the MUCs Code and is funded directly by industry through the Telecommunications Forum (TCF).

145 The process of applying to the District Court on a case-by-case basis is costly and time consuming for the network operator. We have no record of dispute cases involving land access for fibre which have been lodged with a District Court. The costs and slow pace of this scheme mean it is not efficient to support the mass market deployment of a new network which requires thousands of new connections each month.

Option One: Impact analysis

Affected property owners who don't want fibre	Property owners can only have complaints about network operator's actions on their property heard through the District Court. For many this may be an intimidating process and incurs significant transaction costs on the part of property owners, as the complex District Court process is not easily accessible and requires a significant time investment.
Network operators who install fibre	Disputing the validity of property owners' objections through the District Court process is time-consuming and costly; the high transaction costs incurred means this is not a chosen avenue for network operators. Without efficiency in the resolution of disputes, network operators cannot proceed with installations in a timely manner. There is a greater risk of reputational damage to network operators due to inefficient or failed installations.
End users who want fibre	End users can be denied a fibre connection by virtue of objections from neighbouring property owners on grounds which may not be reasonable.
New Zealand economy and society	This ultimately reduces the ability of New Zealanders to realise the benefits of UFB.

Conclusion

146 The status quo does not provide an accessible, independent, fair and effective means of dispute resolution.

Option Two: Create a legislative provision which requires network operators to belong to an approved disputes resolution scheme to deal with disputes arising from land access consenting for fibre

- 147 A provision would be created in the Telecommunications Act providing for an approved alternative disputes resolution scheme to be established. The Minister for Communications would then be empowered to appoint a person or entity to be the approved scheme provided the Minister is satisfied they meet certain criteria.
- 148 The Act would specify that fibre network operators must belong to the approved scheme as a pre-requisite for using the proposed new access rights outlined in Problem One of this RIS, to ensure disputes resolution is addressed in an equal manner nationwide regardless of network operator.
- 149 The specific form of the scheme would not be prescribed in legislation, but be detailed in a scheme code.
- 150 The costs of the scheme would be met by network operators proposing to use the amended access rights.
- 151 The scope of the disputes resolution scheme would likely include the following:
- a. Facilitating a change of date for an installation
 - b. Objections/refusals to enter land
 - c. Validity of property owners’ objections
 - d. Whether the correct process was followed
 - e. Classification of installation
 - f. Whether surface-mounted installations minimise visual impact and whether remediation is required
 - g. Quality of property reinstatement
 - h. Damage to property incurred as a result of installation
 - i. Disputes in relation to a network operator’s compliance with the MUCs Code
- 152 It would not cover:
- a. Overturning a decision to opt-out if this was previously deemed to be made on valid grounds
 - b. Disputing the right of electricity lines companies to deploy fibre for telecommunications alongside existing utilities

Option Two: Criteria

Affected property owners who don't want fibre	✓✓	Property owners would have the opportunity to raise grievances regarding all stages of the consents and installation process, in an accessible, fair and independent manner. Property owners are not financially disadvantaged should they raise a dispute. A more easily accessible scheme would likely reduce the transaction costs of registering a complaint relative to the status quo.
Network operators who install fibre	✓	This would create efficiency for network operators as it would provide a relatively quick resolution process rather than an indefinitely delayed installation. Requiring all fibre network operators to belong to the scheme would ensure that a single, efficient process was followed. Network operators would be impacted financially by the requirement for them to fund the costs of the scheme, and would incur additional transaction costs involved in engaging with the scheme, but would accrue a

		net benefit in terms of a reduction in the time and costs of resolving consenting issues outside of a formal resolution scheme.
End users who want fibre	✓✓	End users have the ability to dispute neighbouring property owners' grounds for objection in a fair, accessible and independent manner. End users are not financially disadvantaged should they raise a dispute.
New Zealand economy and society	✓✓	Individual property rights are an important foundation of New Zealand society. A scheme which supports the right of property owners to object to impacts on their property rights on valid grounds is of overall benefit to New Zealand. On the other hand, this option also supports the right of end users to enjoy and use their property by way of connecting to fibre, in a way which ensures that doing so does not infringe upon the rights of other persons.

Conclusion

153 MBIE's preferred option provides an accessible, independent, fair and effective means of dispute resolution. The benefits of Option Two outweigh the costs, the greatest of which is the financial cost borne by network operators. However we consider that this option also provides efficiency gains for network operators beyond the status quo.

Conclusion and recommendation

Option	Affected property owners	Network operators	End users	New Zealand
1: Status quo	–	–	–	–
2: Approved scheme	✓✓	✓	✓✓	✓✓

154 Option Two is preferred as it has a net benefit overall and incurs minor costs. Option Two balances the costs to network operators with the benefits to that same population, while the status quo has negative impacts for all affected populations and achieves no evident benefit.

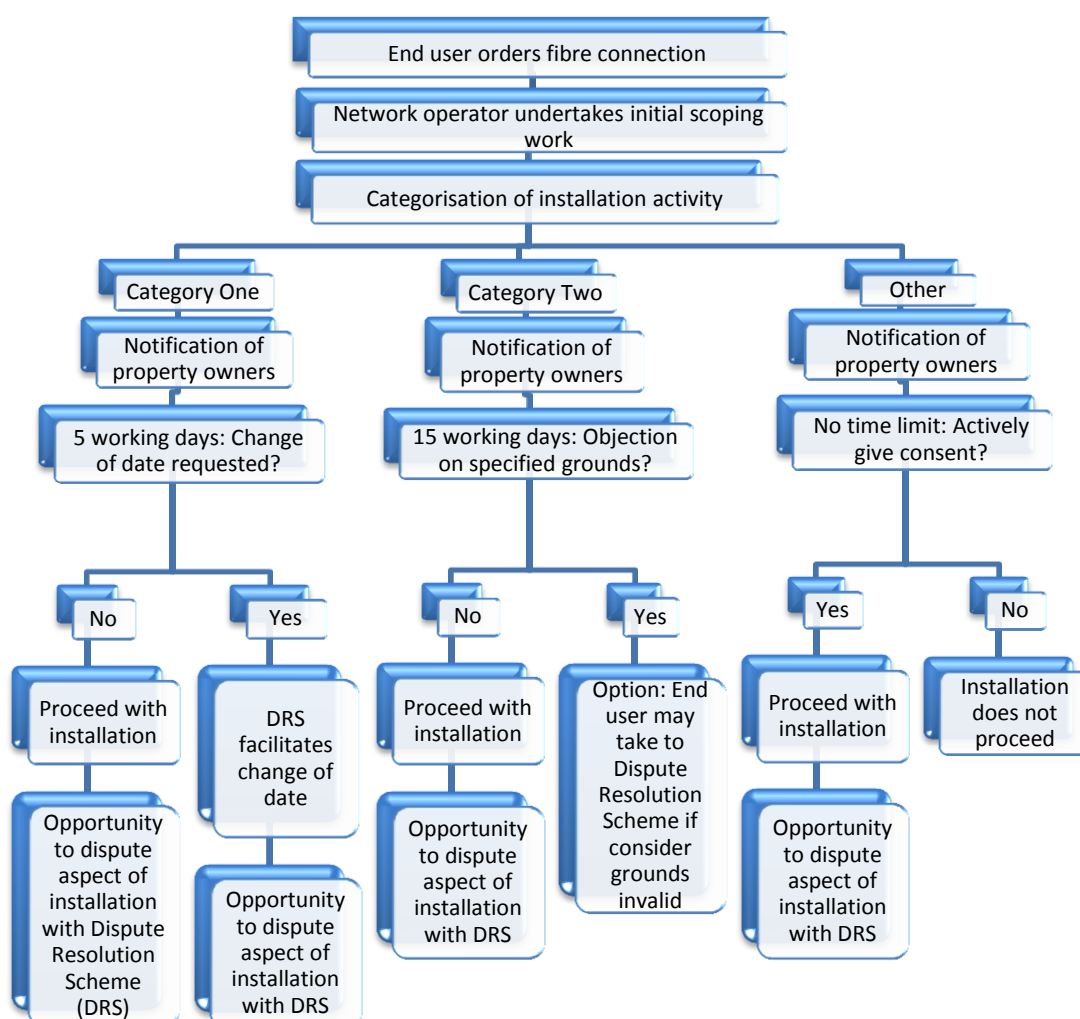
Consultation

- 155 MBIE has formally consulted on the issues and most of the options raised in this Regulatory Impact Statement, in a public discussion document, *Land Access for Telecommunications*, released in June 2015. The document asked for comment on the current and proposed legal framework governing land access in situations requiring multiple consents, whether electricity lines companies should have rights to install fibre for telecommunications purposes alongside existing lines, whether the access rights held by network operators to maintain copper lines should be extended to fibre, and how a disputes resolution scheme would operate most effectively.
- 156 MBIE received 54 submissions from a range of stakeholders, including the telecommunications and electricity industry, members of the public, local authorities, iwi and legal and technical specialists. The majority supported MBIE's view that the status quo impedes the realisation of UFB policy objectives, and supported the proposed changes.
- 157 With regard to Problem One, the majority of network operators believe the existing land access regime, including that for MUCs, does not facilitate the mass market rollout of UFB. End users also commented that the current system does not result in a fair outcome. The majority of commentators on the proposals supported a mixed model approach combining the low impact facilities and deemed consent models. A minority of submitters did not agree with the proposals, with some suggesting that telecommunications are an essential utility and access rights could go further, and others suggesting that easements achieve a more appropriate balance of rights.
- 158 The majority of submitters supported the proposals outlined for Problem Two, including open access requirements to support competition. Those who did not support it believed that easements are sufficient to secure this right, or held concerns about visual impacts or the impacts on existing electricity infrastructure. We consider that concerns regarding existing infrastructure can be mitigated by providing the infrastructure owners with the choice of whether or not to deploy fibre.
- 159 The majority of submitters supported the proposed statutory right to be granted in respect of Problem Three.
- 160 The majority of submitters supported the proposal to establish a disputes resolution scheme. This included most telecommunications network operators who submitted, who would bear the greatest costs of the proposal. These submissions have informed the list of grounds for objection and the proposed scope of the dispute resolution scheme.
- 161 MBIE is satisfied that potentially affected parties have had a reasonable opportunity to provide comment on the issues and proposed options. MBIE has considered the issues raised when assessing the costs and benefits of each of the options outlined above.

Implementation

- 162 The proposed legislative changes will be considered by Cabinet. Assuming MBIE's preferred options are chosen, a bill amending the Telecommunications Act 2001 and Electricity Act 1992 will be drafted and introduced.
- 163 Legislative provisions specifying the proposed options should be sufficient to enforce compliance. Existing penalties for breaching the Telecommunications Act and Electricity Act would apply.

164 The following diagram demonstrates how MBIE’s preferred option (Option Eight) for addressing Problem One would work in practice:



165 The above process and the amendments to the access rights regime in general would be communicated to industry through the Ministry’s relationships with both Crown Fibre Holdings, the Crown company which oversees UFB build progress, and the Telecommunications Forum (TCF), which represents telecommunications providers. Members of the TCF include retail service providers, who have relationships with both network operators and end users and therefore serve as an important interface for communication. Retail service providers would be expected to communicate the process to end users upon the initial request for connection, and this would be communicated to property owners during the notification stage. Initial notification would outline the ability of property owners to raise grievances via the approved dispute resolution scheme.

166 In regard to Problem Two, should Option Two proceed, MBIE will consult with the Commerce Commission to specify the detail of open access obligations and how these obligations will be enforced. One option is to require network operators who propose to use this right to register with the Commerce Commission for monitoring purposes. Another, lighter touch option would be a reactive approach which would see a complaints system put in place and overseen by the Commerce Commission. Amended access rights for the deployment of fibre alongside existing utilities should be communicated to property owners whose property will be passed by newly installed fibre. We expect that

the infrastructure owner would notify property owners of the intended activity at a reasonable timeframe before this activity is carried out.

Monitoring, evaluation and review

- 167 We propose to monitor, evaluate and review the policies by collecting information through regular reporting requirements. UFB network operators are contractually obliged to provide Crown Fibre Holdings with reports of their achievement of agreed performance metrics for provisioning, which cover connection processes and times. As part of this monthly reporting, network operators would continue to provide data on connection times and time to obtain consents. This monitoring mechanism will provide MBIE with sufficient information to evaluate and review the effectiveness of the policies.
- 168 Although UFB network operators contracted by the Crown are not the sole companies deploying fibre for telecommunications, in the context of the mass market rollout of fibre under the UFB programme, information provided by UFB network operators will be on a sufficient scale for effective monitoring and evaluation.
- 169 The legislative provisions which provide for an approved disputes resolution scheme will enable MBIE to monitor the impact of the proposed access rights amendments on affected property owners. The legislation would require the disputes resolution scheme to report on its actions and be reviewed every five years. The volume, form and outcome of the disputes raised by and involving affected parties with an ownership stake would provide an indication of the impact of these policies.
- 170 Once the policies have come into force, MBIE will begin to provide qualitative and quantitative reports on these policies, including performance metrics data and anecdotal evidence or estimates from industry of the impact of the policies, to the Minister for Communications.