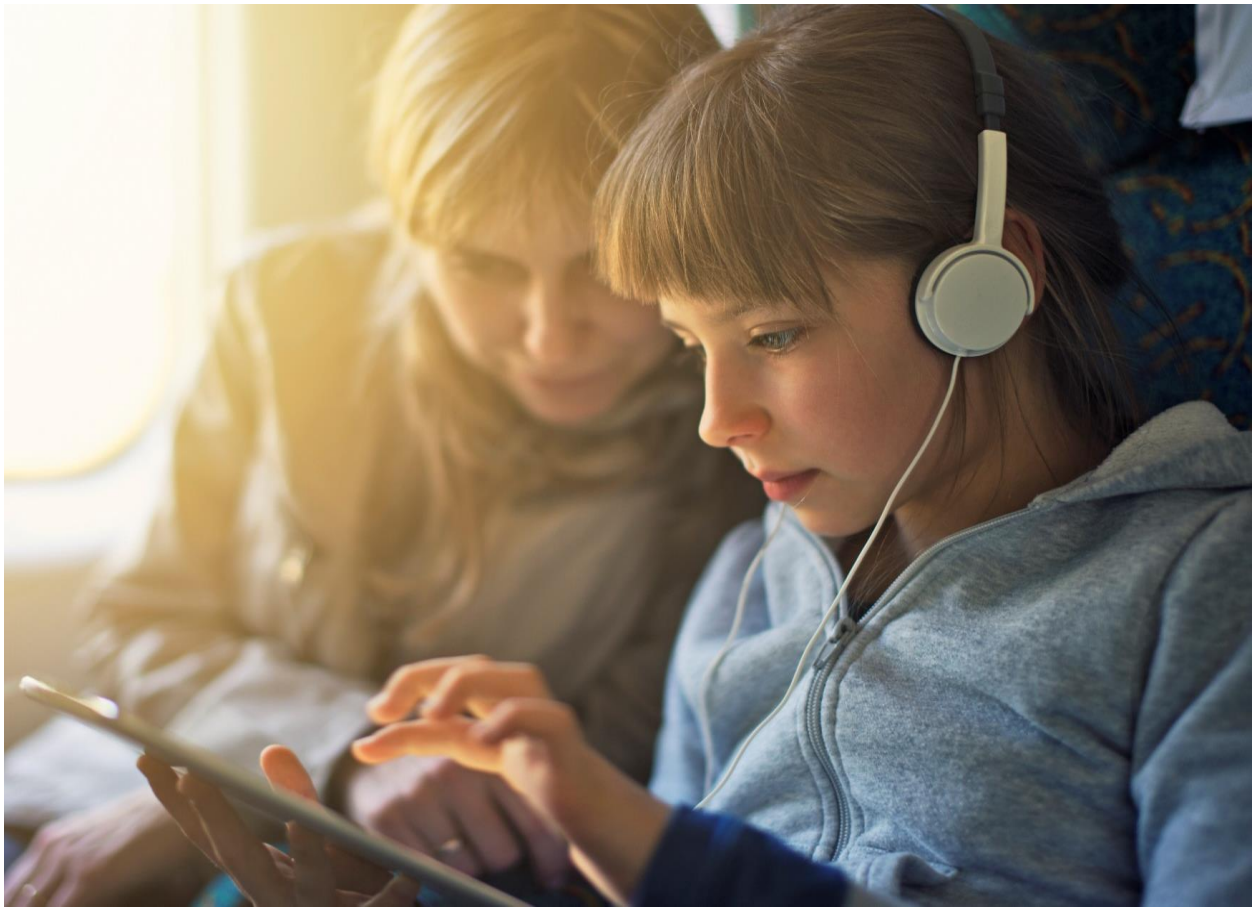


Submission on the Commerce Commission "Study of mobile telecommunications markets in New Zealand" Issues Paper

26 October 2018



EXECUTIVE SUMMARY

- 1 The Commerce Commission's "Study of mobile telecommunications markets in New Zealand" Issues Paper (**Issues Paper**) is a timely opportunity to increase the understanding and transparency in a segment of the broader telecommunications sector that has had little regulatory attention in recent years.
- 2 The Commission's Issues Paper raises a number of important questions, which go to the heart of understanding what policy and regulatory settings are needed to ensure mobile telecommunications markets deliver the best outcomes for all New Zealanders.
- 3 As technologies evolve, new opportunities and potential new business models will arise. An issue for the Commission to consider is whether current market structures will support such innovation or whether changes are needed so that New Zealand can benefit from future innovation.
- 4 New Zealand has been widely recognised as an ambitious and bold world leader in telecommunications. Here we have implemented some world-leading changes, including structural separation of Telecom, ultra-fast broadband (UFB) and the rural broadband initiative (RBI). These have arisen through the innovative implementation of the structurally separated open access fixed line model based on infrastructure sharing. As a result of this shift we have seen greater competition in areas where different types of service providers can get fair access to network capacity, thereby supporting the objectives of a thriving market. This has also been accompanied by an increase in transparency and quality of service for consumers.
- 5 In order to get the initial thinking in the mobile markets underway, we think there are five key areas the Commission could investigate further:
 - 5.1 What is preventing the development of competition for wholesale access to mobile networks;
 - 5.2 How to ensure spectrum allocation supports innovation – this could include setting aside some spectrum for future use, using a "public park" approach, factoring in rural and regional impacts, introducing "use it or lose it" provisions and coverage obligations. Although not the direct responsibility of the Commission, it could make recommendations to the Government on this;
 - 5.3 How to consider efficient levels of infrastructure sharing and avoid anti-competitive outcomes;
 - 5.4 How to increase transparency, so that consumers can make informed choices on which product best serves their needs; and
 - 5.5 Whether the prices for Mobile Termination Access Services (**MTAS**) set in 2014 remain appropriate given the potential for above cost termination rates to distort markets for mobile retail services and structurally disadvantage fixed-line only RSPs.

INTRODUCTION

- 6 Thank you for the opportunity to comment on the Commerce Commission Issues Paper “Study of mobile telecommunications markets in New Zealand,” released on 31 August 2018.
- 7 New Zealand is undergoing a digital transformation, driven by high speed connectivity. The Commission’s Issues Paper raises a number of important questions about the health and transparency of mobile markets and is a good opportunity to reflect on whether we have the right policy and regulatory settings to ensure consumers get the most out of this digital transformation.
- 8 Both fixed and next generation wireless connectivity, including the move to 5G, have an important role to play in this digital transformation. We are now more than 70% through our UFB commitment of reaching over a million kiwis and are achieving a near 45% uptake of our fibre service. By 2022, we will have fibre to the premises available to 87% of New Zealanders. Our network is allowing competition to flourish with over 90 retailers and is supporting all three mobile networks with high speed connectivity.
- 9 At this stage, no-one knows for certain how 5G will evolve. In the short-term, it’s likely that existing mobile network operators (**MNOs**) will focus on enhanced mobile broadband services and enhanced fixed wireless services in urban areas. Under the right policy settings, 5G could also open up possibilities for alternative players to innovate by bringing new mobile services to market in the massive machine-type communication and ultra-reliable low-latency communications areas. Use cases include private 5G networks in universities, factories, farms, rural areas, and private 5G networks developed by specific areas and local authorities to enable smart cities.
- 10 The challenge for policy-makers and regulators is to balance the desire to support the timely deployment of 5G services with ensuring they do not lock out future innovation by new players or business models. We encourage the Commission to think about wholesale access, infrastructure sharing and spectrum allocation approaches that will enable new 5G players to participate, and new innovative mobile services to emerge.
- 11 We also encourage the Commission to consider mobile policy and regulatory settings within the wider telecommunications framework. Including ensuring any proposed treatments are consistent with existing and future regulatory settings across all telecommunications markets. Transparency across the entire telecommunications market is key to enabling consumers to choose the products best suited to their needs.

Entry and expansion conditions

- 12 In New Zealand, the market for retail mobile services is concentrated in the hands of the three existing MNOs. There are six commercial MVNOs holding less than 1% of that market. There are over 90 RSPs in the retail broadband market. The two largest MNOs are also the two strongest RSPs and account for 80% of connections in the retail broadband market.

- 13 It is unclear why MVNO market share is low when compared with other markets. We think the Commission could carefully consider what is preventing the expansion of wholesale mobile services.
- 14 There is a potential that inadequate wholesale access could affect the ability of fixed-line RSPs to grow. Non-MNO RSPs may find it challenging to attract and retain customers without bundles of fixed and mobile services.
- 15 Over time, it may become more difficult for an RSP to compete if they are not able to also offer competitively priced mobile services as part of a product bundle. Increasingly, customers expect their services to operate seamlessly across fixed and mobile networks. We expect this trend to continue and to accelerate.
- 16 The convergence of fixed and mobile services, the shift towards online content and the desire by consumers to access content wherever they are (especially data hungry applications such as video), may put non-MNO RSPs at an increasing competitive disadvantage compared to MNOs and lead to increased concentration in markets for retail telecommunications services. We think this is an area that should be of interest to the Commission.
- 17 We also consider that transparency for consumers, in particular recognition of price differences for data on mobile versus unlimited fixed data plans, will remain important. We discuss this issue further below.

Future 5G models

- 18 5G use cases are expected to evolve alongside the development of massive machine-type communication and ultra-reliable low-latency communications areas. It's expected 5G will over time open up possibilities for alternative players with business models that are significantly different from those of existing MNOs, such as individual vertical industries, local government and other regional players.
- 19 The regulatory approach to 5G will need to be sufficiently flexible to support these new types of operator to enter the mobile market when they are ready. The lack of MVNOs in the retail mobile market today raises a question about whether these new types of operator will be able to negotiate wholesale access on terms sufficient to allow potential alternative use cases to flourish. This further supports the rationale for understanding barriers to the growth of wholesale markets. In addition other regulatory options could be considered, including designing a more flexible spectrum allocation approach. For example:
 - 19.1 Setting aside some 5G spectrum for flexible access – this could be reserving blocks of spectrum (licensed, unlicensed and shared) for future use or for a particular type of use or use in a specific location.
 - 19.2 Developing a “public park” approach to spectrum/open access – allocating (more) spectrum to wholesale only businesses, or to operators with an open-access obligation.
 - 19.3 Factoring in rural and regional impacts in spectrum allocation policy and developing alternative payment models on reserved spectrum that factor in cost-effective use.

- 19.4 “Use it or lose it” provisions on underutilised nationally held spectrum – spectrum held nationally and for long-term periods may have led to inefficient use and underutilisation of spectrum in certain geographic areas (mainly rural), and in certain bands.
- 19.5 Coverage obligations – as a way of ensuring that the operators granted use of this limited resource do so in a way that benefits everyone, rather than cherry picking profitable areas. Coverage obligations are generally expressed as service availability to a percentage of the population and can be used to ensure rural coverage.
- 20 The current split of regulatory roles between MBIE’s Radio Spectrum Management (who is in charge of spectrum allocation) and the Commerce Commission (who assesses the competitiveness of and regulates telecommunications markets), means the Commission does not have direct control over spectrum policy settings. However, we expect the Government’s decisions on spectrum policy will be informed by relevant recommendations from the Commission.
- 21 Another regulatory option is to consider open access infrastructure – which has proven to be a success in the fixed line market, where we have a large number of RSPs who are able to compete on a level playing field. We note that there are moves to increase the sharing of infrastructure by MNOs to improve rural coverage, but it is unclear what approach is being taken to ensure access to shared infrastructure for non-MNOs. We think there is a role for efficient levels of infrastructure sharing in the mobile market as long as it is balanced by appropriate structures and transparency to ensure competition can flourish.

Improving transparency

- 22 As a general principle, we don’t think reporting and monitoring of network quality is required in markets where infrastructure competition exists. However, where mobile providers are marketing fixed wireless broadband services as a substitute for fixed broadband services, these fixed wireless services should be subject to requirements that allows consumers to make informed choices about which product best serves their needs.
- 23 The quality of services provided by Chorus is currently governed by agreements with the Crown (fibre services) or regulation (copper services). Under the new regulatory framework the quality of fibre services will be regulated through the building blocks model and the quality of copper services will continue to be regulated where fibre isn’t available.
- 24 These quality commitments provide for certainty, transparency and oversight of the key aspects of service performance that matter to end users. Consumers can be satisfied that their broadband service is supported by network inputs with clear standards around matters such as reliability and traffic performance (congestion). This is not the case where a broadband service is supported by a mobile network.
- 25 Currently fixed broadband services are also subject to the TCF Code for Broadband Product Disclosure Information (the **Code**). The Code only applies to fixed line broadband products, and while the TCF notes in the preamble to the Code, that it intends to expand it to include fixed wireless and mobile mass market residential

Broadband Plans in the future, there is no specific timeline agreed. Bringing all broadband products within the requirements of this Code could improve the transparency and consistency of consumer offers.

Mobile Termination Access Services

- 26 The Commission's paper notes that Mobile Termination Access Services (**MTAS**) have been retained as a designated service under Schedule 1 of the Telecommunications Act. Above cost MTAS prices can distort downstream competition. It is for this reason that termination rates are set on the basis of forward looking cost in the vast majority of comparable markets.
- 27 As the significant growth in data accounts for a greater proportion of traffic carried on mobile networks the cost of terminating calls is decreasing. As the Commission noted in its 2015 Market Monitoring Report, the ACCC set mobile termination rates at 1.7 Australian cents per minute (**cpm**) in 2015. BEREC estimates the weighted average termination rate in EU member states at 0.89 eurocents per minute.¹ This may suggest that the existing termination rates of 3.56 NZ cpm are significantly above cost.
- 28 In addition to any distortions caused in retail markets for mobile services, termination rates that are significantly above cost can distort competition in retail markets for fixed-line services. This is because the high rates cause a transfer of wealth from fixed-line only RSPs to those RSPs who operate mobile networks. It may therefore represent a structural barrier to the growth of fixed line only RSPs.

Backhaul

- 29 The Commission observes that backhaul availability is important for supporting the growth of mobile networks, particularly as network capacity and data demand grows.
- 30 The Commission is currently undertaking a separate backhaul market study, and we look forward to continuing to engage in that process as it proceeds.

¹ Body of European Regulators for Electronic Communications (BEREC), *Termination rates at European Level January 2018*, p2.

APPENDIX

Consolidated Chorus answers to questions asked in the Issues Paper

Please note not all questions have been answered

Question	Commission Question	Chorus' position
BUNDLING OF MOBILES SERVICES		
Q4	What are the constraints on non MNO fixed line broadband providers' ability to compete by supplying their own bundles, such as bundling of fixed line broadband and electricity by Trustpower and Vocus?	As we discuss in "Entry and expansion conditions" above, the inability of non-MNOs to match bundled offers likely hinders RSPs' ability to compete. We think that the trend towards fixed mobile convergence will see this competitive constraint become more problematic in the future.
PRICING		
Q5	What are the reasons for high retail prices for higher volume bundles of mobile services in New Zealand compared to other countries?	<p>It is not clear why higher volume mobile bundles are priced higher in New Zealand compared to other countries.</p> <p>The significant pricing differences we see today for mobile consumers as compared to fixed-wireless consumers (utilising the same current generation mobile capacity), suggests some cross-subsidisation occurs between fixed wireless and mobile consumers. This may suggest that there is not sufficient retail competition for mobile data services.</p>
USAGE TRENDS		
Q7	How are mobile data usage trends expected to evolve in the next few years, and how might that affect suppliers of mobile services?	Mobile data consumption will likely continue to increase, however this is dependent upon the pricing. Demand could easily be constrained by price if high data cap plans remain expensive.
INVESTMENT		
Q9	Do you agree that we have identified the relevant measures of mobile service quality?	As we discuss in "Improving transparency" above, as general principle, we don't think reporting and monitoring of network quality is required in markets where infrastructure competition exists. However, where mobile providers are marketing fixed wireless broadband services as a substitute for fixed broadband services, these fixed wireless services should be subject to requirements that

		allow consumers to make informed choices about which product best serves their needs.
MVNO BASED ENTRY		
Q12	Do you agree we have described the key factors relevant to wholesale competition both currently and into the immediate future? Are there any other factors likely to influence wholesale competition for mobile services, going forward?	It is still unclear what the technological changes will look like as there are still many unknowns regarding 5G deployment and uses. However, it is expected that consumers will increasingly expect to have connectivity and access online content anywhere, from multiple devices, and this will drive further convergence of fixed and mobile services. As discussed in "Entry and expansion conditions" above, these trends are likely to put non-MNOs at an increasing competitive disadvantage to MNOs.
Q13	Please describe how you see wholesale competition evolving over the next 2-5 years.	On the current policy and regulatory settings, we don't anticipate significant changes in wholesale competition over the next 2-5 years. There appears to be little incentive for any of the MNOs to make major changes.
Q14	Why do MVNOs account for a small share of subscribers and revenue in New Zealand?	It is not clear why this is the case. A starting point for making an assessment might be to consider whether the terms of MVNO agreements are sufficient to allow takers of such services to compete effectively in retail markets. The Commission may wish to consider what terms have been made available to firms seeking MVNO agreements and benchmarking those against what can be obtained in jurisdictions with more successful wholesale markets.
Q15	How have the competitive conditions changed in the wholesale mobile services market? What impact has 2degrees had in the wholesale market in recent years?	We are not aware of any significant impact arising from 2degrees on the wholesale market as the only apparent example is Warehouse Mobile.
Q17	Are MVNOs able to negotiate competitive wholesale access arrangements with MNOs? What are the key constraints facing MVNOs in New Zealand, and how do they differ from other countries?	As discussed in "Entry and Expansion Conditions" above, the lack of MVNOs suggests there may be difficulties in negotiating competitive wholesale access arrangements with MNOs.

Q20	What are the risks that fixed line only broadband providers could be foreclosed by providers of mobile and fixed line broadband bundles and what are the potential consequences of that for competition?	As discussed in our answer to Question 12 and “Entry and expansion conditions” above, we expect the trend towards fixed-mobile convergence will make it more difficult for non-MNOs to compete with MNOs.
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MNO BASED ENTRY

Q21	To what extent, and in what ways, do the current spectrum holdings constrain competition in the supply of retail or wholesale mobile services in New Zealand?	As discussed in “Future 5G models” above, 5G use cases and business models are still evolving. The regulatory approach to 5G will need to be sufficiently flexible to support new types of operators with different business models to enter the mobile market when they are ready. We have suggested a more flexible spectrum allocation approach to support this. For example, reserving some spectrum for future use, setting aside some spectrum for open access, coverage obligations, and “use it or lose it” conditions.
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MOBILE INTERCONNECTION SERVICES

Q26	Does the current regulated MTAS, including the pricing principles, remain appropriate?	<p>Mobile termination rates were set in 2011 for five years and have not since been reviewed. International evidence suggests the cost of mobile termination is decreasing. This suggests current regulated rates should be reviewed.</p> <p>If mobile termination rates are too high there is a risk that this will distort revenue flows in favour of firms that offer fixed and mobile calling and those that only offer fixed line calling.</p>
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INFRASTRUCTURE SHARING

Q33	How important is infrastructure sharing likely to be to facilitate the widespread and timely deployment of 5G services—urban and rural—in New Zealand by improving the economics of a 5G deployment?	<p>As discussed in “Future 5G models” above, open access infrastructure is one of the regulatory options that could be considered, as long as it is balanced by appropriate structures and transparency to ensure competition can flourish.</p> <p>The success of infrastructure sharing will depend on how technology and commercial offerings develop in the New Zealand market. For example, if there is significant densification of the network, this may be better achieved through some form of infrastructure sharing.</p>
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<p>Q34</p>	<p>If 5G fixed wireless becomes a substantial substitute for fibre to the home, what is the right approach to setting the price of backhaul from mobile towers and from the additional cell sites?</p>	<p>The right price for backhaul to mobile towers should be established by the market where there is competing infrastructure or the prospect of the deployment competing infrastructure. We understand that the Commission’s telecommunications backhaul services study is seeking to understand where there is competition or the prospect of competition for the provision of backhaul services. In the event there was no competition and the Commission sought to regulate, it would need to initiate a Schedule 3 investigation and as part of that consider the appropriate pricing methodology.</p> <p>In the event that a Fibre Fixed-Line Access Service regulated under the proposed new Part 6 of the Telecommunications Act is used, any pricing would have to be consistent with the design and the requirements of the new regulatory framework. Following the passage of the Telecommunications (New Regulatory Framework) Amendment Bill, the Commission will commence several years of work to implement the new regime.</p> <p>It is not clear in either case that the degree of uptake of 5G based fixed wireless services would relate to the pricing of backhaul or transport services.</p>
<p>Q36</p>	<p>What aspects of infrastructure sharing are most likely to facilitate the entry of a fourth MNO, or expansion of existing MNOs once 5G has been rolled out?</p>	<p>As discussed in the “Future 5G models” section above, infrastructure sharing is one of the options available for potential new entry or stimulation of further competition.</p> <p>We think the focus should not necessarily be on facilitating a fourth MNO. With the right policy and regulatory settings, 5G will enable alternative players with different business models to an MNO. There are a number of regulatory options the Commission could investigate further, such as improving wholesale access, open access infrastructure, shared infrastructure, and a more flexible spectrum allocation approach.</p>
<p>Q37</p>	<p>How and in what ways could the current regulation of mobile services deter some 5G investment?</p>	<p>As discussed in “Future 5G models” above, keeping the status quo will simply reinforce existing competitive dynamics. To encourage new and innovative 5G uses, the policy and regulatory settings need to support entry by alternative players. There are a number of regulatory options</p>

		the Commission could investigate further, such as improving wholesale access, open access infrastructure, shared infrastructure and a more flexible spectrum allocation approach.
Q38	How well do regulated mobile services as currently framed in Schedule 1, both specified and designated (and associated STDs for designated services), support (a) efficient investment in 5G infrastructure (b) efficient sharing of 5G infrastructure? Are there any ways in which this could be improved?	As discussed in “Improving Transparency” above, where mobile providers are marketing fixed wireless broadband services as a substitute for fixed broadband services, we think there is scope to improve transparency and enable consumers to make informed choices about which product best serves their needs.
Q39	What are the likely incentives for infrastructure owners to expand sharing arrangements and to provide access to their network infrastructure assets to third parties?	Infrastructure owners will most likely expand sharing arrangements when they see an economic case to do so. This may be driven by the opportunity to reduce cost and increase the efficiency and speed of network rollout. Alternatively it may be driven by an opportunity to gain new revenue. Their incentives to provide access to third parties are likely to be limited.
Q40	What are your views on the viability of three or more separate 5G networks, and what alternative models do you consider as potentially viable?	As networks become increasingly densified, the economics and community impact of maintaining three separate 5G networks will become increasingly problematic. This will particularly be the case when a move to mmWave, small cell networks occurs. An alternative model could be sharing parts of the networks in areas where that makes sense, either directly between the MNO’s, or facilitated by a third party.
NETWORK SLICING		
Q42	Is network slicing likely to increase the presence of non-traditional providers such as Apple and Google in mobile markets, and are these providers likely to be able to negotiate competitive wholesale access arrangements with MNOs?	Network slicing is just one type of technology. Whether or not another non-traditional provider enters the market will depend on the commercial details of any relevant business case. This will be driven by the dynamics of the wholesale market.

Q43	<p>Given the non-traditional providers' economies of scale what are the likely benefits and harms that may materialise for both existing MNOs and consumers in New Zealand should a non-traditional provider enter the market?</p>	<p>Non-traditional players have been around for a long time. To date their role in New Zealand has been to provide OTT services. Arguably, MNOs have suffered from a loss of traditional calling and texting traffic, although, they have deployed a successful strategy of including bundles of calling and texts with their data products which has secured some revenues regardless of OTT impacts. MNOs have also benefited from increased data consumption which can also be linked to OTT impacts.</p> <p>A non-traditional player who gains access to spectrum in New Zealand (either directly or via a wholesale network slicing arrangement), would likely leverage their economies of scale to deploy competitive products that will challenge traditional operators. Whether this is damaging to MNOs will depend upon their ability to respond to the competitive threat.</p> <p>We would anticipate that the competition brought about by non-traditional providers entering the market would result in product innovation and price competition that would benefit consumers.</p>
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SPECTRUM ISSUES

Q45	<p>What restrictions, if any, ought to be placed on the forthcoming 5G spectrum allocation to best facilitate competition in 5G services?</p>	<p>As discussed in "Future 5G models" above, we recommend taking a long term view on the allocation and restrictions for this scarce resource. We suggest reserving some spectrum for future use to allow for new use cases to emerge with time and enable alternative players to provide innovative offerings when they are ready.</p>
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