



COVERSHEET

Minister	Hon Kris Faafoi	Portfolio	Broadcasting, Communications and Digital Media
Title of Cabinet paper	Early Access to 5G radio spectrum	Date to be published	20 December 2019

List of documents that have been proactively released

Date	Title	Author
9 December 2019	Cabinet paper: Early Access to 5G Radio Spectrum	Office of the Minister of Broadcasting, Communications and Digital Media
9 December 2019	Cabinet Economic Development Committee Minute of Decision: Early Access to 5G Radio Spectrum	Cabinet Office

Information redacted

YES

Any information redacted in this document is redacted in accordance with MBIE's policy on Proactive Release and is labelled with the reason for redaction. This may include information that would be redacted if this information was requested under Official Information Act 1982. Where this is the case, the reasons for withholding information are listed below. Where information has been withheld, no public interest has been identified that would outweigh the reasons for withholding it.

Some information has been withheld for the reasons of:

- Confidentiality
- Commercial information
- Negotiations
- Confidential advice to Government

In Confidence

Office of the Minister of Broadcasting, Communications and Digital Media
Chair, Cabinet Economic Development Committee

Early Access to 5G Radio Spectrum

Proposal

1. This paper seeks Cabinet approval to allocate short-term rights in the 3.5 gigahertz (**GHz**) band to enable early access to 5G spectrum. It also provides an update on the progress of engagement with Māori claimant groups with respect to radio spectrum.

Executive Summary

2. The Government and the telecommunications industry is preparing for widespread deployment of fifth-generation cellular mobile technology (**5G**). This requires mobile network operators (**MNOs**) to have access to sufficient radio spectrum to build 5G mobile networks.
3. 5G is the next evolution of mobile wireless communications technology, promising improved connectivity, greater network speeds and bandwidth, very low latency and enabling mass connectivity. Globally, advanced economies are moving to make spectrum available for 5G network rollout and view the technology as more than incremental improvement in mobile connectivity. Rather, 5G is seen as a platform that will enable the next wave of productivity and innovation across different sectors of an economy.
4. It is important that New Zealand keeps pace with the rest of the world on our 5G deployment. The successful adoption of 5G technology is a critical enabling infrastructure that will support the objectives laid out in the Government's Economic Plan, Industry Strategy and Research, Science and Innovation Strategy.
5. Cabinet has previously decided that the radio spectrum frequency range 3.41-3.80 GHz (**the 3.5 GHz band**) will be allocated for use by 5G cellular mobile services, with the new rights starting when existing rights in the 3.5 GHz band expire in November 2022.
6. About one half of the 3.5 GHz band is currently unallocated. It had been expected that the MNOs would make commercial arrangements with existing rights owners if they wanted access to this band before November 2022. There is insufficient spectrum available in MNOs' existing rights for all MNOs to deploy 5G networks prior to this date.
7. However, some MNOs have had difficulty reaching commercial agreements with existing rights holders and have asked the Government to provide access to the spectrum that is currently unallocated.

8. I am now seeking Cabinet's agreement to allocate short-term rights to the vacant upper-portion of the 3.5 GHz band between 3.59 GHz and 3.80 GHz. Of this 210 megahertz (**MHz**), 160 MHz will be allocated for national 5G networks.
9. Other high-level decisions I am seeking from Cabinet in this paper include that:
 - 9.1. these national rights are allocated as management rights for a term beginning mid-2020 until 31 October 2022 (**'early access'**);
 - 9.2. these national rights are allocated via auction, the standard method for allocating new cellular mobile spectrum rights in New Zealand and overseas;
 - 9.3. a limit is set on the amount of spectrum allocated to any one network operator (spectrum caps) in the auction to promote competition;
 - 9.4. a condition is imposed that successful bidders will be required to return to the Crown existing management rights they hold elsewhere in the 3.5 GHz band to maximise the efficient use of this important spectrum; and
 - 9.5. minimum conditions of use are required of successful bidders, reflecting the short duration of these rights and no guarantee of access to spectrum long term.
10. There are further detailed allocation design questions that will need decisions. I am seeking Cabinet's authorisation for me to make those decisions as the Minister of Broadcasting, Communications and Digital Media without further referral to Cabinet.
11. The amount of spectrum available in the 3.5 GHz band for early access is expected to adequately accommodate the needs of industry, as well as provide an opportunity for Māori interests in spectrum to be addressed.

Māori interests in spectrum

12. Engagement between the Crown and Māori on the issue of radio spectrum in recent decades has been characterised by fundamental disagreement on the nature and extent of Māori interests in spectrum. This has resulted in spectrum allocation being an unresolved issue in the Māori-Crown relationship.
13. Government's preparations for 5G spectrum allocations have sparked renewed focus on Māori interests in spectrum. A Māori Spectrum Working Group (**MSWG**) has been formed representing key Māori stakeholders, including Treaty of Waitangi claimants. This group is working jointly with Ministers and officials to explore shared Māori-Crown interests in spectrum.
14. Māori are seeking meaningful participation in spectrum-related activities and the telecommunications sector as a key part of an overall strategy for greater Māori participation in, and benefit from, a digital environment. Improving connectivity, particularly for rural communities, will be a significant part of this strategy.

15. The Government is committed to growing and sharing New Zealand's prosperity more fairly by supporting Māori to lift economic, social, environmental and cultural wellbeing. The Crown recognises that Māori have an interest in spectrum, relating to the role that telecommunications play in economic development.
16. The MSWG has developed a package jointly with Ministers and officials that is based on the Government's intention to allocate short-term rights for 5G spectrum. The short-term allocation is proposed to act as a stepping-stone towards Māori and the Crown reaching an enduring arrangement recognising Māori interests in spectrum. I expect that this enduring arrangement will be established prior to allocation of the long-term rights for spectrum in the 3.5 GHz band from 2022.
17. The package includes an allocation of a proportion of spectrum to Māori, and funding for a programme of work to be led by Māori to grow the capability, both technical and commercial, that will accelerate Māori participation in spectrum-related activities and the telecommunications sector. It also includes a programme of Māori-led engagement to establish widespread representation and participation of Māori in spectrum-related activities and benefits.
18. I am seeking your support for this package; specifically, your agreement that 50 MHz of spectrum in the 3.5 GHz band is allocated directly to Māori, at no cost, for the period until 31 October 2022. Confidential advice to Government
19. Negotiations
20. Ministers of Māori Crown Relations: Te Arawhiti; Finance; Māori Development; and Broadcasting, Communications and Digital Media and officials will continue to work closely with the MSWG as the proposed package is further developed and then delivered.
21. Ministers and officials will also progress work on an enduring solution to address Māori interests in spectrum with the MSWG to be established in conjunction with the allocation of the long-term rights for spectrum in the 3.5 GHz band. I expect to seek Cabinet consideration on those matters in 2021.

Background

22. 5G is the next evolution of mobile wireless communications technology, promising improved connectivity, greater network speeds and bandwidth, very low latency and enabling mass connectivity. Globally, advanced economies are moving to make spectrum available for 5G network rollout and view the technology as more than incremental improvement in mobile connectivity. Rather, 5G is seen as a platform

that will enable the next wave of productivity and innovation across different sectors of an economy.

23. 5G can contribute to economic development – both horizontally by raising productivity across sectors (eg through integrating 5G technologies into business operations) and vertically through opportunities to develop specific sectors (eg autonomous vehicles or precision agriculture).
24. Under the Radiocommunications Act 1989, the Ministry of Business, Innovation and Employment (**MBIE**) is responsible for managing spectrum allocation. By convention, Cabinet's approval is sought for significant commercial allocations.

Previous Economic Development Committee decisions on allocation of 3.5 GHz band

25. In December 2018, Cabinet agreed that radio spectrum between 3.41-3.80 gigahertz ('3.5 GHz band') will partly be allocated for national 5G networks, subject to the outcome of the process for considering Treaty of Waitangi issues. Rights for national networks will be allocated as management rights, by auction, for a term of 20 years. These rights would apply from November 2022, when existing rights in the band expire. Further matters of detail were delegated to joint Ministers without further reference to Cabinet [DEV-18-MIN-0311 refers].
26. Cabinet also noted that it was intended and expected that 5G service providers would commercially negotiate with incumbents in the 3.5 GHz band if they wanted to obtain access to the relevant spectrum before November 2022, but that there could be some cases in which government intervention is appropriate to facilitate early access.

Previous Māori-Crown Relations Committee decisions on Māori interests in spectrum

27. Access to and ownership of spectrum has been an ongoing issue in the history of the Māori-Crown relationship. Four Waitangi Tribunal claims relating to spectrum have been lodged since 1984 centring on spectrum as a taonga of special value to Māori with the WAI 2224 claim (lodged in 2009) still outstanding. The Government's current preparations for 5G spectrum allocations have sparked renewed focus on the claims to radio spectrum.
28. Previous interactions between Māori and the Crown on this issue have been characterised by fundamental disagreement on the nature and extent of Māori interests in spectrum and whether Māori have a right to a share in Crown-allocated spectrum rights via Article 2 of the Treaty of Waitangi.
29. Previous engagement between Māori and the Crown has resulted in some recognition of Māori interests in spectrum, but no enduring approach has ever been agreed.

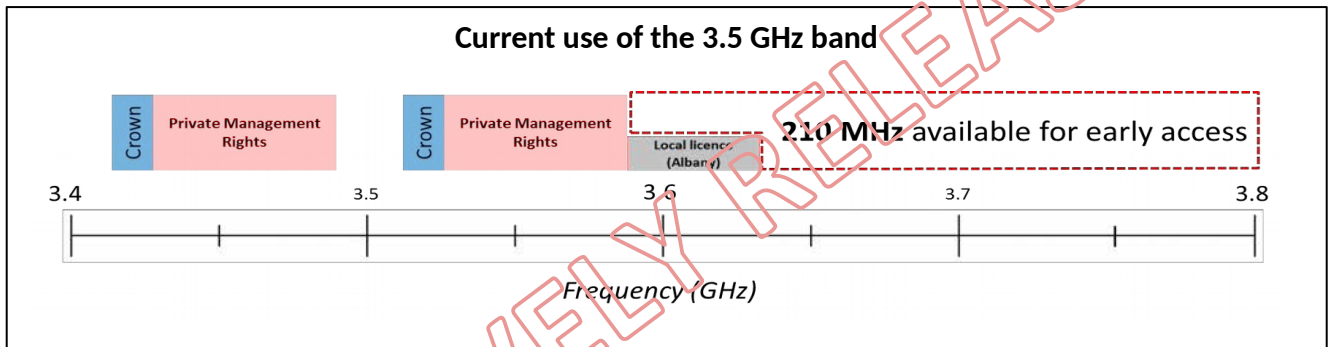
¹ The delegated Ministerial group comprises the Minister of Finance; the Minister of Research, Science and Innovation; the Minister for Māori Crown Relations: Te Arawhiti; the Minister for Māori Development; and the Minister of Broadcasting, Communications and Digital Media.

30.

Negotiations

Enabling early access to spectrum in the 3.5 GHz band for 5G

Status quo



31. Industry has asked Government to release unallocated 3.5 GHz spectrum to enable implementation of 5G networks prior to long term rights beginning in 2022. I understand that private commercial negotiations between existing rights holders and MNOs to enable early access to 3.5 GHz spectrum have been unsuccessful.

32. There is an opportunity to allocate the vacant spectrum for national 5G networks. The government could allocate this 'early access' spectrum as short-term rights that begin in mid-2020 and expire on October 31 2022. The decision to allocate short-term rights would be consistent with previous Cabinet decisions regarding long-term rights beginning on November 2022.

33. Commercial Information
The status quo is not a competitive outcome for New Zealand's mobile market.

Rationale for early access

34. The primary objective of radio spectrum policy is to maximise the value of radio spectrum for all New Zealanders by ensuring it is allocated to its most efficient and effective use.

35. Facilitating early access to 5G-capable spectrum will advance economic development objectives in several ways including:

35.1. MNOs will invest earlier in infrastructure as they bring forward investment plans to compete. Competition on mobile network characteristics has increased in recent months as more 5G equipment becomes available.


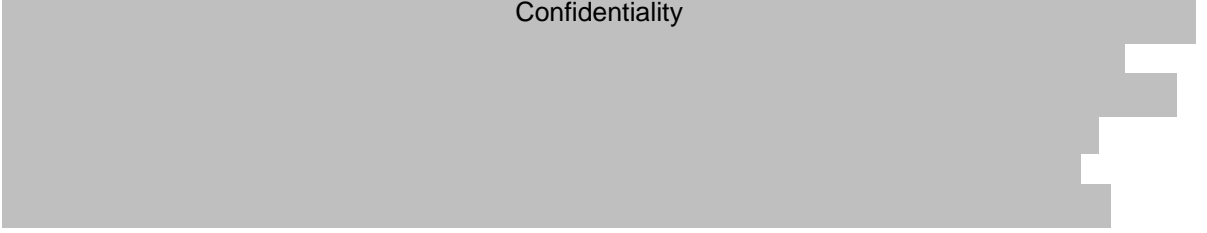
Allocation of spectrum in the 3.5 GHz band will provide all MNOs an opportunity to invest and compete on 5G services.

- 35.2. 5G technologies are expected to require integration into business operations and other investments. The sooner businesses commence experimentation and development activities, the faster the adoption and the shorter the lag between New Zealand businesses and offshore competitors.
 - 35.3. Public networks and marketing of consumer devices will create a domestic market that stimulates ICT/digital services and product innovation for mobile 5G applications. The sooner quality 5G networks are available, the sooner these markets will grow.
 - 35.4. Opportunities will be provided for New Zealand more generally in key sectors such as aerospace, health tech, and agritech, in line with Government's industry strategy.
36. Overall, I consider there is a strong case for the Government to enable early access to spectrum in the 3.5 GHz band. There is market demand for this spectrum, it is currently unused and there are economic benefits to be gained. Therefore, I am seeking Cabinet agreement to allocate short-term management rights to vacant spectrum in the 3.5 GHz band for 5G services that expire on 31 October 2022.
37. In addition to providing the necessary access to spectrum to enable earlier investment in 5G mobile networks in New Zealand, the early access allocation of spectrum in the 3.5 GHz band provides the opportunity for the Crown to consider:
- 37.1. how to address Māori interests in spectrum;
 - 37.2. where shared Māori-Crown objectives in spectrum lie; and
 - 37.3. how to pursue Māori economic development through spectrum-related activities.
38. The rest of the main body of this paper:
- 38.1. provides an update on Māori-Crown engagement since MCR consideration of Treaty issues in April 2019 and outlines where there are shared interests in spectrum (paragraphs 39-47);
 - 38.2. seeks agreement to a joint proposal developed by Ministers and Māori for Māori participation in early access to 5G spectrum that pursues Māori economic development, aligns with existing government priorities and builds toward Māori and the Crown reaching an enduring arrangement regarding spectrum allocations (paragraphs 48-68); and
 - 38.3. seeks agreement to high-level parameters of how the government will allocate spectrum in the 3.5 GHz band for MNOs and associated conditions on purchase (paragraphs 69-88).

Māori-Crown engagement on spectrum: progress since MCR consideration in April 2019

39. In May 2019 a Māori Spectrum Working Group (MSWG) was established by Māori to work with the Crown towards an enduring solution to Māori interests in spectrum.
40. The MSWG is made up of Treaty claimants and other Māori stakeholders. The claimant group, Ngā Kaiwhakapūmau i Te Reo (Wellington Māori Language Board), Graeme Everton (on behalf of Rangiaho Everton) and New Zealand Māori Council; as well as Iwi Leaders, report back to their organisations and constituents on a regular basis and continue to seek mandates wherever needed. These organisations, along with interested stakeholders, have significant constituencies, such as Iwi Leaders across a great many iwi and hapū, and the New Zealand Māori Council across sixteen districts.
41. The breadth of organisations represented on the MSWG represents a strong mandate to engage with the Crown on Māori interests in spectrum. The MSWG will seek to further strengthen this mandate through a programme of wider engagement with Māori.
42. The MSWG, officials and Ministers have engaged constructively together, with much goodwill, over a number of months. Discussions have focused primarily on how spectrum can be used to achieve shared Māori-Crown objectives, while at the same time acknowledging there remain some areas where our views differ.

Objectives

43. The Crown and Māori both want to see an enduring solution to spectrum allocations that addresses Māori interests in spectrum, in order to strengthen the ongoing Māori-Crown relationship and move past the adversarial nature of previous engagements.
44. The MSWG has a clear statement of position that has framed the engagement with officials and Ministers. Confidentiality

45. Confidentiality

46. The Government is committed to growing and sharing New Zealand's prosperity more fairly by supporting Māori to lift economic, social, environmental and cultural wellbeing. We are doing this by ensuring strong partnerships with Māori. We want to see the growth of Māori enterprises and to support digital innovation and connectedness.

47. Māori-led initiatives hold the key to bringing about a long lasting step-change in the Māori economy. Māori have demonstrated in the past the value added to the New Zealand economy as a result of Māori participation in the telecommunications sector. Māori are keen to continue and strengthen that role.

Proposal for Māori participation in early access to 5G spectrum

48. The MSWG has developed a package jointly with Ministers and officials that leverages the opportunity afforded by early access to 5G-capable spectrum available over the next two years. The proposal is for a short-term spectrum allocation of 50 MHz in the 3.5 GHz band to Māori and funding for an associated programme of work. This package will develop Māori capability, both technical and commercial, that will contribute to meaningful participation for Māori in spectrum-related activities and the telecommunications sector.

49. This package will be used as a stepping-stone towards Māori and the Crown reaching an enduring arrangement for Māori interests in spectrum. Negotiations

[Redacted]

50. Negotiations

[Redacted]

51. As a key part of this proposal I seek Cabinet approval to allocate 50 MHz of spectrum (approximately one quarter of available early access spectrum) in the 3.5 GHz band to Māori, at no cost, for the period until 31 October 2022.

Research, capability building and engagement programme

52. Alongside the allocation of spectrum, Māori will lead a programme of work including research, capability building and engagement with Māori. The work programme will be designed for Māori to build capability quickly by leading where necessary and collaborating where possible. I anticipate that this programme will run over the next two years, until long-term rights begin in November 2022.

Negotiations

[Redacted]

53.9. contributing to the Government's work on New Zealand's digital inclusion strategy – the Digital Inclusion Blueprint, with a particular focus on access and connectivity for Māori communities

54. The work programme will enable Māori to explore areas of interest before discussions on an enduring solution, which I expect to take place in 2021. I expect that undertaking this initial phase of work will deliver a more productive and enduring resolution.

Māori spectrum governance entity

55. The MSWG will work with the Crown to establish a Māori-led interim governance and spectrum management entity. This will be the initial vesting entity that will hold and manage the short term spectrum rights in the 3.5 GHz band allocated to Māori under this proposal. Negotiations

Engagement and communications programme

56. As a key part of the programme of work over the next two years the MSWG will lead engagement and communication with Māori nationally. The purpose of this engagement with Māori groups is to inform, gain feedback and advocate the views of their constituents in relation to Māori interests in spectrum.

57. The MSWG will ensure Māori across all demographics are included in the discussion whether digitally, kanohi ki te kanohi or by other means. The MSWG will take advantage of existing fora to schedule conversations about spectrum-related activities and aspirations at times that are convenient to Māori groups and communities. Engagement will include issues such as 5G health concerns and the use of spectrum to achieve better outcomes for Māori health, education, economics, rural connectivity, business and social enterprises, digital inclusion and capability development.

Resourcing the programme

58. Negotiations

59. In addition to government funding, the programme of work will need industry participants who can bring investment capital, equipment and technical and commercial know-how. Allocation of a portion of available 5G spectrum is likely to help attract commercial partners who share similar research questions and/or wish to develop long-term partnerships with Māori in the industry.

Further detailed decisions required

60. The detailed administrative arrangements and the interim governance entity for this programme of work need to be decided. I propose that further decisions be delegated to Ministers of Māori Crown Relations: Te Arawhiti; Finance; Māori Development; and Broadcasting, Communications and Digital Media, without further reference to Cabinet.
61. The Ministers for Māori Crown Relations: Te Arawhiti; Māori Development; and Broadcasting, Communications and Digital Media and officials will continue to work closely with the MSWG as the proposed package is further developed and then delivered.

Alignment with existing government policy and initiatives

62. This package aligns with the emerging Crown approach to resolving contemporary Treaty issues. Direct engagement with claimants and other key Māori stakeholders has allowed for productive discussions focused largely on the opportunities for Māori and the Crown to work together towards shared outcomes.
63. The proposal to recognise Māori interests sets the foundation of an enduring Māori-Crown partnership and works towards increased Māori involvement in the telecommunications sector, a policy objective shared by Māori and the Crown.
64. This proposal aligns with existing government initiatives. For example, the Department of Internal Affairs is working on a digital inclusion blueprint to address motivation, access/connectivity, skills and trust. Within this Blueprint is Te Whata Kōrero, a call to action for tāngata whenua to provide leadership on digital inclusion-related issues, alongside government. I anticipate that the programme of work will address these issues, in particular, how spectrum can be used to improve connectivity for rural communities.
65. The MSWG proposal also aligns with the Government's new Industry Transformation Plans that partner with industry, iwi, unions, science and academia to grow more innovative industries by setting out a long term vision and action plan for the sector. The MSWG could be a key partner in the development of the digital technologies Industry Transformation Plan, by representing Māori aspirations in the sector and informing the development of new initiatives that will be committed to by Government and industry.

Towards a long-term Māori Crown partnership on spectrum

66. Ministers and officials will continue to work with the MSWG on an enduring solution to be established in conjunction with the allocation of the long-term 3.5 GHz spectrum rights. I expect to seek Cabinet approval on those matters in 2021.

Short-term commercial spectrum allocation

Context – commercial environment for early access to 5G spectrum

67. In addition to the 50 MHz allocated to Māori, there will be 160 MHz of spectrum available in the 3.5 GHz band to allocate on a commercial basis. If not allocated, these frequencies will remain unused until the 20-year rights begin on 1 November 2022.
68. There is demand for these rights. Some MNOs have had difficulty reaching commercial agreements with existing rights holders and have asked the Government to provide access to the spectrum that is currently unallocated.
69. The proposed short-term allocation of spectrum as management rights (lasting approximately 2.5 years (compared to the more typical allocation periods of up to 20 years) introduces investment uncertainty for buyers. There is no guarantee that buyers in a short-term allocation will obtain spectrum in the long-term rights auction, nor is there a guarantee over where they may be placed in the band long-term. The short-term allocation design should account for these investment risks and promote healthy competition between interested parties.
70. This section outlines decisions I am seeking from Cabinet on the high-level parameters that need to be set for a short-term commercial allocation to proceed. The following objectives guided my proposed allocation design:
 - 70.1. allocating spectrum in a manner that is timely, simple and transparent;
 - 70.2. supporting competition in the market place; and
 - 70.3. achieving a fair return on the spectrum.

Allocation method

71. I propose that early access spectrum is allocated as national management rights by auction. Auction is the method commonly used to allocate commercially-valuable spectrum and is standard practice in New Zealand. It is also commonly used overseas. An auction is transparent and should ensure spectrum rights go to the party valuing them the most. Commercially-valuable spectrum is typically allocated as a management right (akin to a property right).
72. If approved, the auction for short-term rights will take place around March 2020. This will allow successful bidders time to procure the necessary equipment and roll out 5G services by around mid-2020. If the early access auction is delayed beyond early 2020, the value of the rights to network operators will reduce.

Proposed conditions on the sale and use of short-term spectrum rights

73. In past spectrum auctions in New Zealand, the Government has placed conditions on the sale and use of rights to achieve desired public policy outcomes. Conditions include caps on the amount of spectrum each bidder can purchase at auction, a reserve price to ensure only serious bids are lodged, and post-allocation requirements to ensure a minimum level of use or service.

Restrictions on allocation to any one party – ‘spectrum caps’

74. The Commerce Commission recently released its market study into mobile services. The study concluded that while the Commission does not believe there is a case for regulatory intervention to promote a fourth national MNO to enter the market, upcoming spectrum designated for 5G use should not preclude new parties from obtaining spectrum. The Commission also concluded that spectrum is a critical factor into the supply of mobile services and significant asymmetries in spectrum holdings can affect competition in the mobile market. The design of future allocation processes for spectrum should have regard to such asymmetries.
75. Due to the limited spectrum available for a short-term allocation, I propose that the Government impose caps on the amount of spectrum any one bidder can obtain through the early access auction. The cap should be high enough to ensure winning bidders can provide a quality service, and strict enough to ensure the process is fair and maintains a competitive mobile market in New Zealand.
76. For example, the maximum useful block size of spectrum for 5G in the 3.5 GHz band is 100 MHz. This would constitute over 60 per cent of available spectrum and result in a highly skewed outcome in favour of those with the deepest pockets. A cap lower than this would prevent such an outcome.
77. I propose that in addition to a spectrum cap, the Government should place a condition on the auction requiring all successful bidders to return existing rights in the 3.5 GHz band to the Crown. This would not only prevent disproportionate holdings of 5G-capable spectrum but also maximise the efficient use of spectrum in the 3.5 GHz band.
78. I also propose that successful bidders receive a discount on their purchase of new rights based on the amount of spectrum they return to the Crown. For example, if a bidder won 60 MHz in the auction and returned 30 MHz to the Crown, the purchase price would be 50 per cent of their winning bid.


Reserve price

79. Auctions of cellular mobile spectrum typically have a reserve price to keep speculative bidders out and to ensure a fair fiscal return to the Crown. I note that revenue maximisation has not been the primary goal of spectrum allocation in New Zealand to date; the primary goal is to maximise the value of spectrum use for New Zealanders.
80. MBIE commissioned independent advice providing a valuation of spectrum in the 3.5 GHz band. The report provided a very wide valuation and it will have to be contextualised to market conditions specific to early access.

Commercial
Information

Officials are undertaking further work on an appropriate reserve price.

Implementation requirements

81. It is common practice internationally to impose conditions on auctioned spectrum rights to ensure a minimum level of use. Conditions are imposed universally on all winning bidders. Common conditions include technical specifications for equipment, minimum coverage obligations or specified numbers of cell sites deployed.
82. These conditions have the additional benefit of discouraging speculation because rights holders would incur significant capital expenditure to meet the conditions.
83. Business compliance with implementation requirements is typically evaluated part-way through the term of management rights. For example, Cabinet previously agreed recipients of long-term rights for spectrum in the 3.5 GHz band will be required to implement a national network 5 years into a 20-year management right.
84. However, given the investment uncertainty winning bidders would face deploying mobile networks using early access spectrum, I consider minimal implementation requirements should be required in this instance. As a matter of best practice, requirements should be based on expectations of a reasonable commercial implementation. Commercial information

85. At a minimum, I consider businesses that obtain spectrum will be required to use spectrum in the 3.5 GHz band to provide services that comply with international 5G standards (as opposed to, for example, using the spectrum to enhance bandwidth on existing 4G networks).

Matters of further detail to be decided

86. I propose that further decisions on details of the auction design be delegated to me as the Minister of Broadcasting, Communications and Digital Media without further reference to Cabinet. These decisions include the exact spectrum acquisition cap to be imposed at auction, the exact reserve price for spectrum at auction and details of any further implementation requirements.
87. I also propose that further decisions on the use (including the sale) of any returned or unallocated blocks of spectrum after the auction be delegated to me as the Minister of Broadcasting, Communications and Digital Media without further reference to Cabinet.

Consultation

Consultation with industry

88. In September 2019, MBIE sent out a call for expressions of interest (EOIs) from parties interested in obtaining short-term access to spectrum in the 3.5 GHz band for 5G. The purpose of the EOI process was to establish the level of interest and to identify parties capable of providing 5G services within the early access period. Once identified those parties were consulted on technical matters related to the auction design. MBIE had detailed discussions with four parties: Commercial Information

Commercial Information

PROACTIVELY RELEASED



PROMPTLY ACTIVELY RELEASED

Consultation with government agencies

- 98. The following agencies were consulted on this matter: Te Arawhiti, Te Puni Kōkiri, Treasury, Department of Internal Affairs, Ministry of Business Innovation and Employment (Economic Development and Research, Science and Innovation portfolios).
- 99. The Commerce Commission has been consulted on the commercial allocation sections of this paper. The Commission notes the short-term allocation of spectrum in the 3.5 GHz band would be subject to the Commerce Act. Notwithstanding any consideration of competition issues in the design of the auction (eg spectrum caps), the Commission may examine any acquisitions of spectrum in the 3.5 GHz band by MNOs either through acquirers seeking clearance for any acquisition or by undertaking an enforcement investigation.
- 100. The Department of Prime Minister and Cabinet (Policy Advisory Group) was informed.

Financial Implications

- 101. No funding is sought in this paper. Confidential advice to Government

102. The proposed short-term commercial allocation of 3.5 GHz spectrum will generate revenue for the Crown.

Commercial Information

Commercial Information

Legislative Implications

104. The proposals in this paper do not have any legislative implications.

Impact Analysis

105. The proposals in this paper do not require an impact analysis as they do not require regulatory intervention.

Human Rights

106. This proposal is consistent with the New Zealand Bill of Rights Act 1990 and the Human Rights Act 1993.

Publicity

107. I intend to issue a press release announcing decisions made in this paper, in the week following Cabinet approval.
108. I expect this announcement to receive a reasonable amount of media coverage. As you are aware, there is some concern within communities in New Zealand (and globally) about the possible health impacts of 5G technology. I anticipate the Government's decision to allocate 5G spectrum to bring forward mobile infrastructure investment to generate commentary.

Proactive Release

109. Following public announcements on policy decisions, I intend to release this paper proactively, subject to redaction as appropriate consistent with the Official Information Act 1982.

Recommendations

The Minister of Broadcasting, Communications and Digital Media recommends that the Committee:

Previous Cabinet decisions

1. **Note** that Cabinet previously decided that the radio spectrum frequency range 3.41-3.80 gigahertz (the 3.5 GHz band) will be allocated for 5G cellular mobile services use [DEV-18-MIN-0311 refers];
2. **Note** that long-term (up to 20-year) rights will be available from November 2022 when existing rights in the 3.5 GHz band expire;
3. **Note** that at the time of those decisions it had been expected that mobile network operators would enter into commercial agreements with the existing rights holders if they wanted access before November 2022, but that further government intervention could be considered;
4. **Note** that there is currently 210 megahertz (MHz) of unallocated spectrum in the 3.5 GHz band;
5. **Note** that Cabinet authorised Ministers for Māori Crown Relations: Te Arawhiti; Māori Development; and Broadcasting, Communications and Digital Media to engage with Māori to determine where there are shared Māori-Crown interests in radio spectrum and how those interests could be met [MCR-19-MIN-0006 refers];

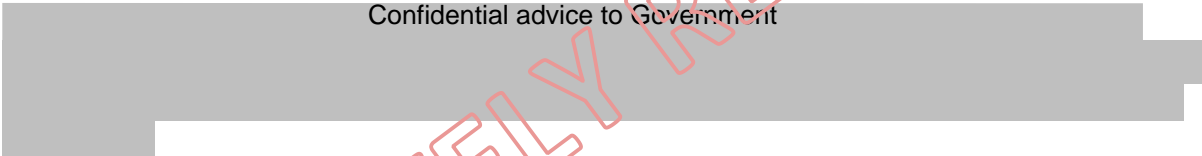
New developments

6. **Note** that some mobile network operators have had difficulty reaching commercial agreements and have asked the Government to provide short-term access to spectrum in the 3.5 GHz band that is currently unallocated;
7. **Note** that any short-term rights in the 3.5 GHz band would expire on 31 October 2022, once long-term rights begin on 1 November 2022, consistent with previous Cabinet decisions;
8. **Note** that a Māori Spectrum Working Group comprised of WAI776/2224 claimants and other Māori stakeholders has been established to engage with the Crown and that Ministers and officials have had productive discussions with this group on shared interests in spectrum;
9. **Note** that the breadth of organisations represented on the Māori Spectrum Working Group represents a strong mandate to engage with the Crown but ongoing engagement with wider Māori will be required to support this mandate;
10. **Note** that Ministers and officials have been engaging with Māori on shared interests in spectrum and have reached agreement (subject to Cabinet approval) on a proposal that would allow Māori to build capability and technical expertise in spectrum-related sectors;

Māori interests in spectrum

11. **Note** that the WAI 776/2224 claimants continue to maintain that radio spectrum is a taonga protected under Article Two of the Treaty of Waitangi;
12. **Note** that, while not accepting the claimants' position, the Government does accept that Māori have significant interests in spectrum relating to economic development;
13. **Note** that a package including short-term rights to spectrum in the 3.5 GHz band and funding for a programme of work is proposed to address Māori interests in spectrum in the short-term;
14. **Agree** that 50 MHz of spectrum in the 3.5 GHz band be allocated to Māori, at no cost, for the period until 31 October 2022;
15. **Note** the Māori Spectrum Working Group has developed a research, capability building and engagement programme that will enable Māori to explore areas of interest before discussions on an enduring solution with the Crown;
16.

Confidential advice to Government


17. **Note** that there are many matters of detail on the programme of work, interim spectrum holding entity, **Negotiations** that will require further decisions;
18. **Agree** that the Ministers for Māori Crown Relations: Te Arawhiti; Finance; Māori Development; and Broadcasting, Communications and Digital Media be delegated to make decisions on the administrative arrangements for this spectrum, including interim spectrum holding entity, without further reference to Cabinet;
19. **Note** that Ministers for Māori Crown Relations: Te Arawhiti; Finance; Māori Development; and Broadcasting, Communications and Digital Media will continue to engage with Māori stakeholders in 2020 and 2021 to establish an enduring arrangement regarding shared interests in spectrum;
20. **Agree** that the Minister of Broadcasting, Communications and Digital Media will report to Cabinet in 2021 on an enduring solution in relation to Māori interests in spectrum;

Short-term commercial spectrum allocation

21. **Agree** that short-term rights for 160 MHz of spectrum in the 3.5 GHz band be allocated as national management rights, by auction, for a term concluding on 31 October 2022;
22. **Agree** that a limit ("cap") will be imposed on allocations of these short-term rights to any single operator to maintain and foster competition in the mobile market;
23. **Agree** that participants in the auction will be required to return existing rights in the 3.5 GHz band to the Crown to maximise the allocative efficiency of spectrum;

24. **Agree** that participants in the auction who return spectrum rights in the 3.5 GHz band to the Crown receive a discount on their purchase price, pro-rated on a per megahertz basis;
25. **Agree** that post-allocation requirements be imposed on national allocations to ensure that rights are used for their intended purpose and not for speculation;
26. **Note** that these decisions set the high-level parameters for the allocation but there are many matters of detail that will require further decisions;
27. **Agree** that the Minister of Broadcasting, Communications and Digital Media be delegated to make decisions on the detailed design of the commercial allocations without further reference to Cabinet;
28. **Agree** that further decisions on the use of any returned or unallocated blocks of spectrum after the auction be delegated to the Minister of Broadcasting, Communications and Digital Media without further reference to Cabinet; and

Administrative matters

29. **Authorise** the Ministry of Business, Innovation and Employment to create the management rights necessary to enable the spectrum allocations described above.

Authorised for lodgement

Hon Kris Faafoi

Minister of Broadcasting, Communications and Digital Media