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Public version

Statement of Issues

One NZ/Dense Air

2 February 2024

Introduction

1. On 2 November 2023, the Commerce Commission registered an application (the Application) from One New Zealand Group Limited (One NZ) seeking clearance to acquire 100% of the shares in Dense Air New Zealand Limited (Dense Air) from Dense Air Limited and SoftBank Corp (the Proposed Acquisition).[1]

2. To clear an application, we must be satisfied that an acquisition will not have, or would not be likely to have, the effect of substantially lessening competition in a New Zealand market.

3. This Statement of Issues (SoI) sets out the potential competition issues we have identified following our initial investigation. This is so the parties and other interested parties can provide us with submissions relating to those issues.

4. In reaching the preliminary views set out in this SoI, we have considered information provided by the parties and other industry participants. We have not yet made any final decisions on the issues outlined below (or any other issues) and our views may change, and new competition issues may arise, as the investigation continues.

The issues and theories of harm we are continuing to investigate

5. We are continuing to investigate the competitive effects of the Proposed Acquisition.

6. We are still to conclude on the definition of the relevant market(s) for assessing the competitive effects of the Proposed Acquisition. Regardless of how markets are defined, we are focused on assessing the impact of the Proposed Acquisition on competition between mobile network operators (MNOs) in New Zealand for the provision of retail and wholesale mobile and wireless broadband services.

7. At this stage, we cannot exclude the real chance that Two Degrees Mobile Limited (2degrees) would acquire Dense Air's 2600MHz spectrum in the counterfactual. Applying a counterfactual in which 2degrees would acquire Dense Air's spectrum, we are continuing to assess the relative capacity of MNOs and, as a result, their ability to compete in the provision of retail and wholesale mobile and wireless broadband services in this counterfactual scenario compared to the scenario with the Proposed Acquisition.

[1] A public version of the Application is available on our website at: http://www.comcom.govt.nz/business-competition/mergers-and-acquisitions/clearances/clearances-register/.

8. Significant disparities in spectrum holdings may influence the relative capacity of MNOs, which may affect competition between MNOs or influence competition in telecommunications markets. With the Proposed Acquisition, One NZ would significantly increase its total spectrum holdings, and increase the disparity in its holdings compared to those of 2degrees, whilst also reducing the disparity between One NZ and those of Spark New Zealand Limited (Spark). In a counterfactual where 2degrees acquired Dense Air's 2600MHz spectrum, there would be no spectrum disparity between One NZ and 2degrees, although a spectrum disparity between One NZ and 2degrees compared to Spark would remain.

9. We are considering whether competition in any relevant retail and/or wholesale telecommunications markets would be substantially lessened with the Proposed Acquisition (in the factual) compared to the likely counterfactual. In doing so, we have been considering and continue to consider:

    9.1 the extent to which the Proposed Acquisition might inhibit the ability of 2degrees to compete with, or to expand and provide a greater degree of competitive constraint on, or reduce the competitiveness of 2degrees relative to, One NZ, Spark and other competitors (as relevant) in retail and wholesale telecommunications markets;

    9.2 the extent to which the competitive constraint provided by 2degrees and One NZ on Spark might differ in the factual compared to the counterfactual (eg, if One NZ would have the capacity to offer higher quality services or services to more customers in the factual); and

    9.3 what this means for consumers and whether they would be likely to face higher prices, less choice or lower quality for telecommunications services as a result of the Proposed Acquisition.

10. We are continuing to explore these issues, but are currently not satisfied that the Proposed Acquisition would not substantially lessen competition, leading to higher prices and/or a reduction in quality, customer choice or innovation. In summary, this is because:

    10.1 radio spectrum is a scarce and critical input that is used by MNOs in mobile telecommunications networks and in the provision of mobile and wireless broadband services;

    10.2 evidence indicates that the capacity that an MNO has to provide mobile and wireless broadband services to retail and wholesale customers depends on the amount of spectrum it holds and the number of sites within its network;

    10.3 evidence indicates that there are unlikely to be other opportunities in the short to medium term for 2degrees to acquire sufficient additional spectrum to remove, or materially reduce, the disparity in its holdings compared to those of One NZ (and Spark);

    10.4 while technically, there are alternatives available to MNOs to add capacity to their networks, such as building more sites, evidence indicates that these are

second best in terms of cost and timeframes to holding more spectrum, and in some instances ([ ]) also may not be commercially viable and/or practical; and

10.5 given the above, the Proposed Acquisition may raise the cost of network capacity to 2degrees, resulting in 2degrees being at a significant cost disadvantage relative to One NZ and Spark, hindering its ability to compete.

11. The main issues (theories of harm) we are continuing to test relate to the fact that, compared to a counterfactual where 2degrees acquired Dense Air's 2600MHz spectrum, the Proposed Acquisition would increase the disparity between One NZ's holdings and those of 2degrees and could accordingly change the relative capacities of the three MNOs. The Proposed Acquisition could prevent, inhibit or hinder the ability of 2degrees to compete with One NZ and Spark in providing wholesale and/or retail telecommunications services. This could lead to consumers facing higher prices, less choice or lower quality.

11.1 Specifically in terms of the retail supply of mobile services, we continue to investigate whether capacity constraints may hinder the retail mobile propositions (eg, unlimited data plans) which 2degrees is and would be able to offer with the Proposed Acquisition, relative to the counterfactual.

11.2 With respect to the retail supply of wireless broadband services, we are investigating whether and to what extent harm could arise due to 2degrees being constrained in the factual in its ability to grow its wireless broadband offering and customer base, by being restricted in where it can offer wireless broadband, relative to the counterfactual.

11.3 In the factual compared to the counterfactual, we are investigating whether and to what extent 2degrees could be restricted in its ability to compete against One NZ and Spark in the wholesale supply of services by MNOs, [ ]. Although 2degrees would compete to offer wholesale mobile services, a lack of a wholesale wireless broadband product could preclude it from being able to compete for wholesale customers seeking to purchase multiple (eg, mobile and broadband) services from a single supplier.

12. We explain our reasons for our current views below and invite submissions on them.

Process and timeline

13. We have agreed with One NZ to extend the period in which to make a decision from the initial 40 working day statutory timeframe until 3 April 2024.

14. We would like to receive submissions and supporting evidence from the parties and other interested parties on the issues raised in this SoI. We request responses by close of business on **19 February 2024**, including a confidential and a public version of any submission made. All submissions received will be published on our website with

appropriate redactions.[2] All parties will have the opportunity to cross-submit on the public versions of submissions received from other parties by close of business on **29 February 2024**.

15. If you would like to make a submission but face difficulties in doing so within the timeframe, please ensure that you register your interest with us at registrar@comcom.govt.nz so that we can work with you to accommodate your needs where possible.

The parties and the Proposed Acquisition

One NZ

16. One NZ (formerly Vodafone NZ) is one of New Zealand's largest telecommunications companies and one of three MNOs in New Zealand. One NZ is 99.91% owned by Infratil 2019 Limited.

17. Relevant to the Proposed Acquisition, One NZ provides:

    17.1 retail mobile and broadband services to residential and business customers, including wireless broadband; and

    17.2 wholesale services to other telecommunications companies, including mobile virtual network operators (MVNOs).

Dense Air

18. Dense Air is owned by Dense Air Limited (67.03%) and SoftBank Corp (32.97%).

19. Dense Air's only assets in New Zealand are the management rights to 2 x 35 MHz of 2600MHz spectrum, specifically management right number 473 (2620-2655MHz) and management right number 474 (2500-2535MHz).[3]

20. Dense Air does not currently use this spectrum. It has terminated its business in Asia-Pacific, including New Zealand, citing a desire to focus on fewer markets.[4] The management rights for Dense Air's 2600MHz spectrum expire on 31 December 2028.

The Proposed Acquisition

21. With the Proposed Acquisition, One NZ would increase its holdings of 2600MHz spectrum. It would own a 2 x 15 MHz block of 2600MHz[5] plus a second 2 x 35 MHz block.[6]

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2 Confidential information must be clearly marked (by highlighting the information and enclosing it in square brackets). Submitters must also provide a public version of their submission with confidential material redacted. At the same time, a schedule must be provided which sets out each of the pieces of information over which confidentiality is claimed and the reasons why the information is confidential (preferably with reference to the Official Information Act 1982).

3 As recorded in the Register of Radio Frequencies under the Radiocommunications Act 2001.

4 The Application at [3.4]

5 One NZ strictly holds 1 x 15 MHz and 1 x 20 MHz of 2600MHz spectrum, but for the purposes of our analysis we view its holding as 2 x 15 MHz paired.

6 The only other party that currently owns 2600MHz spectrum is Spark, which owns a 2 x 20 MHz block.

22. One NZ has publicly stated that it would immediately deploy Dense Air's spectrum to improve speeds and capacity on its 4G and 5G mobile network. The additional capacity added would also mean increased availability for wireless broadband at faster download and upload speeds. One NZ stated that this would be beneficial to customers across New Zealand, describing the effect as "like adding an extra lane on the motorway".[7]

Relevant background

23. Radio spectrum is a scarce and critical input used in mobile telecommunications networks and in the provision of mobile and wireless broadband services.[8] MNOs like One NZ acquire and hold long-term management rights to spectrum, while other parties such as wireless internet service providers (WISPs) use and share spectrum through licences.

24. The type and amount of spectrum held by individual MNOs affects the way in which they deploy their networks, the coverage of their networks (particularly in rural and remote areas), and the capacity and/or types of services they can offer to retail and wholesale customers.[9] Given this, significant disparities, differences or asymmetries in spectrum holdings between MNOs (including in terms of the amount and type of spectrum held) may affect competition between MNOs or influence competition in telecommunications markets.[10]

25. As noted in Table 1, an MNO can increase its network coverage and capacity by acquiring more sites to support capacity, adding additional equipment to existing sites (ie, upgrading sites), and/or obtaining additional spectrum (as is proposed by the Proposed Acquisition).[11] Technically, building more and/or upgrading existing sites may provide comparable improvements to an MNO's service and network quality to additional spectrum.[12] However, upgrading and/or building additional sites may be commercially less desirable than acquiring additional spectrum (as it tends to come at a significantly higher cost).

Table 1: Ways in which MNOs can add capacity

Way to add capacity	Details and features
Acquiring more sites	Build/lease additional sites or co-locate equipment on new sites, increasing the number of sites within an MNOs network and increasing/improving coverage or capacity in specific areas where add sites

7 One NZ media release re Proposed Acquisition (3 November 2023) – https://media.one.nz/denseair. This is consistent with information in the Application at [6.1]-[6.2] and [24.1], which states that the Proposed Acquisition would
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8 Commerce Commission, Mobile Market Study – Findings (26 September 2019) at [3.98] and [4.4], and the Application at [11.7].

9 Commerce Commission, Mobile Market Study – Findings (26 September 2019) at [3.98] and [4.4], and the Application at [11.7].

10 Commerce Commission, Mobile Market Study – Findings (26 September 2019) at [3.102], [4.10] and 71.

11 The Application at [11.7].

12 The Application at [22.5].

Way to add capacity	Details and features
	Decisions to acquire more sites typically based on long-term network planning by MNOs
Upgrade existing sites	Upgrade existing sites within an MNOs network to increase capacity at sites through adding additional equipment to a site (eg, to be able to offer 5G, not just 4G, or to deploy/use existing spectrum holdings at a site, where not already deployed) Extent to which existing sites can be upgraded may vary depending on type of site and whether an MNO is physically able to add further equipment to a site
Obtain more spectrum	MNOs seek to acquire or access additional spectrum holdings that they can then deploy to add capacity to existing sites Deployment of additional spectrum may require other investment in equipment on sites, and may be only way to increase capacity at sites where an MNO has already deployed all existing spectrum

How MNOs acquire spectrum

26. MNOs typically acquire spectrum from the Crown. The Radio Spectrum Management team within the Ministry of Business, Innovation and Employment (MBIE), on behalf of the Crown, allocates rights to use spectrum usually through either the allocating management rights or the granting of licences.[13]

27. Historically, MBIE has run a competitive auction to sell the management rights to spectrum, but it can also simply allocate spectrum to MNOs. Auction processes usually mean that spectrum is allocated to those that value it the highest. Management rights are generally for an initial period of 20 years, after which MBIE will consider whether to renew the rights for a further 20 year period.

28. MNOs can also acquire spectrum through third-party sales, as One NZ proposes to do with the Proposed Acquisition. MNOs may also reach commercial arrangements with Māori interests to utilise spectrum that they are allocated by the Crown.[14]

The Interim Māori Spectrum Commission

29. The Interim Māori Spectrum Commission (IMSC) represents Māori groups with an interest in spectrum assets and is designed to hold and maximise the value of spectrum that the Crown vests in Māori.[15]

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13 In addition to allocating management rights and granting licences, in a broader sense, the Radio Spectrum Management administers the Radiocommunications Act 1989 and the Radiocommunications Regulations 2001 and provides relevant policy advice.

14 2degrees has for some time used 2100MHz spectrum owned by the Hautaki Trust.

15 The Application at [11.15].

30. The Crown and IMSC entered into a memorandum of understanding (MOU) in February 2022 proposing that 20% of all future commercial spectrum allocations will vest in the IMSC.[16] IMSC already holds some spectrum assets (as detailed in Table 2, further below).

Different spectrum frequencies/types

31. Different spectrum bands have different characteristics or properties that may make them suitable for different purposes.[17]

32. Low frequency spectrum (eg, 700MHz, 800MHz and 900MHz) transmits signals over long distances, meaning that it provides greater coverage or range from a single site (just at lower capacity). It is best suited to providing coverage in rural areas and assists in providing greater indoor penetration in urban areas. Higher frequency spectrum (above 1GHz, or 1000MHz) offers greater capacity, but over shorter distances, so is useful to provide capacity and carry signals in densely populated urban areas using a large number of sites.[18]

33. The Proposed Acquisition relates to mid-band spectrum. Mid-band spectrum is that between 1000MHz and 6000MHz.[19] The mid-band spectrum currently in use by MNOs in New Zealand is 1800MHz, 2100MHz, 2300MHz, 2600MHz and 3.5GHz. 2600MHz spectrum is currently used by One NZ and Spark to provide 4G mobile and wireless broadband services, and may be used for 5G and 6G services in the future. 2degrees does not currently own or use 2600MHz spectrum. 2600MHz spectrum is well suited to providing high capacity services in urban areas and is less suitable to provide rural services, although One NZ submits that it may have application benefits in rural areas (subject to coverage considerations).[20]

Spectrum bands currently allocated and used by MNOs

34. Table 2 summarises the bands in which MNOs currently hold management rights to spectrum, noting the holdings of each MNO, when the spectrum rights expire, and any blocks of spectrum held or used by other parties. The information in Table 2 is relevant because, in undertaking competition analysis around an acquisition of spectrum, we do not just consider the aggregation of spectrum holdings within a specific frequency (eg, 2600MHz).We also consider the spectrum being acquired alongside holdings an MNO has in other bands, if not its total spectrum holdings. This takes account of the fact that MNOs use a mix of spectrum to provide services, and may aggregate their spectrum holdings across bands.

Table 2: Spectrum bands currently in use by MNOs

Band	Expiry	Spark	One NZ	2degrees	Other users/owners
700MHz	2031	2 x 20 MHz	2 x 15 MHz	2 x 10 MHz	None
800-900MHz	2031	2 x 15 MHz	2 x 15 MHz	2 x 10 MHz	None

16 https://www.mbie.govt.nz/dmsdocument/18702-memorandum-of-understanding-maori-spectrum-agreement.
17 The Application at [11.2].
18 The Application at [11.5], [11.20] and [22.2]-[22.4].
19 The Application at [11.3] and [11.5].
20 The Application at [1.5], [11.21] and [16.5].

Band	Expiry	Spark	One NZ	2degrees	Other users/owners
1800MHz	2041	2 x 20 MHz	2 x 25 MHz	2 x 20 MHz	2 x 10 MHz Crown[21]
2100MHz	2041	2 x 15 MHz	2 x 20 MHz	2 x 15 MHz[22]	2 x 10 MHz IMSC
2300MHz	2030	70MHz	None	None	25MHz IMSC
2600MHz	2028	2 x 20 MHz	2 x 15 MHz[23]	None	2 x 35 MHz Dense Air 45 MHz Crown (managed spectrum, park) used by WISPs via licences[24]
3.5GHz	2043	80MHz	80MHz	80MHz	100MHz IMSC 60MHz Crown[25]

35. Most of the spectrum listed in Table 2 is FDD spectrum, where two blocks of spectrum are paired, with one being used for uplink and the other downlink. 2300MHz and 3.5GHz spectrum are TDD spectrum, where a single block of spectrum can be flexibly used for uplink and downlink.[26]

The relevant markets

36. Market definition is a tool that helps identify and assess the close competitive constraints a merged entity is likely to face. We define markets in the way that we consider best isolates the key competition issues that arise from a specific merger or acquisition. In many cases this may not require us to precisely define the boundaries of a market. A relevant market is ultimately determined, in the words of the Commerce Act, as a matter of fact and commercial common sense.[27]

Submissions received

37. One NZ submits that the relevant markets for assessing the Proposed Acquisition are the national markets for:[28]

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21 This block of 1800MHz spectrum is currently (along with 1900MHz spectrum) set aside, pending future government decisions, as being suitable for emergency services, rail communications or Māori interests. MBIE, The New Zealand Spectrum Outlook 2023-2027 (September 2023) at 9.

22 This block of spectrum is owned by Hautaki Limited, but is used by 2degrees.

23 One NZ strictly holds 1 x 15 MHz and 1 x 20 MHz of 2600MHz spectrum, but for the purposes of our analysis we view its holding as 2 x 15 MHz paired.

24 Dense Air's 2600MHz spectrum sits adjacent to the managed spectrum park.
[
] The Application at footnote 18 and 43.

25 This is a 60MHz block that the Crown retained when it allocated to MNOs and the IMSC the management rights to other 3.5GHz spectrum in May 2023. Dense Air had been in negotiations with the government to acquire the long-term rights to this block, but withdrew its interest. What will happen with this block of spectrum is yet to be decided. See May 2023 MBIE update here.

26 The Application at footnote 39.

27 Section 3(1A). See also *Brambles v Commerce Commission* (2003) 10 TCLR 868 at [81] and Commerce Commission, Mergers and Acquisitions Guidelines (May 2022) at [3.7]-[3.10].

28 The Application at [14.1], [15.1] and [16.2]-[16.3].

37.1 mobile telephony services (in a single product market for 2G, 3G, 4G and 5G services, which it submits are interchangeable); and

37.2 residential broadband services (whether by way of wireless broadband, fibre, copper or satellite broadband, which it submits are functionally similar and substitutable).

38. Given that spectrum is used as an input into mobile or wireless broadband services, One NZ further submits that there is no need to separately assess other market segments based on customers or any other parameters. It submits that mobile and wireless broadband services provided to business or wholesale customers would not use different spectrum than that used by residential customers.[29]

39. 2degrees considers that, for the purposes of the Proposed Acquisition, a separate market for wireless broadband services should be defined to isolate the competitive effects of the Proposed Acquisition. Specifically, it considers that:[30]

39.1 the service and speed that can be delivered on wireless broadband (and implied substitutability) depends on the capacity of the network which depends on spectrum;

39.2 although wireless broadband is a substitute for lower broadband data users, it is not considered a substitute for high data users; and

39.3 whether a separate market or not, the ability to substitute for wireless broadband, or to remain competitive in a stand-alone wireless broadband market, is impacted by spectrum.

Previous decisions

40. The Commission has considered acquisitions of spectrum on a number of occasions in the past.[31] In these previous cases, the Commission has ultimately considered the implications of the acquisition of spectrum (an input) on competition in various downstream wholesale and retail telecommunications markets.

Our view

41. In considering the relevant markets for the purposes of assessing the Proposed Acquisition, we are considering:

41.1 the substitutability of different spectrum bands and frequencies, including between 2300MHz and 2600MHz;

41.2 the types of spectrum suitable for providing 4G and 5G mobile services;

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29 The Application at [14.2].

30 Submission from 2degrees to the Commerce Commission (8 December 2023) at [10].

31 Spark, Craig Wireless and Woosh Wireless [2016] NZCC 7, Telecom and the Crown [2014] NZCC 13, Vodafone and TelstraClear [2012] NZCC 33, Telecom and the Crown Decision 640 (2008), Vodafone and the Crown Decision 634 (2008) and Telecom and Counties Power s47 investigation (2006).

41.3 the types of spectrum suitable for providing wireless broadband services, in both fibre and non-fibre areas;

41.4 the extent to which fixed-line (fibre or copper) or satellite broadband services may be substitutes for wireless broadband and fall within the same retail market(s), including the extent to which any substitutability varies between areas where there is fibre and no fibre, and whether we should define a market for wireless broadband services to isolate the competitive effects of the Proposed Acquisition; and

41.5 the extent to which wholesale markets in which MNOs supply services to MVNOs and retail telecommunications service providers are relevant to our assessment of the Proposed Acquisition, and the scope of any markets in which MNOs wholesale mobile or wireless broadband.

42. At this time, we have not reached any definitive views on the relevant markets for assessing the Proposed Acquisition.

43. Currently, we consider that the competition issues that may arise from the Proposed Acquisition are best assessed and isolated by defining markets for the:

43.1 national acquisition of spectrum management rights;

43.2 national retail supply of mobile services by MNOs;

43.3 retail supply of broadband services (including wireless broadband services) in fibre areas;

43.4 retail supply of broadband services (including wireless broadband services) in non-fibre areas; and

43.5 national wholesale supply of telecommunications services by MNOs, including mobile services, wireless broadband services and fixed-line broadband services.

44. With regards to the geographic scope of each relevant market, we consider it appropriate, for purposes of our assessment of the competition issues that may arise from the Proposed Acquisition, to define national markets in some cases and separate geographic markets for fibre and non-fibre areas for broadband services. This is because:

44.1 retail and wholesale mobile services are provided nationally by MNOs;

44.2 in the case of broadband services, there are differences between fibre and non-fibre areas in the services available to customers and the pricing of different broadband services, potentially due to network availability or capacity; and

44.3 spectrum management rights are allocated on a national basis to MNOs.

45. We invite submissions on our current approach to market definition and for parties to provide us with further evidence on the scope of the relevant markets.

National acquisition of spectrum management rights

46. In some previous decisions, the Commission has defined (or considered defining) discrete markets relating to the acquisition of spectrum management rights.[32] Our preliminary view is that it is appropriate to define a national market for the acquisition of spectrum management rights in this case. With the Proposed Acquisition, there would be aggregation in One NZ's spectrum management rights.

47. As noted earlier, different spectrum bands have different characteristics that make them suitable for different purposes.[33] Evidence from industry participants confirms that coverage and performance characteristics of low frequency spectrum differs to mid-band spectrum and high frequency spectrum.[34] Because of this, the substitutability between different bands can be an important consideration when assessing the implications for competition of a spectrum acquisition.[35]

48. In the previous decisions cited above, the Commission has considered if different spectrum frequencies constitute individual product markets, or comprise a broader differentiated market. While the Commission has not reached a firm conclusion on this point, it has in the past defined specific spectrum markets for the provision of discrete services (eg, mobile services) or for particular spectrum frequencies (eg, 700MHz). The Commission also noted in its 2019 mobile market study that spectrum is a critical input in the deployment of a mobile network. The type and amount of spectrum held by MNOs affects the way in which they deploy their networks, and likely affects the capacity and services they can offer to retail and wholesale customers.[36]

49. One NZ submits that there is a degree of substitutability between all spectrum bands and that other spectrum can be used to provide 5G mobile and wireless broadband services.[37] One NZ further submits that mid-band spectrum in a specific frequency band is interchangeable for other mid-band spectrum.[38] One NZ also submits that the various frequencies of mid-band spectrum offer a similar coverage radius and capacity.[39]

50. 2degrees submits that, at a high level, there is substitutability between spectrum bands for capacity purposes. Although it further submits that an MNO needs to manage its spectrum holdings across different technologies and products (eg, mobile versus wireless broadband). It also submits that 2600MHz spectrum is an important spectrum for the provision of services and, in particular, wireless broadband services.[40]

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32 Telecom and the Crown [2014] NZCC 13 and Vodafone and TelstraClear [2012] NZCC 33.

33 The Application at [11.2].

34 [

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35 Commerce Commission, Mobile Market Study – Findings (26 September 2019) at [4.25].

36 Commerce Commission, Mobile Market Study – Findings (26 September 2019) at [3.102].

37 The Application at [11.23].

38 The Application at [9.2(c)(iv)].

39 The Application at [11.23].

40 Submission from 2degrees to the Commerce Commission (8 December 2023) at [2.2] and [3.2(a)].

51. Evidence from other industry participants largely supports One NZ's submissions on the substitutability of different spectrum frequencies. While in the past an MNO might have used specific spectrum only for, or technology may have meant that specific spectrum was better suited for, wireless broadband services this is not the case today.[41] Technology has become more flexible on spectrum use, with MNOs even able to aggregate different bands of spectrum to increase capacity. MNOs use a mix of spectrum to provide mobile and wireless broadband services, in both fibre and non-fibre areas. While initially MNOs may (to some degree) use a dedicated spectrum band to provide 4G or 5G services, this is not the case over the medium to long-term. Having said that, all MNOs seek to have a mix of low frequency and mid-band spectrum to provide network coverage and capacity.[42]

52. Industry participants support One NZ's submissions on the substitutability of mid-band spectrum and 2600MHz spectrum to a degree. All MNOs are initially using 3.5GHz spectrum to provide 5G services, while other mid-band spectrum will largely continue in the short to medium term to be used to provide 4G mobile and wireless broadband services (but be re-farmed to provide 5G services in the medium to long term). Evidence indicates that 1800MHz, 2100MHz, 2300MHz and 2600MHz spectrum are mostly seen as having similar characteristics. However, the evidence before us also indicates that specific frequencies of mid-band spectrum may be more or less useful to individual MNOs depending on an MNO's network architecture and the active equipment it has deployed on sites.[43]

53. The evidence and discussion above on the substitutability of different spectrum is also relevant to our analysis of the competitive impacts of the Proposed Acquisition.

54. We invite submissions and further information on the market for the acquisition of spectrum management rights, including on:

    54.1 the substitutability of specific frequencies of mid-band spectrum by individual MNOs; and

    54.2 how substitutability may potentially be affected by an individual MNO's network architecture and the active equipment it already has deployed on sites.

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41 The Commission has previously observed that the 2300MHz and 2600MHz spectrum held by Spark and One NZ had enabled them to launch wireless broadband services while minimising disruption to their mobile services. Commerce Commission, Mobile Market Study – Findings (26 September 2019) at [4.7]. Today, Spark and One NZ are using this spectrum for both mobile and wireless broadband services.

42 [ ]

43 [ ]

National retail supply of mobile services by MNOs

55. Since spectrum is an essential input to provision of mobile services, we consider that the national market for the supply of retail mobile services is a relevant market for assessing the competitive effects of the Proposed Acquisition.

56. Our preliminary view is that we do not consider it necessary for the purposes of assessing the Proposed Acquisition for us to determine whether there are discrete markets for the provision of 2G, 3G, 4G and 5G retail mobile services by MNOs, or whether there are any distinct customer markets for mobile services (eg, business customers versus consumers). All three MNOs provide both 4G and 5G mobile services, and services to both businesses and consumers. To the extent that the Proposed Acquisition would impact on competition in the supply of 4G mobile services differently to 5G mobile services, or in the supply of mobile services to business customers differently to consumers, we can consider this as part of our competition analysis.

57. We invite submissions and further information on retail mobile markets, including on:

    57.1 the interchangeability of 2G, 3G, 4G and 5G retail mobile services from the perspective of customers and, separately MNOs; and

    57.2 whether there are any discrete customer markets in the provision of retail mobile services that would be relevant to our competition assessment.

Markets relating to retail supply of wireless broadband services by MNOs

58. Markets relating to the supply of retail wireless broadband services are also relevant for assessing the competitive effects of the Proposed Acquisition.

59. Wireless broadband services are provided over the same networks that MNOs use to provide mobile services. This means that the capacity that an MNO has within its mobile network (which is influenced by its spectrum holdings) likely affects its ability to offer wireless broadband services, or the quality of services it can offer.

60. Evidence before us indicates that the Proposed Acquisition is likely to have an impact on the provision of wireless broadband services (4G wireless broadband in the short to medium term and 5G wireless broadband in the medium to long term). One NZ has publicly stated that, with the Proposed Acquisition, the additional capacity that would be added by Dense Air's spectrum would result in increased availability for wireless broadband at faster download and upload speeds.[44] 2degrees told us that
[
].[45]

61. All MNOs indicated aims to grow the extent of their wireless broadband services.[46]

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44 One NZ media release re Proposed Acquisition (3 November 2023) – https://media.one.nz/denseair.

45 Commerce Commission call with 2degrees (17 June 2023) and Commerce Commission interview with 2degrees (4 December 2023).

46 Commerce Commission interview with Spark (27 November 2023), Commerce Commission interview with One NZ (1 December 2023), e-mail from Bell Gully (on behalf of One NZ) to the Commerce Commission (18 December 2023) and Commerce Commission interview with 2degrees (4 December 2023).

62. One NZ submits that 4G wireless broadband is not a particularly effective substitute for some broadband users. That said, it considers that other forms of broadband still provide a constraint on wireless broadband and does not see wireless broadband as a separate market.[47] One NZ noted that Chorus New Zealand Limited (Chorus) now offers a low priced fibre product, which helps some retailers compete on price at the low end of the broadband market against wireless broadband in fibre areas.[48]

63. 2degrees submits that, to isolate the competitive effects of the Proposed Acquisition, we should define a separate market for wireless broadband services. It submits that wireless broadband is a substitute for lower broadband data users, but is not a substitute for high data users. It also submits that [ ].[49] Although we note that [ ].[50] Whilst 2degrees [ ].[51]

64. In order to best isolate the key competition issues in this case, we consider that it is appropriate for us to consider the competitive effects of the Proposed Acquisition in separate geographic markets for the:

    64.1 retail supply of broadband services (including wireless broadband services) in fibre areas;[52] and

    64.2 retail supply of broadband services (including wireless broadband services) in non-fibre areas.

65. Defining the markets relating to retail supply of wireless broadband services by MNOs in this way enables us to consider differences between fibre and non-fibre areas in terms of the services available to customers and potentially in the pricing of wireless broadband services, including due to network availability or capacity. It also enables us to isolate any competitive effects of the Proposed Acquisition on the supply of wireless broadband services that may be different in fibre and non-fibre areas.

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47 Submission from One NZ to the Commerce Commission (18 December 2023).

48 The Application at [16.3].

49 Submission from 2degrees to the Commerce Commission (8 December 2023) at [10.1]-[10.3]. 2degrees' internal documentation also notes [ ].

50 [ ]

51 [ ]

52 Fibre areas comprise all the parts of New Zealand where fibre is available, either through Chorus, other local fibre companies (Northpower Fibre, UltraFast Fibre and Enable Networks) or where fibre has been or is otherwise being rolled out by parties without Crown funding. Fibre is generally available in urban areas.

66. We have reached no definitive view on whether retail wireless broadband services are supplied within a broad product market for broadband services that includes wireless, fixed-line (fibre or copper) and satellite broadband, or in a narrow market for wireless broadband services. We have also not reached any definitive view on whether wireless broadband services supplied to residential customers are supplied in the same market as wireless broadband supplied to business customers, or in separate customer markets. To the extent that the Proposed Acquisition would impact on competition in the supply of wireless broadband to business customers differently to residential customers, we can consider this as part of our competition analysis. However, we note that business customers may use more or less data than residential customers (impacting on the capacity and MNO would need to service a customer) and business customers may seek to get wireless broadband and mobile services through a single supplier.

67. Evidence from industry participants supports to a degree One NZ's submissions that different types of broadband are substitutable. However, evidence also indicates that the extent of substitutability for a specific customer depends on their location (eg, if they are in a fibre or non-fibre area), their speed and use requirements for broadband, and the price that they are prepared to pay for broadband services. There may be some limitations to wireless broadband which impact on how substitutable it is seen as being for other types of broadband. For high usage households within fibre areas, wireless broadband may not be a very good substitute for fibre broadband (although this could change in the medium to long term with 5G). However, wireless broadband may be more substitutable for fibre for low usage households. In non-fibre areas, there may be fewer suitable alternatives to wireless broadband, although satellite broadband may be the main alternative in such areas.[53] Defining separate markets for the retail supply of broadband services in fibre and non-fibre areas, therefore assists us in assessing if the competitive effects of the Proposed Acquisition may be different in fibre and non-fibre areas.

68. We invite submissions and further information on the markets relating to the retail supply of wireless broadband services, including on:

    68.1 the substitutability between retail wireless broadband services and fixed-line (fibre or copper) or satellite broadband services;

    68.2 whether the substitutability of types of broadband services is different for business versus residential customers;

    68.3 how the pricing of alternative types of broadband impacts on the pricing of wireless broadband services in each of fibre and non-fibre areas; and

    68.4 the extent to which the substitutability of broadband services varies between fibre and non-fibre areas.

53 [ ]

National wholesale supply of telecommunications services

69. We consider that the competitive effects of the Proposed Acquisition need to be assessed at the wholesale level, as well as at the retail level.

70. One NZ and other MNOs provide wholesale telecommunications services to other smaller retailers (who operate as resellers), including MVNOs. The services wholesaled by MNOs include mobile services and wireless broadband services.

71. Any mobile and wireless broadband services that MNOs wholesale are provided using the same mobile networks and capacity that MNOs use to provide their own retail mobile and wireless broadband services. This means that the capacity that an MNO has within its mobile network (which is influenced by its spectrum holdings) likely affects its ability to offer wholesale mobile and wireless broadband services.

72. Evidence before us indicates that the Proposed Acquisition is likely to have an impact on the provision of wholesale mobile and wireless broadband services, and may also have an impact more broadly on the markets in which MNOs provide wholesale services (to the extent that wholesale customers seek to acquire multiple wholesale services from a single supplier). With the Proposed Acquisition, One NZ has indicated that [ ].[54] Currently and with the Proposed Acquisition, 2degrees is and would be [ ], whereas if it were to acquire Dense Air's spectrum it would [ ].[55]

73. Our preliminary view is that it would be appropriate to consider the competitive effects of the Proposed Acquisition in a national market for the wholesale supply of services by MNOs (in particular, wholesale mobile and wireless broadband services, which MNOs may wholesale using their mobile networks).

74. We have reached no definitive view on the precise boundaries of the market(s) in which MNOs provide wholesale services. We note that there could be a basis for defining discrete markets for each of wholesale mobile services, wholesale wireless broadband services and wholesale fixed-line broadband services. However, at this stage we consider that defining a broader market for the wholesale supply of services by MNOs may be more appropriate because it better enables us to consider how a specific MNO's capacity to provide wholesale wireless broadband services may impact on its competitiveness in the wholesale supply of services to MVNOs that seek to acquire wholesale mobile and wireless broadband services from a single supplier.

75. We invite submissions and further information on the markets for the wholesale supply of services by MNOs, including on:

    75.1 the extent to which wholesale services are demanded and supplied on a national basis, or separately in fibre and non-fibre areas; and

[54] Additional information provided by One NZ under the cover of an e-mail from Bell Gully to the Commerce Commission (1 November 2023).

[55] Commerce Commission interview with 2degrees (4 December 2023).

75.2 whether there are discrete wholesale markets for the supply of mobile services, wireless broadband services and other wholesale services, or whether customers demand and acquire different wholesale services in a package.

With and without scenarios

76. Assessing whether a substantial lessening of competition is likely requires us to:

76.1 compare the likely state of competition if the Proposed Acquisition proceeds (the scenario with the merger, often referred to as the factual) with the likely state of competition if it does not (the scenario without the merger, often referred to as the counterfactual); and

76.2 determine whether competition is likely to be substantially lessened by comparing those scenarios.

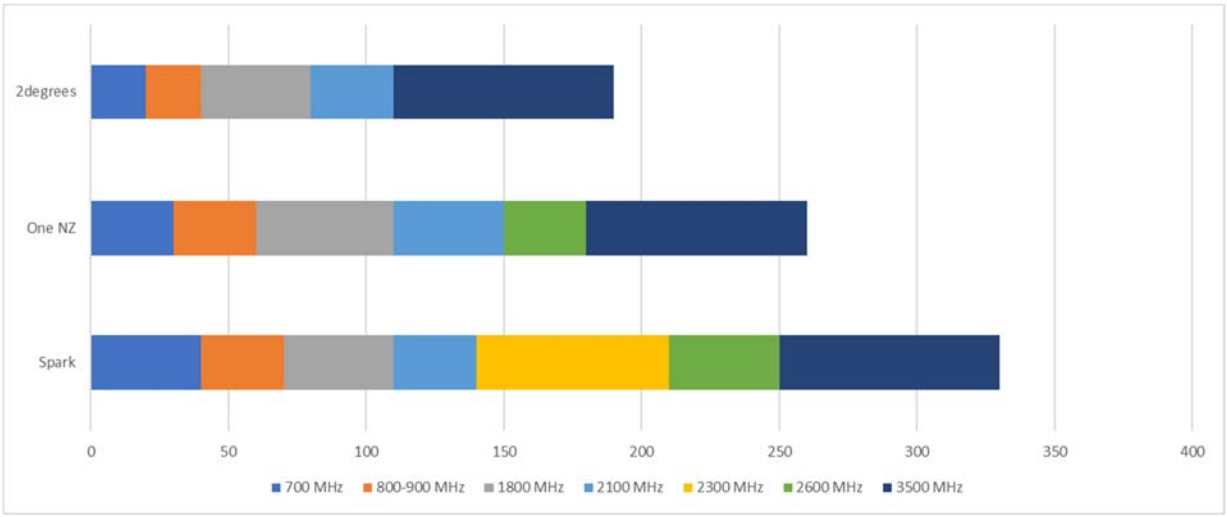
77. We discuss below what is likely to happen in each of the factual and counterfactual.

The factual (with the Proposed Acquisition)

78. With the Proposed Acquisition, One NZ would increase its holdings of 2600MHz spectrum. It would own a 2 x 15 MHz block of 2600MHz[56] plus a second 2 x 35 MHz block.[57] The spectrum holdings of 2degrees and Spark would remain unchanged.

79. Figure 1 illustrates simply the spectrum holdings of each of One NZ, 2degrees and Spark currently, which is a significant contributor to the relative capacity of each MNO and, as a result, their ability to compete in the provision of retail and wholesale mobile and wireless broadband services.[58] It shows that Spark currently holds the most spectrum of all three MNOs and that 2degrees has the least spectrum.

Figure 1: Current spectrum holdings of each MNO



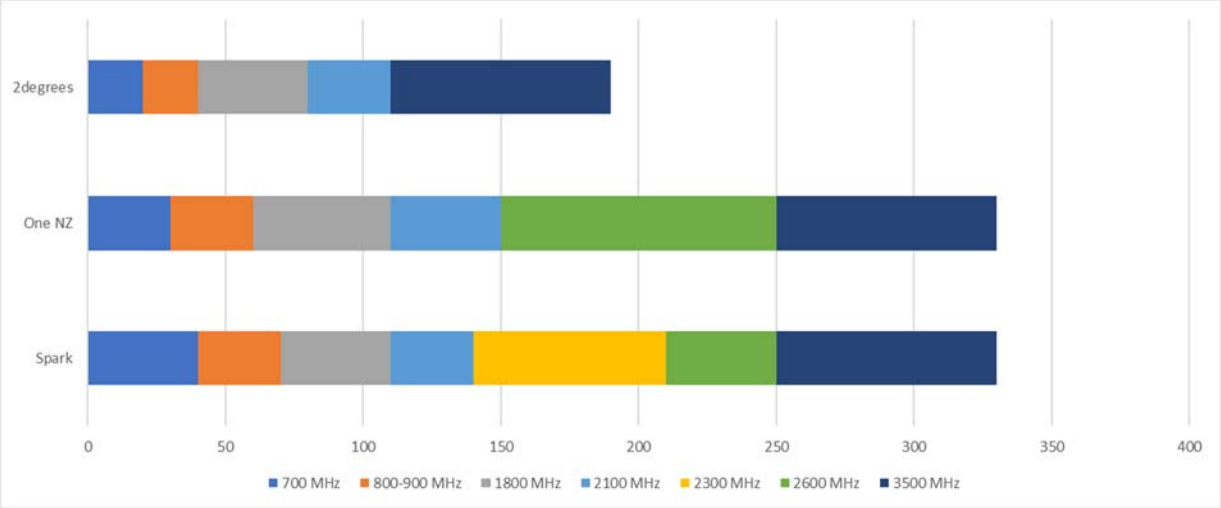
[56] One NZ strictly holds 1 x 15 MHz and 1 x 20 MHz of 2600MHz spectrum, but for the purposes of our analysis we view its holding as 2 x 15 MHz paired.

[57] The only other party that currently owns 2600MHz spectrum is Spark, which owns a 2 x 20 MHz block.

[58] Figure 1 and Figure 2 (and later figures) exclude any spectrum in these bands held by other parties (ie, Dense Air, the IMSC and the Crown). 2600MHz spectrum (which the Proposed Acquisition involves) is the green shaded part of the bars.

80. Figure 2 illustrates what the spectrum holdings of each MNO would be in the factual (with the Proposed Acquisition).

Figure 2: Spectrum holdings in the factual



81. Figure 2 shows that, in the factual (with the Proposed Acquisition), One NZ would:

81.1 significantly increase its total spectrum holdings;

81.2 eliminate entirely the gap, or disparity, between its total holdings and those of Spark, thereby likely increasing One NZ's capacity relative to Spark; and

81.3 increase materially the gap, or disparity, between its total holdings and those of 2degrees, thereby likely increasing One NZ's capacity relative to 2degrees.

82. We discuss in more detail, in turn, below what the factual (the scenario with the Proposed Acquisition) would mean for each of One NZ and 2degrees.

What the factual would mean for One NZ

83. We can take into account efficiency gains in assessing whether the Proposed Acquisition would be likely to substantially lessen competition, but only if One NZ satisfies us that any efficiencies would:[59]

83.1 be realised in a timely fashion;

83.2 not likely be realised without the Proposed Acquisition (ie, are acquisition specific); and

83.3 be passed on to buyers sufficiently to prevent a finding of a substantial lessening of competition.

84. Evidence indicates that the Proposed Acquisition would have benefits for One NZ in a number of respects.

[59] Commerce Commission, Mergers and Acquisitions Guidelines (May 2022) at [3.118]-[3.119].

84.1 As noted earlier, One NZ has publicly stated that it would immediately deploy Dense Air's spectrum to improve speeds and capacity on its 4G and 5G mobile network. The additional capacity added would also mean increased availability for wireless broadband at faster download and upload speeds. One NZ stated that this would be beneficial to customers across New Zealand, describing the effect as "like adding an extra lane on the motorway".[60] The Application states that One NZ intends to [ ].[61]

84.2 One NZ submits that the Proposed Acquisition would [ ].[62] One NZ clarified that, with the Proposed Acquisition, [ ].[63] In the factual, One NZ proposes to pay Dense Air $[ ] for its 2600MHz spectrum.[64]

84.3 One NZ further submits that the Proposed Acquisition would [ ].[65] It has internally noted that it [ ].[66] One NZ told us that, [ ].[67]

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60 One NZ media release re Proposed Acquisition (3 November 2023) – https://media.one.nz/denseair. This is consistent with information in the Application at [6.1]-[6.2] and [24.1], which states that the Proposed Acquisition would [ ].

61 The Application at [6.1]. One NZ told us that [ ]. Commerce Commission interview with One NZ (1 December 2023). One NZ has internally noted that acquiring Dense Air's 2600MHz spectrum [ ].

62 [ ] The Application at [6.1(a)].

63 Commerce Commission interview with One NZ (1 December 2023).

64 Sale and Purchase Agreement at 5. The price is based on [ ]. Letter from Bell Gully (on behalf of One NZ) to the Commerce Commission (31 May 2023) at Appendix 1 and Commerce Commission interview with One NZ (1 December 2023).

65 The Application at [6.1(b)].

66 [ ]

67 Commerce Commission interview with One NZ (1 December 2023).

84.4 One NZ also told us that [ ].[68]

85. It is currently unclear whether any efficiencies or savings would be realised in a timely fashion, [ ]. One NZ told us that the Proposed Acquisition would not:

85.1 [ ];[69] and

85.2 [ ].[70]

86. We are not satisfied at this time that these efficiencies or savings are necessarily specific to the Proposed Acquisition and may not also be realisable without the Proposed Acquisition. One NZ submits that [ ].[71] This is also relevant to what One NZ may do in the counterfactual, which we discuss in the next section.

87. We are still considering the extent to which the efficiencies or savings noted above would be passed on to (and benefit) consumers. For example, the extent to which any better quality that One NZ offered its customers might have potential knock-on on effects for all consumers, by forcing Spark and other competitors to similarly improve their offerings.

88. We invite submissions and further information on what the Proposed Acquisition would mean for One NZ, its and others' telecommunications customers, and for One NZ's competitiveness in downstream retail and wholesale telecommunications markets.

What the factual would mean for 2degrees

89. As noted above, in the factual, the spectrum holdings of 2degrees would remain unchanged. 2degrees would continue to hold the least spectrum of all three MNOs. The gap, or disparity between the spectrum holdings of 2degrees and Spark would remain unchanged. However, the gap, or disparity between the spectrum holdings of 2degrees and One NZ would increase significantly and One NZ would likely have increased capacity relative to 2degrees.

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68 Commerce Commission interview with One NZ (1 December 2023).
69 Commerce Commission interview with One NZ (1 December 2023).
70 The Application at [6.2] and Commerce Commission interview with One NZ (1 December 2023).
71 The Application at [6.3], [24.1] and [24.3].

90. This could be problematic from a competition standpoint if the consequence of this is that, in the factual compared to the counterfactual, 2degrees would be (for the reasons that we discuss in our competition analysis) capacity constrained and restricted in its ability to grow its customer base and in the propositions it is able to offer both retail mobile and wireless broadband customers, therefore be less competitive at the retail level compared to One NZ and Spark, and/or restricted in its ability to compete at the wholesale level for the provision of mobile and wireless broadband services to MVNOs. However, such competition concerns might not arise in the factual is 2degrees was able to grow its capacity by other means. As we discuss further later, there is evidence before us to indicate that 2degrees [ ], and we are considering the adequacy of this in terms of 2degrees' ability to compete in the factual.

The counterfactual (without the Proposed Acquisition)

91. We are considering what is likely to happen to Dense Air's holdings of 2600MHz spectrum absent it being acquired by One NZ, and what One NZ would do absent the Proposed Acquisition.

92. At this stage, we consider that the counterfactual is unlikely to be the status quo [ ].[72]

93. Specifically in terms of Dense Air, we are considering:

    93.1 the likelihood of Dense Air's 2600MHz spectrum being sold to an alternative purchaser (whether that be another MNO such as 2degrees, another spectrum owner or out-of-market player); and

    93.2 the plans that 2degrees would have for Dense Air's 2600MHz spectrum, in terms of it being utilised as an input to provide retail or wholesale telecommunications services.

94. In terms of the counterfactual, One NZ submits that:[73]

    94.1 the appropriate counterfactual for Dense Air is one where an alternative buyer is sought for its 2600MHz spectrum, either locally or internationally; and

    94.2 if One NZ does not acquire Dense Air's 2600MHz spectrum, One NZ would [ ].

95. We set out below our views on the likely counterfactuals for both One NZ and Dense Air, including what the counterfactual might mean for 2degrees.

96. We invite industry participants to provide us with further evidence on what is likely to happen absent the Proposed Acquisition.

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72 Commerce Commission interview with Dense Air (29 November 2023).

73 The Application at [9.1]-[9.2] and [9.4].

The counterfactual for One NZ

97. In the counterfactual, the spectrum holdings of One NZ would remain unchanged. In addition, [ ]. This may prompt One NZ to seek out alternative options to add additional capacity to its network.

98. As noted above, One NZ submits that, in the counterfactual it would [ ].[74] One NZ further submits that, [ ].[75]

99. One NZ told us that, [ ].[76]

100. Were One NZ able to [ ].[77]

The counterfactual for Dense Air

101. Dense Air has advised that, absent the Proposed Acquisition, it would [ ].[78]

102. Based on the evidence currently before us, we consider a likely counterfactual is that 2degrees would acquire Dense Air's 2600MHz spectrum.

103. Given this, for the purposes of this SoI, we have assessed the Proposed Acquisition against a counterfactual where Dense Air's 2600MHz spectrum is acquired by 2degrees. We consider this is the most competitive likely counterfactual against which to assess the competitive effects of the Proposed Acquisition.

104. Figure 3 illustrates what the spectrum holdings of each MNO would be in this counterfactual.

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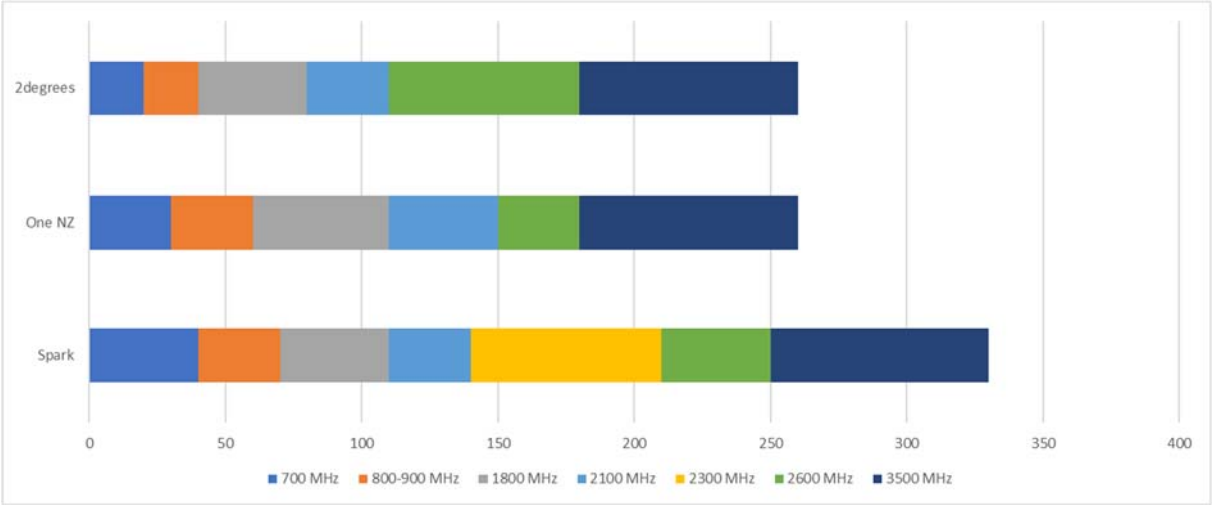
74 The Application at [9.4].
75 The Application at [9.4].
76 The Application at [6.1(a)] and Commerce Commission interview with One NZ (1 December 2023).
77 The Application at [24.1] and [24.3].
78 Commerce Commission interview with Dense Air (29 November 2023).

Figure 3: Spectrum holdings in the counterfactual



105. Figure 3 shows that, in a counterfactual where Dense Air's spectrum is acquired by 2degrees, 2degrees would:

105.1 significantly increase its total spectrum holdings;

105.2 eliminate entirely the gap, or disparity, between its total spectrum holdings and those of One NZ, thereby likely increasing 2degrees' capacity relative to One NZ; and

105.3 reduce materially the gap, or disparity, between its total holdings and those of Spark thereby, likely increasing 2degrees' capacity relative to Spark.

106. We discuss below our evidence and analysis on alternative purchasers for Dense Air's spectrum, on the likelihood of 2degrees buying Dense Air's spectrum, and evidence on what 2degrees acquiring Dense Air's spectrum would mean for it in the counterfactual.

<u>Potential alternative purchasers of Dense Air's 2600MHz spectrum</u>

107. The potential alternative purchasers of Dense Air's 2600MHz spectrum theoretically may include Spark, 2degrees, other telecommunications companies (existing and potential new entrants) and third parties. However, beyond 2degrees, there is uncertainty as to who exactly might be potential alternative purchasers of Dense Air's spectrum.

108. One NZ submits that Spark has the majority share of mid-range spectrum holdings such that any acquisition by Spark would be materially less competitive than the Proposed Acquisition.[79]
[ ] Even if acquisition by Spark was a likely counterfactual, we would not assess the Proposed Acquisition against this counterfactual, because we consider that a scenario where 2degrees acquires Dense Air's spectrum to be a more competitive counterfactual.

[79] The Application at [9.2(b)].

109. Dense Air has already undertaken a sale process to find a buyer for its business and assets in New Zealand.[80] From this, we know that
[

].[81]

110. One NZ considers that it would be feasible for a third party (that is not currently an MNO or using spectrum to provide telecommunications services in New Zealand) to acquire Dense Air's 2600MHz spectrum and make use of it. One NZ advised that a third party could in theory use the spectrum to provide services on its own, but noted that acquiring 2600MHz spectrum alone would not give a scale coverage network to a third party. One NZ further submits that
[ ] in the counterfactual.[82]

111. [ ] commented that there might be other parties that could utilise Dense Air's 2600MHz spectrum, maybe even a new entrant. It suggested that [ ].[83] It subsequently told us that
[

].[84] Currently, there is not sufficient evidence before us to indicate that there is a real chance of [ ] or a new entrant acquiring Dense Air's 2600MHz in the counterfactual. Although, we acknowledge that competition in downstream telecommunications markets may benefit from the existence a new entrant, fourth MNO.

112. We invite submissions and further information on the potential alternative purchasers of Dense Air's spectrum in the counterfactual, including on:

112.1 the plans that alternative purchasers would have for Dense Air's spectrum; and

112.2 the value that potential alternative purchasers see in and attribute to Dense Air's spectrum.

<u>The likelihood of 2degrees buying Dense Air's 2600MHz spectrum in the counterfactual</u>

113. As noted above, we consider it a likely counterfactual that 2degrees would acquire Dense Air's 2600MHz spectrum. We set out below the evidence and submissions currently before us that supports this view.

114. Dense Air
[

80 The Application at [4.1]-[4.2].
81 E-mail from Wynn Williams (on behalf of Dense Air) to the Commerce Commission (2 November 2023).
82 The Application at [9.2(a)].
83 [ ]
84 [ ]

[ ].[85] Dense Air told us that it [ ].[86] Dense Air commented that [ ].[87] However, Dense Air also told us that [ ].[88]

115. 2degrees submits that, absent the Proposed Acquisition, a likely counterfactual would be that 2degrees acquires Dense Air's 2600MHz spectrum.[89] [ ].[90] 2degrees told us that:[91]

115.1 [ ];

115.2 [ ];

115.3 [ ];

115.4 [ ];

115.5 [ ]; and

115.6 [

[85] [ ] E-mail from Wynn Williams (on behalf of Dense Air) to the Commerce Commission (2 November 2023) and Commerce Commission interview with Dense Air (29 November 2023).

[86] E-mail from Wynn Williams (on behalf of Dense Air) to the Commerce Commission (18 December 2023).

[87] Commerce Commission interview with Dense Air (29 November 2023).

[88] Commerce Commission interview with Dense Air (29 November 2023).

[89] Submission from 2degrees to the Commerce Commission (8 December 2023) at [2.8].

[90] Letter from 2degrees to the Commerce Commission (24 July 2023) and submission from 2degrees to the Commerce Commission (8 December 2023) at [2.8(a)].

[91] Commerce Commission call with 2degrees (17 June 2023), Commerce Commission interview with 2degrees (4 December 2023) and submission from 2degrees to the Commerce Commission (8 December 2023) at [2.9].

].

116. [

].[92]

117. We invite submissions and further information on the likelihood of 2degrees buying Dense Air's spectrum in the counterfactual.

What the counterfactual would mean for 2degrees

118. 2degrees submits that if it acquired Dense Air's spectrum in the counterfactual, this would provide it with enhanced mobile capacity to enable it to compete better in both a wireless broadband market and in a mobile market by delivering improved mobile quality compared with the factual. In particular, there would be for 2degrees:[93]

    118.1 closer to equivalence in terms of spectrum holdings and/or cost base to One NZ and a sustainable cost base;

    118.2 more capacity to allocate, particularly over the medium and long term; and

    118.3 [

    ].

119. 2degrees has further told us, or provided evidence to indicate, that in such a counterfactual scenario, compared to in the factual, it would:[94]

    119.1 [ ];

    119.2 [ ];

[92] [ ]

[93] Submission from 2degrees to the Commerce Commission (8 December 2023) at [2.10].

[94] Letter from 2degrees to the Commerce Commission (9 June 2023), Commerce Commission call with 2degrees (17 June 2023), letter from 2degrees to the Commerce Commission (24 July 2023), [ ].

119.3 [ ];

119.4 [ ];

119.5 [ ]; and

119.6 [ ].

120. 2degrees has internally stated that [ ].[95]

121. We consider the above later in our assessment of the competitive effects of the Proposed Acquisition.

Considerations relevant to our assessment of the Proposed Acquisition

122. We discuss below some considerations that are relevant to our assessment of the Proposed Acquisition, and the potential competitive effects of it. These are:

122.1 the capacity constraints that MNOs may have in terms of their networks, and how additional spectrum would change capacity;

122.2 what spectrum holdings and network capacity means for the retail and wholesale services an MNO can offer;

122.3 the opportunities that MNOs may have to acquire or access additional spectrum in the future; and

122.4 the alternatives available to MNOs to add capacity to their networks.

123. These considerations inform our assessment of the extent to which there may be existing constraints on the ability of MNOs to compete in any downstream telecommunications markets, and whether there may be barriers that 2degrees might face in expanding in the factual.

124. We refer back to these considerations later in discussing the competitive effects of the Proposed Acquisition.

Capacity constraints and how spectrum affects capacity

125. In assessing the competitive effects that might result from the Proposed Acquisition, it is relevant for us to consider the capacity constraints that MNOs may have (or may face in the future) in terms of their networks, and how additional spectrum would change any capacity/capacity constraints. This is because:

[95] [ ]

125.1 the type and amount of spectrum held by individual MNOs affects the capacity of their networks; and

125.2 any existing capacity constraints of individual MNOs may already vary and have implications for our assessment of the competitive constraints that would exist on One NZ with the Proposed Acquisition.

126. All MNOs (along with some other industry participants) agree that more spectrum is preferable in terms of an MNO's business and its capacity.[96] [ ] noted that there is technical and strategic value to spectrum.[97] 2degrees submits that an MNO needs a total volume of spectrum that is enough to deliver its required capacity.[98] MNOs seek to have sufficient spectrum to meet demand, [ ].[99]

127. Larger 'blocks' of contiguous spectrum are also generally preferrable, especially in order to provide wireless broadband services. In addition, there is the potential for MNOs to use technology to aggregate non-contiguous blocks of spectrum in different bands.[100] That said, this may reinforce any disparity of spectrum holdings and differences in relative capacity between MNOs.[101]

128. All MNOs are likely to have increasing demands for more spectrum in the future in order to cater to growth in data traffic on their networks, in particular to provide wireless broadband services. One NZ noted that mobile traffic grows [ ]% year on year, on average. To satisfy growing demand, [ ].[102] It advised that spectrum needs to [ ].[103]

129. Table 3 summarises the existing capacity constraints (if any) of each MNO's network, nationally as a proportion of each MNO's overall network of sites. To the extent that MNOs have capacity constraints, this may have implications for the services that they are offering, or may wish to offer in the future. That said, we note that the extent of any constraints could vary between individual sites or locations.

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96 Commerce Commission call with 2degrees (27 June 2023), Commerce Commission interview with Spark (27 November 2023), Commerce Commission interview with One NZ (1 December 2023), [ ].

97 [ ]

98 Submission from 2degrees to the Commerce Commission (8 December 2023) at [3.2(a)].

99 [ ]

100 Commerce Commission interview with Spark (27 November 2023), Commerce Commission interview with One NZ (1 December 2023), Commerce Commission interview with 2degrees (4 December 2023), submission from 2degrees to the Commerce Commission (8 December 2023) at [3.2(b), [ ].

101 Commerce Commission interview with 2degrees (4 December 2023).

102 Commerce Commission interview with One NZ (1 December 2023).

103 Commerce Commission interview with One NZ (1 December 2023).

Table 3: Existing capacity constraints of MNOs (if any)

MNO	Capacity constraints (if any)
Spark	[ ][104]
One NZ	[ ][105]
2degrees	[ ][106]

130. To the extent that MNOs are capacity constrained, this impacts on their ability to provide both mobile and wireless broadband, given network capacity is shared.

130.1 One NZ noted that network availability or capacity (along with demand) influence where wireless broadband is offered.[107] One NZ told us that [ ].[108]

130.2 2degrees submits that [ ].[109] It advised that [ ].[110] However, it noted that [ ].[111]

130.3 Spark stated that [ ].[112]

131. We invite submissions and further information on the existing capacity of MNOs and their capacity constraints and on how spectrum holdings affect capacity, including on how essential spectrum is to the capacity of MNOs and the extent to which MNOs are capacity constrained (including if capacity constraints differ in fibre and non-fibre areas).

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104 Commerce Commission interview with Spark (27 November 2023) and e-mail from Spark to the Commerce Commission (18 December 2023). [ ]

105 The Application at footnote 25 and Commerce Commission interview with One NZ (1 December 2023).

106 Commerce Commission interview with 2degrees (4 December 2023). [ ]

107 The Application at [16.1] and [16.6].

108 Commerce Commission interview with One NZ (1 December 2023).

109 Submission from 2degrees to the Commerce Commission (8 December 2023) at [3.3(c)].

110 Commerce Commission interview with 2degrees (4 December 2023).

111 Commerce Commission interview with 2degrees (4 December 2023).

112 Commerce Commission interview with Spark (27 November 2023) and e-mail from Spark to the Commerce Commission (18 December 2023).

What spectrum holdings and network capacity mean for services offered by MNOs

132. In assessing the competitive effects that might result from the Proposed Acquisition, it is also relevant for us to consider what spectrum holdings and network capacity mean for the retail and wholesale services an MNO can offer. This is because:

132.1 radio spectrum is a critical input used in mobile telecommunications networks and in the provision of mobile and wireless broadband services;

132.2 the type and amount of spectrum held by individual MNOs affects its capacity and the types of services they can offer to retail and wholesale customers; and

132.3 significant disparities in spectrum holdings of MNOs may affect competition between them in telecommunications markets.

133. To the extent that any MNOs are, or may become, capacity constrained because they have less spectrum, they may face a trade-off between acquiring more customers to which they offer lower quality of services (eg, reduced average speeds, less services) or having fewer customers to which they offer higher quality services.

134. One NZ submits that:[113]

134.1 all MNOs, including 2degrees and Spark, have access to adequate spectrum to provide high quality services;

134.2 2600MHz spectrum is not essential for the provision of mobile or wireless broadband services and there are many alternative spectrum bands that can be used to provide such services; and

134.3 the Proposed Acquisition does not confer a material advantage on One NZ over Spark or 2degrees. Both Spark and 2degrees are strong competitors that have adequate spectrum holdings to provide high quality mobile services, grow their customer bases in the future and maintain comparable network performance to One NZ (which would not be impacted by the Proposed Acquisition).

135. 2degrees submits that the more spectrum an MNO has directly impacts the capacity and speeds it can provide to its mobile and wireless broadband customers. Limited spare capacity means an MNO will either be forced to constrain customer numbers, prioritise certain customers or products over others, degrade the performance of its network for its customers and/or build more sites which is more expensive and often uneconomic.[114]

136. 2degrees does not agree with One NZ that it has access to adequate spectrum to provide high quality mobile and wireless broadband services, nor that the Proposed Acquisition would not confer a material advantage on One NZ over 2degrees. 2degrees submits that it needs 2600MHz spectrum to effectively compete with One NZ and Spark on price, products and service quality. It does not agree with One NZ that there are many alternative (and available) spectrum bands that it could use.[115] It submits:

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113 The Application at [1.6], [18.1], [21.2] and [22.1].

114 Submission from 2degrees to the Commerce Commission (8 December 2023) at [2.5] and [4.2].

115 Submission from 2degrees to the Commerce Commission (8 December 2023) at [2.2], [3.1], [4.1] and [8.1].

136.1 [ ];[116]

136.2 [ ];[117] and

136.3 if it remains at a spectrum disadvantage, [ ].[118]

137. 2degrees has noted that, [ ].[119] 2degrees has internally [ ].[120]

138. 2degrees told us that [ ].[121] 2degrees has internally noted [ ].[122]

139. MNOs need significantly more network capacity to provide wireless broadband services, because wireless broadband customers use substantially more data than mobile customers. Evidence (summarised in Table 3) indicates that [ ].

140. Even if MNOs have sufficient capacity to currently provide services, their future competitiveness (or ability to grow) could be impacted by spectrum they acquire, and network capacity they build, today. One NZ told us that [ ].[123] 2degrees told us that

116 Submission from 2degrees to the Commerce Commission (8 December 2023) at table after [3.4].
117 Submission from 2degrees to the Commerce Commission (8 December 2023) at [2.11(d)].
118 Submission from 2degrees to the Commerce Commission (8 December 2023) at [4.8].
119 [ ]
120 [ ]
121 Letter from 2degrees to the Commerce Commission (9 June 2023) and letter from 2degrees to the Commerce Commission (24 July 2023).
122 [ ]
123 Commerce Commission interview with One NZ (1 December 2023).

[ ].[124]

141. The amount of spectrum an MNO needs to be competitive is not just a factor of the number of customers it has, but needs to take account of customer mix and also potentially how its spectrum holdings are being deployed. This is because a wireless broadband customer uses substantially more capacity than a mobile customer.[125] [ ] considers an analysis of downlink Hz/per customer to be a static and inaccurate measure of competition or an MNO's need for spectrum. It considers that [ ].[126]

142. With more spectrum, an MNO may have more certainty over the quality of services it can offer. As noted earlier, One NZ further submits that the Proposed Acquisition would [ ].[127] [ ] noted that the more spectrum an MNO had the more it could guarantee speed of its services.[128] [ ] suggested that, depending on its capacity and spectrum, an MNO might need to trade-off the quality of its mobile services to offer more wireless broadband services.[129]

143. An MNO that has significantly more spectrum than another rival may have an ability to offer services at a greater scale or to a higher quality than its rival. 2degrees submits that the speed and service that an MNO can deliver on wireless broadband depends on the capacity of its network, which depends on its spectrum holdings.[130] 2degrees also told us that [ ].[131]Although [ ] expressed the view that all three MNOs have the ability to deliver the same services with roughly the same performance.[132]

144. [ ] told us that:[133]

144.1 [ ] having additional capacity would enable it to support future growth, particularly in wireless broadband;

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124 Letter from 2degrees to the Commerce Commission (9 June 2023), letter from 2degrees to the Commerce Commission (24 July 2023) and Commerce Commission interview with 2degrees (4 December 2023).

125 [ ]

126 [ ]

127 The Application at [6.1(b)].

128 [ ]

129 [ ]

130 Submission from 2degrees to the Commerce Commission (8 December 2023) at [10.2(c)].

131 Commerce Commission call with 2degrees (17 June 2023), letter from 2degrees to the Commerce Commission (24 July 2023) and Commerce Commission interview with 2degrees (4 December 2023).

132 [ ]

133 [ ]

144.2 it did not want to see any MNO having large swings in capacity and spectrum, noting that balance is important for competition and if MNOs were operating substantially different networks, this could impact on the ability of individual parties to compete; and

144.3 spectrum holdings do not always translate directly to network quality.

145. Spectrum is also important to parties other than the three MNOs. WISPA submits that spectrum is critical to WISPs and enables them to be able to provide high quality connectivity to current and future customers, and services that are competitive. Spectrum assets that MNOs can only deploy on high density sites with short end user/mobile user distances, can be used by WISPs in rural settings to provide long distance connectivity. WISPA submits that it is difficult for WISPs to obtain sufficient spectrum to compete, other than in difficult rural locations and that WISPs are unable to truly compete in urban areas.[134]

146. We invite submissions and further information on what spectrum holdings and network capacity means for the services offered by (and the relative competitiveness of) MNOs, including on:

146.1 how MNOs intend to reallocate spectrum from 2G/3G to 4G/5G as they retire older networks, and how this may impact on the capacity of MNOs to serve mobile or wireless broadband customers in the future;

146.2 the extent to which any spectrum-driven capacity constraints impact on an MNO's ability to offer 4G and 5G services to the same extent, or to varying degrees; and

146.3 efforts MNOs can undertake to alleviate or eliminate capacity constraints, or otherwise manage capacity to offer competitive mobile or wireless broadband services.

Opportunities to acquire or access additional spectrum

147. The opportunities that MNOs may have to acquire or access additional spectrum in the future, including around the renewal of 2600MHz spectrum, may be relevant to our assessment of the competitive effects that might result from the Proposed Acquisition. This is because:

147.1 if 2degrees were to have opportunities to acquire or access additional spectrum to a sufficient degree within the short to medium term in the factual, this could mean that the theories of harm we are investigating in terms of the Proposed Acquisition may not transpire; and

147.2 if it were likely that One NZ would acquire or access additional spectrum in the counterfactual, this may impact any assessment of the efficiencies that it submits would result from the Proposed Acquisition. This is because, as indicated earlier

[134] Submission from WISPA to the Commerce Commission (8 December 2023).

at [83], we only consider efficiencies if One NZ satisfies us that it would be unlikely to also realise these without the Proposed Acquisition.

148. One NZ submits that there are a number of opportunities for MNOs to acquire additional spectrum arising in the short, medium and long term.[135]

149. In contrast, 2degrees submits that it has limited spectrum alternatives to Dense Air's spectrum. It submits that
[
].[136] 2degrees considers
that
[
].[137]

150. In investigating the opportunities to acquire or access additional spectrum in the future, we have been considering:

150.1 the likelihood of MNOs acquiring or accessing spectrum held by the IMSC;

150.2 what is likely to happen to the rights to 2600MHz spectrum when the existing management rights expire in 2028 (eg, whether they might be renewed); and

150.3 the likelihood of the Crown allocating, or making available, to MNOs other spectrum it holds.

151. At this time, we consider that there are unlikely to be other opportunities in the short to medium term for 2degrees to acquire sufficient additional spectrum to remove, or materially reduce, the disparity in its holdings and capacity relative to those of One NZ that would exist in the factual. We also note that:

151.1 uncertainty exists about the future opportunities that MNOs may have to acquire spectrum (in terms of whether MNOs will get to access additional spectrum, to what extent and within what timeframe), and this impacts on the extent to which we may take this into account in assessing the Proposed Acquisition;

151.2 the amount of spectrum that MNOs may have an opportunity to access or acquire in the future may be relatively small, compared to Dense Air's block of spectrum to which the Proposed Acquisition relates; and

151.3 even where there is some evidence to suggest that all MNOs may get to acquire additional spectrum in the future, there is uncertainty on the extent (or amount) of spectrum that each MNO may get access to who and whether the allocations of spectrum might vary between MNOs.

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135 The Application at [1.6], [18.1], [24.2] and [26.1].

136 Submission from 2degrees to the Commerce Commission (8 December 2023) at [11.2(a)], [11.4] and [11.7].

137 Commerce Commission call with 2degrees (17 June 2023) and Commerce Commission interview with 2degrees (4 December 2023).

IMSC spectrum

152. The IMSC [ ].[138] Although, there is uncertainty around whether MNOs will get to access or utilise IMSC spectrum, and to what extent.

Potential renewal of 2600MHz

153. No decisions have been made about the renewal of 2600MHz spectrum beyond 2028.[139] MBIE has signalled that it is likely to commence its review of 2600MHz spectrum in 2024 and that any renewal of the rights to this spectrum beyond 2028 would be subject to the MOU between the Crown and IMSC (ie, 20% of 2600MHz spectrum may be allocated to Māori on renewal of the rights).[140]

Future allocations of spectrum by the Crown

154. MBIE (on behalf of the Crown) may make other bands of spectrum available for use in the future by MNOs. MBIE may in the future consider the use of spectrum by MNOs in 600MHz, 1400MHz, 3.8-4.2GHz, 6.4-7.1GHz and/or 24-30GHz.[141] However, there is uncertainty around the quantum of additional spectrum that MNOs may be able to acquire from the Crown in the future, and around the timing of any future spectrum allocations.

155. We invite submissions and further information on the opportunities that MNOs will have to acquire or access additional spectrum in the future.

The alternatives available to MNOs to add capacity

156. One NZ submits that building or utilising more sites is an alternative to acquiring more spectrum, and provides comparable improvements in service and network quality. It further submits that 2degrees is at an early stage of its 5G roll-out and has greater latitude to pursue alternative strategies and is not constrained by legacy equipment.[142]

157. 2degrees submits that it is not practical for it to build more sites to gain capacity as an alternative to spectrum, noting that this would be uneconomic and not viable.[143]

158. The alternatives available to MNOs (to acquiring more spectrum) to add capacity to their networks are relevant to our assessment of the competitive effects that might result from the Proposed Acquisition. This is because:

    158.1 if 2degrees had sufficient commercially viable and practical alternatives available to add capacity to a sufficient degree within the short to medium term in the factual, this could mean that the theories of harm we are investigating in terms of the Proposed Acquisition may not transpire. As we discuss later, evidence from 2degrees
    [

138 The Application at [11.16]-[11.17].
139 Commerce Commission interview with MBIE (30 November 2023).
140 MBIE, The New Zealand Spectrum Outlook 2023-2027 (September 2023) at 21.
141 MBIE, The New Zealand Spectrum Outlook 2023-2027 (September 2023) at 27, and the Application at [23.7] and Appendix 2.
142 The Application at [22.5] and [24.2].
143 Submission from 2degrees to the Commerce Commission (8 December 2023) at [2.13] and [9.1].

], and we are considering the adequacy of this in terms of 2degrees' ability to compete in the factual; and

158.2 if it were likely that One NZ had commercially viable and practical alternatives available to add additional capacity in the counterfactual, this may impact on our assessment of the efficiencies that it submits would result from the Proposed Acquisition.

159. In investigating the alternatives available to MNOs to add capacity, we are considering:

159.1 the practical feasibility of MNOs building more sites or upgrading existing sites, and timeframe within which this would be feasible;

159.2 the commercial implications of building more sites or upgrading existing sites;

159.3 the extent of sites that may be suitable or profitable to build or upgrade (eg, in areas where an MNO considers it can obtain additional wireless broadband customers due to likely market demand); and

159.4 the number of additional sites that an MNO might need to build or upgrade to achieve a comparable increase in capacity to that which would be achieved through the acquisition of additional spectrum.

160. At this time, we consider that while, technically, there are alternatives available to MNOs to add capacity to their networks, evidence indicates that these are second best in terms of cost and timeframes to holding more spectrum, and in some instances also may not be commercially viable and/or practical. However, we note that some sites may be more suitable to develop than others, and we are considering the extent of sites that may or may not be profitable to build or upgrade and the impact this would have on competition and of this for analysis of the Proposed Acquisition.

161. Evidence indicates that MNOs may face a trade-off between spectrum holdings and investment in building new sites or upgrading existing sites.[144] Spark [ ].[145] We also note that all MNOs are all undertaking a programme of investment in new sites and site upgrades as part of their roll out of 5G.

162. Evidence indicates that MNOs' preferences in adding capacity are to deploy existing spectrum to site or acquire additional spectrum. Building more sites is seen as the more costly and least efficient alternative.

162.1 One NZ advised that [

144 [ ]

145 Commerce Commission interview with Spark (27 November 2023).

].[146]

162.2 Spark told us that
[

].[147]

162.3 2degrees stated that
[

].[148] It has internally noted
[

].[149]

162.4 [ ] noted that building sites was very costly and that, for an MNO, extra spectrum was preferable even if it had to invest in infrastructure to use it.[150]

162.5 [ ] told us that more spectrum is better for MNOs, in terms of increasing capacity, with the main alternative to more spectrum being densification of an MNO's network. Simplistically, with more spectrum an MNO needs fewer sites.[151]

163. We invite submissions and further information on the alternatives available to MNOs to add capacity, including on the extent to which it may be profitable for an MNO to invest in adding capacity to its networks in the above ways and how these alternatives compare to acquiring additional spectrum.

Competitive effects of the Proposed Acquisition

164. We are continuing to assess the potential for adverse competitive effects to result from the Proposed Acquisition.

Submissions received

One NZ's submissions

165. One NZ submits that the Proposed Acquisition would not give rise to any substantial lessening of competition in any relevant market. This is because, in its view:[152]

146 Commerce Commission interview with One NZ (1 December 2023).
147 Commerce Commission interview with Spark (27 November 2023).
148 Commerce Commission interview with 2degrees (4 December 2023).
149 [ ]
150 [ ]
151 [ ]
152 The Application at [1.6], [18.1], [19.1], [19.5]-[19.6], [20.1]-[20.2], [21.2], [22.1], [22.5], [24.2]. [26.1]-[26.2] and [28.1] and submission from One NZ to the Commerce Commission (18 December 2023).

165.1 all MNOs, including 2degrees and Spark, have access to adequate spectrum to provide high quality services;

165.2 2600MHz spectrum is not essential for the provision of 4G or 5G mobile services for wireless broadband services and there are many alternative spectrum bands that can be used to provide such services (with only around [ ]% of One NZ's wireless broadband traffic using its 2600MHz spectrum);

165.3 there are a number of opportunities for MNOs to acquire additional spectrum for use in 4G and 5G services arising in the short, medium and long term;

165.4 the Proposed Acquisition does not confer a material advantage on One NZ over Spark or 2degrees. Both Spark and 2degrees are strong competitors that have adequate spectrum holdings to provide high quality mobile services, grow their customer bases in the future and maintain comparable network performance to One NZ (which would not be impacted by the Proposed Acquisition);

165.5 Spark is the largest holder of mobile telephony spectrum in New Zealand and would remain so following the Proposed Acquisition;

165.6 MNOs do not need equivalent spectrum holdings to compete, asymmetric outcomes in spectrum allocations are not indicative of competition concerns, and capacity is merely one element of competition;

165.7 building or utilising more sites is an alternative to acquiring more spectrum, and provides comparable improvements in service and network quality, with 2degrees currently undertaking an extensive upgrade of its sites and having the financial resources to invest in its network;

165.8 2degrees is at an early stage of its 5G roll-out and has greater latitude to pursue alternative strategies and is not constrained by legacy equipment;

165.9 retail mobile and broadband markets are highly competitive and the Proposed Acquisition would not impact on the ability or incentives of parties to compete, including in wireless broadband;

165.10 2degrees' concerns on the impact of the Proposed Acquisition are focused on its ability to compete in 4G wireless broadband, which has a relatively limited lifespan and will soon be replaced by 5G;

165.11 the Proposed Acquisition has no impact on barriers to entry or expansion in mobile or broadband markets; and

165.12 the Proposed Acquisition would not increase One NZ's market power or materially increase the likelihood of coordination occurring.

2degrees' submissions and statements

166. In media reporting on registration of the Application, 2degrees is publicly cited as having told media in a statement that:[153]

166.1 spectrum has been crucial to its ability to disrupt and bring competition and choice to consumers benefiting all New Zealand telecommunications customers;

166.2 spectrum plays a fundamental role in effective competition and it wants to ensure that when spectrum changes hands it does so appropriately; and

166.3 any acquisition that enhances spectrum disparities and has the potential to cause competitive harm, as the Proposed Acquisition does, must be scrutinised by the Commission.

167. 2degrees submits that
[
].[154]

2degrees also submits that the Proposed Acquisition will have the effect of substantially lessening competition in the mobile and broadband markets (including a wireless broadband services market).[155] It further submits:[156]

167.1 spectrum is essential, and 2degrees' lack of spectrum is limiting its ability to compete with Spark and One NZ. With the Proposed Acquisition, 2degrees
[
];

167.2 with the Proposed Acquisition, One NZ and Spark would have a sustainable cost advantage over 2degrees;

167.3 if 2degrees acquired Dense Air's spectrum it would have a significantly increased ability to compete with One NZ and Spark;

167.4 it is not viable for 2degrees to build more sites to resolve its spectrum issues. It
[
];[157]

167.5 other comparable spectrum acquisition options are not available to 2degrees;

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153 NZ Herald article 3 November 2023 at 2.43pm and Reseller News article 3 November 2023 at 6.32am.

154 Letter from 2degrees to the Commerce Commission (9 June 2023), Commerce Commission call with 2degrees (17 June 2023) and letter from 2degrees to the Commerce Commission (24 July 2023).

155 Submission from 2degrees to the Commerce Commission (8 December 2023) at [11.1].

156 Submission from 2degrees to the Commerce Commission (8 December 2023) at [1.2]-[1.2], [2.11]-[2.12], [9.3(b)] and [11.2(b)].

157 Commerce Commission interview with 2degrees (4 December 2023) and submission from 2degrees to the Commerce Commission (8 December 2023) at [9.3]. Although we note that,
[
]

167.6 2degrees is not at an early stage of its 5G roll out, nor does it have greater latitude to pursue alternative equipment strategies compared to One NZ;

167.7 there are not competitively effective mitigation options that would be available to 2degrees; and

167.8 the effects of this Proposed Acquisition would be long term.

WISPA submissions

168. WISPA submits that:[158]

168.1 it has concerns around further spectrum being amalgamated into an existing MNO network that further reduces the ability for new or even existing smaller providers outside of the three MNOs, being able to compete in urban and rural areas;

168.2 spectrum is critical to WISPs and enables them to be able to provide high quality connectivity to current and future customers, and services that are competitive. However, current policy settings make it difficult for WISPs to obtain sufficient spectrum to compete, other than in some of the most difficult locations, such as rural New Zealand;

168.3 wireless broadband has tremendous potential in New Zealand and enabling more competition could tap into more of this potential;

168.4 spectrum assets, that MNOs can only deploy on high density sites with short end user/mobile user distances, can be used by WISPs in rural settings to provide long distance connectivity;

168.5 new entrants or existing providers wishing to grow in mobile and wireless broadband markets are prevented from entering due to the unavailability of spectrum to create a network. MNOs control the vast majority of spectrum that is able to be used in urban environments, meaning that WISPs are unable to truly compete in urban areas;

168.6 it supports the concept of new entrants or preferably the enabling of existing smaller regional operators to be able to compete more effectively throughout New Zealand both in rural and urban markets. It submits that there are benefits to more competition, and that anecdotal evidence would suggest that globally, having more than three MNOs is good for the market, enabling innovation, uptake and better use of spectrum resources; and

168.7 it supports the enabling of regional providers who are innovative and agile operators, being able to compete not just in the more difficult to reach places but also in more densely populated areas, thus bolstering competition, consumer choice and a more rounded use of the resource.

[158] Submission from WISPA to the Commerce Commission (8 December 2023).

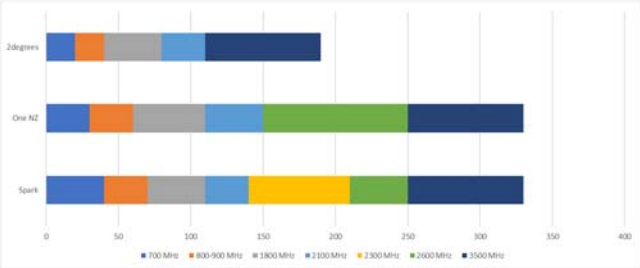
Summary of our current view

169. Acquisitions of spectrum may substantially lessen competition due to unilateral and/or vertical effects. With an acquisition of spectrum, the aggregation of spectrum holdings occurs in a national market for the acquisition of spectrum management rights (an input market), while the markets in which any competitive effects play out are the different downstream telecommunications markets (where spectrum is used as an input). Any vertical effects or foreclosure may happen immediately upon an acquisition of spectrum occurring, simply by one MNO foreclosing rivals from acquiring and making use of that spectrum. Our assessment of an acquisition of spectrum focuses on the competitive effects that may occur in downstream telecommunications markets.

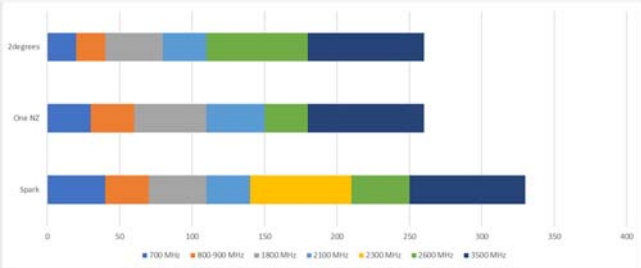
170. Relevant to our assessment of the competitive effects of the Proposed Acquisition, Figure 4 represents earlier Figure 2 depicting spectrum holdings in the factual alongside earlier Figure 3 depicting spectrum holdings in the counterfactual.

Figure 4: Spectrum holdings in the factual compared to counterfactual

Factual



Counterfactual



171. We are considering whether competition in any relevant retail and/or wholesale telecommunications markets would be substantially lessened with the Proposed Acquisition (in the factual) compared to the likely counterfactual. In doing so, we have been considering and continue to consider:

171.1 the extent to which the Proposed Acquisition might inhibit the ability of 2degrees to compete with, or to expand and provide a greater degree of competitive constraint on, or reduce the competitiveness of 2degrees relative to, One NZ, Spark and other competitors (as relevant) in retail and wholesale telecommunications markets;

171.2 the extent to which the competitive constraint provided by 2degrees and One NZ on Spark might differ in the factual compared to the counterfactual (eg, if One NZ would have the capacity to offer higher quality services or services to more customers in the factual); and

171.3 for the ultimate effects on consumers and whether the latter would be likely to face higher prices, less choice or lower quality for telecommunications services as a result of the Proposed Acquisition.

172. We are continuing to explore these issues, but are currently not satisfied that the Proposed Acquisition would not substantially lessen competition, leading to higher prices and/or a reduction in quality, customer choice or innovation. In summary, this is because:

172.1 radio spectrum is a scarce and critical input that is used by MNOs in mobile telecommunications networks and in the provision of mobile and wireless broadband services;

172.2 evidence indicates that the capacity that an MNO has to provide mobile and wireless broadband services to retail and wholesale customers depends on the amount of spectrum it holds and the number of sites within its network;

172.3 the Proposed Acquisition would significantly increase One NZ's total spectrum holdings, and increase the disparity between its holdings and those of 2degrees (and also reduce the disparity between One NZ's holdings and those of Spark);

172.4 in a counterfactual where 2degrees acquires Dense Air's spectrum, there would be no total spectrum disparity between One NZ and 2degrees, although a total spectrum disparity between One NZ and 2degrees compared to Spark would remain;

172.5 evidence indicates that there are unlikely to be other opportunities in the short to medium term for 2degrees to acquire sufficient additional spectrum to remove, or materially reduce, the disparity in its holdings compared to those of One NZ (and Spark);

172.6 while, technically, there are alternatives available to MNOs to add capacity to their networks, such as building more sites, evidence indicates that these are second best in terms of cost and timeframes to holding more spectrum, and in some instances ([ ]) also may not be commercially viable and/or practical; and

172.7 given the above, the Proposed Acquisition may raise the cost of network capacity to 2degrees, resulting in 2degrees being at a significant cost disadvantaged relative to One NZ and Spark, hindering its ability to compete.

173. Therefore, the Proposed Acquisition could prevent, inhibit or hinder the ability of 2degrees to compete with One NZ and Spark in providing wholesale and/or retail telecommunications services. This could lead to consumers facing higher prices, less choice or lower quality and give rise to a substantial lessening of competition.

174. We set out below evidence on the issues we are considering, and invite submissions on our assessment of the competitive effects of the Proposed Acquisition.

175. We discuss further below:

175.1 how the Proposed Acquisition may impact on competition in the supply of retail mobile and wireless broadband services; and

175.2 how the Proposed Acquisition may impact on competition at the wholesale level.

Potential competitive effects at the retail level

176. In the factual, as distinct from the counterfactual, there would be an increased disparity in spectrum holdings between 2degrees and One NZ, and One NZ would likely have increased capacity relative to 2degrees. 2degrees may be capacity constrained and

restricted in its ability to grow and compete with One NZ and Spark at the retail level. In the counterfactual, 2degrees would be a stronger competitor. This could lead to retail consumers facing higher prices, less choice or lower quality in the factual compared to the counterfactual. Differences in quality would likely be felt by consumers in terms of the speeds of services, the extent to which MNOs offer capped or unlimited data plans and also potentially network coverage.

176.1 Specifically in terms of the retail supply of mobile services, we continue to investigate whether and to what extent capacity constraints may hinder the retail mobile plans which 2degrees is able to offer in the factual, relative to the counterfactual (eg, extent of unlimited data plans).

176.2 With respect to the retail supply of wireless broadband services, we continue to investigate whether and to what extent harm could arise in the factual due to 2degrees being constrained in its ability to grow its wireless broadband offering and customer base, by being restricted in where it can offer wireless broadband, relative to the counterfactual.

176.3 In relation to both the retail supply of mobile services and the retail supply of wireless broadband services, we continue to investigate whether any potential competitive effects at the wholesale level could impact on the competitiveness of other competitors at the retail (eg, MVNOs).

177. In investigating the above theories of harm relating to the retail supply of mobile and wireless broadband services, we are particularly considering:

177.1 the extent to which the Proposed Acquisition might inhibit 2degrees from competing with, or reduce the competitiveness of 2degrees relative to, One NZ in providing retail mobile and wireless broadband services resulting in a substantial lessening of competition;

177.2 the extent to which the competitive constraint provided by 2degrees and One NZ on Spark at the retail level might differ in the factual compared to the counterfactual (eg, if One NZ would have the capacity to offer higher quality services or services to more consumers in the factual); and

177.3 for the ultimate effects on consumers and whether are they would be likely to face higher prices, less choice or lower quality for retail mobile and wireless broadband services as a result of the Proposed Acquisition.

178. At this time, we consider that, in the factual compared to the counterfactual, 2degrees may be constrained in its ability to grow its customer base and the propositions it is able to offer retail mobile and wireless broadband customers. The consequential reduced competition at the retail level may mean consumers face higher prices, less choice or lower quality services.

Retail mobile services

179. As the Commission has previously noted, competition in the supply of retail mobile services has strengthened since the arrival of 2degrees in 2009. The retail mobile market has become less concentrated as 2degrees has gained market share,

particularly in the prepaid mobile services, but also more recently in the on-account residential mobile services segment. The emergence of 2degrees has been important in the development of an increasingly competitive retail mobile market.[159]

180. In the factual compared to the counterfactual, 2degrees may be constrained in its ability to grow its customer base and the propositions it can offer retail mobile customers.

181. 2degrees considers that the Proposed Acquisition would [ ].[160] Evidence indicates that 2degrees [ ].[161]

182. 2degrees told us that if it cannot acquire sufficient additional spectrum, it [ ].[162] It considers that, in the factual, [ ].[163] In contrast, in the counterfactual, 2degrees said that:[164]

182.1 [ ];

182.2 [ ]; and

182.3 [ ], which could see it grow its customer numbers.

183. We invite submissions and further information on the potential impacts of the Proposed Acquisition on the retail supply of mobile services, including on:

183.1 whether there could be differences between the types of retail mobile plans, the pricing of retail mobile plans and/or the quality of mobile services that different MNOs may be able to offer in the counterfactual and factual; and

183.2 the extent to which competition from MVNOs in the retail supply of mobile services could be negatively impacted by the Proposed Acquisition.

159 Commerce Commission, Mobile Market Study – Findings (26 September 2019) at [3.14].

160 Commerce Commission interview with 2degrees (4 December 2023).

161 Commerce Commission interview with 2degrees (4 December 2023).

162 Letter from 2degrees to the Commerce Commission (9 June 2023) and letter from 2degrees to the Commerce Commission (24 July 2023).

163 Commerce Commission interview with 2degrees (4 December 2023) and submission from 2degrees to the Commerce Commission (8 December 2023) at [2.16] and [11.19].

164 Letter from 2degrees to the Commerce Commission (9 June 2023), Commerce Commission call with 2degrees (17 June 2023), letter from 2degrees to the Commerce Commission (24 July 2023) and Commerce Commission interview with 2degrees (4 December 2023).

Retail wireless broadband services

184. In the factual, One NZ is likely to be more competitive in the retail supply of wireless broadband services. As noted earlier, Dense Air's spectrum would enable One NZ to offer more wireless broadband at faster download and upload speeds,[165] and to offer [ ].[166]

185. In the factual compared to the counterfactual, 2degrees may be constrained in its ability to grow its customer base and the propositions it is able to offer retail wireless broadband customers. We continue to investigate the implications of this for 2degrees ability to compete, and competition in, the retail supply of broadband services in each of fibre and non-fibre areas.

186. 2degrees considers that the Proposed Acquisition would [ ].[167]

187. [

].[168]

188. [

].[169]

189. 2degrees submits that its lack of spectrum has prevented (and is continuing to prevent) it from competing effectively in 4G wireless broadband.[170] It further submits that it is [ ], noting that:[171]

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165 One NZ media release re Proposed Acquisition (3 November 2023) – https://media.one.nz/denseair.

166 Commerce Commission interview with One NZ (1 December 2023).

167 Commerce Commission interview with 2degrees (4 December 2023).

168 [ ]

169 [ ]

170 Submission from 2degrees to the Commerce Commission (8 December 2023) at [2.6].

171 Submission from 2degrees to the Commerce Commission (8 December 2023) at [4.5] and [7.1].

189.1 [ ];

189.2 [ ]; and

189.3 [
].

190. Evidence before us indicates that 2degrees
[
].[172] However, we note that
[ ].[173]

191. In contrast, in the counterfactual, 2degrees has told us that it would have
[
].[174] That said, we note that:

191.1 [
].[175]

191.2 In addition, we note that 2degrees
[
].[176]
[ ],[177] and
[

].

[172] Commerce Commission interview with 2degrees (4 December 2023) and submission from 2degrees to the Commerce Commission (8 December 2023) at [2.16] and [11.19].

[173] Submission from 2degrees to the Commerce Commission (8 December 2023) at [10.2(b)].

[174] Letter from 2degrees to the Commerce Commission (9 June 2023), Commerce Commission call with 2degrees (17 June 2023), letter from 2degrees to the Commerce Commission (24 July 2023) and Commerce Commission interview with 2degrees (4 December 2023).

[175] [ ]

[176] [ ]

[177] [ ]

192. WISPA submits that wireless broadband has tremendous potential in New Zealand and enabling more competition could untap more of this potential.[178]

193. In specifically assessing the impact of the Proposed Acquisition on the supply of retail wireless broadband, and the retail supply of broadband services more broadly, in fibre areas we are considering the extent to which Chorus' fibre 50/10 broadband product (which MNOs and other retail service providers can access at the wholesale level) is comparable to wireless broadband (in terms of service and price), and a means by which 2degrees could still compete in the retail supply of broadband services in the factual. In non-fibre areas, we note that the copper network is expected to be retired over time and there is uncertainty whether fibre will be rolled out to replace copper networks, and are considering whether this means that the Proposed Acquisition could result in greater harm and materially different levels of competition in non-fibre areas.

194. We invite submissions and further information on the potential impacts of the Proposed Acquisition on the retail supply of wireless broadband services, including on:

    194.1 whether there may be differences between the types of retail wireless broadband plans, the pricing of retail wireless broadband plans and/or the quality of wireless broadband services that different MNOs may be able to offer in the factual versus the counterfactual (eg, unlimited versus capped data plans), and whether this would differ between fibre and non-fibre areas;

    194.2 the extent to which the pricing of wireless broadband is constrained by the pricing of other types of broadband in each of fibre and non-fibre areas;

    194.3 whether the Proposed Acquisition may impact on the provision of both 4G and 5G wireless broadband to the same extent, or to varying degrees; and

    194.4 the extent to which competition from MVNOs in the retail supply of wireless broadband services could be negatively impacted by the Proposed Acquisition.

Potential competitive effects at the wholesale level

195. One of the theories of harm that we are continuing to investigate with respect to the Proposed Acquisition relates to the wholesale supply of services by MNOs. In the factual, as distinct from the counterfactual, there would be an increased disparity in spectrum holdings between 2degrees and One NZ, and One NZ would likely have increased capacity relative to 2degrees. 2degrees may be capacity constrained and restricted in its ability to grow and compete with One NZ and Spark. Specifically in terms of the wholesale supply of services, 2degrees could be restricted in its ability to compete against One NZ and Spark,
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[178] Submission from WISPA to the Commerce Commission (8 December 2023).

196. In investigating this theory of harm relating to the wholesale supply of services by MNOs, we are considering:

196.1 the extent to which the Proposed Acquisition might inhibit the ability of 2degrees to compete with, or reduce the competitiveness of 2degrees relative to, One NZ in relevant market(s) for the wholesale supply of wireless broadband and broadly for the wholesale business of MVNOs; and

196.2 the extent to which the competitive constraint provided by 2degrees and One NZ on Spark at the wholesale level might substantially differ in the factual compared to the counterfactual; and

196.3 what this means for wholesale customers and whether they would be likely to face higher prices, less choice or lower quality for wholesale services as a result of the Proposed Acquisition.

197. At this time, we cannot exclude the real chance that, in the factual compared to the counterfactual, 2degrees may be constrained in its ability to compete at the wholesale level for the business of MVNOs and that, consequentially, wholesale customers may face higher prices, less choice or lower quality services.

198. 2degrees submits that its lack of relevant spectrum has impacted [

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199. Evidence indicates that 2degrees [

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[179] Submission from 2degrees to the Commerce Commission (8 December 2023) at [2.7] and [4.6].

[180] Commerce Commission interview with 2degrees (4 December 2023).

200. We invite submissions and further information on the potential impacts of the Proposed Acquisition on the wholesale supply of services by MNOs, including on:

200.1 existing competition between MNOs to provide wholesale services;

200.2 the extent to which MNVOs or other wholesale customers acquire wholesale services in a package or individually (and potentially from different suppliers);

200.3 whether the degree of wholesale competition between MNOs varies between fibre and non-fibre areas, or between mobile and wireless broadband services;

200.4 the impact that any intermediary service providers may have on the wholesale supply of services by MNOs and the options available to MVNOs; and

200.5 what the number and scale of MVNOs operating in retail telecommunications markets indicates about the state of competition at the wholesale level.

Next steps

201. We are currently scheduled to decide whether or not to give clearance to the Proposed Acquisition by 3 April 2024. However, this date may change as our investigation progresses.[181] In particular, if we need to test and consider the issues identified above further, the decision date may extend.

202. As part of our investigation, we are identifying and contacting parties that we consider will be able to help us assess the issues identified above.

Making a submission

203. We are continuing to undertake inquiries and seek information from industry participants about the impact of the Proposed Acquisition. We welcome any further evidence and other relevant information and documents that the parties or any other interested parties are able to provide regarding the issues identified in this SoI.

204. If you wish to make a submission, please send it to us at registrar@comcom.govt.nz with the reference "One NZ/Dense Air" in the subject line of your email, or by mail to The Registrar, PO Box 2351, Wellington 6140. Please do so by close of business on **19 February 2024**.

205. All information we receive is subject to the Official Information Act 1982 (OIA), under which there is a principle of availability. We recognise, however, that there may be good reason to withhold certain information contained in a submission under the OIA, for example in circumstances where disclosure would be likely to unreasonably prejudice the commercial position of the supplier or subject of the information.

[181] The Commission maintains a clearance register on our website at http://www.comcom.govt.nz/business-competition/mergers-and-acquisitions/clearances/clearances-register/ where we update any changes to our deadlines and provide relevant documents.