Notice seeking clearance for Connexa Limited to acquire certain passive mobile telecommunications infrastructure assets of Two Degrees Networks Limited and Two Degrees Mobile Limited

16 December 2022

Confidential material has been removed. Its location in the document is denoted by [ ].

Contents

SECTION 66 COMMERCE ACT 1986: NOTICE SEEKING CLEARANCE FOR BUSINESS ACQUISTION

16 December 2022

The Registrar
Competition Branch
Commerce Commission, PO Box 2351
Wellington, New Zealand

Pursuant to section 66(1) of the Commerce Act 1986, notice is hereby given seeking clearance of a proposed transaction in which Connexa Limited (*Connexa*) will acquire certain passive mobile telecommunications infrastructure assets from Two Degrees Networks Limited and Two Degrees Mobile Limited (*2degrees*, *Proposed Transaction*).

PART 1: SUMMARY OF APPLICATION

1 The Proposed Transaction involves the acquisition by Connexa of certain passive mobile telecommunications infrastructure assets (*Assets*)[1] of Two Degrees Networks Limited and Two Degrees Mobile Limited (2degrees) (*Proposed Transaction*).

2 Connexa operates as an independent owner and manager of passive mobile telecommunications infrastructure assets (the individual structures are also referred to as *towers*, and their owner-managers as *TowerCos*). In October 2022, it was used as a vehicle for the separation and sale of a majority stake in Spark New Zealand Trading Limited's (*Spark*) passive infrastructure assets to the Ontario Teachers' Pension Plan Board (*OTPP*). The result of that transaction is that Connexa owns almost all of the former Spark passive mobile telecommunications infrastructure assets. At present, OTPP holds 70% of the shares in Connexa and Spark holds 30%.

3 Following the Proposed Transaction OTPP's shareholding in Connexa will increase, so that OTPP will own 83% of the shares and Spark will own 17%.[2]

Industry background

4 The Proposed Transaction takes place in the context of a trend (observed in Australia, Europe and the United States) of mobile network operators (*MNOs*) selling, or selling majority stakes in, their passive mobile telecommunications infrastructure to specialist asset/mobile tower management companies,[3] including the 2022 Spark transaction which created Connexa, and Vodafone New Zealand Limited's (*Vodafone*) sale (of 80%, with 20% held by Vodafone shareholder Infratil) to create Aotearoa Towers Group (trading as FortySouth, referred to in this application as *FortySouth*).

5 TowerCos develop and manage passive mobile telecommunications infrastructure. They do not own or manage active mobile infrastructure, they do not generally own the land on which passive infrastructure is situated or construct the infrastructure themselves (they contract third parties to do so).

6 MNOs' sale of passive mobile telecommunications infrastructure around the world has been driven by, in addition to a release of capital, the following factors:

6.1 as coverage for all MNOs has reached near-full population coverage, MNOs no longer compete based on coverage superiority. Rather, key areas of competition among MNOs are active network capacity and speed, end-user plans, content and other inclusions, service and customer experience,

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[1] The Proposed Transaction only includes certain (not all) passive infrastructure assets of 2degrees. For example, [ ] are excluded from the Proposed Transaction. For further details, see the Agreement for Sale and Purchase of Assets of Two Degrees Networks Limited and Two Degrees Mobile Limited dated [15 December 2022] (the *ATA*), (**OTPP.02.01**), in particular, [ ]. In addition, see paragraph 20 below and the diagram at **Appendix 3**.

[2] [ ].

[3] TowerXchange estimates that globally there are now 325 TowerCos, which between them own 3.74 million of the world's 5.06 million investible towers and rooftops (being 73.9% of the world's mobile sites), see https://www.towerxchange.com/Towerco-Table. For further information see NERA Report, **Appendix 1**, at [32].

6.2 the capital intensity of MNOs is forecast to increase over the next three to four years as they deploy 5G technology.[4] Sharing passive infrastructure costs allows the MNOs to invest in active network upgrades, and

6.3 MNOs seek efficiency and service level improvements from TowerCos, which are focused on asset management rather than a broader range of activities, including:

(a) improved service levels,

(b) improved asset utilisation (in particular increased co-location) leading to lower access charges for MNOs[5] and reduced environmental and social issues from unnecessary duplicative site building,

(c) increased deployment speeds, and

(d) operating cost and capital expenditure efficiencies, through better co-ordination of maintenance schedules and capital expenditure.

Counterfactual

7 Connexa assumes that the most theoretically competitive counterfactual which has a real chance of occurring is 2degrees selling 100% of the Assets to an independent third party (noting Spark would hold 30% rather than 17% of Connexa in that counterfactual).[6]

8 In this counterfactual, as in the factual, all three existing MNOs would:

8.1 no longer own a majority interest in their passive mobile telecommunications infrastructure, and that infrastructure would be at least majority-owned by a

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[4] Further information on the roll-out of 5G technology is provided at paragraphs 185 to 192 below.

[5] Increased co-location will drive the below key savings, including:

- reduced spend on capital build for passive towers. Connexa will benefit in that it could build a single tower for two tenants, whereas each individual MNOs would likely have to build a tower resulting in two towers, and
- reduced access price payments for an MNO, [
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  -].

[6] [
]. As discussed at Part 6 below, the focus is on the counterfactual scenario where 2degrees sells 100% of its passive mobile telecommunications to an independent third party, as this is the most theoretically competitive counterfactual.

party with no involvement in the downstream national market for the retail supply of mobile services, and

8.2 hold long-term services contracts with a TowerCo (described as Master Infrastructure Services Agreements, or *MISAs*) in relation to a large proportion of their passive mobile telecommunications infrastructure needs.

Market definition

9 The potential effect on competition of the Proposed Transaction is considered in relation to:

9.1 the national market for the retail supply of mobile services (since passive mobile telecommunications infrastructure is an input to the retail supply of mobile services),

9.2 national competition for the supply of MISAs to MNOs,

9.3 for sites in respect of which terms have not been set under the relevant MISA (also called "uncommitted sites"), competition in small local markets for the supply of passive mobile telecommunications infrastructure assets to MNOs (noting that passive mobile telecommunications infrastructure is a subset of locations where network equipment can be located), and

9.4 the supply of passive mobile telecommunications infrastructure to non-MNO customers.

No lessening of competition

10 The Proposed Transaction would result in there being two effectively independent and non-vertically integrated TowerCos in New Zealand, as opposed to the current situation where there are two independent TowerCos together with one vertically integrated TowerCo/MNO (i.e. 2degrees). The Proposed Transaction would not result in a lessening of competition in any market in New Zealand because:

10.1 *national market for the retail supply of mobile services* –

(a) Spark's limited retained shareholding would not provide it with any ability, nor would it have a material incentive, to foreclose other MNOs' competitive access to passive mobile telecommunications infrastructure, and

(b) given the nature of passive mobile telecommunications infrastructure services, there is limited competition between MNOs based on passive mobile infrastructure. Innovation and competition between MNOs is focused on active equipment, active network capacity and speeds, end-user plans, content and other inclusions, service and customer experience. None of these features are affected by the Proposed Transaction. In any event, passive mobile telecommunications infrastructure costs are a relatively small input cost for downstream services such that theoretical uncompetitive prices or services in relation to uncommitted sites (which for the reasons below would not be likely) would not be capable of having any material impact on prices for downstream services,

10.2 *competition for the supply of MISAs to MNOs* –

(a) as an independent non-vertically integrated tower operator, Connexa is strongly incentivised to operate as a commercially driven supplier of passive mobile telecommunications infrastructure services in order to drive revenue growth. In particular, Connexa is and would continue to be incentivised to maximise co-location opportunities (including through upgrades) and new build opportunities,

(b) the three existing MNOs have sold their passive mobile telecommunications infrastructure assets in demonstrably competitive circumstances,[7] and have entered into their respective MISAs in the context of the sale of those assets. Put another way, the MNOs have negotiated their MISAs in a position of significant bargaining leverage. As sophisticated businesses with material bargaining power, the MNOs have negotiated the terms of their exit from self-supply in a way that protects them as a customer, into the future i.e. even as their MISAs expire. The existing MISAs should be understood as the best possible competitive outcomes for the MNOs, and thus 2degrees' MISA would not be more competitive in any counterfactual,[8]

(c) the MISAs protect MNOs into the future, including in a scenario involving TowerCo consolidation along the lines of the Proposed Transaction, and safeguard the best possible position for the second "round" of MISA competition on expiry. For example, they have long terms, with renewal rights (to allow the MNOs to position for expiry) and contain uncommitted sites which allow MNOs to self-supply or use other suppliers for certain of their passive infrastructure needs. Indeed, one way MNOs conceptualise TowerCos is as distributors of the upstream input, being locations where active infrastructure can be placed by MNOs – MNOs are able to bypass TowerCos and negotiate directly with land and building owners to place the infrastructure, and can build Towers if needed using the same contractors the TowerCos use, and

(d) any new entrant MNO seeking a MISA from a TowerCo would have countervailing power, as a new national customer would be a source of highly valued revenue for any TowerCo,

10.3 *competition for the supply of passive mobile telecommunications infrastructure in local markets* –

(a) competition in local markets is only relevant for a portion of sites i.e. those where MNOs' network requirements exceed the build to suit (*BTS*) commitments in the relevant MISA (i.e. MNOs' excess demand),[9]

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7 [

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8 Neither Spark nor Vodafone's MISA are affected by the Proposed Transaction.

9 *BTS commitment* is used throughout the document to refer to the new sites that each MNO has committed to Connexa as part of their respective sales processes.

(b) MNOs have chosen, in competitive circumstances, to allow flexibility for their excess demand, by not committing those sites to their respective TowerCo (i.e. uncommitted sites), in order to:

(i) recognise their needs to evolve their networks in ways they cannot predict at the outset of a MISA, and

(ii) allow them to maintain pressure on their MISA counterparty by having the ability to place new coverage needs (whether new-builds or by co-locating on existing sites) with or switch a limited number of sites to other passive mobile telecommunications infrastructure providers,

(c) where MNOs require additional sites outside of the BTS commitments (as above, these are referred to as uncommitted sites) they have the option of building a new site or co-locating on an existing site:

(i) for new sites:

(A) there would continue to be two national suppliers to choose from, as well as smaller and new entrant alternatives (see below), and

(B) self-supply is a realistic option given the lack of economies of scale in building an individual new site, the ready availability of build contractors, the availability of low-cost light pole solutions and the retention of self-supply capability by MNOs, and

(C) where a light pole solution is not available, obtaining land for new sites is a well-established and relatively straightforward process,[10]

(ii) for existing sites, MNOs may choose to fulfil their excess demand through co-locating on an existing Connexa, FortySouth or other smaller TowerCo site:

(A) TowerCos are operating in an environment where much of the total business is already contracted, therefore they will be incentivised to take tenants from the other TowerCos where possible and to retain their own tenants where uncommitted,

(B) there are few local sites where there is overlap between Connexa and 2degrees (based on the NERA analysis, at most 76 sites out of a total of 1,243 Connexa sites and

[10] Challenges in obtaining land may occur where a landowner is required to consider a large number of stakeholders, or where there are complications with a leasing process generally. However, this is rare. Where such challenges arise, this normally results in a longer process, but with a similar rate of success. Sometimes, there may be alternative options nearby and TowerCos generally only require small parcels of land. Community responses in some areas can also cause challenges, for example, anti-5G protests. This can make it more difficult for a retail-facing brand to acquire land due to reputational risk. However, this should be less of an issue for a TowerCo. In any event, the Proposed Transaction would have no effect on these challenges.

[ ][11] 2degrees sites)[12] and even fewer such sites where there is no alternative third party TowerCo present as an alternative for MNOs. For other sites, where there is no overlap, the Proposed Transaction brings about no change, and

(C) in a very small number of locations, Connexa would potentially have the ability to charge more for co-location to the extent there is a cost differential between co-location and building a new site. But:

1 against the background of national competition and MNOs' countervailing power, it is not realistic for Connexa to take advantage of any such opportunity. The overarching national dynamic means that Connexa will be seeking to incrementally increase its share of Vodafone's (or a new entrant's) services, and seeking to win Spark and 2degrees' uncommitted requirements on as many "at-risk" Spark and 2degrees services as possible. Reflecting this reality, in practice pricing applies across a network or for specific packages, rather than site by site. It would not be commercially rational to price above competitive levels for a very small number of sites (including where the MNO in question would have a view on what it regards as competitive pricing based on its experience in other geographic areas). This dynamic would not be diminished where there is one fewer TowerCo in the immediate term, and

2 in any event, it is likely to be rare for specific sites to genuinely be a MNO's only alternative. MNOs would be in a position to threaten to plug gaps using low cost light poles, upgrade active equipment on nearby sites, disintermediate the TowerCo and deal with land and building owners directly, or engage in active sharing with another MNO. As above, towers are only a subset of locations where MNOs' equipment can be hosted,

10.4 *supply of passive infrastructure to non-MNO customers* –

(a) Mobile Virtual Network Operators (*MVNOs*) do not contract directly for passive mobile infrastructure services, but instead obtain services indirectly, through MNOs. Accordingly, they will not contract directly

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[11] [ ].

[12] Excluding "in-flight" sites (i.e. sites in varying stages of development/works in progress, which the vendor will make operational and then subsequently transfer to Connexa). For further information, see paragraphs 153.5(b) and 231 to 237 below, and NERA Report, **Appendix 1** at [94] to [98]. NERA's analysis identified 68 sites where there are potentially overlapping sites (or 78 using Statistics New Zealand (*Stats NZ*) definitions of "urban" and "rural". Once sites where Vodafone's expected demand are covered, this reduces to 26 sites (or 28, if Stats NZ definitions are used).

with TowerCos and are protected from any adverse effect on competition to the extent MNOs are protected, and

(b) non-MNO customers occupy a tiny proportion of sites. They have less stringent site requirements, and therefore typically a broader set of options for their sites. Non-MNOs would not be impacted by the Proposed Transaction,

10.5 in relation to *conditions of entry and expansion*:

(a) while there are efficiencies for TowerCos (e.g. in managing leases and multiple sites), there are not material economies of scale in building individual towers that would disadvantage new entrants or self-supply by MNOs, and access to inputs (e.g. contracting services) is readily available,

(b) MNOs are likely to retain the skills and willingness to self-supply if their access risks becoming uncompetitive. Alternatively, MNOs can outsource most (if not all) of the skills to self-supply as needed. Put another way, MNOs have chosen to outsource passive mobile telecommunications infrastructure services but could disintermediate TowerCos if they wished (including on a site by site basis),

(c) MNOs have the ability and incentive to facilitate the entry and expansion of new TowerCos using their uncommitted sites, during the course of their MISAs and particularly later in their term (when more sites are uncommitted and MNOs may wish to more actively position for expiry):

(i) the forecast number of uncommitted sites in the initial terms of the MISA, for Spark and 2degrees alone, is sufficient to underwrite at least one additional TowerCo,

(ii) this is consistent with observations of other jurisdictions where TowerCos are a feature. In Australia, Stilmark Group (*Stilmark*) entered the market in 2013 sponsored by a MNO, and expanded to owning 75 sites (before it was acquired earlier this year),

(iii) American Tower Corporation (*ATC*), the New York Stock Exchange (*NYSE*)-listed owner of approximately 223,000 towers globally, has bought a company owning land under New Zealand passive mobile telecommunications infrastructure, and

(iv) there are already a number of other owners of small amounts of passive mobile telecommunications infrastructure in New Zealand, such as Mount Campbell Networks Limited, which could readily expand, and

10.6 passive mobile telecommunications infrastructure is not vulnerable to coordination and this would not change as a result of the Proposed Transaction. Furthermore, Spark's limited retained stake in Connexa would not provide opportunities for coordinated conduct with 2degrees.

PART 2: APPLICANT AND TARGET DETAILS

Applicant for clearance

11 This notice seeking clearance is given by Connexa. Connexa can be contacted at the details set out below:

Rob Berrill
Chief Executive Officer
Connexa Limited
167 Victoria Street West
Auckland
P: [ ]
E: Rob.Berrill@connexa.co.nz

12 OTPP can be contacted at the details set out below:

Jan Brand / Soo Yien Khor
Director, Infrastructure & Natural Resources / Director & Associate General Counsel
OTPP
5650 Yonge Street
Toronto
Ontario
M2M 4H5
P: [ ]
E: Jan_Brand@otpp.com / SooYien_Khor@otpp.com

13 All correspondence and notices in respect of this application for the applicant should be directed in the first instance to:

Lucy Cooper / Stacey Thomson
Partner / Senior Solicitor
Chapman Tripp
10 Customhouse Quay
Wellington
P: +64 4 498 2406 / +64 9 357 9032
E: lucy.cooper@chapmantripp.com / stacey.thomson@chapmantripp.com

Other party to the acquisition

14 Contact details for 2degrees are set out below.

Paul Mathewson / Gus Stewart
Chief Commercial Officer / Senior Corporate Counsel
Two Degrees Networks Limited
Level 2, 136 Fanshawe Street
Auckland
P: [ ]
E: Paul.Mathewson@2degrees.nz / Gus.Stewart@2degrees.nz

15 All correspondence and notices in respect of this application for 2degrees should be directed in the first instance to:

James Craig / Elsie Stone
Partner / Senior Solicitor
Simpson Grierson
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88 Shortland Street

Private Bag 92518
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P: +64 9 977 5125
M: +64 21 497 713
E: james.craig@simpsongrierson.com / elsie.stone@simpsongrierson.com

PART 3: TRANSACTION DETAILS

16 On 15 December 2022, Connexa entered into the ATA to acquire 2degrees' mobile telecommunications passive infrastructure assets.[13] Consideration for the Proposed Transaction is approximately NZ$1,076m.

17 As part of the Proposed Transaction, Spark's share in Connexa will reduce to 17%, with OTPP holding 83%. A structure diagram setting out the effect of the Proposed Transaction on Connexa's ownership is attached as **Appendix 2**.

18 The Proposed Transaction is conditional on Connexa obtaining:

18.1 Commerce Commission (*NZCC*) clearance,

18.2 Overseas Investment Office (*OIO*) consent under the Overseas Investment Act 2005. Connexa's OIO application has been filed and it expects to receive OIO consent in February 2023, or at the latest, by 7 March 2023, being the expiry of the upper end of the OIO statutory timeframe, and

18.3 notification by the Director General of the GCSB under the Telecommunications (Interception Capability and Security) Act 2013 that the Proposed Transaction does not raise or pose more than a minimal network security risk.

19 As part of the Proposed Transaction, Connexa and 2degrees will enter into:

19.1 a long term MISA (the *2degrees MISA*),[14] which covers a large portion of 2degrees' expected demand for towers. This runs for a period of 20 years, with [ ]. The relevant terms from the 2degrees MISA are discussed as part of the competition analysis in Part 8 of this Application, and

19.2 a transitional services agreement (*2degrees TSA*) under which 2degrees will provide services to Connexa for a transitional period.[15]

20 The Assets to be acquired include:[16]

20.1 leases, licences and certain other property rights (including one freehold interest) in certain sites at which 2degrees' passive mobile telecommunications infrastructure is located across New Zealand,

20.2 passive mobile telecommunications infrastructure located at sites (e.g. towers, masts, poles, fences),[17] and

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13 See document **OTPP.02.01**.

14 See document **OTTP.02.03.**

15 See document **OTPP.02.04**.

16 The full list of assets to be acquired is set out at [ ] of the ATA.

17 [

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20.3 [

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21 [

].[18]

The parties

Connexa

22 Connexa operates a nationwide portfolio of passive mobile telecommunications infrastructure and is responsible for an ongoing build programme to ensure the growth of its network.[19]

Connexa's existing business

23 Connexa was established as a result of Spark selling a majority stake in its passive mobile telecommunications infrastructure to OTPP (*Spark Transaction*).[20] Prior to the Spark Transaction, the assets were wholly owned by Spark TowerCo Limited, a wholly owned subsidiary of Spark. On 14 October 2022, OTPP acquired 70% of the shares in Spark TowerCo, with Spark retaining the remaining 30%. On 14 November 2022, Spark TowerCo changed its name to Connexa. [

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24 As part of the Spark Transaction, Spark and Connexa entered into a long term MISA (*Spark MISA*) which covers a large proportion of Spark's expected tower demand.[21] This runs for a period of 15 years, [ ]. The relevant terms from the Spark MISA are discussed as part of the competition analysis in Part 8 of this Application.

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25.1 [

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18 [

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19 For further information see https://www.connexa.co.nz/. As Connexa has only recently acquired the Spark towers, it does not yet have relevant financial statements.

20 As a result of the Spark Transaction, Connexa acquired 1,243 previously Spark-owned sites. However, as part of the Spark Transaction, Spark retained [ ] COWS and COPS (temporary cell sites), and paging towers on which active equipment is located. Spark also retained its equipment on third party ([ ]) towers. [

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- [ ]
- [ ]

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21 See document **OTPP.01.02**.

22 See document **OTPP.01.11**.

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25.2 [

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Connexa's ownership

26 In terms of the relative rights and interests of OTPP and Spark, at a shareholder level:

26.1 OTPP:[23]

(a) currently holds 70% of the shares in Connexa and following the Proposed Transaction will hold 83% of the shares,

(b) [ ]

(i) [ ]

(ii) [

]

26.2 Spark:[24]

(a) currently holds 30% of the shares in Connexa and following the Proposed Transaction will hold 17% of the shares, and

(b) [ ]

(i) [

][25] [

][26] and

(ii) [

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27 The shareholding reduction is based on [

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[23] Shareholders' agreement relating to Frodoco Holdings Limited, dated 14 October 2022 (*Shareholders' Agreement*) (**OTPP.01.09**), [ ].

[24] Shareholders' Agreement, [ ].

[25] [ ].

[26] Shareholders' Agreement, [ ]

Connexa's decision-making

28 As described in more detail below at paragraphs 171 and 173, and in the Shareholders' Agreement:[27]

28.1 [

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(a) [

],[28]

(b) [

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28.2 [

].[30] [

].[31] [ ]:

(a) [

],[32] and

(b) [

],[33]

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[27] Shareholders' Agreement. [

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[28] Shareholders' Agreement, [ ]

[29] Shareholders' Agreement, [ ]

[30] Shareholders' Agreement, [ ]

[31] Shareholders' Agreement, [ ]

[32] Shareholders' Agreement, [ ]

[33] Shareholders' Agreement, [ ]

28.3 [ ],[34] [ ][35]

(a) [ ]

(b) [ ]

(c) [ ]

(d) [ ]

29 Connexa does not participate in any relevant industry association in New Zealand.

OTPP

30 OTPP was incorporated under the Teachers' Pension Act 1990 (Ontario). OTPP oversees the OTPP Pension Fund (*Pension Fund*).

31 As at 30 June 2022, the Pension Fund had approximately CA$242 billion in net assets. As such, it is Canada's largest single-profession pension plan. OTPP invests the Pension Fund's assets and administers the pensions of 330,000 active and retired teachers in Ontario.

32 The key objective of OTPP is to ensure the Pension Fund meets its long term funding needs. To achieve this objective, OTPP seeks to maximise investment returns at an appropriate level of risk, taking into account pension liabilities (the cost of future pension benefits) and challenges presented by OTPP's mature membership demographics.

33 OTPP invests for the long term and has a global diversified investment portfolio containing an asset mix of equities (public and private), inflation sensitive investments (real-return bonds, real estate, infrastructure and natural resources), fixed income and absolute return strategies.

34 OTPP's infrastructure investments comprise a global portfolio of 38 investments totalling NZ$39.4 billion. OTPP invests directly in its infrastructure investments and generally takes a controlling majority stake or a co-controlling minority stake alongside like-minded financial investors. OTPP's infrastructure investing team takes an active management approach to its investments, working with its management teams to deliver business plans.

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[34] Shareholders' Agreement, [ ]

[35] Shareholders' Agreement, [ ] [ ].

35 OTPP's principal investments in New Zealand include OTPP New Zealand Forest Investments Limited, which owns 30,000 hectares of pine forests in the central North Island, Abano Healthcare Group Limited (along with BGH Capital Limited), and NZ Healthcare Investments Limited.

36 OTPP has a long history of investments in the telecommunications sector globally, having partnered with leading telecom, IT and data centre companies to fund the development of critical ITC infrastructure. OTPP retains an active presence in the New Zealand market through its Asia Pacific team in Hong Kong and Singapore.[36]

37 For completeness, Dense Air Network (*Dense Air*) was acquired by Sidewalk Infrastructure Partners in 2021 which, in turn, is [ ]% owned by OTPP.[37] As a result it is an interconnected body corporate for the purpose of section 47(2). However, [

]. In any event, Dense Air's activities are adjacent to passive mobile telecommunications infrastructure, but are not capable of altering the effects of the Proposed Transaction. That is:

37.1 Dense Air works with cities and carriers to create neutral host 5G small cell infrastructure. It does so by combining open radio access network infrastructure with licensed spectrum, and[38]

37.2 Dense Air currently has operations in 6 countries, including New Zealand,[39] where it acquired spectrum rights in 2019 and now offers wholesale network extension services to the existing MNOs and other customers.[40] In October 2022, Dense Air announced it was partnering with Crown Infrastructure Partners to address mobile coverage challenges in under-served areas.[41]

Spark

38 Spark is a New Zealand listed entity. Spark provides mobile, broadband, cloud services, digital services and entertainment to a range of customers (including consumers, small businesses, not-for-profits, government entities and large enterprises).[42]

39 Spark's wholly owned subsidiaries Entelar Limited (previously Telegistics) and Connect8 have been brought together as part of Entelar Group Limited (together, *Entelar*). Entelar is the result of Spark combining a number of its different technology infrastructure delivery businesses and moving them into a new subsidiary that operates independently of Spark. One of the functions of Entelar is

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36 For further information, see https://www.otpp.com/en-ca/investments/our-advantage/our-global-presence/asia-pacific/ and OTPP's latest annual report and financial statements at https://www.otpp.com/content/dam/otpp/documents/otpp-2021-annual-report-eng.pdf.

37 See https://denseair.net/sidewalk-infrastructure-partners-will-acquire-5g-innovator-dense-air/.

38 See https://denseair.net/about-us/.

39 See https://denseair.net/dense-air-and-millbrook-partner-on-the-sustainability-of-the-5g-autoair-network/.

40 NZCC, *Mobile Market Study – Final Report,* 26 September 2019 (*Mobile Market Study*) at [4.32].

41 See https://denseair.net/dense-air-working-with-the-new-zealand-government-to-explore-accelerating-5g-connectivity-nationwide/.

42 For further information, see https://www.spark.co.nz/ and Spark's latest annual report and financial statements https://investors.sparknz.co.nz/FormBuilder/_Resource/_module/gXbeer80tkeL4nEaF-kwFA/Spark%20FY22%20Annual%20Report%20FINAL.pdf.

to provide mobile telecommunications infrastructure construction services (see further below at paragraph 106).[43]

2degrees

40 2degrees launched in New Zealand in 2009 and is a leading mobile service provider in New Zealand.[44] 2degrees initially offered mobile services only, but following the acquisition of Snap in 2015 it expanded into broadband services to consumers, business and wholesale customers. In 2022, 2degrees was acquired by Voyage Digital (NZ) Limited, as a result of which 2degrees merged its business with Vocus Group in New Zealand. 2degrees' ultimate parents are Macquarie Asset Management (previously Macquarie Infrastructure and Real Assets), through its managed funds and clients (together, *MAM*) and Aware Super Pty Ltd as trustee of Aware Super (*Aware*). MAM is a global assets manager, focused on infrastructure and renewables, real estate, agriculture and transportation finance. Aware is one of Australia's largest industry funds.[45]

Commercial rationale

Connexa

41 As above, Connexa currently owns and operates a network of passive infrastructure assets throughout New Zealand (previously owned by Spark). The acquisition of certain passive infrastructure assets from 2degrees would allow Connexa to grow and expand its network.

42 Connexa is conscious of the:

42.1 critical importance of passive tower infrastructure to MNOs and their customers. It aims to be a long-term, supportive partner for MNOs which will continue to deliver superior network performance and customer experience, and

42.2 need to operate flexibly with MNOs as the New Zealand telecommunications market continues to evolve. It is aligned to a shared objective with MNOs to build a vibrant independent tower network to support growth and implement a customer service proposition, as well as meeting the strategic and operational requirements of MNOs.

43 The Proposed Transaction would assist Connexa in meeting these objectives. It would allow Connexa the ability to substantially grow its network, offering more diverse locations and more flexibility to customers. With more towers, Connexa is able to achieve greater efficiencies through aggregating customer demand in optimal locations across the country.

OTPP

44 OTPP currently has a 70% ownership stake in Connexa. OTPP's and Connexa's incentives and objectives in respect of these assets are aligned. OTPP's view is:

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[43] For further information, see https://www.entelar.co.nz/.

[44] For further information, see https://www.2degrees.nz/ and 2degrees' latest annual report and financial statements https://app.companiesoffice.govt.nz/companies/app/service/services/documents/300F31E6B71BAABEDAAA238CC2DE6B41.

[45] See *Voyage Digital (NZ) Limited, Orcon Holdings Limited and Two Degrees Group Limited* [2022] NZCC 3 (*Voyage Determination*).

44.1 OTPP is conscious that the New Zealand mobile telecommunications tower market is transitioning from a market in which the MNOs self-deliver tower infrastructure to an independent tower provider led market, in which the passive mobile tower infrastructure is owned and operated by separate but complementary businesses. This trend follows a similar evolution of the telecommunications market in other jurisdictions with more mature markets, including Australia, Europe and the US.

44.2 As part of this process, in October 2022, OTPP acquired a majority interest in Spark's passive mobile infrastructure, through the acquisition of Connexa. [

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44.3 [

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44.4 As network coverage across the market approaches full population coverage, the MNOs no longer compete based on coverage superiority. Growth in data consumption, deployment of 5G and increasing mobile and connected device penetration has resulted in MNOs competing on active network capacity, plans, content, service and customer experience. This is expected to result in increased infrastructure sharing, as reflected in commentary from the CEO of Vodafone NZ who stated the FortySouth transaction "will help us to accelerate the roll-out of critical infrastructure" and that it is "a move that will further increase the coverage, capacity and speed of our network for our customers".[46] The CEO of Spark NZ has made similar comments, noting that its sale "allows us to deliver better outcomes and service experience for our customers…through faster, more efficient deployment of digital infrastructure".[47]

44.5 The capital intensity of the MNOs is forecast to increase over the next three to four years as they deploy 5G technology across the network.[48] Sharing passive infrastructure costs allows the MNOs to invest in active network upgrades.

44.6 [

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44.7 [

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44.8 [

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[46] See https://news.vodafone.co.nz/towerco.

[47] See https://www.sparknz.co.nz/news/Spark-announces-sale-of-TowerCo/.

[48] Further information on the roll-out of 5G technology is provided at paragraph [184] – [191] below.

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44.9 [

]

44.10 [

]

44.11 [

].[49] [

].

2degrees

45 For 2degrees:

45.1 [

]

45.2 [

]

(a) [

]

[49] For further information, see https://www.otpp.com/en-ca/about-us/news-and-insights/2022/future-of-investing-digitization-decarbonization-disparity/.

(b) [

]

(c) [

]

(d) [

]

Spark

46 [

]

PART 4: BACKGROUND TO RELEVANT SERVICES

47 In this Part, Connexa sets out:

47.1 the services that passive mobile telecommunications infrastructure providers supply (and the services they do not supply),

47.2 information on the nature of passive mobile telecommunications infrastructure,

47.3 the site types owned by Connexa, and those to be acquired from 2degrees,

47.4 unique aspects of the New Zealand regulatory environment, including special network operator rights and the Standard Terms Determination (*STD*) for mobile co-location,[50]

47.5 the status of the Rural Broadband Initiative (*RBI*), and

47.6 key trends relevant to the provision of mobile passive telecommunications infrastructure services.

TowerCos provide only passive mobile infrastructure services

48 Passive mobile telecommunications infrastructure owners (also referred to as TowerCos) own and operate passive mobile telecommunications infrastructure. Their services include marketing of such infrastructure to access seekers, undertaking maintenance on the infrastructure and contracting with developers and landowners for new infrastructure.[51]

49 TowerCos are new to New Zealand. Up until 2022, each MNO self-supplied passive mobile telecommunications infrastructure services (with a limited amount of co-location).[52] Consistent with a trend observed in Australia, Europe and the United States (described further below), in 2022 Spark and Vodafone each ran a competitive process to sell a majority stake in their tower assets, creating Connexa and FortySouth respectively.

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[50] NZCC, *Standard Terms Determination for the specified service co-location on cellular mobile transmission sites*, Decision 661 (11 December 2008) (*STD for mobile co-location*).

[51] This contrasts with the current merger authorisation application in Australia: Telstra Corporation Limited and TPG Telecom Limited proposed spectrum sharing, which involves TPG authorising Telstra to use *spectrum* which it currently owns, and Telstra providing TPG with network services by way of *active* mobile network infrastructure sharing in certain regional and urban fringe areas (*Regional Coverage Zone*), which comprise approximately 17% of the Australian population coverage. TPG will use the MOCN services supplied by Telstra to offer 4G and 5G retail and wholesale services in the Regional Coverage Zone. TPG will also transfer up to 169 of its existing mobile sites in the Regional Coverage Zone to Telstra, and intends to decommission the remainder (see https://www.accc.gov.au/public-registers/mergers-registers/merger-authorisations-register/telstra-corporation-limited-and-tpg-telecom-limited-proposed-spectrum-sharing).

[52] For example, Connexa has a [ ] average tenancy ratio based on [ ], 2degrees has an average tenancy ratio of [ ]. For further information see Table 3 at **Appendix 5**.

50 It is important to note that TowerCos do not:[53]

50.1 own any active mobile infrastructure – MNOs retain ownership and responsibility for all parts of the active network,

50.2 generally, own the land on which the passive mobile infrastructure is situated (it is usually leased), noting that obtaining land for new sites is a well-established process and relatively straightforward:

(a) generally offering a number of benefits to landowners. A commercial lease or licence is often an attractive arrangement for landowners hosting sites, as passive mobile infrastructure sites:

(i) take up a relatively small footprint, meaning tenants represent a low burden,

(ii) are owned by credit-worthy tenants that will provide a reliable source of long-term income, with no upfront investment required from the landowner, and

(iii) (by nature of their technical constraints) make use of parts of a property that would otherwise often go underutilised,[54]

(b) however, resource consents are needed[55] when new site or site modification deployments do not comply with permitted activity standards under either the Local Authority District Plan or the National Environment Standards for Telecommunication Facilities (or both). In general for cell sites, resource consents are typically required as a means to assess and manage potential environmental effects.[56] The resource consent process is usually relatively simple (albeit in limited circumstances can involve time and expense for operators).[57]

50.3 construct passive mobile telecommunications infrastructure themselves – instead they contract third parties to construct it. As is explained in more detail in the Competition Analysis section, contractors do not provide services exclusively to one passive infrastructure supplier, but instead are available for any such supplier to use.

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[53] See NERA Report, **Appendix 1,** at [38]: the role of the TowerCos is owning and maintaining towers, managing contractors to build new towers (including project management), identifying and acquiring sites for towers, lease management and customer management.

[54] Where light pole solutions are not available, for most locations TowerCos would have the ability to acquire a site that fulfils its requirements. Challenges in obtaining land may occur where a landowner is required to consider a large number of stakeholders, or where there are complications with a leasing process generally. However, this is rare. Where such challenges arise, this normally results in a longer process, but with a similar rate of success. Sometimes, there may be alternative options nearby.

[55] Connexa will generally be the party that holds the environmental consent, although the approval is technically for the land use and associated potential environmental effects, and so can effectively be transferred to whoever needs to rely on that approval to operate the facility.

[56] Such as visual effects resulting from the establishment of the physical structures and physical equipment, safe propagation of radio frequency emissions, and noise from the site operation.

[57] Cell site establishment by Network Utility Operators is generally governed by targeted sections of Local Authority District Plans ('Utilities' sections) and the National Environmental Standards for Telecommunications Facilities (NESTF) which envisage facilities of at least a similar nature to what is typically being deployed. Facilities are also very consistent in the potential effects that they generate, which means that councils and operators typically follow a standard process.

Asset management focus

51 Ownership of passive mobile telecommunications infrastructure is at the core of TowerCos' businesses.

52 [

]58

52.1 [

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52.2 [

]

52.3 [ ]

52.4 [ ]

52.5 [ ]

53 As is suggested by this material, the use of TowerCos is intended to be efficiency enhancing e.g. a "programmatic" build plan by a TowerCo should have the potential to meet the "point of presence" (*PoP*) demands of multiple MNOs, including building and expansion, more quickly (see also below at paragraph 133.2).

54 This is consistent with one of the purposes of MNOs' sales of their passive mobile telecommunications infrastructure, which is to separate the provision of a non-strategic aspect of their requirements into an entity with a genuine focus on efficiently managing those requirements. For example, Vodafone has said of the sale of a majority stake in its passive mobile infrastructure assets:[59]

> The new TowerCo structure allows for separate and specialised ownership of the passive mobile towers, providing strong incentives to drive better capital efficiency, which will include increased co-location of equipment on common tower assets. This is essential as demand for data and connectivity continues to grow year on year, driving the importance of more intensified digital infrastructure to meet community needs. It will allow Vodafone to focus on its core strategic objectives, accelerating the roll out of active network technology.

55 In essence, passive infrastructure comprises the structures capable of hosting tenants' active infrastructure. More specifically, passive mobile infrastructure comprises:

55.1 relevant underlying land interests (a mixture of freehold and leasehold property interests as well as licences – as above at paragraph 50.2, TowerCos do not generally own the land),

55.2 the physical structures themselves, such as towers, masts, poles and mounts,

55.3 foundations,

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58 [ ].

59 See https://news.vodafone.co.nz/towerco.

55.4 fencing and gates,

55.5 power systems and cooling,

55.6 electricity distribution network connections,

55.7 shelter and service rooms, and

55.8 fire suppression and security systems.

56 Connexa notes that the [

].

57 Active infrastructure, which is not owned or managed by TowerCos, is the infrastructure on which MNOs runs their network including antennae, cabinets, radio units, backhaul electronics and electricity meters.

58 The relevant passive and active infrastructure [
] are illustrated visually in the diagram set out at **Appendix 3**.

Site types

59 Note that the passive mobile telecommunications infrastructure assets discussed in this section are not the full range of options for hosting active infrastructure. Substitutes for placing active equipment on passive infrastructure include:

59.1 MNOs' sharing active equipment, and

59.2 MNOs contracting with third parties (such as City Councils) to place their active infrastructure directly on well situated structures.[60] As shown below, rooftop and other building sites may require limited passive infrastructure, so it is possible for MNOs to simply disintermediate TowerCos and deal directly with landlords for these sites.

60 New Zealand's passive mobile telecommunications infrastructure comprises various site types, Spark's views on which are set out in the following table.

[60] For example, Bastia Water Tower (owned by Wanganui District Council) has been used by multiple MNOs and non-MNOs to host their active equipment.

Table 1: Passive mobile telecommunications infrastructure site types[61]

Site type	Description	Estimated time for design to completion (approximate)	Estimated build time (approximate)	Capacity
Large/macro sites				
Large monopole 	A type of tower that consists of one pole anchored to the ground. Often preferred type in metro and provincial areas due to minimal ground space. Average height: 19m	[ ]	[ ]	[ ]
Lattice tower 	These towers are segmentally designed with rectangular or triangular base steel lattices. Because of the larger visual impact and larger required lease area, generally deployed in outer metro and rural locations. Average height: 29m	[ ]	[ ]	[ ]
Guyed mast 	A thin mast that depends on guy lines for stability and normally has structural capacity to host multiple tenants. Typically these are the largest towers and require the most amount of land due to the application of the steel cables, so are generally located in rural areas. Average height: 29m	[ ]	[ ]	[ ]
Small sites				
Small monopole 	A smaller version of the large monopole, requiring less leased space than large monopoles. If installed on the roadside, ground rent is typically not required (see "Light pole" below). Average height: 14m	[ ]	[ ]	[ ]

[61] Based on Spark estimates.

Site type	Description	Estimated time for design to completion (approximate)	Estimated build time (approximate)	Capacity
Rooftop / on-building 	Network equipment is installed on the rooftop or facades of existing buildings. Typically used in dense metro areas where installation of a tower is less feasible. Average height: 20m	[ ]	[ ]	[ ]
Road side 	Network equipment mounted on top of light poles on the roadside. Typically have no ground rent and are deployed under the Resource Management (National Environmental Standards for Telecommunication Facilities) Regulations 2016. Average height: 14m	[ ]	[ ]	[ ]

61 A diagram showing the breakdown of site types across New Zealand is provided at **Appendix 6**.

62 In broad terms, the key differences between the types of large sites and small sites are, in Spark's view:

62.1 *build time*: light poles typically take up to [ ], while larger structures can take up to [ ]. Note that these estimates include site acquisition, which is the part of the process that can take the longest (for small sites, typically taking [ ], and for large sites, taking [ ]). The key steps involved are:

(a) radio frequency design,

(b) civil design,

(c) site acquisition,

(d) equipment arrival, and

(e) build.

62.2 for all site types there is a short live build period, [ ],

62.3 *construction costs*:

(a) construction costs range from approximately [ ][62] [ ],

(b) the cost of constructing new towers in New Zealand is lower than that in Australia. This is for two key reasons:

(i) New Zealand new build monopole towers are on average significantly shorter than Australian new build towers. The average large monopole tower in Australia is 30m in height, while the average in New Zealand is 20-25m. This is partly attributable to maximum tower heights prescribed under regulatory regimes, and

(ii) the weighted average maximum wind speed for which New Zealand structures need to be designed is less than the Australian weighted average maximum in Australia. Therefore, New Zealand structures are on average 85% of the strength of Australian structures.

(c) In summary, large monopoles in New Zealand are generally approximately 64% of the size and strength of Australian large monopoles. This means lower costs, because less steel is required for the tower, less steel and concrete is required for the footings, and less time is required on site to erect smaller structures,

62.4 *capacity for co-location*: co-location is the service by which an infrastructure owner allows a third party to install active equipment on that infrastructure subject to an access charge and other terms and conditions. The capacity of sites to accommodate more than one set of active equipment varies. Generally, large sites perform well with two to three tenants and sometimes up to four, while small sites generally have more limited capacity for co-tenancies. Existing light poles generally are not shared as these are essentially a small cell that is attached to an existing structure (e.g. a light pole or telephone pole), which are readily available, therefore, co-location is not generally required, and

62.5 *coverage area:* in broad terms, the greater the height of the active equipment situated on the tower, the greater its coverage area. However, coverage area also significantly depends on the topography and terrain in question, as well as the extent of coverage offered by existing nearby sites and the MNOs' spectrum holdings and network strategy relative to the service proposition.

Connexa and 2degrees sites

Site types

63 The table below provides a breakdown of Connexa and 2degrees' site types:

[62] [ ].

Table 2: Breakdown existing site types in New Zealand[63]

Site type	Connexa	2degrees	Vodafone
Large/macro sites			
Macro site	[ ]	[ ]	1,531 (66%)
Small sites			
Rooftop / on-building	[ ]	[ ]	533 (23%)
Road side	[ ]	[ ]	255 (11%)
Total	**1,243 (100%)**	**[ ][64] (100%)**	**2,319 (100%)**

64 This table shows that [ ] and [ ] of the portfolio by number comprise large monopoles, which are the largest structures and have the most capacity for co-location.

65 Connexa also acquired [ ] "in-flight"[65] sites from Spark, and will acquire [ ] "in-flight" sites from 2degrees under the ATA, which, once completed, will increase the total number of sites acquired from each entity to [ ] and 1,124, respectively.

Co-location

66 Co-location is the practice of placing more than one tenant's active infrastructure on a single passive site.

Regulatory framework

Special network operator rights

67 A unique feature of the New Zealand industry is that telecommunications companies that have "network operator" status under the Telecommunications Act 2001 (*Telecommunications Act*) are entitled to place equipment on existing or new roadside structures (e.g. light poles) at no rent under the network operator special access rights regime.[66] In addition, those companies that hold "network operator" status are deemed a "network utility operator" under the Resource Management Act 1991 (*RMA*) and are exempt from the requirement to obtain resource consents for various activities. This status is not currently slated for change as part of proposed amendments to resource management laws.[67] Generally, these sites are not the subject of formal leases or licences but the parties rely on rights prescribed in the Telecommunications Act.

68 The network operator right is broad, as "road" is defined widely in section 5 of the Telecommunications Act to include any "street and any other place to which the public have access, whether as of right or not". Literally interpreted, this definition includes parks, reserves and any place to which the public typically has access.

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63 Based on estimates provided by Connexa and 2degrees, and Vodafone estimates of site types in its Vodafone Investor Update (15 February 2022) http://nzx-prod-s7fsd7f98s.s3-website-ap-southeast-2.amazonaws.com/attachments/IFT/387270/364500.pdf. See also, NERA Report, **Appendix 1**, at Figure 3.1 and Table 3.2.

64 [ ]

65 See above, n 12.

66 Telecommunications Act 2001, section 153.

67 The definition of "network utility operator" in clause 7 of the Natural and Built Environment Bill (one of three Bills set to replace the RMA if passed) mirrors that in s 166 of the RMA.

Substantially similar wording in the preceding legislation, the Telecommunications Act 1987, has been held to include privately owned land situated beside a highway and to which the public has access.

69 Network operator status is used frequently in the context of passive mobile telecommunications infrastructure. The status has also led to a proportion of passive mobile telecommunications infrastructure being mounted at relatively low cost on light poles. The coverage area is generally smaller for light poles given that they are located lower than other equipment. They are therefore more likely to be employed to densify existing coverage in urban areas.

70 Connexa has recently obtained network operator status.[68] Network operator status plays an important role in network development and has [ ].[69] [ ].

71 Vodafone, 2degrees[70] and Spark are also, and are likely to remain, registered as network operators. Retaining the ongoing ability to use this status forms part of MNOs' suite of tools to safeguard the competitive provision of passive mobile telecommunications infrastructure (see paragraph 153.5).

STD for mobile co-location

72 As the NZCC is aware, under the Telecommunications Act the NZCC has issued a STD, which sets out the non-price terms on which access providers must make the co-location service on cellular mobile transmission sites available to access seekers.

73 "Access provider" in relation to co-location on cellular mobile tower sites is defined as "every person who operates a cellular mobile telephone network".[71] Therefore, the STD only applies to MNOs. As Connexa is not a MNO, nor is it becoming a MNO by acquisition of the passive mobile tower network, it does not consider that it will be captured by the terms of the STD in either the factual or the counterfactual.

74 However, Connexa does not consider that this will give rise to competition issues. The STD came into force at a time where passive infrastructure assets were owned and operated by vertically integrated MNOs, which had limited incentives to co-locate. The purpose of the STD was to ensure access on reasonable terms to other

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68 See MBIE's record of telecommunications and broadcasting network operators which notes that Connexa acquired network operator status in November 2022: https://www.mbie.govt.nz/science-and-technology/it-communications-and-broadband/our-role-in-the-ict-sector/telecommunications-and-broadcasting-network-operators/.

69 [ ].

70 For completeness, note that Two Degrees Mobile Limited and Two Degrees New Zealand Limited have Network Operator status under the Telecommunications Act 2001, but Two Degrees Network Limited does not.

71 Telecommunications Act 2001, s 5 and Schedule 1 of Part 3.

access seekers. Under a commercial model, where passive mobile infrastructure is owned by independent TowerCos this issue does not exist.

75 Independent TowerCos have commercial incentives to provide access to other access seekers and to provide that access on competitive terms to allow them to win more business.

76 STD terms include those providing for:[72]

76.1 restrictions on the ability of access providers to freely reserve or block access seekers from using unused space at an access provider's sites, by requiring access providers to publish their forecast requirements for capacity at sites, and

76.2 limits on access providers' ability to reserve space, so that they can only do so for the purposes of implementing such forecast requirements within specified timeframes.

77 As above, [

].[73]

Mobile trends in New Zealand and overseas

78 Key current trends relevant to passive mobile telecommunications infrastructure are:

78.1 *increasing non-MNO ownership of passive infrastructure globally*: as described elsewhere in this application, there is a trend, observed in Australia, Europe and the US, towards MNOs selling their passive mobile telecommunications infrastructure portfolios, or at least a majority stake in them, to independent (i.e. non-MNO) third parties which, in turn, leads to increased co-location due to more efficient deployment.[74] Increased co-location results in assets being more utilised (benefiting the TowerCo) and reduces the cost per user, since the fixed cost per tower is shared among more MNOs (benefiting the MNOs),

78.2 *significant increases in mobile data consumption*: the NZCC observed in 2021 that the amount of data consumed over mobile networks by retail customers continues to grow, with the average amount of mobile data consumed per connection increasing by 28% in 2021 from the 2020 average.[75] Mobile connections, and mobile data consumption per capita, follow a similar rapidly increasing trend. While MNOs now have extensive nationwide coverage, Connexa expects that increased mobile usage will continue and translate into

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72 STD for mobile co-location, Schedule 3 – Mobile Co-location Operations Manual, at 11.5.

73 Spark MISA, [
]

74 See NERA Report, **Appendix 1**, at [32].

75 See https://comcom.govt.nz/__data/assets/pdf_file/0019/279100/2021-Annual-Telecommunications-Monitoring-Report-17-March-2022.pdf.

an increase in demand for new sites as MNOs seek to infill their networks to address additional capacity demands – see paragraph 185 below,[76] and

78.3 *the 5G roll-out requiring additional investmen*t: the roll-out of 5G will require the densification of existing networks as higher spectrum and lower propagation frequencies necessitate the use of more sites in close proximity. The impact of this on demand for sites is at paragraph 185 below.

RBI

79 In 2010, the New Zealand government launched the RBI, a subsidy programme to upgrade infrastructure and extend the reach of broadband services to those rural areas and communities in New Zealand where broadband service was not available or where the service was deemed to be inadequate.[77]

80 In 2016, the NZ government extended the RBI to RBI2, and established the Mobile Black Spots Fund. 2degrees, Spark and Vodafone formed a joint venture in 2017 – the Rural Connectivity Group (*RCG*) – to deliver a shared wireless broadband/mobile solution in the rural areas identified. 2degrees and Spark will each have an ongoing role in the RCG.[78] As mentioned, 2degrees, Spark and Vodafone each own one-third of the shares in RCG, and each appoints one of the three directors of that entity. 2degrees' interest in the RCG is outside the scope of the Proposed Transaction. The RCG owns approximately 350 current passive mobile telecommunications infrastructure assets.[79]

81 This should not affect the competition analysis. The RCG is not a commercial entity that competes to supply any infrastructure services to MNOs and others. Rather, the purpose of the RCG is for the three MNOs to jointly partner with Crown Infrastructure Partners (*CIP*) to provide greater mobile coverage in rural areas. The RCG does not offer services outside of that purpose. CIP is also partnering with fifteen wireless internet service providers (*WISPs*). Under the relevant agreements with the MNOs and WISPs, CIP makes available Crown funding for the MNOs and WISPs to enable them to put the relevant services in place, mainly focussing on delivery mobile coverage on State Highways and at tourism areas, with some rural broadband coverage as well. In addition, as noted above, 2degrees' interest in the RCG is outside the scope of the Proposed Transaction. As a result, there is no meaningful "competitive overlap" with the RCG for the purpose of the analysis, and the RCG is not considered further in this application.

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[76] See NERA Report, **Appendix 1,** at [20] to [21].

[77] See https://www.mbie.govt.nz/science-and-technology/it-communications-and-broadband/fast-broadband/broadband-and-mobile-programmes/.

[78] See generally https://www.crowninfrastructure.govt.nz/rural/what/, and the media release for the 2018 expansion of the RBI here: https://www.crowninfrastructure.govt.nz/wp-content/uploads/2018/12/Media-release-RBI2-MBSF-expansion-announcement-18-Dec-2018-FINAL.pdf.

[79] In August 2022, the Government announced that the RCG had delivered its 350th tower, see https://www.beehive.govt.nz/release/govt-marks-350th-tower-push-improved-rural-connectivity. Based on the figures in Table 3 below, this amounts to approximately 6.5% of the total number of sites nationally.

PART 5: OTHER INDUSTRY PARTICIPANTS

82 In this part, Connexa provides information on key industry participants.

Customers of passive mobile telecommunications infrastructure

MNOs

83 In total, New Zealand has 5.8 million mobile connections, with a penetration level of 113% as at December 2021.

84 MNOs, which provide national mobile coverage as part of a baseline service offering, are and will continue to be the key customers in relation to access to passive mobile infrastructure.

85 New Zealand has three well-established MNOs, which as at quarter three, 2022 had the following estimated share of the national market for retail mobile services (by number of connections):[80]

85.1 2degrees: 24.4%,

85.2 Spark:39.5% , and

85.3 Vodafone: 35%.

86 Note for completeness that MVNOs are not direct customers of TowerCos. They do not generally have their own radio spectrum or much of the infrastructure required to provide mobile services. Rather they rely on buying wholesale services from a MNO. They are not expected to contract directly with a TowerCo, because they require contracts covering both active and passive infrastructure.

Non-MNOs

87 There are also non-MNO access seekers, which generally comprise organisations that require wireless coverage and capacity for their services. They use passive mobile telecommunications infrastructure to host their own communications equipment.

88 Non-MNO tenants comprise government entities, broadcasters and private entities:

88.1 [

[80] Market share data is based on IDC New Zealand Telecommunications Market Research on total mobile connections as at quarter 3, 2022. The remaining 1% of market share is held by MVNOs.

], and

88.2 [

]

89 [

]

90 WISPs are also potential non-MNO tenants although more commonly they choose to self-supply their passive infrastructure.

Other providers of passive mobile telecommunications infrastructure

FortySouth

91 FortySouth was created as a result of the sale of a majority stake in Vodafone's passive mobile telecommunications infrastructure to InfraRed Capital Partners (40%) and Northleaf Capital Partners (40%). As part of that transaction, Infratil (currently a 50% shareholder in Vodafone) reinvested to hold 20% of the new TowerCo.[81]

92 FortySouth has a 20-year MISA with Vodafone (with extension rights) providing Vodafone with access to both existing and new towers, and a commitment from the TowerCo to build at least 390 additional sites over the next 10 years.

93 Vodafone will continue to own the active parts of its network, including the radio access equipment and spectrum assets, and maintaining its leading strong mobile coverage and network position.

94 Vodafone states:[82]

> The new TowerCo structure allows for separate and specialised ownership of the passive mobile towers, providing strong incentives to drive better capital efficiency, which will include increased co-location of equipment on common tower assets. This is essential as demand for data and connectivity continues to grow year on year, driving the importance of more intensified digital infrastructure to meet community needs. It will allow Vodafone to focus on its core strategic objectives, accelerating the roll out of active network technology.

ATC

95 ATC is a global provider of wireless communications infrastructure. It began as a subsidiary of American Radio in 1995, but quickly expanded, becoming a separate company and going public on the NYSE in 1998.[83] ATC now has a portfolio of approximately 223,000 sites across 25 countries, comprising towers in advanced, evolving and developing wireless markets.[84]

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81 See https://news.vodafone.co.nz/towerco.

82 See https://news.vodafone.co.nz/towerco.

83 See https://www.americantower.com/company/history.html.

84 See https://www.americantower.com/company/our-global-presence/index.html.

96 While ATC does not currently have a New Zealand TowerCo presence, it has recently acquired 100% of the shares in Clearspan Property Limited (*Clearspan*),[85] with the intention of continuing to grow Clearspan and invest in the New Zealand telecommunications industry.[86]

97 Clearspan established operations in 2007. It specialises in operating as a landlord to TowerCos, by owning land under New Zealand mobile telecommunications towers. Its key clients are telecommunications companies and utility providers.[87] Connexa understands Clearspan's portfolio includes land under approximately [ ] mobile towers.

98 As a large global TowerCo, which has recently invested in the land under a number of TowerCo sites, it would not be unexpected for ATC to expand into providing towers as well as land. [ ] Further, in consenting to ATC's acquisition of Clearspan, the OIO noted that this was likely to lead to a "significant level of capital investment resulting from [ATC]'s proposed growth strategy for new site acquisitions".[88]

99 By way of example:

99.1 [ ]

99.2 [ ]

100 The decision to renew is generally at the discretion of the tenant, rather than the landlord. However, following expiry, it is possible that ATC could elect not to enter into another lease, and instead build its own towers on sites. [ ].

Other potential new entrants

101 [ ]

102 A possible new entrant would include Everest Infrastructure ANZ (*Everest*) which is a relatively recent entrant to the Australian TowerCo market. Everest was set up as a joint venture between Everest Infrastructure Partners Inc (a privately-owned operator of Communications Infrastructure assets) and Peppertree Capital Management Inc (a private equity firm).[89]

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85 Overseas investment decision for case 202100802 – ATC New Zealand Limited, 6 October 2022 (*ATC OIO decision summary*). For further information see https://www.linz.govt.nz/our-work/overseas-investment-regulation/decisions/2022-10/202100802. See also https://www.nbr.co.nz/business/oio-approves-50m-land-portfolio-sale-to-american-behemoth/.

86 See https://www.nbr.co.nz/business/oio-approves-50m-land-portfolio-sale-to-american-behemoth/.

87 See https://www.clearspanproperty.co.nz/experience.

88 See https://www.nbr.co.nz/business/oio-approves-50m-land-portfolio-sale-to-american-behemoth/.

89 See https://everestinfrastructure.com.au/announcing-everest-infrastructure-anz/.

103 Everest entered the Australian marked on 16 February 2021[90] and, as at 30 August 2021, had 25 tower sites across multiple states.[91] Everest has publicly stated an interest in entering the New Zealand market "Everest Infrastructure Partners announced the company formation of Everest Infrastructure ANZ to pursue acquisition and development of wireless communications infrastructure located in Australia and New Zealand".[92]

Other owners of passive mobile telecommunications infrastructure

104 A number of other organisations also own infrastructure that is, or otherwise can be used as, passive mobile telecommunications infrastructure. These owners typically own the infrastructure for the purpose of self-supply, although some may wish to expand their ownership to operate as a TowerCo and/or sell infrastructure to a new TowerCo entrant. The presence of smaller commercial suppliers of passive mobile telecommunications infrastructure would be consistent with jurisdictions in which non-MNO owned TowerCos are more established (see further below at paragraph 245):

104.1 Chorus' portfolio comprises approximately [ ] towers, which it primarily uses to provide radio linking for legacy voice and data services. [ ], and Chorus also provides co-location services to MNOs and non-MNOs, [ ],

104.2 Kordia's network comprises approximately [ ] towers, of which the majority are large lattice structures providing radio and television broadcast and linking services. Kordia also provides co-location services to both MNOs and non-MNOs,

104.3 Vital/TeamTalk's tower portfolio accommodates land mobile radio equipment to support emergency services such as St John ambulances. However, its towers are typically not engineered to a carrier grade standard and are therefore more similar to those of WISPs. As such, it also commonly co-locates on others' portfolios, such as Connexa, Chorus and FortySouth. For example, [ ],

104.4 Rural Connectivity Group (described above at paragraph 79),

104.5 Transpower owns a network of towers, which it uses to link data around its transmission network to maintain network health and improve performance,

104.6 KiwiRail owns a portfolio of tower structures typically located within rail corridors, which it uses for lighting, radio linking, and voice and data transmitting services for its network,

104.7 Broadtech (formerly, JDA Network Specialists) offers towers and backhaul data links for tenancy and equipment co-location to MNOs, radio and television broadcasters and other wireless operators such as WISPs,

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90 See https://everestinfrastructure.com.au/announcing-everest-infrastructure-anz/.

91 See https://everestinfrastructure.com.au/everest-completes-strategic-portfolio-acquisition-in-south-east-queensland/.

92 See https://everestinfrastructure.com.au/announcing-everest-infrastructure-anz/.

104.8 Mount Campbell Networks Limited has one of New Zealand's largest privately-owned communications and broadcast facilities – a 63 metre steel lattice tower situated on Mount Campbell, which offers significant geographic coverage. It provides co-location services to numerous telecommunications service providers, including MNOs and non-MNOs. Meanwhile, its service business (Mount Campbell Communications Limited) sells and installs active network equipment,[93]

104.9 WISPs, of which there are 32 in New Zealand, the majority being regionally-focused, privately-owned and run by an owner-operator. WISPs connect to a fibre optic link at a central point and install fixed wireless receivers and transmitters on hilltops or high buildings, which then transmit wireless signals to a cluster of end users (typically in rural areas).[94] WISPs own their own towers, but these are typically much smaller in scale and lower in cost than those used by MNOs,

104.10 NZ Police own a small number of towers, but predominantly co-locate on other entities' towers, and

104.11 Airways similarly has a limited tower portfolio and for the most part is hosted on other entities' towers.

105 As noted above, Connexa understands that Chorus, Broadtech, Kordia, Transpower, Mount Campbell Networks Limited and KiwiRail already host MNO co-location on their sites. Some have the potential to expand into bigger TowerCos. For example, Mount Campbell Connect Limited[95] currently focuses on radio communications,[96] but has extensive services and expertise that appear readily able to be deployed to owning and managing passive mobile telecommunications infrastructure.[97]

Builders of passive mobile telecommunications infrastructure[98]

106 As described above at paragraph 50, providers of passive mobile telecommunications infrastructure do not carry out construction themselves. Instead, they contract with third parties to do this work. The work is not particularly specialised and there is a range of options for carrying it out. Contractors are not owned by or committed exclusively to any provider of passive mobile telecommunications infrastructure and instead are free to provide services to any provider. The exception is that [

]:

106.1 [

],[99]

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93 See https://www.mountcampbell.co.nz/about-us/.

94 See https://www.wispa.nz/about/.

95 A related entity of Mount Campbell Communications Limited and Mount Campbell Connect Limited.

96 It operates radio services from 23 sites throughout Nelson, Marlborough, Tasman and Golden Bay, which cover multiple industry sectors, including emergency, forestry, security and utilities. See https://www.mountcampbell.co.nz/about-us/.

97 For further information, see https://www.mountcampbell.co.nz/.

98 Note TowerCos manage both building and upgrading existing sites.

99 Operational Services Agreement between Spark TowerCo Limited and Spark New Zealand Trading Limited (1 July 2022) (*Operational Services Agreement*) (**OTPP.01.03**), [ ].

106.2 [

],[100] and

106.3 [

].[101]

107 [

]. Further, all of these contractors operate nationally:

107.1 Entelar,

107.2 Downer Group NZ,

107.3 Ventia NZ,

107.4 Broadtech, and

107.5 Infratel Networks Limited.

108 Sub-contracting services are also required for passive mobile telecommunications infrastructure building. These services are not particularly specialised and can be obtained from a range of sub-contractors (with some of the contractors listed above also operating in the sub-contracting space), including at a local level. Examples include:

108.1 MRT Construction,

108.2 HEB Construction,

108.3 DW Dentice Buildmaster,

108.4 WSP,

108.5 Northland Underground Drilling (Northland) – small civils jobs,

108.6 Huband Contractors (Northland) – small civils jobs,

108.7 Steve Bowling (Northland), and

108.8 Duyvestyn Drainage Limited (Midlands).

109 The Proposed Transaction will not result in any aggregation, or change, in relation to the supply of contracting services for building passive mobile telecommunications infrastructure.

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[100] Operational Services Agreement, [ ]

[101] Operational Services Agreement, [ ]

PART 6: COUNTERFACTUAL

110 Irrespective of whether the Proposed Transaction goes ahead, [
]

110.1 [
]

110.2 [
].[102]

111 Connexa assumes there is a real chance 2degrees would sell 100% of the Assets to an alternative purchaser. That being the case, the "without-the-merger" scenario that would be most competitive, in theory, is a sale of a 100% stake in the Assets to an alternative purchaser.[103] In this scenario, the 2degrees passive mobile telecommunications infrastructure would be completely vertically disintegrated from its MNO business.

112 In any event, the analysis would be similar for either counterfactual scenario as even if [ ] the supply of passive mobile telecommunications infrastructure has evolved to a situation where there are two independent TowerCos [
]

113 Notably, in both the factual and the counterfactual, Spark, 2degrees and Vodafone:

113.1 would no longer own a majority interest in their passive mobile infrastructure, and that infrastructure will be at least majority-owned by a party with no involvement in downstream markets, and

113.2 would have a MISA with a TowerCo that has been agreed in competitive conditions where the MNO holds significant bargaining power.

114 The key difference arising in the factual is that Spark's former towers and 2degrees' towers would be owned by the same TowerCo (which 2degrees would not retain a stake in). In the counterfactual, there is likely an additional TowerCo, which would own 2degrees' towers, in which 2degrees may not retain a stake.

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[102] See NERA Report, **Appendix 1**, at Part 3.2.

[103] NERA notes, at [36], that, in any counterfactual involving 2degrees retaining ownership of its assets, it would face competitive pressure to operate those assets independently. The status quo may therefore not be materially different from sale to an alternative purchaser.

PART 7: RELEVANT MARKETS

115 In this Part, Connexa sets out the markets that are relevant to the Proposed Transaction. In particular:

115.1 passive mobile telecommunications infrastructure is an input, so the national market for the retail supply of mobile services is relevant,

115.2 competition to supply passive infrastructure services to MNOs takes place at a national level, in relation to MISAs, as well as site-by-site in small local "markets". These types of competition affect each other, and

115.3 there are different dynamics associated with supply to non-MNO customers such that they should be examined separately.

National market for the retail supply of mobile services

116 The NZCC has previously identified a national market for the retail supply of mobile services.[104] Given TowerCo services are an input into the provision of such services, the potential impact of the Proposed Transaction should be considered in relation to this market.

117 As set out in more detail below in the Competition Analysis (see paragraph 184) and NERA's report, competitive conditions in the supply of passive mobile telecommunications infrastructure are not capable of any material impact on downstream competition between MNOs in any market for the supply of mobile phone services for the following reasons:

117.1 passive infrastructure costs make up only a small proportion of retail mobile costs,[105]

117.2 coverage is no longer a material competitive differentiator,[106] and

117.3 to the extent that there are downstream benefits of more infrastructure based competition between MNOs (or conversely, detriments from infrastructure sharing) this would arise from competition in relation to active infrastructure (i.e. spectrum and software are the key drivers of innovation) and not passive infrastructure (which is only the location of the active infrastructure).

118 In that context, the Proposed Transaction is arguably not capable of giving rise to any lessening of competition that could be considered "real" or "of substance".[107]

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[104] *Infratil Limited and Vodafone New Zealand Limited* [2019] NZCC 9 at [57.2] and [62.2]. In the Voyage Determination, at [11] – [12], the parties submitted that the relevant market was a national one. The NZCC found that it did not need to identify the precise boundaries of relevant markets. It said that while multiple markets at the wholesale and retail level may exist for different services, it was able to reach a decision simply by considering the impact of the Proposed Merger generally on retail and wholesale competition. As no geographic distinction was made, it appears that a national analysis was considered appropriate.

[105] See NERA Report, **Appendix 1,** at Part 4.1.

[106] See NERA Report, **Appendix 1,** at [15], each MNO now claims similar geographic coverage (Spark 97.5%, Vodafone NZ 98% and 2degrees 98.5%). Spark has stated publicly that "now that mobile operators have largely homogenous network coverage, our passive mobile assets are no longer a point of competitive advantage – it is our active infrastructure… that drive differentiation in the market", see Spark Annual Report 2022 at page 31.

[107] Commerce Act, s 2(1A), definition of "substantial". NZCC, *Mergers and acquisitions Guidelines*, May 2022 (the *Guidelines*) at [2.22] "only a lessening of competition that is substantial is prohibited. A

Wholesale supply of passive infrastructure services

Competition for the supply of MISAs

119 On the demand side, all three existing MNOs offer mobile services nationally, and any new entrant would inevitably do the same.[108] MNOs around the world, and in New Zealand, have chosen to outsource the bulk of their passive mobile telecommunications infrastructure to a TowerCo in a single, long-term contract (described in this application as a MISA). Accordingly, competition to supply those contracts is a key dynamic in the provision of passive mobile telecommunications infrastructure. At least in the first "round" of competition, demand was national.

120 On the supply side, each of the MISA providers is also national. All three existing MNOs own or owned passive mobile telecommunications infrastructure and the MISAs have been agreed in the context of the sale of those assets. Accordingly, the existing MISA suppliers are national in their geographic scope.

121 The first "round" of MISA competition has already occurred, or is occurring as part of the Proposed Transaction. Spark and Vodafone have both agreed a MISA with a TowerCo irrespective of the Proposed Transaction. 2degrees' MISA would form part of the Proposed Transaction, meaning the first round of competition would be complete following the Proposed Transaction.

122 There is potential for a further "round" of MISA competition at the end of the existing contracts. The MISAs come up for renewal at the end of the Initial Term (15 years for Spark and 20 years for 2degrees and Vodafone), with renewal periods, and [ ]. Therefore, options for a MNO at expiry or renewal are:

122.1 to switch its sites to a different provider or combination of providers, and enter into a new MISA with a different provider or a range of different agreements with multiple providers. To that end, Spark and 2degrees' MISAs [ ]. Switching costs are material but this feature is unaffected by the Proposed Transaction so MISA competition would have a similar dynamic regardless of the number of existing TowerCos. In Connexa's view, it is realistic to expect MNOs to switch a portion of sites away from their MISA counterparty, but also to create competitive pressure by increasing or reducing the BTS commitment it is willing to give any single TowerCo, or reducing the services (such as maintenance) it purchases from a TowerCo.

122.2 to stay with its current provider (at least for a proportion of its sites), whether under the current MISA (through renewal rights) or by entering a new agreement.

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lessening of competition will be substantial if it is real, of substance, or more than nominal". See also *Woolworths v Commerce Commission* (2008) 8 NZBLC 102,128 (HC) at [127].

[108] In this application, Connexa has considered the potential effect of the Proposed Transaction on a new entrant MNO. However, it is not currently likely in terms of the "real chance" standard that a new MNO would enter. In the Mobile Market Study (at [4.28] to [4.32]), several parties submitted that a fourth national MNO was unlikely and the NZCC concluded that, based on its analysis of the retail mobile market in New Zealand, there did "not appear to be a strong case for regulatory intervention to promote a fourth MNO to enter the New Zealand market". However, the NZCC did not limit participation in spectrum to allocation to the MNOs, which would have had the effect of precluding the possibility of new entry.

123 But importantly, any second "round" of MISA competition would occur after a long period (at least 15 to 20 years) during which MNOs are likely to have material numbers of uncommitted sites. The second round of competition will occur against the backdrop of site usage, and re-positioning, which has occurred during the course of the first term of MISAs. As such, the second "round" of MISA competition will take place in a competitive context that has been shaped, materially, by MNOs' use of their contractual freedoms to support their MISA counterparty and/or sponsor new entry or engage in self-supply. Further, the second round may have a national dimension:

123.1 on the demand side, but the extent of this will depend on the extent and method by which MNOs have allocated uncommitted demand during the term, and

123.2 on the supply side, but this will depend on whether MNOs have supported regional or smaller market participants which then host MNOs' active equipment at the time of renewal or expiry.

124 Consequently, MISA competition both affects (by setting the parameters for where site-by-site competition can occur, and by setting an aspiration for TowerCos) and is affected by (because site-by-site competition ultimately affects how and to what extent MNOs are able to obtain competitive MISA terms) site-by-site competition.

Competition in local "markets"

125 In negotiating their MISAs, each existing MNO estimated its expected demand over the initial period of the MISA and agreed a certain number of BTS sites forming a BTS commitment to its MISA counterparty. The BTS commitment is a total number of sites, but individual site locations have not yet been selected.[109] Expected demand above the BTS sites sits outside the terms of the MISAs (we refer to these as *uncommitted sites*). Such sites:

125.1 recognise the needs of MNOs to evolve their networks in ways they cannot predict at the outset of a contract, and

125.2 allow MNOs to maintain competitive pressure on their MISA counterparty by having the ability to place new coverage needs with or switch a limited number of sites to other passive infrastructure service providers, prior to contract expiry.

126 For uncommitted sites, competition takes place on a site by site ("local markets") basis, even though MNO customers have national needs, and local market competition always has an overlay of the national dynamic described above. So, for example, MNOs may seek coverage in a specific local area but their bargaining power benefits from their ability to threaten, or offer, business in additional areas.

127 On the supply side, local market competition is also likely manifest on a site by site basis but with a wider perspective. Passive mobile telecommunications infrastructure suppliers may be national or local, but will typically be seeking to expand (or retain) a role with a MNO customer beyond any particular site. Indeed, TowerCos' geographic footprint could expand based on MNOs' allocation of

[109] The BTS commitment is fulfilled by initiating individual new site requests through Connexa when the MNO identifies a need for additional demand.

uncommitted sites, and will fail to expand where MNOs are given an incentive to resume self-supply.

128 In this context, it is important to bear in mind that passive mobile telecommunication infrastructure is only a subset of location types used for hosting network equipment. The type of network equipment, available space on the structure, strength of the host structure, cost to co-locate, compared to self-supply and access to supporting facilities (e.g. electricity, fibre, shelters/cabinets) all ultimately dictate the chosen solution from the MNO's (or non-MNO's) perspective.

129 As a result, other places where active equipment can be hosted meaningfully constrain TowerCos. Further, towers are currently an important feature of the market, but may become a less important subset over time (e.g. 5G infill may be carried out more frequently without the use of towers).

130 Nevertheless, while Connexa has taken account of MNOs' options to use locations other than towers, to best expose the competitive overlap for the local dimension of competition, Connexa considers the following dimensions to be the appropriate way to define markets:

130.1 product: passive mobile infrastructure including both macro and small macro sites as well as BTS sites and the ancillary services that TowerCos provide,

130.2 geographic: competition is most precisely analysed by reference to small local markets (acknowledging competition has an important wider overlay), and

130.3 functional: relevant services are an upstream input for mobile phone services, and is taking place at the wholesale level.

Market definition for local competition

Product dimension

No segmentation between sites based on size

131 Developed sites can broadly be split into macro (or larger) and smaller sites, with a further breakdown of site types also possible.[110] The parties consider that, for analytical purposes, all site types should be treated as part of the same product market. It is also important to note that many sites are not "towers", including light poles and equipment mounted directly on buildings. This is particularly the case in urban areas, as densification occurs.

132 The various site types are not always substitutable. There are circumstances where more than one type of site is suitable for a location or e.g. a MNO or TowerCo is able to put together equivalent capacity using a combination of light pole sites rather than a single macro site. However, they are not perfectly substitutable in that particular types of sites are suitable for different:

132.1 types of location depending on, for example, the available space (on top of a building compared with undeveloped rural land), the nature of and distance from other sites, and the surrounding topography, and

132.2 coverage needs, such as greenfield or densification.

[110] See further information on site types above at [60] – [64] and Table 1.

133 However, Connexa considers all site types should be treated as a single product market because:[111]

133.1 on the supply side, a portfolio of all types of sites must be offered by any supplier offering material geographic coverage, and

133.2 on the demand side, sites of different sizes are partly substitutable (as above), and a mixture of types will make up any MNO's total coverage. For example, in the case of an individual new site, coverage may be obtained by a single macro site, several smaller sites, or some other combination depending on the particular circumstances and terrain. In fact, from a demand-side perspective, MNOs are interested in "points of presence" for their active equipment, and/or access to particular coverage, rather than a specific solution or type of tower.

134 Regardless, in Connexa's view the analysis would not alter depending on whether different site types were treated as being in separate product markets. That is because, where competition is assessed on a local areas basis, only sites that are appropriate for that area and capable of giving rise to concerns would form part of the analysis. So, for example, when considering the potential for the Proposed Transaction to have an impact in relation to existing sites (below), only macro sites need to be considered, since existing light poles generally are not shared. Light pole "towers" are essentially a small cell attached to an existing structure (e.g. a light pole or telephone pole), which are readily available and typically without space for other equipment.

Developed and BTS sites

135 Customers have the option of co-locating their equipment onto an existing developed site, or to opt for a BTS solution, whereby a new site is built.

136 There are differences in cost and timeframe between co-locating and building a new site. However, on the demand-side, the parties consider that BTS is an effective constraint on the provision of access to existing developed sites.

137 On the supply-side, there are similarly different costs and benefits between building a new site and hosting an additional tenant on an existing site. Where a new tenant co-locates on an existing site, the TowerCo receives additional revenue from that site, however, where a new site is built, the TowerCo is expanding its network and will have the ability to earn additional revenue in future. Therefore, from a

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[111] This differs from the UK Competition and Markets Authority's (*CMA*) decisions in *Anticipated acquisition by Cellnex UK Limited of Arqiva Services Limited – Decision on relevant merger situation and substantial lessening of competition*, 18 May 2020 (https://assets.publishing.service.gov.uk/media/5ec246ffe90e071e29d537f6/Cellnex_Arqiva_full_text_decision_PDFaa.pdf) at [63] to [64] and *Anticipated acquisition by Cellnex UK Limited of the passive infrastructure assets of CK Hutchison Networks Europe Investments S.À R.L. – Final Report*, 3 March 2022 (*Cellnex/CK Hutchinson*) (https://assets.publishing.service.gov.uk/media/62221304d3bf7f4f0ec9b75e/Cellnex_CK_Hutchison_-_Final_Report.pdf) at [6.13].

In *Cellnex/CK Hutchison*, the CMA concluded that the relevant market was the supply of access to developed macro sites (including for the avoidance of doubt, BTS sites) and ancillary services to MNOs and other wireless communication providers (i.e. excluding what it termed micro sites from the analysis).However, the Proposed Transaction can be distinguished because, unlike the parties in *Cellnex/CK Hutchison*, the parties here overlap in not only the supply of access to macro sites, but micro sites also and seek to offer a full TowerCo solution to MNOs. Specifically:

- micro sites: Connexa currently has [ ] micro sites and 2degrees has [ ] sites, and
- macro sites: Connexa currently has [ ] macro sites and 2degrees has [ ].

TowerCos perspective, there is unlikely to be a difference between provision on BTS sites or existing sites.

138 Therefore, BTS sites form part of the relevant market for the purposes of this analysis.

Geographic dimension

139 On the demand side, existing and any new entrant MNOs[112] require national coverage. Further, the MISAs which are a feature of the competitive landscape are national in their geographic scope. This also means that, when suppliers offer services to a MNO at one or a small number of sites, they can be expected to be "auditioning" for a bigger role in providing the MNO's needs – see further below. Similarly, on the supply-side TowerCos need to provide national coverage under the MISAs and to effectively compete in the market.

140 That said, sites are only genuinely substitutable within a very small geographic area. Where a MNO is looking to obtain access to passive mobile telecommunications infrastructure in a particular geographic area, it will only have a choice of existing sites (if any) within a small radius. Similarly, where coverage is required where existing capacity is not available or attractive, there is a relatively small area within which a site must be built. The importance of location is illustrated by reference to the process for a TowerCo obtaining a new PoP for a MNO customer.[113] Where the MNO requests a new PoP it will generally specify a "required search ring". The TowerCo will then seek out potential sites within a small area to present "candidate sites" to the MNO. The MNO would typically map the coverage it would obtain from each candidate site and select the best location on that basis.

141 The radius, and relevant constraints, in any particular local area will vary depending on the terrain in question and the extent of coverage offered by existing nearby sites (Connexa notes that approximately 55% of sites are in high-density metropolitan areas where there is the highest data demand). For example, the presence of a hill may mean sites that are closer than 500m apart are not in fact substitutes.

142 Nevertheless, to provide an indication of local overlaps, the parties consider an appropriately conservative simplifying assumption to be a radius of approximately 500m for urban sites and 3km in rural areas.[114]

Functional dimension

143 The supply of passive infrastructure services to MNO (and other) customers takes place at a "wholesale" functional level in that it involves the supply of an input for providers of mobile telecommunications services.

144 The Proposed Transaction involves the aggregation of two commercial suppliers of such services. Following the Proposed Transaction another commercial national supplier would remain (FortySouth, which owns the passive infrastructure assets

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[112] Note, based on the Mobile Market Study, a new entrant MNO may be unlikely: several parties submitted that a fourth national MNO was unlikely and the NZCC concluded that, based on its analysis of the retail mobile market in New Zealand, there did "not appear to be a strong case for regulatory intervention to promote a fourth MNO to enter the New Zealand market", at [4.28] to [4.29].

[113] For example Spark Operations Manual at [ ]

[114] See NERA Report, **Appendix 1,** at [91].

previously owned by Vodafone). Smaller TowerCos may also offer passive infrastructure services as an input for MNOs.

145 Connexa notes that the MNOs, which are vertically integrated into the downstream supply of mobile services, also retain capacity to carry out the provision of passive infrastructure services. However, the relevant overlap is focused on the wholesale supply of passive mobile telecommunications infrastructure services.

146 Accordingly, the relevant functional dimension is the wholesale supply of passive mobile telecommunications infrastructure services.

The same market definitions should be applied for a new entrant MNO

147 As above, Connexa considers that a new entrant entering the New Zealand market in the form of a new MNO is unlikely. A more likely scenario is that a new entrant would enter as a MVNO (as explained elsewhere, MVNO entry would be unaffected by the Proposed Transaction).

148 Nevertheless, the market definitions outlined above are also an appropriate framework for considering how the Proposed Transaction would affect competition to supply a new entrant MNO.

149 Such a MNO would seek to provide a national offering as soon as possible and therefore, would require national coverage.[115] In doing so, it could engage in one or more of the following options: MISAs with either or both national TowerCos, smaller or regional MISAs with other TowerCos and/or self-supply. The requirement for active infrastructure would make such entry capital intensive, so the new MNO may well also make use of active sharing arrangements and/or MVNO-type arrangements which it could replace over time.

150 Regardless, a new entrant MNO would likely have specific geographic requirements, so that specific geographic markets would also be relevant.

Market definition in relation to non-MNO customers

151 Connexa considers it may be appropriate to assess competition to supply passive infrastructure services to non-MNO customers separately from MNO customers. Non-MNO customers account for a very small number of sites, and their alternatives to using passive mobile telecommunications infrastructure to host their equipment are greater than MNOs', given the lower specifications they require for their sites.

[115] By way of example, when 2degrees entered the market, it had spent almost a decade preparing before switching on as New Zealand's third mobile provider in 2009, see https://www.2degrees.nz/about-us/our-story.

PART 8: COMPETITION ANALYSIS

SUMMARY

No substantial lessening of competition for supply to MNOs

152 There would be no material difference from a competition perspective between the level of vertical integration that would be present in the factual compared with the likely counterfactual. Indeed, if [

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153 Against that background, the Proposed Transaction would not substantially lessen competition for the supply of passive infrastructure services to MNOs in any relevant market compared with any realistic counterfactual, whether through higher prices for services, or diminished non-price factors (such as quality or service). Rather, the Proposed Transaction would enhance the efficiency benefits of independent TowerCos, by consolidating tower requirements, and would likely be pro-competitive arising from the potential to increase co-location,[116] without reducing competition. The key reasons are:

153.1 given passive mobile telecommunications infrastructure services are limited in scope and not (or, no longer) the basis for competitive differentiation among MNOs, there is limited scope for competition,

153.2 in any event, the supply of passive mobile infrastructure services is not capable of giving rise to any lessening of competition downstream because they comprise only a small proportion of the cost of the retail supply of mobile services,

153.3 all three existing MNOs have sold their tower assets in demonstrably competitive processes,[117] in which they have agreed terms for the supply of a large number of their existing and future needs for passive mobile telecommunications infrastructure services (in their MISAs). The outcome of the first round of MISA competition would not be less competitive in the factual compared with the counterfactual,

153.4 as to competition for the replacement of the MISAs at renewal or expiry:

(a) as above, all MNOs have negotiated their MISAs in competitive circumstances, and at least two have shown themselves to be comfortable that the MISAs' protections would remain effective even in the event of TowerCo consolidation,[118] and in any event,

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116 See NERA Report, **Appendix 1**, at Part 10.

117 [

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118 As is clear from the nature of the Proposed Transaction, both Spark and 2degrees are supportive of the consolidation it represents. It would be surprising if, in negotiating its own long-term arrangements, Vodafone did not consider the potential effect of a changed supply structure. Given the competitive nature of its sale process, Connexa assumes Vodafone considers itself adequately protected for an eventuality such as the Proposed Transaction.

(b) there are a number of protections in the MISAs that assist the MNOs to ensure they are able to control their level of dependency on their MISA counterparty during the term, and obtain competitive terms for passive infrastructure services on expiry. These include a long term, with renewal rights (to allow the MNOs to position for expiry) and uncommitted sites such as demand outside of the BTS commitments, which entitle them to switch away a proportion of their future sites to other suppliers or self-supply),[119]

(c) TowerCos are operating in an environment where there is limited scope to take business from one another, therefore they will be incentivised to take tenants from the other TowerCos where possible and to protect their own tenants. It is important to note that any new entrant MNO seeking a MISA from a TowerCo would be in a strong position in terms of countervailing power, as a new national customer would be a source of highly valued revenue for any TowerCo, for which TowerCos would compete aggressively, and

153.5 competition in relation to uncommitted sites in specific local "markets" takes place against the backdrop of the purpose of the uncommitted sites, which is both to recognise the needs of MNOs to evolve their networks in ways they cannot predict at the outset of a contract, and to allow MNOs to maintain pressure on their MISA counterparty. Uncommitted sites can be fulfilled by either new sites or existing sites as follows:

(a) for <u>new sites</u>:

(i) there will continue to be two national suppliers to choose from, as well as smaller and new entrant alternatives (see further below), and

(ii) self-supply is a realistic option given the lack of economies of scale for individual sites, availability of build contractors, the availability of low cost light pole solutions and retention of capability by MNOs, and

(b) for <u>existing sites</u> MNOs may choose to fulfil excess demand through co-locating on an existing Connexa, FortySouth or other smaller TowerCo site:

(i) competition could only theoretically be affected by the Proposed Transaction where there is an overlap between an existing Connexa and 2degrees sites. NERA's local "markets" analysis shows there are likely to be relatively few macro (shareable) sites where there is overlap between Connexa and 2 degrees (400 pairs[120]), and even fewer such sites where there is no FortySouth tower present as an alternative for MNO customers, and where Vodafone is not already co-locating (68). For other

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[119] Spark MISA [ ]
2degrees MISA [ ]
Connexa assumes that Vodafone similarly entered a deal whereby it has a certain level of churn.

[120] Being Spark and 2degrees sites within 500m of each other for "urban" areas, and 3km for "rural" or mixed areas.

sites, the Proposed Transaction brings about no change, or there is an alternative available for MNO customers, and

(ii) in a small number of individual locations, Connexa would arguably have a theoretical ability to charge more to MNOs for co-location in relation to uncommitted sites, to the extent there is a cost differential between co-location and building a new site. However:

(A) against the backdrop of national competition and MNOs' countervailing power, it is not realistic for Connexa to take advantage of any such opportunity. The overarching national competitive dynamic means that Connexa will be seeking to incrementally increase its share of Vodafone's (or a new entrant's) services. Alternatively, it will be seeking to retain as many "at-risk" Spark and 2degrees services as possible. Reflecting this reality, in practice pricing applies across a network or for specific packages, rather than site by site. It would not be commercially rational to price above competitive levels for a very small number of sites (including where the MNO in question would have an informed view of what it regards as competitive pricing). This dynamic is not diminished by the presence of one fewer TowerCos in the immediate term than would be the case in the counterfactual, and

(B) in any event, it is likely to be rare for specific sites to genuinely be a MNO's only alternative. MNOs will be in a position to threaten to plug gaps using low cost light poles, upgrade active equipment on nearby sites, disintermediate a TowerCo and deal with land and building owners directly, or engage in active sharing with another MNO. As above, towers are only a subset of locations where MNOs' equipment can be hosted.

No effect on supply to MVNOs

154 MVNOs will be unaffected by the Proposed Transaction since they do not directly contract for passive infrastructure services. The Proposed Transaction will not affect the dynamics of supply to MVNOs which means that, as long as MNOs are protected, MVNOs will not be separately affected.

No substantial lessening of competition for supply to non-MNO users of passive mobile telecommunications infrastructure services

155 Non-MNO customers occupy a tiny proportion of sites, but TowerCos will have the incentive to retain and win their business which amounts to incremental revenue. Typically, non-MNO customers:

155.1 only co-locate on a handful of sites, supporting the proposition that they have alternatives, and

155.2 require lower site specifications and/or otherwise have greater options for their infrastructure needs (e.g. WISPs typically have simpler towers and typically are able to avoid paying for leases where they self-supply by offering a landowner access to their services in exchange for locating infrastructure on their land).

Entry and expansion are a genuine competitive threat

156 The lack of economies of scale and availability of build contractors mean MNOs have the ability to facilitate the entry and expansion of new TowerCos. They can do this by using their uncommitted sites, particularly later in the term of their MISA (when more sites are uncommitted and MNOs may wish to more actively position for expiry). The number of Spark and 2degrees' forecast uncommitted sites in the initial term of their MISAs would by itself be sufficient to support a commercially viable new entrant TowerCo.

157 as to the candidates for entry and expansion:

157.1 there are several smaller passive infrastructure owners around the country already, which could expand their role,

157.2 Australian experience has shown that where TowerCos are commercialised, new entrants will often emerge providing a new source of competition. For example, Stilmark entered the Australian market in 2013 and expanded to owning 75 sites before being acquired, and

157.3 ATC has indicated an interest in, and taken the first steps towards, entering the New Zealand market through its recent acquisition of Clearspan (see above at paragraphs 95 to 98).

SUBPART A - NO SUBSTANTIAL LESSENING OF COMPETITION FOR SUPPLY TO MNOS

Market shares

158 As is evident from the summary above, market shares have little bearing on the competition analysis. Nevertheless, shares of supply based on site numbers, at a national level (while relevant markets for sites in respect of which terms have not been set under a MISA are also local and not national), are shown in the table. The parties also present shares by number of macro sites, since macro sites are more relevant to capacity for co-location.

Table 3: market share by number of towers[121]

Supplier*	Number of sites	Share of Large TowerCo sites	Share of all sites	Number of macro sites	Share of macro sites
Connexa	1,243	[ ]	[ ]	[ ]	[ ]
2degrees	[ ][122]	[ ]	[ ]	[ ]	[ ]
Merged entity	[ ]	[ ]	[ ]	[ ]	[ ]
FortySouth[123]	2,319	[ ]	[ ]	[ ][124]	[ ]
Connexa / FortySouth Total	[ ]	100%	[ ]	[ ]	100%
Chorus	[ ][125]	N/A	[ ]	N/A	N/A
Kordia	[ ][126]	N/A	[ ]	N/A	N/A
Vital/Team Talk	[ ][127]	N/A	[ ]	N/A	N/A
Broadtech (JDA Network Specialists)	[ ]	N/A	[ ]	N/A	N/A
Mount Campbell Networks	[ ]	N/A	[ ]	N/A	N/A
Total	**[ ]**	**100%**	**100%**	**[ ]**	**100%**

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121 Note Connexa has excluded from this table, tower owners that no information is held for, and those that are unlikely to form part of the current competitive set (specifically, RCG sites (350 sites) and WISPs, given their lower specifications makes them unlikely prospects for hosting MNOs' active equipment). A full table containing this information is included at **Appendix 9.**

122 [ ]

123 Site numbers provided are those contained in the announcement of sale to FortySouth. For further information see https://news.vodafone.co.nz/towerco.

124 In its most recent Investor Update (15 February 2022), Vodafone estimates that 66% of its towers are "tower" structures (as opposed to rooftop or roadside structures), i.e. "macro" sites. See Table 2 above and http://nzx-prod-s7fsd7f98s.s3-website-ap-southeast-2.amazonaws.com/attachments/IFT/387270/364500.pdf.

125 [ ]

126 Kordia's annual report says that it has 270 network "sites" (of which 50 are large lattice towers). [ ].

127 See Tables 6 and 7 below, and Appendix 7.

* Note RCG also owns 350 sites. They are not included in market shares as they are unlikely to form part of the relevant market.

The degree of vertical integration in the factual compared with the counterfactual would have no material impact on competition

159 In both the factual and counterfactual, Spark would retain a minority shareholding in Connexa. Spark would have a higher share of Connexa in the counterfactual than the factual – if Connexa does not acquire the 2degrees assets then Spark's shareholding will remain at 30% rather than be diluted to 17%.

160 In the factual, 2degrees would no longer be vertically integrated, to any extent, with its passive infrastructure assets. There is a real chance this would also be the case in the counterfactual (i.e. if 2degrees chose to sell 100% of its TowerCo to an independent third party). But if 2degrees were to retain ownership of its towers in the counterfactual, then there would be less vertical integration in the factual compared with the counterfactual.

161 In the following sections, Connexa explains why, in the factual, its incentives will not be materially different from a TowerCo that is 100%-owned by non-MNO shareholders. The focus of this analysis is Connexa's incentives where Spark owns 17%. It is not necessary to decide whether the difference in Spark's influence at 17% compared with 30% is material from a competition perspective. That is because, if Spark's influence were higher in the counterfactual, the counterfactual would be theoretically less competitive (i.e. Spark's downstream presence would have the theoretical potential to dilute its incentive to offer access to passive infrastructure on competitive terms). In other words, Spark having a higher influence over Connexa in the counterfactual can only serve to make the Proposed Transaction relatively less likely to substantially lessen competition.

OTPP's incentives would be focused on the commercial provision of passive infrastructure services

162 In both the factual and the counterfactual, OTPP would be the significant majority owner, and interconnected body corporate, of Connexa. OTPP is not involved in providing downstream mobile services in New Zealand. Accordingly, OTPP's incentives are for the Connexa business to operate as a commercially driven supplier of passive mobile telecommunications infrastructure services. OTPP (and any other shareholder in its position) would have no incentive to tolerate a scenario where its returns are diminished by Spark seeking to have Connexa offer uncompetitive terms to a MNO customer, with a view to advantaging its own position in downstream markets. OTPP has, and will continue to have, every incentive to enforce the protections described in more detail below at paragraph 171.

163 [

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Spark's incentives with respect to Connexa are also commercial

164 First, it is unlikely 2degrees would have chosen to accept the form of the Proposed Transaction if it considered the structure left it vulnerable to Spark foreclosing its access to passive mobile telecommunications infrastructure on competitive terms.

165 Consistent with 2degrees' position, it would not be commercially rational for Spark to seek to foreclose any would-be MNO customer of Connexa. Foreclosure is not rational because it would reduce revenue for Connexa, which would mean a reduction in the return on its own shareholding. If an attempt were made to foreclose, the MNO customer could readily obtain alternative services, either from FortySouth, self-supply or other means (see further below). That being the case, there would be no offsetting commercial upside for Spark.

166 Even if a foreclosure strategy might have been rational in the past, when MNO asset owners competed with each other for geographic coverage to improve their downstream offering, that dynamic is no longer material. MNOs all have a high degree of geographic coverage (see Figure 2.2 in the NERA report) so there would be no material ability to foreclose a MNO from such coverage. NERA discusses these points in its report at Part 5.2.

167 In addition, [
].[129] [
].

Spark would have no ability to dilute the overriding commercial objectives[130]

168 As set out above in paragraph 26, Spark will retain a limited number of rights at the governance levels. However, [

]

169 Spark would be unable to dilute or override Connexa's commercial objectives. As set out above at paragraph 163, [
] which explains the governance protections described in the following paragraphs.

170 As noted above at paragraph 28, [

]

[128] See document **OTPP.03.01**.

[129] This discount amounting to [ ], Spark MISA, [ ].

[130] For further information, see NERA Report, **Appendix 1**, at Part 5.2.

171 Spark would not have the ability to distort or dilute Connexa's overall incentive to operate a commercial passive mobile telecommunications infrastructure services business and maximise the value of that business. In particular:

171.1 in the Shareholders' Agreement,[131] [

]

[132]

(a) [

]

[133] [

]

(b) [ ]

(c) [ ]

(d) [

]

(e) [ ]

171.2 [

].[134]

172 In any event, as set out in more detail below, all existing MNOs would be materially protected by the terms of their MISAs, which lock in terms for large numbers of sites and therefore mean they are not vulnerable to changes in competitive strategy by a TowerCo.

173 A new entrant MNO (or Vodafone), seeking a MISA from a TowerCo, would be in a strong position in terms of countervailing power, as a new national customer would be a source of highly valued revenue for any TowerCo. Spark would not be able to prevent Connexa from competing vigorously for such a customer. If Connexa entered into a contract with a new MNO to provide tower services:[135]

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131 Shareholders' Agreement. [

]

132 Shareholders' Agreement, [ ]

133 Shareholders' Agreement, [ ]

134 Shareholders' Agreement, [ ].

135 For further information see paragraph 28.

173.1 [
]

173.2 [
]

173.3 [
]

Competition has a limited role

Competition has played a limited role to date

174 It is important to bear in mind, as noted above, the limited services that make up passive mobile telecommunications infrastructure supply – see above at paragraphs 48 to 53.

175 Historically, the role of competition in passive mobile infrastructure was limited as the three vertically-integrated MNOs owned the majority of New Zealand's towers and each was largely self-sufficient in terms of owning and managing its own passive mobile infrastructure.[136]

176 Each MNO's focus was competing to achieve national coverage. In that context, downstream rivalry between the MNOs in the retail telecommunications market meant that each MNO had limited incentives to provide access to other MNOs on its sites.[137]

177 In recognition of this dynamic, since 2008 mobile co-location has been subject to a STD requiring MNOs to provide access on certain terms.[138] Since that point, co-location has somewhat increased.[139]

178 But in addition, as MNOs have increased their coverage to the point of near parity at near nationwide coverage, and coverage is no longer a basis of downstream competitive advantage, they have a greater incentive to co-locate with their rivals.[140] This shift is illustrated in NERA's report at Part 2, in particular Figure 2.2. In a scenario where all MNOs have effectively full national coverage, and infrastructure competition shifts to innovation in active equipment, the disincentive not to co-locate fades and the incentive to earn incremental revenue from co-location becomes more real.[141] This shift plays a part in explaining MNOs'

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136 This is shown by the share of towers that each of the MNOs held prior to their sales: see NERA Report, **Appendix 1**, at Table 3.1.

137 [
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138 NZCC, *Telecommunications Act 2001: Schedule 3 investigation into amending the co-location service on cellular mobile telephone transmission sites* (14 December 2007) and *Review of Designated and Specified Services under Schedule 1 of the Telecommunications Act 2001*, 30 June 2016 (*Review of Mobile Co-location)*.

139 This was recognised by the NZCC in the Mobile Market Study at [7.27] and the Review of Mobile Co-location at [154] to [156]. In the Review of Mobile Co-location, Vodafone submitted that "it is co-locating on hundreds of sites, both as an access seeker and access provider" at [157].

140 See NERA Report, **Appendix 1,** at [15], each MNO now claims similar geographic coverage (Spark 97.5%, Vodafone NZ 98% and 2degrees 98.5%).

141 As further explained at paragraph 185 below, Connexa expects that this will hold true into the future despite advances in technology. Firstly, in relation to 5G, MNOs have forecast their demand for their 5G

willingness to vertically disintegrate their passive mobile telecommunications infrastructure.

Under commercial ownership, incentives are pro-competitive but the role of competition is still circumscribed

179 Nevertheless, TowerCos' overall incentives will be more commercially focused with respect to the provision of passive infrastructure services than was the case under full MNO ownership. The provision of passive infrastructure services is the exclusive focus of TowerCos' business. This is likely to lead to high rates of co-location, as TowerCos do not have the same incentives as MNOs previously had to prevent competitors co-locating on their towers (in fact, TowerCos will be incentivised to encourage co-location as this will reduce their fixed costs).[142] More co-location, resulting in lower charges to MNOs (as set under the MISAs), would likely lead to an overall reduction in price in the tower access market.[143] For sites not committed under the MISAs, it is likely that MISA charges, including [ ], will inform development of a market price for co-location.

180 But regardless of market structure, competition for the supply of access to passive mobile telecommunications infrastructure services is circumscribed by several features:

180.1 first, passive infrastructure is not a basis on which MNOs compete to any material extent. Near-nationwide coverage has been achieved by all suppliers of mobile services (Spark: 97.5%,[144] Vodafone NZ: 98%,[145] 2degrees: 98.5%[146]). There may be limited basis on which MNOs continue to compete for 5G coverage which is discussed further below. Innovation and competition occur on active infrastructure.[147] Passive infrastructure services are simple and not highly differentiated. MNOs seek reliable and cost-effective services in the right location, so TowerCos focus on cost efficiency and reliable provision of asset development and management services at the right sites,

180.2 consistent with that focus, and with other jurisdictions where TowerCos have emerged, in both the factual and counterfactual all three existing MNOs will have long-term contracts with a TowerCo. MISAs provide certainty to MNOs

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roll-out and taken account of this in their MISA requirements. In any event, the 5G roll-out will largely require smaller infill cells which can be placed on the side of buildings and light poles (rather than large macro sites). Further, as new technologies develop, Connexa will be well placed to consider the needs of each of the MNOs, aggregate demand, and make the most efficient use of the network for all of its customers. This may lead to a faster and more efficient roll-out of new technologies.

142 [ ]

- [ ]
- [ ]
- [ ]

[ ] An estimate of fixed costs is set out at **Appendix 8**.

143 For further information see NERA Report, **Appendix 1**, at Part 10. [ ].

144 See https://www.spark.co.nz/shop/mobile/network/.

145 See https://www.vodafone.co.nz/network/coverage/.

146 See https://www.2degrees.nz/coverage/.

147 Spark Annual Report 2022 at page 31.

on the price and service levels they are likely to receive for both their existing sites and additional sites they may require during the term. In return, long-term contracts provide suppliers with predictable, committed revenues for the duration of the contracts (with a decreasing level of commitment over the duration).[148] There is competition in relation to the establishment of those contracts, and a further "round" of national competition on expiry (analysed in more detail below). But during the term of the contracts, a large proportion of a MNO's purchasing of passive infrastructure services is locked in and not subject to ongoing competition, and

180.3 thirdly, switching sites is costly and, as a result, does not occur often. Spark estimates that the costs of switching towers are [ ]. This is roughly the same as a co-locating MNO would pay annually to Connexa under the proposed rate card. Taking a simple percentage price analysis increase, using the co-location price for a macro tower, a 7% discount rate and a contract term of 10 years, prices could rise by approximately [ ] before it would be worthwhile switching.[149] As a result of high switching costs, being a customer's current supplier of existing sites provides a significant incumbency advantage over rivals seeking to attract those customers to switch to alternative sites.[150] This position is unrelated to, and unaffected by, the Proposed Transaction. It means that, in the factual as in the counterfactual, while the MISA's allow some potential switching, the most scope for a new TowerCo's entry and expansion is in relation to new sites, rather than switching opportunities.

181 Scope for competition does remain, within the term of a MISA as well as at renewal and expiry.[151] In negotiating the terms of their MISAs, the MNOs have negotiated an initial Term that ensures security/surety of supplyterms, but with renewal rights which they may choose whether to exercise. They have also kept some sites outside the scope of the MISAs through the ability to locate new site requirements (outside of BTS commitments) with a supplier other than their TowerCo counterparty.[152] There is scope for ongoing competition for MNOs' needs in this respect. Such competition takes place on a site by site basis but against the backdrop of avoiding dependency on any particular TowerCo. The split is shown in the following table (described at a high level – see the MISAs for more detail). Presumably, Vodafone's MISA also contains similar carve-outs.

182 In short, [

] The sites which are subject to competition during the term of the MISAs are referred to as "uncommitted sites".

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148 *Cellnex/CK Hutchison* at [52] to [53].

149 See NERA Report, **Appendix 1** at [65].

150 See NERA Report, **Appendix 1** at Part 6.1.

151 See below at paragraph 204.

152 There is also a limited ability for MNOs to switch sites away from their respective TowerCo. [

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Table 4: Sites where ongoing competition is relevant

	Spark	**2degrees[153]**
Current existing sites	• [ ] • [ ][154]	• [ ] • [ ].[155] [ ].[156] [ ],[157] [ ].[158]
BTS sites[159]	• Commitment of 671 BTS sites [ ].[160] • [ ].[161] [ ].[162]	• Commitment of 450 new sites, [ ],[163] [ ]. • [ ].[164]
New sites	• [	• [

[153] The terms of the 2degrees MISA are still under negotiation and are subject to change.

[154] Spark MISA [ ]. However, [ ].

[155] 2degrees MISA [ ].

[156] 2degrees MISA [ ].

[157] 2degrees MISA [ ].

[158] 2degrees MISA [ ].

[159] Note that the BTS commitment does not set out specific sites that must be completed. Instead, it represents the MNOs' expected demand over the period, with the MNO having committed to using Connexa to provide a certain number of sites that the MNO will identify as required.

[160] Spark MISA [ ].

[161] Spark MISA [ ].

[162] Spark MISA [ ].

[163] 2degrees MISA [ ]. [ ].

[164] 2degrees MISA [ ].

	Spark	2degrees[153]
	.][165] • [ ][166] • [ ].	].[167] • [ ].[168] • [ ].

No ability to interfere with other MNOs' active infrastructure

183 The MISA protects MNOs from interference by other MNOs. [ ]:

183.1 [ ],[169] and

183.2 [ ].[170]

Passive infrastructure has no material impact on downstream competition

184 The costs of passive mobile telecommunications infrastructure do not have any material bearing on competition in downstream retail mobile competition i.e. the national market for the retail supply of mobile services.[171] Further, since the Proposed Transaction only has the potential to impact price and non-price terms for the uncommitted sites, the potential impact is even smaller. That is:

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[165] Spark MISA [ ].

[166] Spark MISA [ ].

[167] 2degrees MISA [ ].

[168] 2degrees MISA [ ].

[169] Spark MISA [ ].

[170] Spark MISA [ ].

[171] See NERA Report, **Appendix 1,** at Part 4.1.

184.1 tower costs make up a small percentage of retail mobile costs such that they are not capable of causing detriment to any MNO in its ability to compete downstream. Even a significant percentage price increase for TowerCos would have a limited impact on the end price paid by consumers,[172] and

184.2 coverage is no longer a material competitive issue,[173] and active infrastructure, spectrum and software, not passive infrastructure, are the key drivers of innovation and downstream competition. Any benefits of infrastructure based competition between MNOs would be derived from the active part of the network. towers are passive infrastructure and thus part of the "dumb" part of the network, so the level of competition and innovation in the provision of passive mobile infrastructure is not a material driver of downstream competition and innovation.[174] As long as MNOs are able to obtain passive infrastructure capacity, there is no material upside to competition (and likely a downside for efficiency) between them for the supply of such infrastructure.

5G coverage

185 As set out above, the existing MNOs now have extensive coverage on their 3G and 4G networks. Coverage is not generally a feature on which they continue to compete.

186 MNOs are in the early stages of rolling out 5G technology across their networks with each MNO offering 5G coverage in limited locations.[175] While 5G coverage is a potential basis on which MNOs may compete, Connexa understands that [

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187 [

]

188 Under the MISA, 2degrees will commit to 450 BTS (new) sites [

]

189 [

] In terms of the programmes in place by each of the MNOs:

189.1 [

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172 See NERA Report, **Appendix 1,** at Part 4.1.

173 See NERA Report, **Appendix 1,** at [15].

174 See NERA Report, **Appendix 1,** at Part 4.2.

175 See 5G coverage maps for Spark: https://www.spark.co.nz/shop/mobile/network/, 2degrees: https://www.2degrees.nz/coverage/ and Vodafone: https://www.vodafone.co.nz/network/coverage/.

], and

189.2 [

]

190 Connexa does not consider the Proposed Transaction will impact on any competition for 5G coverage because:[176]

190.1 as above, the MISAs have been agreed in a context where the 5G roll-out was anticipated and planned for by MNOs. Connexa assumes the MNOs have obtained terms that they consider will position them to secure the required passive infrastructure for their 5G roll-out,

190.2 given changes in technology, in particular mmWave deployments for fixed wireless access, the 5G roll-out is likely to mean network topology will be more orientated toward in-fill of small sites (noting macro towers will still play an important role, particularly in rural areas) which:

(a) cannot readily be shared between MNOs, meaning there can be no impact on sharing,[177]

(b) in urban areas, are economically feasible for MNOs to self-supply,[178] and

(c) offer more alternatives for MNOs, because hosting them does not necessarily require extensive passive infrastructure (e.g. sides of buildings will often be sufficient),

190.3 the MNOs each already have extensive mobile networks, therefore the upgrade to 5G will require upgrading active infrastructure at pre-existing sites and then in-filling sites using small cell technology, and

190.4 as explained above from paragraph 159, Spark does not have the ability to foreclose on 2degrees access to sites. Therefore, to the extent that 2degrees requires additional sites for its 5G roll-out, Spark will not have the ability to prevent 2degrees from securing access to those sites. [

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176 See NERA Report, **Appendix 1,** at Part 2.3.

177 See NERA report, **Appendix 1**, at [27].

178 See Ministry of Business, Innovation and Employment, *Lifting Connectivity in New Zealand: Government statement of Intent for improving digital connectivity*, December 2022 (*MBIE statement of Intent*) at page 25.

].[179]

191 The expectation is that 5G networks will require more towers to cover similar areas of land (compared to previous generation networks), meaning the operation of 5G networks in rural areas is likely to be expensive.[180] This is because 5G signals tend to have shorter broadcasting ranges and are at greater risk of being blocked by physical barriers like trees and hills given most 5G equipment requires the use of high frequencies.[181] The cost of building and maintaining infrastructure in lower demand areas (i.e. rural areas) is likely to disincentivise MNOs individually investing in the development of the infrastructure necessary to operate rural 5G networks.

192 In light of this problem, the New Zealand Government has acknowledged the opportunities infrastructure sharing in rural areas offers in relation to cost efficiencies.[182] The Australian Government has also recommended that telecom carriers consider infrastructure sharing in rural areas to deliver 5G services and ensure network coverage.[183]

MISA competition

193 Each of the MNOs have entered MISAs with their TowerCos that largely protect the MNOs from any uncompetitive prices or service, to the extent those terms are locked in under the relevant MISAs. Competition has occurred in relation to those sites for Spark and Vodafone.[184]

194 For 2degrees, the outcome of MISA competition would manifest in the Proposed Transaction.

Highly competitive process

195 Competition for all three MNOs' MISAs has taken place through a competitive sale process, whereby each of the three MNOs has entered a MISA in the context of selling down its towers.[185] This is analogous to the "recent round of competition" in the *Vector/Arc Innovations* decision. This is the first basis for assessment.

196 The MNOs have all sold (or in 2degrees' case, is in the process of selling) their passive infrastructure through a competitive process.[186] As a result, it can be

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179 For further information, see *MBIE Statement of Intent* at paragraphs 28 and 173.

180 *MBIE Statement of Intent* at page 25.

181 *MBIE Statement of Intent* at page 25.

182 See *MBIE Statement of Intent* at page 40 and Office of the Prime Minister's Chief Science Advisor, *5G in Aotearoa New Zealand*, https://www.pmcsa.ac.nz/topics/5g-in-aotearoa-new-zealand/.

183 See House of Representatives Standing Committee on Communications and the Arts: Parliament of Australia, *The Next Gen Future: Inquiry into the deployment, adoption and application of 5G in Australia*, March 2020 at paragraph 2.171.

184 Similarly to *Vector Limited and Arc Innovations Limited* [2014] NZCC 36 at [53] (*Vector/Arc Innovations*), competition takes place in the tower market by TowerCos attempting to win long-term contracts with MNO customers. In *Vector/Arc Innovations*, the NZCC approached the competition analysis by (55):

- considering the recent round of competition that has already occurred (i.e. the competitive tender process), and then
- considering the competition likely to occur at the next round of tenders.

185 See NERA Report, **Appendix 1,** at Part 7.1. Through the highly competitive sales process, MNOs have largely contracted out of having competition.

186 [

assumed that all of the MNOs would have ensured that they achieved terms they considered appropriate to protect their position as a customer in the future, including balancing the certainty with respect to sites within the MISA against the ability to use sites outside the MISA to constrain their supplier (and give them options to position themselves for expiry of their MISA).[187]

197 2degrees' MISA is brought about by the Proposed Transaction, the other MISAs are not affected by the Proposed Transaction.[188] 2degrees has agreed the MISA in the context of the best possible deal it considered it could obtain for its passive mobile telecommunications infrastructure. There is no basis to supplant that view with an alternative view that 2degrees' MISA could somehow reflect more competitive terms under a different transaction structure or in a sale to a different purchaser.

198 Accordingly, the Proposed Transaction would not be likely to result in a substantial lessening of competition to supply a MISA.

199 MISA competition is next likely to occur when the MISAs come up for renewal or expiry and the MNOs consider whether to enter new long term arrangements. In this subsequent round, irrespective of the Proposed Transaction there is an incumbency advantage associated with the high switching costs to move sites to another supplier. The parties were conscious of this feature when entering into the MISAs and have put measures in place to protect themselves. Even so:

199.1 [

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199.2 [

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199.3 [

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199.4 [

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200 In any event, MNOs are able to position for further competition throughout the MISA period by using the leeway in the MISAs to reduce their dependency on their counterparty over time, and position themselves to move, or threaten to move,

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187 See NERA Report, **Appendix 1,** at Part 3.4.

188 [

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189 Note that the Spark MISA [

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some sites away at the end of the term, not commit to further builds with the counterparty, and otherwise achieve competitive terms.

201 Two of the MNOs (Spark and 2degrees) have carried out their sale in a context where they anticipated consolidation of TowerCos. Presumably, in their view the arrangements provide protection from competitive detriment in relation to negotiating a new MISA in a scenario of two rather than three national TowerCos in the immediate term, with the vast majority of the MISA term still to run.

202 Furthermore, it would be surprising if Vodafone agreed its MISA on a basis that meant any change in market structure upstream would render it vulnerable to non-competitive price rises or reduction in service quality.

203 Accordingly, it is unlikely the next round of MISA competition will be materially less competitive compared with any realistic counterfactual.

Terms that protect the MNOs

204 The MISAs run for an extensive period:

204.1 the Spark MISA runs for an initial term of 15 years [ ],[190]

204.2 the 2degrees MISA runs for an initial term of 20 years [ ], and

204.3 Vodafone also has a 20 year term with extension rights.[191]

205 The long duration allows MNOs a substantial lead-in period, with off-ramps, to position themselves to obtain competitive supply at the end of the term. Given switching costs, it is unlikely a MNO would switch all of its sites away from its counterparty TowerCo at the end of a term or upon renewal. However, it can use the period of the term to reduce its dependency on the TowerCo, including by self-supply, supporting a smaller TowerCo or using the alternative large TowerCo, and position itself to switch a proportion of sites away at the end of a term or use alternative suppliers for excess demand, or threaten to do so, driving competitive pricing and service. The ability to ensure competitive terms at renewal or expiry (the next "round" of MISA competition) therefore depends in large part on competition in relation to uncommitted sites during the term of the MISAs. It bears reiterating that each MNO has presumably negotiated the terms relating to uncommitted sites conscious of:

205.1 the need to ensure competitive MISA terms at the next "round", and

205.2 the possibility of a change in market structure during the term of the MISA such as the Proposed Transaction.

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190 [ ].

191 As set out in the FortySouth announcement, see https://news.vodafone.co.nz/towerco. This notes that extension periods are available, but not how long they are. For the purposes of our analysis, 10 years is assumed.

206 Furthermore, MNOs negotiated their MISAs in the context of selling (a stake in) their passive mobile telecommunications infrastructure. They were in a position to exercise material countervailing power in extracting favourable terms in their MISAs. Accordingly, the starting point for the analysis is that the MNOs, as sophisticated businesses with material bargaining power, have negotiated the terms of their exit from self-supply in a way that protects them as a customer, into the future.[192] In that context, it is difficult to see how the Proposed Transaction could substantially lessen competition compared with any realistic counterfactual.

207 The MISAs include a range of protections for each of the MNOs. In particular:

207.1 *Service level requirements:*

(a) [

].[193]

(b) [

]194 [

]195 [

]196 [

]197

(c) [

].198 [

]

207.2 *Access charges*:

(a) [

---

192 To illustrate, one way MNOs conceptualise TowerCos is as distributors of the upstream input, being locations where active infrastructure can be placed by MNOs – MNOs are able to bypass TowerCos and negotiate directly with land and building owners to place the infrastructure, and can build towers if needed using the same contractors the TowerCos use.

193 See Service Level Agreement relating to the MISA between Connexa and Spark (*Spark Service Level Agreement*) (**OTPP.01.07**).

194 Spark Service Level Agreement, [ ]

195 Spark Service Level Agreement, [ ]

196 Spark MISA, [ ]

197 Spark Service Level Agreement, [ ]

198 Service Level Agreement relating to the MISA between Connexa and Two Degrees Mobile Limited (*2degrees Service Level Agreement*) (**OTPP.02.05**).

][199] [
].[200]

(b) [
][201]

(c) [
].

Table 5: Connexa's access charges under the MISAs[202]

	Spark[203]			2degrees[204]		Third party pricing[205]
	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Macro	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Rooftop	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Road side	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]

207.3 [ ]:

(a) [

---

199 [
].

200 [ ].

201 [ ].

202 Estimates are taken from document **OTPP.03.06**.

203 Spark MISA, [
].

204 2degrees MISA, [
].

205 [
].

]206

(b) [

]207

207.4 [

]208

Sites that fall outside the scope of the MISA

208 Uncommitted demand outside the scope of the MISAs, recognises the needs of MNOs to evolve their networks in ways they cannot predict at the outset of a contract. They also allow MNOs to maintain pressure on their existing access provider by having the ability to place uncommitted coverage needs with or switch a limited proportion of existing sites to other passive infrastructure service providers, prior to contract expiry (whether on new build or existing TowerCo sites).

209 The reasons the Proposed Transaction would not result in any lessening of competition vary for:

209.1 new sites, and

209.2 existing sites.

210 These choices are made on a site by site basis although against the backdrop of the MNOs controlling their degree of dependence on their MISA counterparty, and positioning for its expiry.

211 Within the term of the contracts, the proportion of sites that fall outside the scope of the MISAs has been accepted by MNOs in a context where obtaining competitive terms for such sites is the key way in which MNOs position themselves for the end of their contractual term.

212 As such, sites that are carved out of the MISAs (pursuant to the terms of the MISAs) will be subject to competition, as described below. MNOs' ability to obtain competitive terms for the supply of passive infrastructure services at such sites has a flow-on impact on their ability to obtain competitive terms for their new MISA. Importantly, that competition takes place against the backdrop of the reasons for the carve-outs.

213 In relation to uncommitted sites, in the relevant MISAs:

213.1 Spark has committed 671 BTS sites to Connexa over the Initial New Sites Commitment Period [ ]209 [

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206 [ ].

207 [ ].

208 2degrees MISA, [ ]

209 Spark MISA [

]

],[210]

213.2 [

][211] [

],

213.3 [

][212] [

], [

].[213] [

],

213.4 [

],

213.5 [ ]. 2degrees has committed to 450 new sites over the next 10 years [

].[214] [

].[215]

[ ],

213.6 [

],

213.7 Vodafone, as part of its towers transaction has committed 390 BTS sites over the next 10 years.[216] It can be assumed, based on the trajectory of the retail

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210 Spark MISA [ ].

211 Spark Operations Manual at [ ].

212 Spark MISA [ ].

213 Spark MISA [ ].

214 2degrees MISA [

].

215 2degrees MISA [ ].

216 BTS site numbers are those contained in the announcement of sale to FortySouth. For further information see https://news.vodafone.co.nz/towerco.

supply of mobile services, and the relative commitments of the other MNOs, that it will require a number of additional sites, and

213.8 for completeness, each of the MNOs is likely to have secured some level of churn allowance in their respective MISAs.[217]

214 In entering MISAs with the TowerCos, Spark and 2degrees have forecast uncommitted volumes of [ ] and [ ] respectively, of which [ ] can be provided to an alternative tower provider, [ ] and [ ]. Vodafone is also likely to have uncommitted demand.[218]

215 MNOs will be in a position to obtain competitive terms for uncommitted sites. In the following sections, Connexa sets out the evidence regarding competition in relation to uncommitted sites which is able to be fulfilled through new sites, and in local areas where existing sites are present.

New sites

216 The Proposed Transaction would not result in any lessening of competition compared with the counterfactual where MNOs seek to fulfil their uncommitted demand through new sites.

217 For completeness, note that this analysis is based on the most theoretically competitive counterfactual, i.e. 2degrees sells the Assets to an alternative purchaser, therefore, this also holds true for other theoretically less competitive counterfactuals.[219]

Existing competition: two national TowerCos will remain

218 First, FortySouth will remain an available alternative for Spark and 2degrees following the Proposed Transaction, while Connexa will remain an alternative for Vodafone. These TowerCos will be strongly incentivised to win uncommitted sites. This incentive is to:

218.1 retain a strong customer relationship with a MISA counterparty, or

218.2 build a relationship with a third party MNO,

to win incremental volumes and also to position for an improved position with the MNO during the term of the MISA, and in the next round of MISA competition. Note in this regard that uncommitted new build sites are unlikely to be fully priced in to the purchase price. This means that MNOs are exposed to the contract prices agreed for these volumes. However, this carve out also allows MNOs to maintain competitive tension on TowerCos by self-supplying and acquiring towers from other TowerCo providers. As the MNOs are exposed to prices on uncommitted sites, they will be incentivised to use parties besides the TowerCo if pricing is not competitive.[220]

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[217] Spark MISA [ ], (see Table 4); 2degrees MISA [ ], (see Table 4). Connexa assumes that Vodafone similarly entered a deal whereby it has a certain level of churn.

[218] See NERA Report, **Appendix 1,** at Table 3.3 and [117](e).

[219] As set out in Part 6 above, the most competitive counterfactual is one where there are three TowerCo operators each with commercial incentives. [ ].

[220] See NERA Report, **Appendix 1,** at Part 7.2.

219 These conclusions are consistent with NERA's findings regarding pricing where there are two rather than three TowerCos.[221]

Potential competition and MNOs' countervailing power: smaller TowerCos and self-supply are realistic options

220 There are two other important options for MNOs, self-supply and smaller or new entrant TowerCos. In both cases, the significant countervailing bargaining power held by MNOs is a key factor. This manifests because there are a small number of MNOs, each of high potential value to a TowerCo. It also arises because of the terms on which the MNOs have chosen to sell their passive mobile telecommunications infrastructure assets, which mean that competition regarding existing sites during the term of the MISA are part of a positioning, or "auditioning" process for a larger role for the TowerCo with the MNO in future.

221 As to smaller or new entrant TowerCos (see also paragraph 240):

221.1 NERA's work demonstrates that there are not material economies of scale in building a single new site, which mean that self-supply and smaller TowerCos are theoretically competitive with the national TowerCos for uncommitted sites. More information on smaller TowerCos is provided below from paragraph 240,

221.2 there is ready access to the inputs required to build sites. Importantly, as outlined above at paragraph 106, there are a number of contractors offering build services for passive mobile telecommunications infrastructure. These contractors offer services nationally, and are not tied to any infrastructure services provider (see also paragraph 241), and

221.3 even during the initial terms of the MISAs, as noted above there are material numbers of uncommitted sites (see paragraph 214). The evidence suggests commercially viable TowerCos can and do operate with fewer towers than the likely uncommitted volumes (see from paragraph 240).

222 Self-supply is a realistic possibility for MNOs. The points above regarding economies of scale and access to inputs apply to self-supply as well as new entry and expansion. The MNOs have only recently sold their passive mobile telecommunications infrastructure, therefore, while deciding it was no longer commercially advantageous to own and manage their TowerCo network, they do have expertise available that would allow them to once again own and manage their own infrastructure.

223 Despite transferring estate management capability to the tower providers, MNOs have retained core network planning, engineering and maintenance (for active equipment) capacity. MNOs have also therefore retained relationships with contractors and service providers. This would allow MNOs to continue or re-commence self-supply efficiently (including on a site-by-site basis) if service levels or cost outcomes are not acceptable. [

]

[221] See NERA Report, **Appendix 1,** at Part 6.2.

224 [

].[222]

225 In summary, there are commercially viable and realistic options for MNOs to obtain competitive terms for new uncommitted sites, from their MISA counterparty, the other national TowerCo, their own self-supply and facilitating the entry and expansion of smaller TowerCos. As a result, the Proposed Transaction would not result in any lessening of competition compared with the counterfactual.

Existing sites

226 Where Connexa and 2degrees have towers near each other (and provide comparable coverage) they might be considered to be competing to provide co-location to third parties. Connexa and 2degrees, having sites in the area, would both already have coverage, therefore Vodafone (or a new entrant) are the only potentially affected MNOs.

227 There are limited scenarios in which a MNO would potentially seek to fulfil their uncommitted demand through existing sites. The more likely scenario is that a MNO would contract with a TowerCo to provide a site, the TowerCo would undertake a search for sites, and its candidate sites could include those that already exist.

228 Where existing sites could fulfil a MNO's demand, the Proposed Transaction can have an effect only where the Proposed Transaction represents an aggregation of substitutable available space. Where such aggregation occurs, by definition Spark and 2edgrees are likely already to have coverage (because the overlapping sites are sites previously owned by Spark and 2degrees). Accordingly, the key question is whether Vodafone (or another MNO) would have competitive alternatives in those areas.

229 To assess where these scenarios potentially arise, it is necessary to focus on:

229.1 local geographic "markets",

229.2 where there is both a Connexa and a 2degrees tower, and

229.3 where both towers have space available to host a new tenant.

230 Comparing the counterfactual scenario (i.e. a separate 2degrees TowerCo) to the factual (i.e. Connexa, which is a combined Spark/2degrees TowerCo), even in the counterfactual there are limited sites which overlap geographically. And, where there is overlap, there are very few scenarios where both sites have capacity. Therefore, the Proposed Transaction would bring about little change in relation to the number of existing sites available to host additional tenants.

231 NERA has undertaken a screening analysis to consider the number of sites where there is potential for an overlap. The analysis is limited to macro sites, which is the site type with sharing potential.

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[222] [

].

232 To determine which sites were close enough to one another to act as a substitute, NERA has set a radius of:[223]

232.1 500m for a "urban" site, or

232.2 3km for a "rural" or mixed site.

233 There were 407 such pairs.[224]

234 The NERA analysis has excluded sites where a FortySouth site is present, because in those areas Vodafone is unlikely to be seeking coverage. This reduces the overlap to 76 pairs. Removing pairs where the duplicate relates to a unique Connexa site,[225] and where Vodafone currently co-locates on a Connexa site reduces the number to 68.

235 Based on the above, NERA's overlap analysis shows 68 overlap pairs.[226] The parties consider this number is likely to overstate the overlap. To further refine the analysis NERA has applied an analysis of Vodafone's demand for PoPs, which allowed NERA to estimate whether Vodafone is likely to have demand for additional sites near the overlapping 2degrees and Connexa sites. When this is applied, the number of site pairs reduces to 25.[227]

236 There are grounds on which it may well be possible to exclude further overlap sites:[228]

236.1 first, specifics of topography will be material in some cases e.g. where there is a hill between two nearby sites, the sites may not in fact overlap,[229]

236.2 secondly, many sites will have technical constraints, such as structural capacity constraints which prohibit sharing (although these can largely be

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[223] See NERA Report, **Appendix 1,** at [91]. These radii were those applied by the parties as an input to their commercial negotiations for the proposed transaction. The radii are considered appropriately conservative as a screen, while noting that each site will have factors specific to it that may influence the appropriateness of the radius. For example, in a town, a distance of 3km may be too far to be considered a substitute. [

].

[224] See NERA Report, **Appendix 1,** at Table 6.2.

[225] These are instances where the same Spark site overlaps with multiple 2degrees sites and thus triggers multiple overlaps. NERA filters in this way because it calculates the overlaps by iterating through the list of Spark sites and calculating the distance to every single 2degrees site.

[226] See NERA Report, **Appendix 1,** at [94] to [95]. Or, at most, 78 if data from Stats NZ is used. As above, this analysis was undertaken as a screening process and may overstate the overlaps. [

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[227] For further information, see NERA Report, **Appendix 1**, at [96] to [97].

[228] See NERA Report, **Appendix 1**, at [98].

[229] The factors which determine substitutability include: topography, buildings, altitude differences in tower deployment, azimuths and tower height differences. Substitutability also depends on the specific end-user locations the access seeker requires coverage or capacity for. See the example at footnote 223above.

upgraded), limits on the available spectrum and other technical aspects of sites,[230] and

236.3 thirdly, a number of ground leases have prohibitions on new co-locations, or require consent. In some instances, rental costs for the ground lease will increase in exchange for the landlords' consent to co-locate. Connexa understands that:

(a) in relation to former Spark sites, [ ]:[231]

(i) [ ], and

(ii) [ ], and

(b) in relation to 2degrees sites, [ ]:[232]

(i) [ ], and

(ii) [ ].

237 Nevertheless, assuming the presence of at least some scenarios where there would be a reduction in existing alternatives arising from the Proposed Transaction, for at least those locations, there may be a theoretical possibility of non-competitive price rises for co-location, as a result of the Proposed Transaction. This possibility arises to the extent the cost to co-locate is materially lower than the cost to build a new site, so a TowerCo could raise price above normal co-location rates to just below site build costs (which is not necessarily the case).[233]

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[230] [ ]. [ ].

[231] [ ].

[232] [ ].

[233] For example, for a TowerCo, although a co-location will generally cost less (i.e. upgrade costs are lower than a new build), TowerCos prefer to build as it creates future co-location opportunities. Accordingly, a

238 In the parties' view, MNOs could avoid any non-competitive prices or service in such scenarios, using their countervailing power and the threat of potential competition, as follows:

238.1 there is in almost all circumstances the potential to bypass (or threaten to bypass) a particular site. In many cases, establishing a PoP on a tower is not the MNO's only option. For example, the MNO could, or could threaten to, upgrade active equipment on its nearest site/s, "patch up" coverage using low-cost light poles and/or bypass TowerCos to contract directly with building owners to place sites on their rooftops or the side of their building. Active sharing arrangements between MNOs can also substitute for separate placement of active equipment on passive infrastructure. TowerCos will be strongly incentivised to avoid such threats being carried out, as they could allow MNOs to obtain a solution that is adequate, and lasting, and

238.2 MNOs' countervailing bargaining power makes it commercially unrealistic for any TowerCo to seek to price above competitive levels in a particular local area.[234] That is:

(a) each site offered to a MNO outside a MISA is an "audition" for further sites (or a potential loss of sites to another TowerCo so as to open up an opportunity for MNOs to facilitate a new or smaller TowerCo's expansion), and ultimately a diminution of that TowerCo's competitiveness in the next round of MISA competition,

(b) in that context, each MNO customer will have an informed view on what a competitive co-location price "should" be, being a customer in other parts of the country. MNOs typically order multiple towers in a procurement process rather than single site locations, which would expose any exploitative pricing or service terms – uncommitted tower pricing will in practice be programmatic.

Rationalisation

239 For completeness, Connexa notes that, [

],[235] [

],[236] [ ]

Conditions of entry and expansion

240 In this section, the parties draw together and expand on the key features of the conditions of entry and expansion that mean the Proposed Transaction would not give rise to a substantial lessening of competition compared with the counterfactual.

BTS programme is of considerable value to a TowerCo and the access charges for a new build will often be below the access charge for a co-location as a result.

234 For further information, see NERA Report, **Appendix 1**, at Part 6.5.

235 [

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236 [ ].
[

].

241 There are limited barriers to new entrants joining the passive mobile infrastructure market, which in both the factual and the counterfactual is most likely to occur in relation to new sites rather than customers switching their existing sites, for the following reasons:[237]

241.1 the operational complexity of TowerCos is reasonably low. As above, these are essentially asset management services, not asset builders. The key operational requirements are the ability to manage leases, contractors and customers,

241.2 constructing towers in almost all circumstances is not complex, including for the following reasons:

(a) no unique technology is required. Site management platforms that may be required are available off the shelf (and therefore, at a low cost),

(b) no unique processes are required. The skills needed to run a TowerCo are essentially identical to those required in other asset management industries, such as real estate, and

(c) there are a number of contractors that are able to build passive mobile telecommunications infrastructure and none appear to be subject to exclusivity. Information on these contractors is provided above at paragraphs 106 and 108, and

241.3 economies of scale are low for building new sites, and therefore are not prohibitive to new entrants joining the market or MNOs self-supplying.

242 Importantly, MNOs have easily sufficient countervailing power and uncommitted volumes to facilitate the entry of one or more alternative TowerCos in New Zealand. As noted above, 2degrees has forecast uncommitted volumes of [ ] and [ ] respectively, in the Initial Term, of which 50% can be provided to an alternative tower provider (i.e. [ ] and [ ] towers). Connexa expects Vodafone also has uncommitted volumes. Stilmark (described below) suggests that there would be ample volumes available to make entry worthwhile. Furthermore, the TowerXchange global league table shows that in the United States there are 28 TowerCos with fewer than 100 towers. The same data source shows that globally there 65 TowerCos with fewer than 100 towers and 100 TowerCos with fewer than 200 towers.[238]

Examples

ATC

243 As above, ATC, a global provider of wireless communication infrastructure, has recently acquired 100% of the shares in Clearspan (see paragraph 96).[239] As a global tower provider it would not be unexpected for ATC to expand into the tower market in New Zealand. [

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[237] See NERA Report, **Appendix 1**, at [117].

[238] See NERA Report, **Appendix 1**, at [117](e).

[239] See ATC OIO decision summary: https://www.linz.govt.nz/our-work/overseas-investment-regulation/decisions/2022-10/202100802.

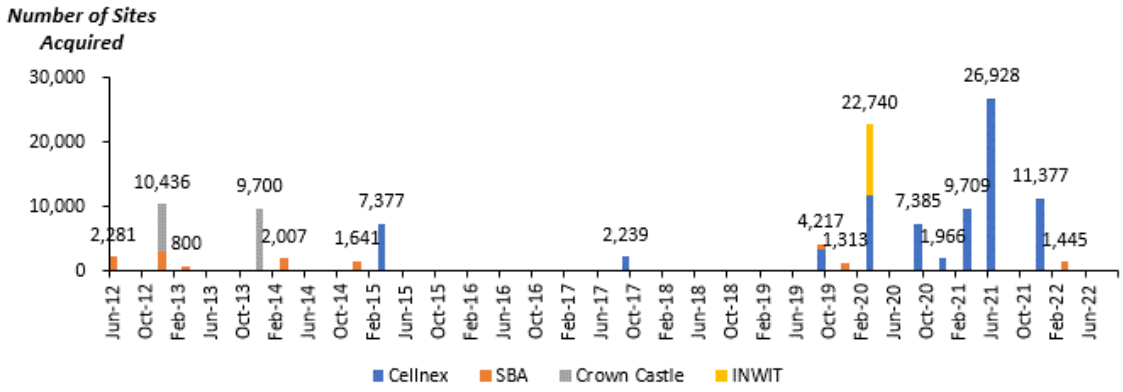
Stilmark

244 Stilmark, founded in 2013, was an independent developer, owner and neutral host operator of mobile tower assets in Australia, offering turn-key tower deployment (i.e. BTS solutions) for MNOs, along with co-location services. Stilmark expanded to owning 75 sites, the majority of which are located in New South Wales and Victoria. In addition, Stilmark controlled a significant development pipeline of towers, with all of its sites secured under long-term revenue agreements. Stilmark worked with a range of asset owners, including delivering BTS projects for Optus and TPG Telecom – Australia's second and third largest wireless carriers.[240] It was recently acquired by OMERS Infrastructure, in conjunction with TPG Telecom Limited's mobile tower and rooftop portfolio, to create WaveConn.[241]

International examples

245 Furthermore, international experience has shown that the number of passive mobile telecommunications infrastructure suppliers may increase, as markets mature. Established TowerCos in mature markets (such as Europe and America) have been very active in mergers and acquisitions, acquiring portfolios of different sizes over time.

Diagram 1: tower Portfolio Acquisitions by Cellnex, SBA, Crown Castle and INWIT (past 10 years)[242]



246 At the same time MNOs have continued to dispose of their tower assets, creating new market participants. This includes Telia disposing of a 49.9% interest in its tower assets in Finland and Norway to Brookfield and Alecta in 2021,[243] Deutsche Telecom disposing of its tower assets to Brookfield and DigitalBridge in July 2022,[244] and Telecom Italia completing the IPO of INWIT in Italy in 2015.[245]

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240 See https://dgtlinfra.com/omers-infrastructure-stilmark-towers-australia/.

241 See https://www.omersinfrastructure.com/news/two-australian-digital-infrastructure-investments-closed-and-combined-to-form-waveconn/.

242 Cellnex, SBA, Crown Castle, INWIT – Quarterly Financial Results (past 10 years).

243 See https://www.teliacompany.com/en/news/press-releases/2021/6/telia-company-reaches-agreement-to-sell-part-of-its-tower-business-in-norway-and-finland-to-brookfield-and-alecta/.

244 See https://www.reuters.com/business/deutsche-telekom-announces-175-bln-euro-sale-tower-business-2022-07-14/.

245 See https://www.nytimes.com/2015/06/20/business/dealbook/telecom-italia-raises-887-million-in-ipo-of-wireless-tower-unit.html.

Case study: Crown Castle, Crown Castle, Optus and Vodafone's Experience in Australia

247 In an independent TowerCo market the MNOs are not necessarily captive customers and continue to exercise significant countervailing power through the ongoing ability to self-build new sites. A key example of this dynamic and the willingness of MNOs to self-deliver is Optus and Vodafone's experience with Crown Castle in Australia.

248 In early 2000, Crown Castle entered the Australian mobile towers market through its acquisitions of tower portfolios from each of Optus and Vodafone Australia:

248.1 In March 2000, Crown Castle Australia ("CCA") announced it had agreed to acquire 700 towers from Optus for A$200 million, including an exclusive 6 year BTS programme. The transaction positioned CCA as the largest independent tower company in Australia. At this time, Optus owned more than 2,000 sites, retaining the remaining ~1,300 sites predominantly in regional and rural locations.

248.2 In December 2000, CCA then announced it had agreed to acquire 669 towers from Vodafone Australia for c.A$230 million, including an exclusive c600 tower BTS commitment from Vodafone over the next six years.

248.3 As a result of the two transactions, CCA acquired a tower portfolio of nearly 1,400 sites across Australia, with additional committed BTS and a relationship with two of the largest MNOs in the Australian market.[246]

249 The divestments were driven by a requirement to prioritise capital allocation within their businesses, given the intense competition based on coverage and rapidly evolving technology landscape. At this time Australian MNOs were focused on the rollout of the latest technology, General Packet Radio Service (GPRS), often referred to as second generation plus (2G+) as a precursor to the move toward 3G mobile technology

250 By 2010 CCA had approximately 1,200 Optus towers. However, the pricing structure was equipment based (rather than sail area) such that each time RAN was upgraded additional charges were payable by the MNO. This was particularly important with the next technology evolution deployment. In addition, the master service agreement with CCA was also due for renewal and Optus did not want to become further reliant on CCA for tower delivery.

251 Vodafone had multiple contracts with CCA with different pricing structures increasing the complexity of managing the relationship and the process for equipment upgrade and new tower deployment.

252 As a result, following completion of the BTS commitments entered into at the time of the sales Optus and Vodafone commenced self-delivering towers.

252.1 In November 2010, Vodafone announced the self-build of 1,400 additional sites, comprising 900 sites in metropolitan areas and 500 sites outside of metro areas,

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[246] Subsequently, in May 2015 Crown Castle announced its exit from Australia and the sale of CCA to a consortium of infrastructure investors led by Macquarie Asset Management (then Macquarie Infrastructure and Real Assets) for A$2.0 billion (c.US$1.6 billion), with the business later rebranded as Axicom]

252.2 In May 2012, Optus and VHA announced an agreement to share a portion of existing sites and the delivery of 500 additional shared sites, giving Optus access to 1,000 and VHA 900 additional sites.

Self-supply

253 MNOs have moved from a model where each individual MNO self-supplied their own passive mobile infrastructure, to one where independent tower providers own the passive mobile infrastructure. This has allowed MNOs to divest capital-intensive infrastructure and re-allocate capital into higher growth areas.[247]

254 As MNOs have previously owned and managed their own tower infrastructure, they would be well placed to self-supply if they decided this was necessary (including on a site-by-site basis). Incremental costs to self-supply are low, so even though MNOs have decided to sell their passive mobile telecommunications infrastructure, they can still retain the ability to self-supply.

255 Despite transferring estate management capability to the tower providers, MNOs have retained core network planning, engineering and maintenance (for active equipment) capacity. MNOs have also retained relationships with contractors and service providers. This would allow MNOs to continue or re-commence self-supply efficiently (including, as noted, on a site-by-site basis) if service levels or cost outcomes are not acceptable.

256 As above, [

].

257 [

].[248]

[247] See NERA Report, **Appendix 1**, at [117](d).

[248] [

].

SUBPART B - THE PROPOSED TRANSACTION WILL NOT RESULT IN ANY LESSENING OF COMPETITION FOR THE SUPPLY OF PASSIVE INFRASTRUCTURE TO NON-MNO CUSTOMERS (OR MVNOS)

Non-MNOs

258 As set out in Part 7 above, Connexa considers it may be appropriate to assess competition to supply passive infrastructure services to non-MNO customers separately from MNO customers, because different supply and demand-side considerations apply. In particular:

258.1 on the demand-side, non-MNO customers use a very small number of sites and do not typically require a national presence,

258.2 where they do co-locate on towers, they take up a smaller amount of space, and

258.3 they often require sites with lower specification and, therefore, have additional alternatives available to them.

Existing non-MNO customers

259 Non-MNO customers that currently co-locate on relevant sites are set out below, along with the number of sites on which they co-locate and whether they also have their own towers.

Connexa

260 Connexa currently has [ ] non-MNO customers tenants out of 1243 sites, this is a total of [ ]%.[249] They are:

Table 6: Connexa's non-MNO customers

Customer	Description	Sites
[ ]	[ ] [ ]	[ ]
[ ]	[ ] [ ]	[ ]
[ ]	[ ]	[ ]
[ ]	[ ]	[ ]

[249] [ ].

[ ]	[ ]	[ ]
[ ]	[ ]	[ ]
[ ]	[ ]	[ ]
[ ]	[ ][250] [ ].[251]	[ ]
[ ]	[ ].[252]	[ ]
[ ]	[ ]	[ ]

2degrees

261 2degrees currently has [ ] non-MNO tenants, across [ ] sites, being just over [ ]% of its network. Its current non-MNO customers and the number of sites each locates on, are set out below:

Table 7: 2degrees' non-MNO customers

Customer	Description	Sites
[ ]	[ ][253] [ ].[254]	[ ]
[ ]	[ ]	[ ]

250 [ ].

251 [ ].

252 [ ].

253 [ ].

254 [ ].

[ ]	[ ].[255]	[ ]
[ ]	[ ]	[ ]
[ ]	[ ].[256] [ ]	[ ]

There would be no lessening of competition for supply to non-MNOs

262 The Proposed Transaction would not result in any lessening of competition for any non-MNO customers compared to the most theoretically competitive counterfactual scenario. This is because:

262.1 as illustrated by Tables 5 and 6 above, non-MNO customers only host equipment on a limited number of MNOs' sites, which co-location is often supplemented by non-MNOs' sites, which suggests they either have significantly lower requirements or they are able to find suitable alternative providers for the majority of their needs. In either event, they are not reliant on TowerCos for sites,

262.2 in addition, their sites generally take up a smaller proportion of space on a tower, therefore, it is possible to add sites where less capacity is available and more tenants can be added on one site, and

262.3 non-MNO customers typically have lower site specification requirements, and consequently alternatives available beyond those provided by TowerCos. For example, Connexa considers that for WISPs,[257] mobile passive telecommunications infrastructure is rarely a cost-effective option and instead it is more cost-effective for them to self-supply. WISPs are able to house their equipment on smaller and simpler infrastructure. Further, they typically do not pay any ground lease where they self-supply. For example, a WISP may place passive infrastructure on farmland, and pay no fee to do so in exchange for offering coverage to the landowner.

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]258

264 [

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255 [ ].

256 [ ].

257 [ ].

258 See document **OTPP.03.01**.

].[259]

MVNOs

265 As set out above, the Proposed Transaction does not give rise to any change that specifically affects MVNOs. MVNOs do not contract directly with TowerCos for passive infrastructure services, rather these underlie their contracts with MNOs. Dynamics associated with supply to MVNOs will not change as a result of the Proposed Transaction. Accordingly, there should be no concerns regarding MVNOs' position as long as the NZCC is satisfied with respect to MNOs' position.

[259] See document **OTPP.03.06**.

SUBPART C - THE PROPOSED TRANSACTION WILL NOT INCREASE THE PROSPECTS OF COORDINATION IN ANY MARKET

266 The Proposed Transaction does not increase the potential for co-ordination between competitors.

Spark/2degrees – no risk of co-ordination at the MNO level

267 The Proposed Transaction will result in Spark becoming a limited minority shareholder in a key supplier to 2degrees. Therefore, a potential concern arises relating to co-ordinated effects post-merger that can negatively impact downstream competition. This would occur in a scenario where Spark's ownership interest in Connexa gives it access to competitively sensitive information from 2degrees, resulting in a softening of competition and allowing tacit co-ordination in the downstream market.

268 However:[260]

268.1 Connexa has strict confidentiality obligations in each of the MISAs to ensure that Spark does not have access to 2degrees information (and vice versa). This will prohibit any unnecessary non-public information being shared with Spark (or, for completeness, with 2degrees),[261]

268.2 as described above, [

],[262]

268.3 each MNO's tower locations are already publicly available through the RSM (radio spectrum management) database. Therefore, even if information protections were ineffective, there would be minimal new information in relation to 2degrees network topology,

268.4 each MNO has a good idea of the equipment the other is using through public announcements and as active equipment is publicly visible on passive mobile telecommunications infrastructure, and

268.5 any decisions about aggregating demand and efficiencies would be made by Connexa, rather than by any agreement between the MNOs.

Connexa/FortySouth – no risk of co-ordination at the TowerCo level

269 The Guidelines set out the market features that the NZCC considers may facilitate co-ordination in the market.[263]

270 The following factors mean that co-ordination is unlikely to occur, even if it could hypothetically occur it would not be sustained and, in any event, would not become more likely as a result of the Proposed Transaction compared with any realistic

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260 See NERA Report, **Appendix 1,** at Part 5.1.

261 Spark MISA [ ]; 2degrees MISA [ ].

262 Shareholders' Agreement, [ ].

263 Guidelines at [3.89].

counterfactual. For the following reasons (see also the NERA Report, **Appendix 1**, Part 9):

270.1 Competition for a large portion of the market has already taken place through entry into the MISAs. This was through a highly competitive process (including multiple bidders) and represented significant value to TowerCos and an opportunity that will not arise again for a material period.. In those circumstances, all participants in MISA competition will have a strong incentive to maximise their offers and not to coordinate.

270.2 For competition for individual uncommitted sites, there is likely to be intense competition for a TowerCo to compete to take sites from the other TowerCo or to retain its own sites as, at least initially, these customers will make up the majority of the TowerCos business.

270.3 This will not allow scope for co-ordination as, despite there only being two large TowerCos, MNOs have countervailing power given the number of other suppliers to choose from, including potential new entrants (such as ATC), smaller TowerCos or the ability to self-supply which remains a realistic option.

270.4 Further, there are limited barriers to entry for new TowerCos. Therefore, to the extent that TowerCos are making excess profits new entrants will have the ability to enter the market, and in fact, to the extent in-fill becomes prevalent towers may become less relevant. These features mean that there should be no incentive to coordinate. Further, these features are not materially affected by the Proposed Transaction. For uncommitted sites, demand is unlikely to be stable and is likely to be vigorously contested.

270.5 In addition, there will be no ability to co-ordinate. There will be little to no interaction between TowerCos as there will be no need to collaborate. As above, competition with respect to the majority of sites is not ongoing as the terms have been fixed through the MISAs (in competitive circumstances).

270.6 The two national TowerCos will have a different mix of site types (which will further change over time). Build costs will be common to the extent all providers use the same mix of competing contractors (which will not be affected by the Proposed Transaction).

270.7 Prices and volumes are not publicly available; the Proposed Transaction will not change this. The only information sharing would be likely to occur by MNOs sharing pricing information from another TowerCo if and when that suits them to extract improved terms (i.e. pro-competitive and in the control of customers with significant countervailing power). There is no available method for coordination.

270.8 Connexa is not related to any other TowerCo, and that would remain the case following the Proposed Transaction. There would be common customers, but they will have every incentive to prevent coordination among TowerCos.

271 "Accommodation" by the TowerCos will also not be relevant.

271.1 In addition to the reasons set out above, for MISA competition the stakes will be too high (and customers too few) for accommodation to make sense.

271.2 As outlined elsewhere in the application, individual site competition in relation to uncommitted sites is also high-stakes as an opportunity to develop a broader relationship with a MNO customer.

271.3 Moreover, self-supply is available to MNOs, and would operate to disrupt any attempted accommodation on the part of TowerCos – see 270.3, above.

PART 9: CONFIDENTIALITY

272 Confidentiality is sought in respect of the information in this application that is highlighted (*Confidential Information*). Confidentiality is sought for the Confidential Information for the purposes of section 9(2)(b) of the Official Information Act 1982 on the following grounds:

272.1 the Confidential Information is commercially sensitive and valuable information which is confidential to the parties, and

272.2 disclosure of the Confidential Information would be likely to unreasonably prejudice the commercial position of the parties.

273 The Parties request that they are notified if the NZCC receives any request under the Official Information Act 1982 for the release of any part of the Confidential Information. They also request that the NZCC seek and consider their views as to whether the Confidential Information remains confidential and commercially sensitive before it responds to such requests.

DECLARATION BY CONNEXA

I, Robert Owen Berrill, have prepared, or supervised the preparation of this notice seeking clearance.

To the best of my knowledge, I confirm that:

- all information specified by the NZCC has been supplied,
- if information has not been supplied, reasons have been included as to why the information has not been supplied,
- all information known to the applicant that is relevant to the consideration of this notice has been supplied, and
- all information supplied is correct as at the date of this notice.

I undertake to advise the NZCC immediately of any material change in circumstances relating to the notice.

I understand that it is an offence under the Commerce Act to attempt to deceive or knowingly mislead the NZCC in respect of any matter before the NZCC, including in these documents.

I am a director/officer of Connexa and am duly authorised to submit this notice.

Name and title of person authorised to sign:

Robert Owen Berrill, Chief Executive Officer

On behalf of Connexa Limited

Sign: _____

Date: 16 December 2022

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9	NZ Industry Associations
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APPENDIX 1: REPORT BY NERA ECONOMIC CONSULTING ON THE PROPOSED TRANSACTION

Attached separately.

APPENDIX 2: STRUCTURE DIAGRAM POST-COMPLETION OF THE PROPOSED TRANSACTION

Following the Proposed Transaction, Connexa's corporate structure will be as set out below.

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APPENDIX 3 – FURTHER DESCRIPTION OF ASSETS OWNED BY CONNEXA

As explained above, Connexa only owns passive infrastructure assets, with the active infrastructure being retained by the MNOs. The bounds of this differ slightly for each of Spark and 2degrees. The below diagrams show the assets that are owned by Connexa and each of the MNOs.[264]

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[264] A system diagram showing Vodafone's typical split of passive and active mobile infrastructure is available at http://nzx-prod-s7fsd7f98s.s3-website-ap-southeast-2.amazonaws.com/attachments/IFT/387270/364500.pdf.

APPENDIX 4: [CONFIDENTIAL]

APPENDIX 5: TOTAL SITE NUMBERS AND EXPECTED DEMAND FOR SITES

Table 1: Connexa / 2degrees site numbers (including "in-flight" sites and expected BTS commitments)

	Connexa / Spark (as applicable)				2degrees				MergeCo			
	Total	**Macro**	**Rooftop**	**Road side**	**Total**	**Macro**	**Rooftop**	**Road side**	**Total**	**Macro**	**Rooftop**	**Road side**
Existing sites	1,243	[ ] [ ]	[ ] [ ]	[ ] [ ]	[ ][265]	[ ] [ ]	[ ] [ ]	[ ] [ ]	[ ]	[ ] [ ]	[ ] [ ]	[ ] [ ]
"In-flight" sites	[ ]	[ ] [ ]	[ ] [ ]	[ ] [ ]	[ ]	[ ] [ ]	[ ] [ ]	[ ] [ ]	[ ]	[ ] [ ]	[ ] [ ]	[ ] [ ]
BTS sites	671	[ ] [ ]	[ ]	[ ] [ ]	[ ][266]	[ ][267] [ ]	[ ]	[ ] [ ]	[ ]	[ ] [ ]	[ ]	[ ] [ ]
Total sites	[ ]	[ ] [ ]	[ ] [ ]	[ ] [ ]	[ ]	[ ] [ ]	[ ] [ ]	[ ] [ ]	[ ]	[ ] [ ]	[ ] [ ]	[ ] [ ]

[265] [ ]

[266] Note, the total BTS commitment for 2degrees is 450 PoPs. [ ].

[267] [ ].

Table 2: Expected demand (sites) – Spark and 2degrees

	Spark	2degrees
Expected uncommitted demand	[ ]	[ ]
Sites contracted to others	[ ]	[ ]
Total uncommitted demand	**[ ]**	**[ ]**

Table 3: Inbound co-location by tenant – Connexa and 2degrees sites

	Connexa	2degrees
Total existing sites	1,243	[ ]
Total inbound co-location	[ ]	[ ]
Tenancy ratio	**[ ]**	**[ ]**

Inbound co-location by tenant	Connexa	2degrees
2degrees / Spark (as applicable)	[ ]	[ ]
Vodafone	[ ]	[ ]
Chorus	[ ]	[ ]
Vital/Team Talk	[ ]	[ ]
NZ Police	[ ]	[ ]
JDA Network Specialists	[ ]	[ ]
Kordia	[ ]	[ ]
NZME	[ ]	[ ]
Airways	[ ]	[ ]
Civil Defence / NEMA	[ ]	[ ]
TLC	[ ]	[ ]
Tuwharetoa Maori Trust Board	[ ]	[ ]
Cogent	[ ]	[ ]
Wairoa Rescue Helicopter	[ ]	[ ]
Thinxtra	[ ]	[ ]

Table 4: Outbound co-location (sites) – Spark and 2degrees

Table 4: Outbound co-location (sites) - Spark and 2degrees

Site owner	Spark	2degrees
Connexa sites	[ ]	[ ]
2degrees sites	[ ]	[ ]
FortySouth sites	[ ]	[ ][268]
RCG sites	[ ]	[ ]
Non-MNO owned sites:		[ ]
Chorus	[ ]	[ ]
Kordia	[ ]	
Transpower	[ ]	
Broadtech (JDA Network Specialists)	[ ]	

[268] [ ].

APPENDIX 6: SITE TYPES ACROSS NEW ZEALAND

See below graphics showing the breakdown of site types across New Zealand.[269]

[ ][270]

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[ ][271]

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[269] Similar information has been provided for Vodafone at http://nzx-prod-s7fsd7f98s.s3-website-ap-southeast-2.amazonaws.com/attachments/IFT/387270/364500.pdf.

[270] [ ].

[271] [ ].

APPENDIX 7: DETAILED MARKET SHARE DATA

Supplier*	Number of sites	Share as between Connexa / Forty South	Share of all sites	"In-flight" sites	Total including "in-flight"	Share Large TowerCos	Share of all sites	Number of macro sites	Share of macro sites
Large TowerCos									
Connexa	1,243	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
2degrees	[ ][272]	[ ]	[ ]	[ ]	1,124	[ ]	[ ]	[ ]	[ ]
Merged entity	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
FortySouth[273]	2,319	[ ]	[ ]	NA	2,319	[ ]	[ ]	[ ]	[ ]
Connexa / FortySouth total	[ ]	100%	[ ]	[ ]	[ ]	100.00%	[ ]	[ ]	100%
Smaller TowerCos									
Chorus[274]	[ ]	NA	[ ]	NA	[ ]	NA	[ ]	NA	NA
Kordia[275]	[ ]	NA	[ ]	NA	[ ]	NA	[ ]	NA	NA
Vital/TeamTalk	[ ]	NA	[ ]	NA	[ ]	NA	[ ]	NA	NA

[272] [ ]

[273] Site numbers given as those contained in the announcement of sale to FortySouth. For further information see https://news.vodafone.co.nz/towerco.

[274] [ ].

[275] Kordia's annual report says that it has 270 network "sites" (of which 50 are large lattice tower). [ ].

Mount Campbell	[ ]	NA	[ ]	NA	[ ]	NA	[ ]	NA	NA
Broadtech (JDA Network Specialists)	[ ]	NA	[ ]	NA	[ ]	NA	[ ]	NA	NA
Transpower	NA	NA	NA	NA	NA	NA	NA	NA	NA
KiwiRail	NA	NA	NA	NA	NA	NA	NA	NA	NA
NZ Police	NA	NA	NA	NA	NA	NA	NA	NA	NA
Airways	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total	[ ]	NA	100%	NA	[ ]	NA	NA	NA	NA
Not included in this market									
WISPs	[ ]								
RCG	350								

APPENDIX 8: ESTIMATE OF FIXED TOWERCO COSTS

A Average cost summary for towers

	Macro	On Building	Road side
Ground lease costs	[ ]	[ ]	[ ]
Opex maintenance]	[ ]	[ ]	[ ]
Capex maintenance	[ ]	[ ]	[ ]
Depreciation on tower[276]	[ ]	[ ]	[ ]
Total cost per tower	[ ]	[ ]	[ ]
Capex build	[ ]	[ ]	[ ]

[276] Depreciation is based on a 15 year asset life.

APPENDIX 9: NZ INDUSTRY ASSOCIATIONS

Association	Contact Details
Technology Users Association of New Zealand (TUANZ)	Phone: +64 4 815 8178 (General enquiries) [ ] Address: PO Box 65503 Mairangi Bay, North Shore AUCKLAND 0754 Website: Home – TUANZ (tuanz.org.nz)
New Zealand Telecommunications Forum Inc (TCF)	Phone: +64 9 475 0203 (General enquiries) [ ] Address: PO Box 65503 North Shore AUCKLAND 0754 Website: Home – TCF (tcf.org.nz/industry/)

APPENDIX 10 –KEY CUSTOMERS - CONNEXA

Name	Revenue earned[277]	Contact Details
[ ]	[ ]	[ ]
[ ]	[ ]	[ ]
[ ]	[ ]	[ ]
[ ]	[ ]	[ ]
[ ]	[ ]	[ ]
[ ]	[ ]	[ ]

[277] [ ]

APPENDIX 11 – KEY CUSTOMERS – 2DEGREES

Name	Revenue earned	Contact Details
[ ]	[ ]	[ ]
[ ]	[ ]	[ ]
[ ]	[ ]	[ ]
[ ]	[ ]	[ ]
[ ]	[ ]	[ ]

APPENDIX 12: CONTACT DETAILS FOR THE PARTIES' KEY COMPETITORS

Competitor	Contact details
FortySouth	Registered Office: CHAPMAN TRIPP, 15 Customs Street West, Auckland Central, Auckland 1010, New Zealand
Kordia	[ ] [ ]
Chorus	[ ]
Broadtech (JDA Network Specialists)	Registered office: Walker Wayland Auckland Limited, Level 14, 88 Shortland Street, Auckland Central, Auckland, 1010 , New Zealand
Everest Infrastructure ANZ	[ ]
ATC	[ ]