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**PUBLIC**

# Fibre fixed line access service deregulation review under section 210 of the Telecommunications Act

## Reasonable grounds assessment draft decision

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# Associated documents

| Publication date | Reference | Title |
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| 13 October 2020 | ISBN 978-1-869458-43-0 | Commerce Commission "Fibre input methodologies – Main final decisions – reasons paper" (13 October 2020) |
| 31 August 2023 | ISBN 978-1-991085-31-3 | Commerce Commission "Fibre price-quality regulation – Proposed process and approach for the 2025-2028 regulatory period" (31 August 2023) |
| 7 December 2023 | ISBN 978-1-99085-60-3 | Commerce Commission "Fibre fixed line access service deregulation review under section 210 of the Telecommunications Act – Draft assessment framework paper" (7 December 2023) |

Commerce Commission
Wellington, New Zealand

# Glossary

| Table of terms and abbreviations | |
|---|---|
| **The Act** | Telecommunications Act 2001 |
| **ADSL** | Asymmetric Digital Subscriber Line – a copper-based technology that can provide basic fixed line broadband services |
| **AMR** | Annual Telecommunications Monitoring Report |
| **ATA** | Analogue Telephone Adapter |
| **BTG** | Business Technology Group |
| **Commission** | The Commerce Commission |
| **CPE** | Customer Premises Equipment |
| **CSM** | Customer Satisfaction Monitoring report |
| **DFAS** | Direct Fibre Access Services |
| **DMR** | Digital Microwave Radio |
| **End-user** | A person who is the ultimate recipient of a service or of another service whose provision is dependent on a service |
| **FFLAS** | Fibre Fixed Line Access Services |
| **FWA** | Fixed Wireless Access |
| **GEO** | Geostationary Orbit - satellite services which orbit the earth at an altitude of roughly 35,000km |
| **GPON** | Gigabit Ethernet Passive Optical Network |
| **HFC** | Hybrid Fibre-Coaxial |
| **ICABS** | Intra-Candidate Area Backhaul |
| **ID** | Information Disclosure |
| **LEO** | Low Earth Orbit – satellite services which orbit the earth at an altitude below 2000km |
| **LFC** | Local Fibre Company (Chorus, Northpower, Enable and Tuatahi). Also referred to as 'regulated providers' throughout the paper |
| **MBNZ** | Measuring Broadband New Zealand report |
| **Mbps** | Megabits per second |
| **MNO** | Mobile Network Operator |
| **OIA** | Official Information Act 1982 |
| **POI** | Point of Interconnection |
| **PON** | Passive Optical Network |
| **PONFAS** | Passive Optical Network Fibre Access Services |
| **PQ** | Price-quality |
| **PQP** | Price-quality Path – PQP1 was the first such path for Chorus from 1 January 2022 to 31 December 2024 while PQP2 is the path that will apply for 1 January 2025 – 31 December 2028 |
| **RAB** | Regulatory Asset Base |
| **RSP** | Retail Service Provider |
| **SMP** | Substantial Market Power |
| **UFB** | Ultra-Fast Broadband (government initiative) |
| **VDSL** | Very High-Speed Digital Subscriber Line – a copper-based broadband connection that allows higher speeds than ADSL technology |
| **VoIP** | Voice over Internet Protocol |

# Contents

# Chapter 1 Introduction

### Purpose and structure

1.1 This paper sets out our draft decision on whether there are reasonable grounds to start a deregulation review of one or more fibre fixed line access services (**FFLAS**) under section 210 of the Telecommunications Act (**the Act**). This paper is structured as follows:

1.1.1 Chapter 1 is an introduction

1.1.2 Chapter 2 outlines the assessment framework we have applied in reaching our draft decision on whether there are reasonable grounds

1.1.3 Chapter 3 outlines our draft decision

1.1.4 Attachment A outlines the changes we have made to our draft assessment framework having regard to the submissions received

1.1.5 Attachment B summarises and responds to additional submission points on our draft assessment framework and submissions on the type of evidence we should use in a reasonable grounds assessment.

### Draft decision

1.2 Our draft decision is that no reasonable grounds exist to start a deregulation review for Voice services, Bitstream PON services, Unbundled PON services, Point-to-point services, Transport services, Co-location and interconnected services, and Connection services.

### Requirement to consider deregulating FFLAS

1.3 Section 210 of the Act sets out that the Commerce Commission (**Commission**) may, at any time after the implementation date, review how one or more FFLAS are regulated under Part 6 if the Commission has reasonable grounds to consider that those services should no longer be:[1]

1.3.1 regulated under Part 6 of the Act; or

1.3.2 subjected to price-quality (**PQ**) regulation under Part 6 of the Act.

1.4 We are required to consider whether there are reasonable grounds to start a FFLAS deregulation review before the start of each regulatory period.[2] We refer to this step throughout this paper as the 'reasonable grounds assessment'.

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1 Telecommunications Act 2001, s 210(1).

2 Telecommunications Act 2001, s 210(3).

1.5 We note that telecommunications markets are dynamic, and that we will remain attentive to market changes. As noted above, we can revisit regulation at "any time" if we consider there are reasonable grounds to do so.

**Our process to date and next steps**

1.6 We published a draft assessment framework paper on 7 December 2023 that set out:[3]

1.6.1 An assessment framework that we proposed to apply when we undertake a FFLAS deregulation review under section 210 of the Act

1.6.2 The proposed parameters for a reasonable grounds assessment and how they apply to a FFLAS deregulation review

1.6.3 The type of evidence we proposed to consider when undertaking a reasonable grounds assessment.

1.7 We received submissions from nine stakeholders and cross-submissions from five stakeholders on our draft assessment framework paper. We have had regard to these submissions and cross-submissions in the framework we have applied in reaching the draft decisions set out in this paper.[4] Attachments A and B outline these submission points, including explaining where it has resulted in us making changes to the framework.

1.8 We also received submissions and cross-submissions regarding the existence of reasonable grounds. We have had regard to these submissions in reaching our draft decision.

1.9 Table 1.1 below sets out our intended timetable and indicative dates for the reasonable grounds assessment.

**Table 1.1 Reasonable grounds assessment process**

| Milestone | Details | Date |
|---|---|---|
| **Draft assessment framework paper** | Proposed legal framework, economic framework, geographic breakdown and service definitions | 7 December 2023 |
| **Submissions** | Submissions on our draft assessment framework received | 16 February 2024 |
| **Cross-submissions** | Cross-submissions on draft assessment framework submissions | 22 March 2024 |

[3] Commerce Commission "Fibre fixed line access service deregulation review under section 210 of the Telecommunications Act – Draft assessment framework paper" (7 December 2023).

[4] Both the submissions and cross-submissions can be found on our website.

| Milestone | Details | Date |
|---|---|---|
| **Reasonable grounds draft decision (this paper)** | Draft decision as to whether there are reasonable grounds to consider how one or more FFLAS are regulated | 27 August 2024 |
| **Submissions** | Submissions on our draft decision due | 24 September 2024 |
| **Cross-submissions** | Cross-submissions on our draft decision due | 15 October 2024 |
| **Reasonable grounds final decision** | Final decision as to whether there are reasonable grounds to consider how one or more FFLAS are regulated | Q4 2024 |

**Information for interested parties on making a submission**

*Process and timeline for making submissions*

1.10 We are seeking submissions on the draft decision contained in this paper, including where we have outlined we have limited data, by 5pm 24 September 2024. We will then invite cross-submissions by 5pm 15 October 2024. Cross-submissions should only focus on matters raised in submissions. We strongly discourage stakeholders from raising new matters in cross-submissions.[5]

1.11 You should address your responses to:

1.11.1 Keston Ruxton (Manager, Fibre PQ Regulation)

1.11.2 c/o infrastructure.regulation@comcom.govt.nz.

1.12 Please include "FFLAS deregulation review" in the subject line. We prefer responses to be provided in a file format suitable for word processing in addition to PDF file format.

*Confidentiality*

1.13 The protection of confidential information is something we take seriously. If you need to include commercially sensitive or confidential information in your submission or cross-submission, you must provide us with both a confidential and non-confidential/public version of your submission that are clearly identified. We intend to publish the non-confidential/public version of all submissions we receive on our website. This also applies to cross-submissions.

1.14 You are responsible for ensuring that commercially sensitive or confidential information is not included in a public version of a submission or cross-submission that you provide to us.

[5] We may place less weight on submissions that are unable to be properly tested because they are raised for the first time in cross-submissions.

1.15 All submissions and cross-submissions we receive, including any parts of them that we do not publish, can be requested under the Official Information Act 1982 (**OIA**). This means we would be required to release material that we do not publish unless good reason existed under the OIA to withhold it. We would normally consult with the party that provided the information before we disclose it to a requester.

# Chapter 2 Assessment framework

**Purpose and structure**

2.1 This chapter sets out the assessment framework, including the legal and economic frameworks, that we have used in reaching our draft decision on whether there are reasonable grounds to start a FFLAS deregulation review under section 210 of the Act.

2.2 This chapter is structured as follows:

2.2.1 Legal framework

2.2.2 Economic framework.

2.3 We have had regard to submissions and cross-submissions on the draft assessment framework paper and have made updates to the assessment framework accordingly. We have provided reasoning for our updates to the framework in Attachment A, along with a summary of additional submission points on our draft assessment framework, and our response, in Attachment B.

## Legal framework

2.4 This section sets out the legal framework we have applied in reaching our draft decision.

2.5 Since 1 January 2022, providers of regulated FFLAS have been subject to regulation under Part 6 of the Act. Chorus Limited (**Chorus**) is the only Local Fibre Company (**LFC**) subject to PQ regulation under Part 6 of the Act.

2.6 Section 210 of the Act sets out that the Commission may, at any time after the implementation date, review how one or more FFLAS are regulated if the Commission has reasonable grounds to consider that those services should no longer be:[6]

2.6.1 regulated under Part 6 of the Act; or

2.6.2 subject to PQ regulation under Part 6 of the Act.

2.7 The Commission must, before the start of each regulatory period (except the first regulatory period), consider whether there are reasonable grounds to start a review.[7]

6 Telecommunications Act 2001, s 210(1).
7 Telecommunications Act 2001, s 210(3).

**Purpose of Part 6 of the Act (FFLAS) – sections 166 and 162**

2.8 Section 210 is in Part 6 of the Act. The matters that we are required to consider under Part 6 when we make a recommendation, determination, or decision are outlined in section 166. This section outlines that when making a recommendation, determination, or decision under Part 6, we must do so in a way that best gives, or is likely to best give, effect to section 162, and to the extent relevant, to the promotion of workable competition in telecommunications markets for the long-term benefit of end-users of telecommunications services.

> "166 Matters to be considered by Commission and Minister
>
> (2) The Commission or Minister must make the recommendation, determination, or decision that the Commission or Minister considers best gives, or is likely to best give, effect-
>
> (a) to the purpose in section 162; and
>
> (b) to the extent that the Commission or Minister considers it relevant, to the promotion of workable competition in telecommunications markets for the long-term benefit of end-users of telecommunications services."

2.9 In reaching our view on whether there are reasonable grounds for commencing a review, we must make the decision that will give, or is likely to best give, effect to the purpose set out in section 162 of the Act:

> "162 Purpose
>
> The purpose of this Part is to promote the long-term benefit of end-users in markets for fibre fixed line access services by promoting outcomes that are consistent with outcomes produced in workably competitive markets so that regulated fibre service providers-
>
> (a) have incentives to innovate and to invest, including in replacement, upgraded, and new assets; and
>
> (b) have incentives to improve efficiency and supply fibre fixed line access services of a quality that reflects end-user demands; and
>
> (c) allow end-users to share the benefits of efficiency gains in the supply of fibre fixed line access services, including through lower prices; and
>
> (d) are limited in their ability to extract excessive profits."

**FFLAS deregulation review and the requirement to undertake a reasonable grounds assessment – section 210**

2.10 Section 210(1) of the Act provides that the Commission:[8]

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[8] Telecommunications Act 2001, s 210(1).

> "may, at any time after the implementation date, review how 1 or more fibre fixed line access services are regulated under this Part if the Commission has reasonable grounds to consider that those services-
>
> (a) should no longer be regulated under this Part; or
>
> (b) should no longer be subject to price-quality regulation under this Part".

2.11 Section 210(2) allows the Commission to:[9]

> "without limitation, describe a service under review with reference to any one or more of the following:
>
> (a) the geographic area in which the service is supplied:
>
> (b) the service's end-users:
>
> (c) the service providers who seek access to the service:
>
> (d) the technical specifications of the service:
>
> (e) any other circumstances in which the service is supplied."

2.12 Section 210(3) sets out that the Commission must, before the start of each regulatory period (except the first), consider whether there are reasonable grounds to start a review.[10]

2.13 We have revised our approach to assessing whether there are reasonable grounds to start a FFLAS deregulation review in light of the submissions received on our draft assessment framework paper.[11] We explain our changes and reasons in more detail in Attachment A.

2.14 We consider the Commission may start a review of FFLAS where the information before us is objectively sufficient to leave us with a view that it is likely that the services should no longer be regulated (or should not be regulated by PQ regulation, as the case may be) in order to promote the purpose in section 162 and, where relevant, workable competition under section 166(2)(b).

2.15 Although some submitters on our draft assessment framework paper suggested a lower threshold, we do not consider this would be consistent with the statutory framework.[12]

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9 Telecommunications Act 2001, s 210(2).

10 Telecommunications Act 2001, s 210(3).

11 This includes moving away from the language of a "change of circumstances" to make it clearer (amongst other reasons) that the inquiry is economic in nature and focused on the degree of competitive constraint at the time of the reasonable grounds assessment.

12 Chorus "Submission on deregulation draft assessment framework for fibre deregulation review" (16 February 2024), at [15]-[18] and Enable and Tuatahi "Submission on deregulation draft assessment framework" (16 February 2024), at [3.1]-[3.6].

2.15.1 Section 210(1) provides that the Commission may only undertake a review of how services are regulated where it has *"reasonable grounds to consider"* that those services should no longer be regulated (or should not be regulated by PQ regulation, as the case may be).

2.15.2 The wording of section 210(1) appears to set a high threshold and, on a plain reading, would only permit a review if the Commission considered, on a preliminary basis, that services should be deregulated.

2.15.3 However, section 210 was intended to promote the long-term interests of consumers by avoiding the cost of regulation that is no longer necessary to address a lack of competition, while also avoiding the cost and uncertainty of unnecessary regulatory reviews.

2.15.4 Given the purpose of section 210, we are of the view that the threshold was not intended to be so high as to risk unnecessary regulation, but nor was the threshold intended to be so low as to risk unnecessary reviews. Deregulation must be a sufficiently likely outcome to justify the considerable expense and uncertainty that will accompany a review.

2.16 Our assessment of whether there are reasonable grounds to start a review of FFLAS will consider the factors listed in section 210(4) of the Act:[13]

> "(4) A review may consider the following:
>
> (a) whether competition to 1 or more fibre fixed line access services has increased or decreased in a relevant market:
>
> (b) the impact of any increase or decrease on the ability of regulated fibre service providers to exercise substantial market power:
>
> (c) whether the purpose of this Part would be better met if 1 or more fibre fixed line access services:
>
> (i) were no longer regulated under this Part; or
>
> (ii) were no longer subject to price-quality regulation under this Part."

[13] Telecommunications Act 2001, s 210(4).

2.17 Our assessment will be forward looking and will not be limited to assessing whether there has been a significant change in circumstances. As outlined in paragraph 2.14, we consider that the information before us is objectively sufficient to leave us with a view that it is likely that the services should no longer be regulated (or should not be regulated by PQ regulation, as the case may be) in order to promote the purpose in section 162 and, where relevant, workable competition under section 166(2)(b).

2.18 As explained in paragraph 2.16, our assessment of whether there are reasonable grounds to start a review of FFLAS will consider the factors listed in section 210(4) of the Act.

2.19 We note that a significant change in circumstances may, while not the focus, nevertheless provide reasonable grounds for us to consider it likely that continued regulation is no longer necessary. In particular, a significant increase in the constraint provided by telecommunications technologies that are sufficiently close substitutes for fibre would be likely to provide reasonable grounds to consider it likely that services should no longer be regulated.

2.20 We consider that to conduct a reasonable grounds assessment we should 'describe' FFLAS in section 210(2) terms (or divide into subgroups of services). Our starting point for this is to consider the definition of FFLAS in the Act, as applied in our existing determinations.[14]

**Definition of FFLAS**

2.21 "FFLAS" is defined in section 5 of the Act as follows:

> "(a) means a telecommunications service that enables access to, and interconnection with, a regulated fibre service provider's fibre network; but
>
> (b) does not include the following:
>
> > (i) a telecommunications service provided by a regulated fibre service provider (F) if the ultimate recipient of the service is F or a related party of F (as if the test for related parties were the same as the test in section 69U, applied with any necessary modifications):
> >
> > (ii) a telecommunications service provided, in any part other than a part located within an end-user's premises or building, over a copper line:
> >
> > (iii) a telecommunications service used exclusively in connection with a service described in paragraph (ii)".

2.22 In turn, "telecommunications service" is defined in section 5 as:

[14] Commerce Commission "Chorus' price-quality path from 1 January 2022 – Final decision – Reasons paper" (16 December 2021), Attachment D.

> "any goods, services, equipment, and facilities that enable or facilitate telecommunication".

2.23 "Telecommunication" is defined in section 5 as:

> "the conveyance by electromagnetic means from one device to another of any encrypted or non-encrypted sign, signal, impulse, writing, image, sound, instruction, information, or intelligence of any nature, whether for the information of any person using the device or not".

2.24 The definition of FFLAS in section 5 of the Act incorporates the broad definition of telecommunications service, which includes goods, services, equipment and facilities that both enable and facilitate telecommunication.[15]

2.25 The definition of FFLAS is also qualified by the requirement that the telecommunications service enables access to, and interconnection with, a regulated provider's fibre network. Therefore, FFLAS are limited to services that relate to the fibre network of a regulated provider who is declared in regulations under section 226 of the Act to be subject to PQ or information disclosure (**ID**) regulation, or both.

2.26 We set out which services fall within the definition of FFLAS in our final decision on Chorus' first PQ path (**PQP**). This is discussed in more detail below. The information we have received to date does not suggest we should reconsider this as part of this reasonable grounds assessment.

**Geographic area in which the service is supplied**

2.27 As set out above, section 210(2) of the Act also gives the Commission (without limitation) the ability to describe a service under review by reference to certain factors.[16] One factor is the geographic area in which the service is supplied. In conducting our reasonable grounds assessment, we identify what geographic area we are considering.

2.28 The Telecommunications (Regulated Fibre Service Providers) Regulations 2019 (**the Regulations**) were declared under section 226 of the Act. These Regulations prescribe that Chorus is the only LFC subject to PQ regulation under Part 6 of the Act. The services subject to PQ regulation are defined as, "all fibre fixed line access services, except to the extent that a service is provided in a geographical area where a regulated fibre service provider (other than Chorus Limited) has installed a fibre network as part of the Ultra-Fast Broadband (**UFB**) initiative".[17]

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15 Commerce Commission "Chorus' price-quality path from 1 January 2022 – Final decision – Reasons paper" (16 December 2021), Attachment D.

16 Telecommunications Act 2001, s 210(2).

17 Telecommunications (Regulated Fibre Service Providers) Regulations 2019, regulation 6.

2.29 The Regulations also set out that Chorus, Enable Networks Limited (**Enable**), Northpower Fibre Limited (**Northpower**) and Tuatahi First Fibre Limited (**Tuatahi**) are subject to ID regulation for all FFLAS.[18]

2.30 We outline the service descriptions and geographic areas for each FFLAS category for the reasonable grounds assessment in Chapter 3. Throughout this paper, unless specified otherwise, we use the term 'urban' to describe areas where regulated FFLAS are present.

2.31 At this stage, based on the information we have received to date, we are proposing these descriptions to inform our reasonable grounds assessment only. It remains open to us to describe the services under review differently in light of future information.

## Economic framework

2.32 This section sets out the economic framework we have applied in reaching our draft decision on whether reasonable grounds exist to undertake a FFLAS deregulation review.

2.33 We have split the framework proposed in the draft assessment paper into four key steps.[19] These steps improve the clarity of the framework (including in response to submissions),[20] and are informed by the approach taken by historic Schedule 3 reviews,[21] but with a specific focus on the requirements under the Act regarding a FFLAS deregulation review, particularly 210(4).[22]

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18 Telecommunications (Regulated Fibre Service Providers) Regulations 2019, regulation 5.

19 The economic framework remains similar to that in the draft assessment framework with structure changes for clarity and usability. Minor language and content changes have been made to ensure consistency with changes to the legal framework and with other similar assessment frameworks.

20 Feedback on our overall assessment framework was primarily positive and so we have retained the elements outlined in our draft, while amending the structure for clarity and alignment with previous Schedule 3 reviews. See Table B1 in Attachment B for specific feedback on our framework.

21 For example, identification of alternatives, an analysis of competition and consideration of the costs of regulation were undertaken in the previous National Roaming (2023), Mobile termination access service (2020) and Spark's resale voice services (2019) Schedule 3 reviews.

22 It is also informed by the proposed approach to the Copper Services Investigation being undertaken at the same time. Commerce Commission "Copper Services Investigation Approach paper" (22 April 2024).

2.34 We note that differences exist between a review under section 210 and one under Schedule 3.[23] However, in our view, this approach remains appropriate due to the similarities between the relevant sections including their respective purpose statements,[24] and the requirement for both reviews to consider the forward looking role of regulation in telecommunications markets.

2.35 We note that while these steps provide a guide to our assessment, where it is impractical and unnecessary to undertake analysis at a step, we would not. For example, where no alternatives exist, we would not assess competition.

2.36 It remains open to us to define the economic framework differently in light of future information.

**Step 1: Describe the services**

2.37 Our first step is to describe the regulated services and the purpose they serve.

2.38 We start with the regulated service in question (which in this case is FFLAS, supplied at the wholesale level), and then look at how that service is being used to offer retail services to end-users.

2.39 Doing this involves considering three key elements:

2.39.1 First, how the service is described in existing legislation and regulatory decisions, as this directs (and informs) the role the regulated service is intended to play in the market.

2.39.2 Second, what the service is used for. There may be multiple uses at different levels of the value chain (i.e., wholesale and retail) that are influenced by the service. Recognising that the service was initially regulated due to potential or actual end-user harm, it will be important to consider how services are supplied to end-users using the regulated service.

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23 Chorus submitted on the difference between a Schedule 3 review and one under section 210 in its submission on the draft assessment framework. Chorus "Submission on deregulation draft assessment framework" (16 February 2024), at [21.1], [21.2] and [21.2b].

24 Section 18 of the Act sets out the purpose for Schedules 1 to 3 and focuses on promoting competition in telecommunications markets for the long-term benefit of end-users of telecommunications services. Similarly, as set out in paragraphs 2.8 and 2.9, ss 162 and 166(2)(b), which provide the purpose for the FFLAS deregulation review, focus on promoting the long-term benefit of end-users in markets for FFLAS by promoting outcomes that are consistent with outcomes produced in workably competitive markets (s 162) and promoting workable competition in telecommunications markets for the long-term benefit of end-users of telecommunications services (s 166(2)(b)).

2.39.3 Third, the geographic constraints to providing the service (the geographic area(s)), which, alongside step 2 below, informs whether competition analysis should be undertaken at a national level, or if a more granular approach is more appropriate.

2.40 In this reasonable grounds assessment, we determine the geographic constraints on a service-by-service basis at the start of our analysis of each category of services.

2.41 In describing the services, we may identify dependencies between services, such as where one is unlikely to be used without another, or where deregulation of one service is impractical without deregulation of others (due to actual or potential consumer harm). Such dependencies may guide how we undertake our analysis.

**Step 2: Identify alternatives**

2.42 The next step is to identify alternative services comparable to the defined regulated services.

2.43 We consider any alternatives that could provide direct competitive constraints to FFLAS (i.e., wholesale alternatives). We also consider any alternatives that could provide indirect competitive constraints, including in downstream retail markets.[25]

2.44 We view steps 1 and 2 as defining the market for the purposes of assessing reasonable grounds.[26]

2.45 FFLAS are used by retail service providers (**RSP**) to offer telecommunications services to residential and business end-users, either directly (for example, using fibre bitstream) or indirectly (for example, using Transport and Co-location services).

2.46 Due to the nature of the fibre rollout in New Zealand, there are limited direct alternatives (wholesale) for regulated FFLAS. Instead, competitive constraints are likely to be provided indirectly, by services in downstream retail markets (such as the retail markets for voice and broadband services). As such, we primarily focus on downstream retail markets for analysis of the competitive constraints that exist for each FFLAS category. Where relevant, we identify and consider the competitive constraints any direct alternatives provide.

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[25] A downstream market is one further down the supply chain. In the case of telecommunications, the retail broadband market (where the end-user buys a broadband service) is downstream from the wholesale broadband market (where a wholesaler sells a broadband service to an RSP who then on sells it to the end-user).

[26] Defining markets is a distinct step in several review frameworks. However, we deem it most appropriate to combine this into steps 1 and 2 for ease of understanding. For further information on market definition, see Commerce Commission, "Mergers and acquisitions Guidelines" (May 2022), see Chapter 3.

**Step 3: Competition assessment**

2.47 The third step involves consideration of the effectiveness of competition. In line with section 210(4) and our forward-looking approach, we consider how much competition each FFLAS faces and could be expected to face into the foreseeable future.

2.48 We then consider the effectiveness of that competition in constraining any substantial market power (**SMP**) that exists. We deem that a business has SMP when its actions are not effectively constrained by competition. For example, a business with SMP can profitably hold prices above competitive levels for a sustained period of time.[27]

2.49 The extent to which alternative services, and associated networks, represent a competitive constraint on FFLAS will depend on a number of factors:

2.49.1 Whether alternatives rely on regulated FFLAS

2.49.2 The market structure

2.49.3 The extent to which identified alternatives represent (sufficiently) close substitutes to regulated FFLAS including their availability and performance (the same applies for alternatives in downstream markets constraining services using FFLAS)

2.49.4 Actual demand and switching behaviour by access seekers (RSPs and end-users).

2.50 We take expected future developments into account in assessing competition and the ability of the regulated providers to exercise SMP.

**Step 4: Testing alignment with the purpose of the regulation**

2.51 Finally, we consider whether the information before us is objectively sufficient to leave us with a view that it is likely that the FFLAS should no longer be regulated (or should not be regulated by PQ regulation, as the case may be) in order to promote the purpose in section 162 and, where relevant, workable competition under section 166(2)(b).

2.52 As part of this we consider the extent to which any competitive constraints identified are dependent on access to regulated FFLAS and would be materially affected by any deregulation.

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[27] Commerce Commission, "Misuse of Market Power Guidelines" (March 2023) for more detail.

2.53 We may consider multiple counterfactuals to regulation as part of the reasonable grounds test.

**Evidence for the assessment**

2.54 In the draft assessment framework paper, we set out the type of evidence we proposed to consider when undertaking the reasonable grounds assessment.

2.55 We received several submissions outlining additional evidence or information we should consider as part of our reasonable grounds assessment and have incorporated these into our draft decision.[28] Table B4 in Attachment B outlines the specific submissions regarding evidence we should consider, and our responses.

2.56 We use evidence relating to the following in our assessment of reasonable grounds:

2.56.1 Whether alternatives rely on regulated FFLAS

2.56.2 Actual uptake (market share) of FFLAS and alternatives (including in downstream markets)

2.56.3 Whether alternatives represent a sufficiently close substitute to FFLAS (in terms of key price and non-price performance features)

2.56.4 The availability of alternatives and whether they are physically present in areas where there are regulated fibre networks

2.56.5 The capacity of alternatives to serve new demand (in the event that end-users wanted to switch away from FFLAS)

2.56.6 Actual demand and switching behaviour by access seekers.

2.57 This evidence has been primarily sourced from existing Commission data sources, and unless specified otherwise, is as of 30 June 2023 or for the 12 months to 30 June 2023. We primarily use data collected via the Rural Connectivity Study and Industry Questionnaire, and refer to such data throughout the paper as 'Commission data'. We have used the Measuring Broadband New Zealand (**MBNZ**) report and the Commission's Annual Monitoring Reports (**AMR**), and reference each where relevant throughout the paper.[29] Where available, we have also used relevant information publicly available, such as Chorus' Quarterly Connections updates.

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[28] Vector "Submission on deregulation draft assessment framework" (16 February 2024), at [16], One NZ "Submission on deregulation draft assessment framework" (16 February 2024), at [12]; and BTG "Submission on deregulation draft assessment framework" (16 February 2024), at [2].

[29] The Commission data collected through the Rural Connectivity Study and Industry Questionnaire were used to form the figures and stats in the 2023 AMR, however, where relevant we directly reference

2.58 In our assessment of reasonable grounds, we also consider factors like the entry or exit (or proposed entry/exit) of different providers, and other significant developments such as regulatory changes (including the proposed removal of restrictions on LFCs other than Chorus).[30]

2.59 We are aware that our various data sources were collated at different points in time. We have had regard to how current our data is when undertaking our analysis. Where possible and appropriate, we have aligned data timepoints (as noted earlier, we often use 30 June 2023 as that is the reporting date for most of our data). We will continue to evaluate and update the data used as we receive submissions on this draft decision and finalise our decision.

figures also used in the 2023 AMR to provide visibility and consistency. All figures used, including in graphs, are in nominal terms unless specified otherwise.

30 MBIE "Discussion document: Enhancing telecommunications regulatory and funding frameworks" (May 2024).

# Chapter 3 Draft decision on the existence of reasonable grounds

**Purpose and structure**

3.1 This chapter sets out our draft decision on whether there are reasonable grounds to start a FFLAS deregulation review under section 210 of the Act.

3.2 This chapter is structured as follows:

- 3.2.1 Summary of our draft decision (in Table 3.1 below)
- 3.2.2 Context for the assessment
- 3.2.3 Description of FFLAS (step 1 of the economic framework)
- 3.2.4 Assessment as to whether reasonable grounds exist for each FFLAS category through:
  - 3.2.4.1 the identification of alternatives (step 2)
  - 3.2.4.2 considering competition in the relevant markets including the effect of competition on SMP (step 3)
  - 3.2.4.3 testing alignment with the purpose of the regulation (step 4).

**Table 3.1 Summary of our draft decision**

| FFLAS category | Draft decision |
|---|---|
| **Voice services** | No reasonable grounds exist to undertake a deregulation review of Voice services. |
| **Bitstream PON services** | No reasonable grounds exist to undertake a deregulation review of Bitstream PON services. |
| **Point-to-point services** | No reasonable grounds exist to undertake a deregulation review of Point-to-point services. |
| **Unbundled PON services** | No reasonable grounds exist to undertake a deregulation review of Unbundled PON services. |
| **Transport services** | No reasonable grounds exist to undertake a deregulation review of Transport services. |
| **Co-location and interconnected services** | No reasonable grounds exist to undertake a deregulation review of Co-location and interconnected services. |
| **Connection services** | No reasonable grounds exist to undertake a deregulation review of Connection services. |

**Context for the assessment**

3.3 We are conducting this assessment at a time when New Zealand is in a state of transition from legacy copper to alternative broadband and voice networks and services.

3.4 We have seen significant year on year reductions in the number of copper connections across the country. This has been most pronounced in areas where fibre is available. There are now 65,000 urban households with access to fibre who remain on copper for voice and/or broadband.[31] Chorus is actively reducing the number of these connections, subject to the requirements of the Copper Withdrawal Code, and aims to turn off the copper network in fibre areas by the end of 2026.[32]

3.5 Fibre has emerged as the dominant replacement for copper. Fibre is now available to 87% of New Zealand households and New Zealand has become a global leader in the uptake of fibre with 75% uptake across UFB areas.[33] Fibre 300 is the most popular fibre plan, and most popular broadband service, reflecting what most consumers currently demand in terms of speed and performance of their service.

3.6 We have seen the rise of wireless broadband technologies in recent years. 4G fixed wireless access (**FWA**) has emerged as an alternative to fibre for a segment of the broadband market. More recently, Low Earth Orbit satellite (**LEO**) has given rural consumers a level of performance that cannot be matched by legacy technologies, resulting in the rapid disruption of the broadband market outside fibre areas.

3.7 Consumers continue to demand more data and faster speeds – resulting in usage requirements continuing to grow every year and an overall trend towards higher speed broadband plans.[34, 35] Although there has been some "downsizing" in the current economic climate (to lower speed fibre or 4G FWA services) the dominant trend in consumer demand is towards higher speed plans that, in most areas of the country, can only currently be provided on fibre networks.

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31 Chorus "Q4 FY24 Connections Update" (9 July 2024), slide 7.

32 Chorus 'Chorus delivers solid full-year result as Kiwis continue to favour fibre broadband' (21 August 2023).

33 As of March 2024. Crown Infrastructure Partners "Quarterly Connectivity Update Q1 2024" (March 2024), page 3.

34 The monthly average data use on fibre for Chorus consumers grew from roughly 387GB per month in June 2020 to 623GB per month in June 2024. Chorus "Q4 FY24 Connections Update" (9 July 2024), slide 9 and Chorus "Q4 FY20 Connections Update" (10 July 2020), slide 9.

35 With the ongoing migration away from copper, technological change (including the Internet of Things), and continued growth in demand for bandwidth, we expect demand for fibre services to continue to increase in the future. This could either be directly through bitstream products, or indirectly as an input to FWA services (that require greater site densification for each successive generation of mobile technology).

3.8 Ever increasing consumer demand means that broadband networks need ongoing investment to stay ahead of demand and meet the future growth and performance expectations of end-users. This can be delivered at low incremental cost on fibre networks, whereas FWA networks are more prone to capacity constraints that are relatively more expensive to relieve. This is particularly the case with 4G FWA which, for a number of reasons, is limited in its ability to accommodate demand-side changes and compete with fibre services. 5G FWA, which is being rolled out across the country, represents a step-change in network capacity and performance. However, at this stage, it is unclear what impact 5G FWA will have on the market.

**Description of services**

3.9 We set out our proposed description of FFLAS for the purpose of a reasonable grounds assessment under section 210 of the Act in our draft assessment framework paper.[36] The proposed services are based on the FFLAS categories used in our PQP1 final decision.[37] These are set out in Table 3.2 below.

3.10 We believe these service descriptions remain appropriate for use in our reasonable grounds assessment and have used them to form our draft decision.

**Table 3.2 Categories of services within the scope of FFLAS**

| Category | Technical | Retail side/End-user |
|---|---|---|
| **Voice services** | Services to enable the delivery of telephony and low-speed data services over a fibre network (including, but not limited to, anchor service, baseband, analogue telephone adapter (**ATA**) voice). | Provides RSPs a connection to supply end-users the ability to make and receive voice calls. |
| **Bitstream PON services** | Single or multi-class point-to-multipoint fibre access services (including, but not limited to, anchor service, Bitstream services, Bitstream 2, 3, 3A, 10GPON, NGPON and multicast). | Bitstream 2 product gives RSPs a fast and reliable connection so end-users can watch, listen, play, post and chat without interruption or slowing down.<br>Bitstream 3 provides RSPs business customers with a business grade internet connection that supports multiple locations, delivering high levels of guaranteed bandwidth to support business critical applications like voice, videoconferencing and cloud-based apps. |

[36] Commerce Commission "Fibre fixed line access service deregulation review under section 210 of the Telecommunications Act – Draft assessment framework paper" (7 December 2023), Chapter 3.

[37] Commerce Commission "Chorus' price-quality path from 1 January 2022 – Final decision" (16 December 2021), see Attachment D at [324].

| Category | Technical | Retail side/End-user |
|---|---|---|
| **Unbundled PON services** | Point-to-multipoint layer 1 fibre access services (including, but not limited to, PON fibre access services (**PONFAS**) and unbundled fibre services). | PONFAS allows RSPs to put their own electronics at each end of a fibre circuit, which can then be used to create innovative new products or services. |
| **Point-to-point services** | Single, multi-class or layer 1 point-to-point fibre access services (including, but not limited to, Bitstream 4, enhanced Bitstream 4, High-Speed Network Services, Bandwidth Fibre and Direct Fibre (**DFAS**)). | Bitstream 4 provides RSPs business customers with similar benefits to Bitstream 3, but over a dedicated fibre, which offers the speed and security required by large organisations.<br>DFAS provides dark fibre access that gives RSPs the ability to develop complex services and products to high-value customers requiring tailored equipment configurations. |
| **Transport services** | Layer 1 or managed throughput fibre services provided over the fibre network, to transport voice and data traffic between central offices, including central offices that are also points of interconnection (**POI**) (including, but not limited to Intra-Candidate Area Backhaul (**ICABS**), Tail Extension Service and inter-CO fibre services; but excluding national / inter-candidate area backhaul services such as Chorus regional transport). | ICABS provides RSPs with dark fibre connectivity between exchanges within the same candidate area – this can be used with other Chorus access products to achieve end-to-end and infrastructure solutions.<br>The Mobile Access service provides RSPs with a high-speed, high traffic class point-to-point bitstream service suitable for connectivity to mobile cell sites and other similar non-building access points. |
| **Co-location and interconnected services (Co-location)** | Network equipment accommodation and management services including network interconnection services (including, but not limited to, central office and POI co-location services, handover connections, Ethernet handover connections, tie cables and jumpering). | Central Office and POI co-location allows RSPs to install equipment in Chorus exchanges. Chorus' property services include a range of options for electricity, back-up power, seismic support and air conditioning, depending on the exchange. |
| **Connection services** | Services to install and enable FFLAS between communal fibre network infrastructure and an end-user's premises, building or other access point (including, but not limited to, pre-wiring, cable and duct fit-out). | N/A |

*Primary vs ancillary FFLAS*

3.11 The seven FFLAS categories comprise a comprehensive suite of wholesale access to the regulated fibre networks, connecting the end-user's premise to the fibre handover point.

3.12 The FFLAS which connect directly to the end-user's premise, namely Voice, Bitstream PON, Point-to-point and Unbundled PON services, are of 'primary' importance as they directly enable access. Transport, Co-location and Connection services do not directly connect to the end-users premises but are necessary to support the FFLAS which do.

3.13 In effect, Transport, Co-location and Connection services are 'ancillary' services in that they are only used in conjunction with one of the primary FFLAS connecting to an end-user's premise.

3.14 However, competition in the markets for these ancillary services can, and does in places, exist. This means that, even if we found no reasonable grounds to start a deregulation review into any of the four primary FFLAS, we could still find reasonable grounds to start a deregulation review into one of the ancillary services.

3.15 Aside from Co-location which, due to its location dependence, cannot be replicated, we assess each ancillary service along the same lines as we do each of the primary services.

**Geographic area definition**

3.16 The potential geographic area of FFLAS is anywhere a regulated provider has installed a fibre network. However, as stated in our draft assessment framework paper, we expect there are differing levels of competition across different parts of New Zealand where fibre networks are present.[38] Describing the geographic areas in which competition for FFLAS differs allows us to assess FFLAS markets more accurately for the existence of reasonable grounds.

3.17 In our draft assessment framework paper, we proposed a description of the geographic area in which the FFLAS is supplied.[39] This approach was based on reference to three areas:[40]

3.17.1 Chorus PQ

3.17.2 Chorus ID-only

3.17.3 Other LFC (Northpower, Tuatahi and Enable).

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38 Commerce Commission "Fibre fixed line access service deregulation review under section 210 of the Telecommunications Act – Draft assessment framework paper" (7 December 2023), at [4.5].

39 Commerce Commission "Fibre fixed line access service deregulation review under section 210 of the Telecommunications Act – Draft assessment framework paper" (7 December 2023).

40 Commerce Commission "Fibre fixed line access service deregulation review under section 210 of the Telecommunications Act – Draft assessment framework paper" (7 December 2023), at [4.12].

3.18 Rather than continue to take a blanket approach to the definition of geographic areas for all FFLAS, we have instead described the geographic area for each category of FFLAS as part of our analysis in reaching our draft decision below. This allows us to be more specific regarding the market(s) in scope of the reasonable grounds assessment for each category of FFLAS.

## Voice services

### Draft decision

3.19 Our draft decision is that there are no reasonable grounds to start a deregulation review of Voice services under section 210 of the Act.

3.20 However, we are seeking views from stakeholders on whether it is likely that the services should no longer be regulated (or should not be regulated by PQ regulation, as the case may be) in order to promote the purpose in section 162 and the promotion of workable competition under section 166(2)(b).

### The market for Voice services and identification of alternatives

3.21 The regulated FFLAS is the voice input (including anchor services, baseband and ATA) which can be used by RSPs to offer fibre-based retail voice telecommunications services to end-users.

3.22 We consider the current market in which Voice services compete, to comprise wholesale services which can be used to offer retail voice services to end-users.

3.23 Demand for wholesale voice services are derived from the demand for retail voice services. We consider the retail voice market to include services which provide end-users with the ability to make and receive reliable voice calls.[41]

3.24 The regulated Voice services offer particular features through the ATA,[42] such as dial tone, 64kbps quality, and direct current power. However, we do not consider these features to be determinative of the current retail voice market.

3.25 Our view is that voice over internet protocol (**VoIP**) services, which are provided over a broadband connection (whether that be fibre or any other broadband access technology), are likely included in the wider retail voice market as they allow end-users the ability to make and receive reliable voice calls.

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41 While not a specific determinant of the market, we use 'reliable' here to mean both available (i.e., uptime – the percentage of time a system is up and running) and of sufficient quality.

42 An ATA is a device for connecting traditional analogue telephones, fax machines, and similar customer-premises devices to a digital telephone system or a voice over IP telephone network. The ATA provides dial tone, ringing generator, direct current power, caller identity data and other standard telephone line signalling to the telephone connected to a modular jack.

3.26 The same likely holds for mobile voice services which, as of June 2023, are available to 99.99% of urban New Zealand households.[43] Our view is that they are likely in a wider retail voice market.

3.27 Accordingly, multiple retail alternatives are geographically present where the regulated wholesale Voice services are supplied. Our view is that a single geographic market, defined by where FFLAS exists (the footprint of the regulated networks), is most appropriate.[44]

**State of competition in the market**

3.28 As demand for Voice services is derived from the downstream retail voice market, we assess competition for retail voice services and the competitive constraint applied to voice services provided using the regulated wholesale Voice input.[45]

3.29 We consider that assessing competition in this market requires analysis of:

3.29.1 the market structure

3.29.2 whether alternatives represent close substitutes

3.29.3 consumer demand and switching behaviour.

*Market structure*

3.30 Consumers are moving away from traditional landline services for calling. Nationwide, landline connections across all access technologies (including broadband-voice bundles) have continued to decline in 2023, down 33% on 2022.[46] 420,791 landline connections remain in urban areas, with urban landline connections making up 83% of those remaining nationwide.[47] 77% of these remaining urban landlines are residential rather than business connections.[48]

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43 Commission data.

44 Our view is that competition does not differ depending on the type of regulation present (e.g., Chorus PQ vs Chorus ID) as set out in our draft assessment framework paper, but rather simply based on where regulated FFLAS is located vs where it is not. As we are only looking at areas where regulated FFLAS exists (i.e., the footprint of regulated fibre networks), a single geographic market is appropriate. We do not believe our conclusions would differ if we were to look at competition on a more granular or narrow geographic level.

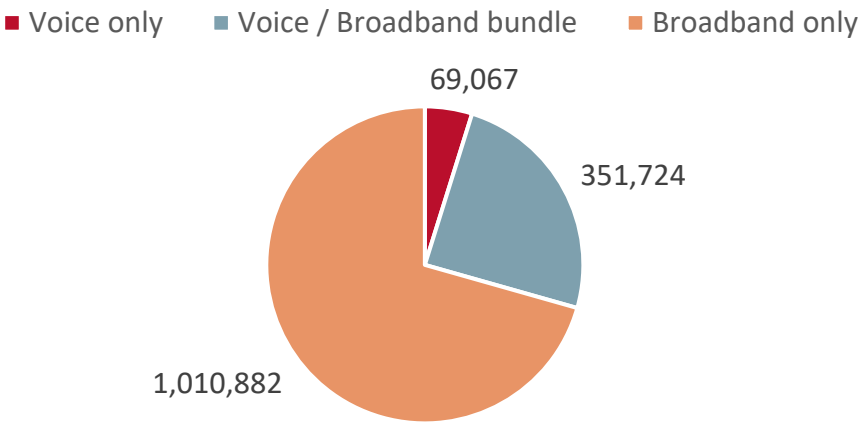
45 No retail alternatives rely on Voice services, however as noted in the Transport section, FWA services (including FWA voice services) often rely on regulated Transport services (mobile access) for delivery.

46 Nationally, there were 757,031 landlines as of June 2022, compared with 504,973 landline connections as of June 2023 (Commission data).

47 Commission data.

48 Commission data.

**Figure 3.1 Share of urban fixed line voice connections by plan type (at June 2023)[49]**

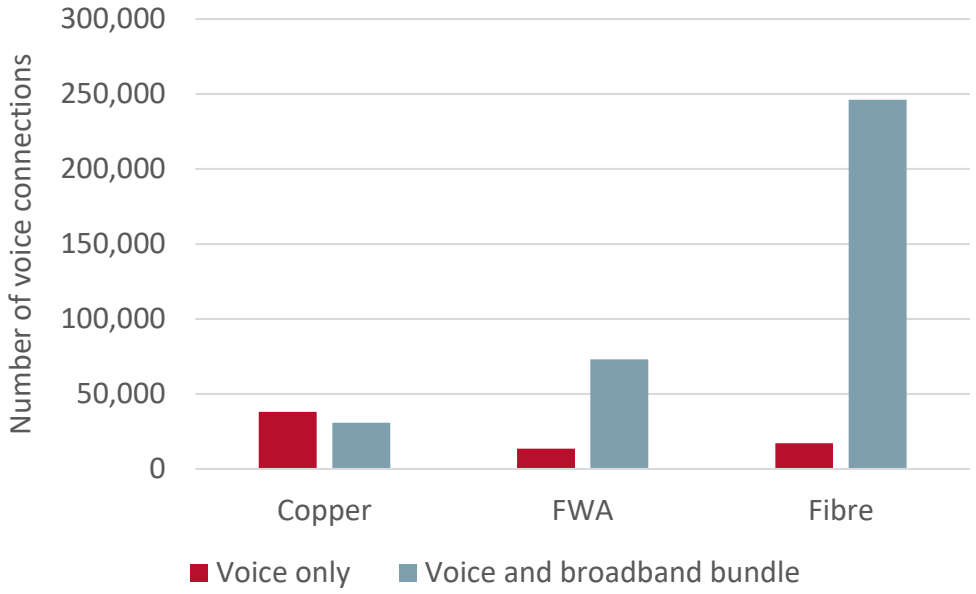



3.31 Voice only connections only represent a small proportion of the remaining urban landline connections (16%), with over half of these (56%) being copper voice only connections. The other 351,724 connections, as shown above in Figure 3.1, are part of voice / broadband bundles.[50] This is similar for urban fibre connections, with 76% of such connections naked broadband, while only 1.6% are fibre voice only connections.[51]

3.32 These remaining landline connections are provided across a range of technologies as shown in Figure 3.2 below.[52]

49 Commission data.
50 Commission data.
51 These figures exclude 126k fibre connections where we received no or unreliable data on plan type. Commission data.
52 There are 340 connections over 'other' technologies such as GEO, non-cellular fixed wireless. Commission data.

**Figure 3.2 Share of urban fixed line voice connections by major technology and plan type**




3.33 As of June 2023, only 4,000 voice connections utilised Chorus' voice anchor service, 0.95% of total urban voice connections and 1.52% of urban voice connections over fibre.[53] There are 86,583 urban voice connections over FWA (including cellular and non-cellular).[54]

3.34 By comparison, at 30 June 2023, there were 6.6m mobile connections across the country, with 10.9b mobile voice call minutes and 6.2b text messages sent during the year.[55]

*Close substitutes*

3.35 We then consider whether retail voice alternatives represent close substitutes to retail services using the regulated Voice services as an input. This involves consideration of both price and non-price performance characteristics.

3.36 Table 3.3 below summarises voice service pricing over different technologies, split by voice only or bundled with broadband, and provides the retail cost of a fibre only landline (using the regulated service as an input) for comparison.

53 There are 263k voice connections over fibre remaining. Commission data.
54 Commission data.
55 Commission 2023 AMR.

**Table 3.3 Summary of retail voice plans by technology[56]**

| Voice technology | Monthly price | NZ Landlines c/p/min | NZ Mobiles c/p/min | Notes |
|---|---|---|---|---|
| **Fibre (Voice only)** | $49 or $61 | $0.24 | $0.39 | Mercury ($49) and Spark ($61) are the only RSPs who sell a fibre voice only plan. |
| **FWA (Voice only)** | - | - | - | There are no FWA voice only plans available. |
| **Copper (Voice only)** | $65.20 | $0.24 | $0.39 | Only Spark offers this service, and only where a wireless or fibre landline is not available. |
| **Fibre (Bundled)** | From $65 | Unlimited | $0.39 | Landlines are able to be added to an existing fibre broadband connection from $10 a month. |
| **FWA (Bundled)** | From $45 | $0.24 | $0.39 | Landlines are able to be added to an existing FWA broadband connection from $10 a month. |
| **Mobile** | $8 - $90 | Free – minute caps on some plans | Free – minute caps on some plans | Mobile plans primarily offer a minute cap rather than cents per minute rates. Most mobile plans do not differentiate between calls to NZ landlines and mobiles. |

3.37 There are numerous mobile voice plans available to consumers, in a wide price range, making comparisons difficult. However, a review of mobile plans available on RSP websites indicates:

3.37.1 The average mobile plan cost is $43.83 (median $42.50), which are both lower than the next cheapest alternative, FWA (bundled), which costs from $45 before any minutes are used.

3.37.2 Both prepaid and postpaid mobile consumers are able to purchase a mobile plan for $45 or less (e.g., there is a postpaid plan for $27) which provides unlimited minutes to New Zealand and Australia mobiles and landlines.

3.37.3 In the year to June 2023, consumers in urban areas with residential landlines used 56 minutes of calling per month. There are mobile plans from $8 which contain enough minutes to meet this demand.[57]

[56] Pricing data taken from the websites of Spark, One NZ, 2degrees and Mercury on 18 July 2024. We used this data to undertake the analysis included in paragraph 3.37.

[57] Most plans offer a minimum of 100 minutes. This is nearly twice the average landline usage. Assuming calls are only to NZ landlines and mobiles, not internationally.

3.37.4 In the year to 30 June 2023, the average mobile prepaid consumer used 68 minutes monthly.[58] On alternative technologies, that usage would cost (per month) from $61.24 on FFLAS Voice, $81.52 over copper, $65 on fibre (bundled) and $61.32 on FWA.

3.37.5 In the year to 30 June 2023, the average postpaid consumer used 211 minutes monthly.[59] On alternative technologies that usage would cost (per month) from $86.98 on FFLAS voice, $115.84 over copper, $65 on fibre (bundled) and $65 on FWA.[60]

3.38 From a pricing perspective, retail voice services offered over FFLAS are comparable with voice services offered over copper and FWA.[61] However, mobile voice services largely offer better value for money than all other voice services, with much cheaper minutes to a wider range of devices (e.g., mobiles and landlines) and locations (e.g., many mobile plans include calling to Australian landlines and mobiles).

3.39 We have no voice quality data available to compare non-price performance between voice services on the different technologies. We are aware of quality concerns from some parties regarding VoIP services, but we have no data to confirm or refute that.[62] As VoIP quality is highly dependent on the stability and bandwidth of the internet connection, we expect the quality of VoIP services to differ depending on the technology used, with FFLAS based VoIP expected to provide better quality than FWA or LEO due to the technology involved.[63]

3.40 Some of the non-price performance metrics from the Bitstream PON discussion below (such as latency, latency under load and disconnections) provide some indication of voice quality, but do not provide a complete picture (for example, quality also depends on location and capacity).

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58 Commission 2023 AMR.

59 Commission 2023 AMR.

60 For our analysis in paragraphs 3.37.4 and 3.37.5, we took the cheapest monthly cost for a voice service on each technology, then multiplied the cheapest c/p/min rate (NZ national landline calling) by the average monthly mobile minutes used. This is indicative only and does not reflect actual expected cost. The fibre $65 plan includes unlimited free minutes to NZ national landlines.

61 A voice connection is available over One NZ's HFC network, with plans starting at $68 per month with a home phone connection able to be added for an additional $10. We have not included HFC in this table as it is not available for the majority of New Zealanders. One NZ website accessed 18/06/24.

62 The Rural Women NZ submission on our Copper Services Investigation Approach paper indicated possible quality issues when users had been switched off copper landlines to VoIP over Asymmetric Digital Subscriber Line (**ADSL**) connections. We note that this reasonable grounds assessment focuses on urban areas, where we would expect very few ADSL connections to remain. See Rural Women NZ "Submission on Copper Services Investigation approach paper" (22 May 2024), page 2.

63 See Bitstream PON section, in particular paragraphs 3.89 – 3.97 for discussion of performance metrics of different broadband networks.

3.41 While we outline in paragraph 3.24 that a specific kbps is not a relevant consideration for the market, we would consider a voice connection to be 24kbps or above to be in this market.[64] This means that we would expect the above-listed technologies to enable users to make and receive reliable voice calls, noting that quality will still vary between end-users.

3.42 Our view is that mobile voice provides competitive constraint on Voice services. In urban areas, mobile services are widely available (no capacity or availability constraints), there are high numbers of users, and they represent good value for money in regard to upfront and ongoing pricing. Mobile voice services can also by definition be used on the move, providing benefits and functionality the other technologies cannot provide. However, mobile voice services also have downsides, such as the need to be in service and limited battery life.

3.43 Our view is that voice services offered over the other fixed line technologies also represent economic substitutes to Voice services. There is sufficient evidence that most represent a close substitute although mobile voice provides in our view the most attractive substitute based on coverage and price.

*Consumer demand and switching behaviour*

3.44 As outlined in paragraph 3.30, consumers are switching away from landline services towards mobile services, with this trend going on for many years. The number of chargeable fixed voice call minutes has decreased 71% from 5.47b to 1.55b since 2012/13, while mobile voice call minutes has grown 127% from 4.8b to 10.9b over the same period. Landline only connections still exist across both urban and rural areas, but disproportionately remain in rural areas where there may be no mobile coverage or where households prefer a back-up connection if they are a long distance from neighbours.[65]

3.45 We do not have any further data on end-user switching behaviour between voice services, including between technologies. Were we to undertake a deregulation review, we would consider sourcing this data, potentially in the form of a representative sample, to inform such a review.[66]

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64 Adaptive Multi-Rate Wideband (AMR-WB) is a wideband extension of the Adaptive Multi-Rate codec which provides high-quality speech encoding at low bitrates. AMR-WB operates at variable bitrates from 6.6kbps to 23.85kbps and is commonly used in 3G and 4G mobile networks, as well as in VoIP and video conferencing applications. We have taken the highest bitrate as our view of a reliable voice connection. See: https://www.gsma.com/newsroom/wp-content/uploads/IR.36-v4.0-2.pdf.

65 Of the approximately 40k residential voice only connections that remain, around 35% are in rural areas, where only 13% of New Zealand's population live.

66 It is possible that this information may lead to refinement of the market definition, for example, to define a separate market for consumers who have specific characteristics that means they see a landline as a complement to a mobile voice service. However, we do not consider that concluding on any such refinement is required for the purposes of our reasonable grounds assessment.

*Competition summary*

3.46 Overall, our view is that it is probable that workable competition exists in the market for retail voice services.[67]

**Ability to exercise substantial market power**

3.47 A business has SMP when its actions are not constrained by competition. As noted above, we believe it is probable that workable competition exists in the market for retail voice services and that it is probable that regulated providers are sufficiently constrained such that they do not have SMP in relation to the regulated wholesale Voice services.

**Alignment with the purpose of the regulation – sections 162 and 166(2)(b)**

3.48 We have identified that competition exists in the market for retail voice services and that it is probable that the regulated providers have no SMP in the market for Voice services as a result. We would expect competition to continue with or without regulation of Voice services.

3.49 We now consider whether the information before us is objectively sufficient to leave us with a view that it is likely that Voice services should no longer be regulated (or should not be subject to PQ regulation) in order to promote the purpose in section 162 and, where relevant, workable competition under section 166(2)(b).

3.50 We consider that workable competition under section 166(2)(b) is relevant for our draft decision on whether there are reasonable grounds to start a deregulation review for Voice services because of the broader impact on wider markets for telecommunications services, in this case, the market for retail voice services.

3.51 Given our finding above that it is probable that workable competition exists currently in the market for retail services, our view is that we expect it is likely that workable competition in the retail voice market would continue (for the long-term benefit of end-users) with or without the regulation of Voice services.[68]

3.52 Therefore, turning to section 162, deregulation of Voice services may provide the regulated providers with some commercial flexibility and compliance cost savings which could support improved efficiency:[69]

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67 We define workable competition as "Workable competition is encapsulated by the concept of economic efficiency, which includes technical (productive) efficiency, allocative efficiency and dynamic efficiency. In a practical context, workable competition implies the existence of sufficient rivalry between firms to push prices close to efficient costs (including the cost of capital and thus a reasonable level of profit)". This is used in the Commission "Fibre Input Methodologies Final Decisions Reasons paper" (13 October 2020), at [2.216.2].

68 As per s166(2)(b).

69 As per s162(c).

3.52.1 Voice costs would be able to be removed from the regulatory asset base (**RAB**), and the voice anchor service and geographic consistent pricing obligations (for Chorus) would cease.

3.52.2 Some other compliance costs on regulated providers may reduce, such as through the removal of ID regulation for Voice services.

3.53 However, it does not automatically follow that the benefits of deregulating Voice services would outweigh the costs. Indeed, based on our experience of developing and implementing the new regime, we are concerned that net compliance costs would likely increase. This is because it would be necessary to separate voice-related costs from the FFLAS that remained regulated, as well as develop approaches to allocation of common overhead costs between regulated and unregulated services. As Voice services are provided using the same infrastructure as other FFLAS services (e.g., Bitstream PON), this would increase the complexity of regulating FFLAS. In terms of regulatory burden, we anticipate the level of cost and effort involved would be comparable to that of allocating Chorus' FFLAS costs between PQ-regulated and ID-only FFLAS. This would impact LFCs who do not currently need to allocate costs within FFLAS assets the most.

3.54 For these reasons, we anticipate a net compliance cost increase in a situation where other FFLAS (primarily bitstream products) remain regulated. Accordingly, our view is that it is likely that the purpose in section 162 would be best promoted if regulation of Voice services were to be continued in its existing form, as, due to the expected net increase in compliance costs, deregulating Voice services would likely provide:[70]

3.54.1 Little (if any) positive impact on incentives for regulated providers to innovate and invest given the legacy nature of voice services and assets shared with other bitstream products.[71]

3.54.2 Little (if any) incentives for regulated providers to improve efficiency and thus little benefit for end-users through the sharing of efficiency gains (such as lower prices).[72]

3.55 Our view is that it is probable that providers currently have no ability to extract excessive profits due to the level of competition that likely exists. Deregulation of Voice services would have no impact on this.[73]

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70 Section 162 (a – d) of the Act.
71 Contrary to s 162(a).
72 Contrary to ss 162(b) and 162(c).
73 As per s 162(d).

3.56 Therefore, for the reasons explained above, our draft decision is that there are not reasonable grounds to start a deregulation review of Voice services.

3.57 We invite views on our considerations above as we believe interested persons are well placed to input on whether it is likely that the services should no longer be regulated (or should not be regulated by PQ regulation, as the case may be) in order to promote the purpose in section 162 and workable competition under section 166(2)(b).

## Bitstream PON services

### Draft decision

3.58 Our draft decision is that there are no reasonable grounds to start a deregulation review of Bitstream PON services under section 210 of the Act.

### The market for Bitstream PON services and identification of alternatives

3.59 Bitstream PON services comprise single or multi-class point-to-multipoint fibre access services (including, but not limited to, anchor services, Bitstream services, Bitstream 2, 3, 3A, Bitstream accelerate services, 10GPON, NGPON and multicast). The different Bitstream PON services provided over these passive fibre networks (such as speeds and traffic classes) are made possible by a variety of electronic or active elements deployed by the regulated providers. This makes the fibre networks scalable.

3.60 This wide variety of Bitstream PON services are wholesaled by the regulated providers to RSPs, who use the services as inputs to supply retail services, such as broadband, voice (VoIP), and videoconferencing to residential and business end-users.

3.61 We consider the current market in which Bitstream PON services compete to comprise wholesale services which can be used to offer retail broadband services to end-users.

3.62 Demand for wholesale broadband services is derived from the demand for retail broadband services. We have considered whether the retail broadband market is one that contains services which provide end-users with a reliable broadband connection or whether any specific features (such as speed) create different (sub) markets for retail broadband services (and thus for wholesale broadband services).

3.63 For the purposes of this assessment we have used a single product market for broadband services. We have considered the main alternative of a separate market for lower speed broadband services and, as we discuss in Attachment A, do not believe that would change our conclusions.

3.64 Alternative retail broadband services are provided over non-regulated fibre networks, as well as a number of non-fibre technologies, including copper, FWA (4G or 5G), Hybrid Fibre-Coaxial (**HFC**), Geostationary Orbit satellite (**GEO**) and LEO satellite.

3.65 Our view is that these are all in the retail broadband market. For the purposes of this draft decision, we have adopted a market that is broad enough to encompass these alternatives. We note the implications if we had used a narrower market below.

3.66 The market for retail broadband services is dynamic with consumers weighing up price and performance considerations and choosing the service they believe best meets their preferences which evolve over time. This changing consumer demand ensures the supply side does not remain static, with the frequent introduction of new services, and the withdrawal or retirement of legacy services.

3.67 In terms of defining the geographic area of the market for wholesale broadband services (and thus our analysis of the downstream retail broadband market), we are looking to identify whether competitive conditions are likely to vary by areas, such as in relation to pricing.

3.68 In the case of Chorus, which is subject to PQ regulation, the requirement to charge the same price (regardless of location) for providing FFLAS that are, in effect the same, prevents it from responding to different competitive conditions that may exist in areas covered by its FFLAS network.[74]

3.69 However, the other LFCs, who are only subject to ID regulation and therefore are not required to charge the same price for providing FFLAS that are, in all material respects, the same, nevertheless typically offer uniform prices across their networks which suggests that competitive conditions are sufficiently similar that a broad geographic market across their network footprint is appropriate.[75]

3.70 We note that this consistent pricing may be due to a degree of countervailing market power from RSPs who have a strong preference for national pricing. However, our view is that the other LFCs could still vary prices to respond to localised competition where it existed, but do not do so.

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74 Telecommunications Act 2001, s 201.

75 For example, Enable offers the same price for a specific FFLAS in all parts of the Christchurch region, rather than a lower price in those specific geographic parts of Christchurch where it faces competition from One NZ's HFC network. See Enable "Enable Networks Limited UFB Services Agreement – Price List v1.15 15 July 2023"; and "Enable Indicative Price Cap Changes – August 2024".

3.71 Our view is that a single geographic market, defined by where FFLAS exists (the footprint of each of the regulated fibre networks), is likely to be appropriate for consideration of whether reasonable grounds exist to review Bitstream PON services.

**State of competition in the market**

3.72 As demand for Bitstream PON services is derived from the downstream retail broadband market, we assess competition for retail broadband services and the competitive constraint applied on retail broadband service which use Bitstream PON as an input.[76]

3.73 We consider that assessing competition in the retail broadband market requires analysis of:

3.73.1 the market structure

3.73.2 whether alternatives represent close substitutes

3.73.3 consumer demand and switching behaviour.

*Market structure*

3.74 The fibre network is a gigabit ethernet passive optical network (**GPON**), meaning that the fibre network can support up to 1Gbps speeds (without changes to the technology at the exchange and in the home). This enables price discrimination via 'throttling' (taking deliberate action to slow down a connection), as in effect every end-user connected to the fibre network has a 1Gbps connection. The network operator can thus 'dip into' parts of the market and offer different speed tiers in the knowledge that the cost to provide different tiers is minimal. This means they can increase quality without incurring significant cost, allowing them to easily compete at speed tiers up to 1Gbps.[77]

[76] No retail alternatives rely on Bitstream PON services, however as noted in the Transport section, FWA services (including FWA broadband services) often rely on regulated Transport services (mobile access) for delivery.

[77] For example, in late 2021 Chorus, Enable and Tuatahi upgraded the speeds of some of their plans for free, resulting, in some cases, in a five-fold increase in speeds. Chorus 'What is the Big Fibre Boost?'; Enable 'Speed upgrade'; and Tuatahi 'Broadband speed set to triple by Christmas for Tuatahi First Fibre customers'.

3.75 By contrast, FWA broadband plans are essentially full-speed (sometimes subject to throttling after a data cap is reached). MBNZ shows average 'full-speed' performance of 4G FWA in urban areas is 38Mbps download (peak time speed), significantly less than 1Gbps possible over the existing fibre network and the 309 Mbps (peak time speed) delivered by the most popular Fibre 300 plan.[78] Performance improvement for FWA is costly, requiring more sites, more spectrum, or the next generation of technology.

3.76 Similarly, HFC services are a full-speed service, with the network capable of 1Gbps like the fibre network. However, like FWA, the speed an end-user experiences is impacted by the number of other users on the network. Improving performance may require an increase in capacity through additional network loops and an upgrade to technology at the exchange and user premises (to obtain speeds over 1Gbps).

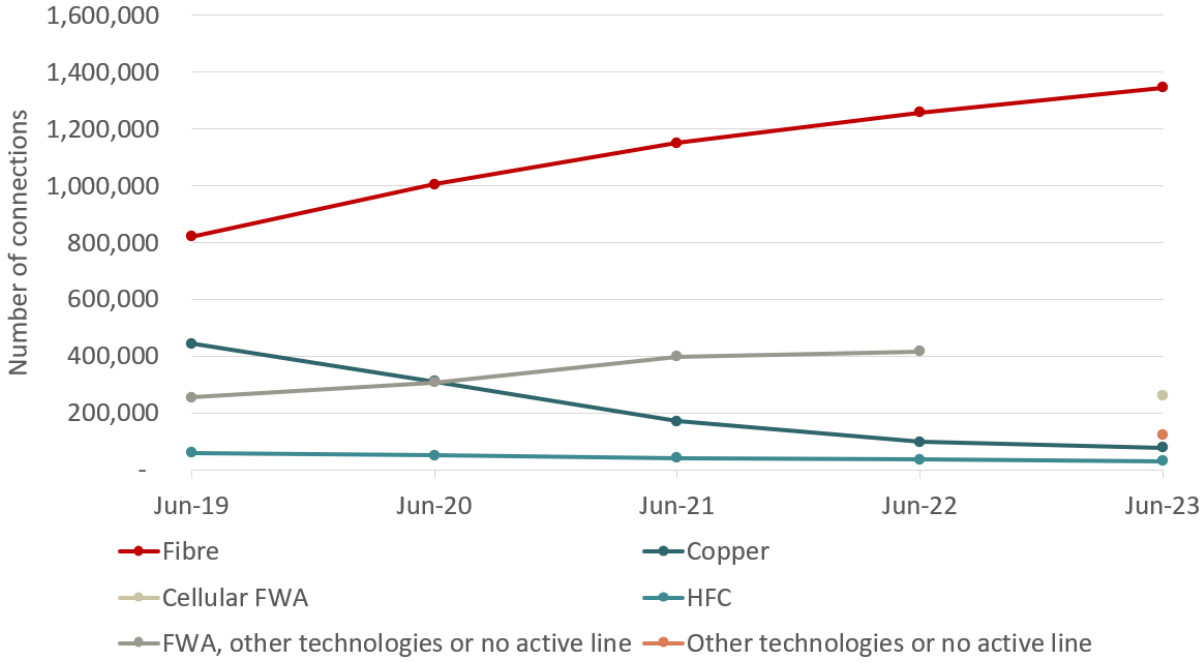
3.77 Satellite broadband services (both GEO and LEO) also suffer from degraded performance as user numbers increase (congestion), with barriers to improved performance even higher for this technology, requiring additional satellites. GEO and LEO service plans vary in speed and data caps, with maximum speeds limited by the nature of the technology (orbit distance, with LEO able to provide faster speeds).

3.78 As a result of these differences in underlying technology, aside from the bitstream anchor service (100Mbps), regulated providers are free to price discriminate across their Bitstream PON services. For example, Chorus has chosen to offer Fibre50 Home Starter, a 50Mbps service with a maximum retail price, to compete with 4G FWA.

3.79 Our latest AMR highlights the market share by retail broadband technology, including how it has changed over time. This is illustrated in Figure 3.3 below.

[78] Note this 4G result was from a sample size smaller than that typically included in reporting (24). Commerce Commission and SamKnows "Measuring Broadband New Zealand – Report 20 – June 2024" (25 June 2024).

**Figure 3.3 Urban fixed line broadband connections by technology[79]**




3.80 As at 30 June 2023, an estimated 73.2% of urban broadband connections are over fibre, with FWA (14.3%), copper (4.2%), HFC (1.7%) and other technology or no active line (6.6%) making up the rest.

3.81 84% of urban fibre consumers have a plan providing 300Mbps or faster, with Fibre 300 by far the most popular plan, accounting for 57% of fibre connections and 44% of all urban broadband connections.[80]

3.82 Chorus supplies 73% of the 1.3m wholesale fibre connections across the country, with Tuatahi (14%), Enable (11%) and Northpower (2%) supplying the rest.[81] We note that 6,248 addresses in New Zealand (0.27% of total addresses) have access to a fibre network from more than one LFC.[82]

3.83 The market share of fibre broadband within each of the regulated provider's network boundaries is 75% or higher.[83] Were we to define a narrower market (as discussed in paragraph 3.65), we would expect fibre shares to be even higher.

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79 This is Commission data and only includes urban connections. The percentages differ slightly from the 2023 AMR as we have included other technologies and no active line in our figures. Prior to 2023 data, we were unable to split FWA between urban and rural, hence the lack of data from 2020 – 2022. As a whole, based on our previous AMRs, FWA across the country increased from 191k connections in June 2019 to 315k connections in June 2022.

80 Commission data.

81 Commission data.

82 Commission data.

83 Market share is calculated as the sum of fibre broadband connections in each regulated provider's area (in all cases provided by multiple regulated providers), as a proportion of total fixed broadband connections in each regulated provider's area. Commission data – June 2023.

3.84 Copper broadband services, as of June 2023, represent only 4% of broadband connections in urban areas.[84] Chorus has stated its plans to have fully withdrawn copper services in fibre areas by the end of 2026.[85] With declining use and planned withdrawal, competition provided by the copper network, along with any competitive constraint it applies on Bitstream PON services, will reduce.[86] We therefore do not consider that copper services provide any competitive constraint on Bitstream PON based retail fibre services, either now or in the future.

3.85 Cellular FWA services represent 14% of urban broadband connections (residential and business), with cellular FWA (primarily 4G FWA) services available to 99.6% of urban households.[87] Commission data shows that fixed wireless connections nationwide continue to grow but we disagree with Enable and Tuatahi's claim that FWA has steadily increased its share of broadband connections at the expense of fibre services.[88] Both the table in their submission and Figure 3.3 above highlight that fibre and FWA connections are both rising, seemingly at the expense of copper and HFC connections.

3.86 24% of urban households are within 5G coverage of one or more Mobile Network Operators (**MNO**), and there are an estimated 7,000 urban 5G connections (residential and business).[89] Looking forward, we expect this to grow, offering faster speeds and lower latency than 4G FWA as 5G coverage increases.[90]

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84 Many RSPs are also making commercial decisions to not offer copper broadband services for sale. Commission data.

85 Chorus 'Chorus delivers solid full-year result as Kiwis continue to favour fibre broadband' (21 August 2023).

86 We note that this is particularly important for the other LFCs as one of the reasons they are subject to ID regulation only is that they faced different competitive conditions, in particular that they compete against Chorus' copper network. Given the reduction in copper connections in areas served by the other LFCs down to low numbers, it appears that the threat of competition by copper may not have been as strong as had been expected. Cabinet paper "Review of the Telecommunications Act 2001: Final policy decisions for fixed line communications services" (7 December 2016), Annex paragraph 25.

87 Commission 2023 AMR. We note the difference with the 2023 AMR (which puts cellular FWA at 15% of urban retail connections) because, as we have included time series data, we have included other technologies and no active connections in our figures and graphs.

88 In this context, fixed wireless includes non-cellular fixed wireless, cellular fixed wireless and satellite (GEO and LEO) connections. Data from Commission 2023 AMR. Enable and Tuatahi "Submission on deregulation draft assessment framework" (16 February 2024), at (8.4).

89 Commission data.

90 The Tech Users Association of New Zealand states on its website that 5G could be up to 100 times faster than previous networks, while Spark 'Spark delivers New Zealand's first 5G commercial wireless broadband into five heartland communities' (28 November 2019) and One NZ 'Fast without the fuss: Vodafone NZ launches 5G Broadband for easy and reliable internet in homes and businesses' (22 February 2021) have commented that 5G compares well with other broadband technologies such as Fibre.

3.87 HFC broadband services are available to 12% of urban households (the HFC network is only present in areas of Christchurch, Wellington and Kapiti), and 1.7% of urban homes and businesses are connected using HFC.[91] However, like copper, the number of HFC connections is declining, with an 11% fall to 32,000 connections in the year to 30 June 2023.[92]

3.88 Nationwide, the number of satellite connections (GEO and LEO) was up from 12,000 at June 2022 to around 37,000 at June 2023. This significant growth over 12 months follows the entry of Starlink to the New Zealand market. Most of this growth is in LEO satellite connections and concentrated outside of urban areas.[93]

*Close substitutes*

3.89 We have adopted a market that is broad enough to encompass these alternatives.[94] Some of these alternatives may be closer or more distant substitutes and are thus likely to pose more or less of a competitive constraint than others.

3.90 Table 3.4 below illustrates price and non-price data regarding retail broadband services offered over different technologies and plans, sourced from various providers' websites and from the MBNZ June 2024 report.[95]

**Table 3.4 Retail broadband plans by technology (plans with unlimited data)[96]**

| Technology | Monthly price | Speed (down/up) (Mbps) | Latency[97] | Latency under load (down) | Customer premises equipment (CPE) |
|---|---|---|---|---|---|
| **4G FWA** | $60 - $99 | 38 / 23 | 53ms | 358ms | Included or $150 |
| **5G FWA** | $79 - $80 | 329 / 49[98] | - | - | Included or $150 |

91 Commission data.
92 Commission 2023 AMR.
93 Around 8% of the total satellite connections (3000) are in urban areas. Commission data.
94 Even with this broad market definition, FFLAS-based broadband services have a relatively high market share. The remaining market share are connections to alternatives, some of which are limited to the lower-speed end of the market. If the market was defined more narrowly, fibre's market share would be higher still.
95 MBNZ report 20 (June 2024).
96 Table 3.4 summarises the retail prices of broadband plans offered by a selection of retail providers (Spark, One NZ, 2degrees, Slingshot, and Starlink) using differing technologies. Where possible we have used urban peak time data. All the plans summarised in Table 3.4 include unlimited monthly data. A number of plans include modems (typically on a 12-month contract) or a modem monthly rental (which are included in the retail monthly prices), or offer a modem for a one-off charge and no fixed-term contract. Source: Spark, One NZ, 2degrees, Slingshot, and Starlink websites (accessed 18 July 2024). Table 3.4 also utilises non-price data from the June 2024 MBNZ report. We have excluded copper due to the planned withdrawal of the copper network.
97 A lower latency figure is better.
98 The June 2024 report is the first time MBNZ has reported on 5G speed. These figures relate to Spark's Max Wireless 5G plan during peak hours.

| Technology | Monthly price | Speed (down/up) (Mbps) | Latency[97] | Latency under load (down) | Customer premises equipment (CPE) |
|---|---|---|---|---|---|
| **GEO** | $109 - $149 | 50 / 10[99] | - | - | Depends on plan length – can be high (up to $2000) |
| **LEO** | $79 - $159 | 186 / 32 | 32ms | 40ms | $599 |
| **HFC** | $68 | 914 / 102 | 12ms | 44ms | Included |
| **Fibre 50** | $59 - $81 | 52[100] | 9ms | 57ms | Included or $150 |
| **Fibre 300** | $77 - $93 | 309 / 107 | 10ms | 42ms | Included or $150 |
| **Fibre Max** | $89 - $106 | 866 / 480 | 9ms | 21ms | Included or $150 |

3.91 This data highlights that, while prices of alternatives may appear comparable, often non-price performance characteristics do not compare well to the fibre plans. For example, 4G FWA plans are similarly priced to Fibre 50 plans, but offer slower speeds and worse latency, and while HFC compares favourably to Fibre Max on price and download speed, it suffers a much lower upload speed.

3.92 GEO compares poorly with fibre across all characteristics, and while LEO compares favourably with Fibre 300 for download speed, it has higher latency and high upfront CPE costs.[101]

3.93 Three of the five performance measures from the MBNZ report show that retail fibre services (in particular Fibre 300) outperform alternatives:[102]

3.93.1 Median daily disconnection rates (urban areas): Fibre 300 (0.08/day) is better than HFC (0.4/day),[103] and materially better than LEO satellite (3.3/day).

99 MBNZ does not capture information on GEO service. This data comes from Gravity NZ and should be used as an indication of GEO speed only.

100 Average upload speeds for Fibre 50 were not included in the MBNZ report due to different upload allocations across LFCs. There were not enough Whiteboxes on Fibre 50 to split upload results by LFC. The sample size of Fibre 50 plans is 16, lower than typically reported on.

101 We note recent reports regarding the introduction of Starlink Mini, a smaller CPE which would come with a lower cost to the consumer.

102 MBNZ Report 20 (June 2024).

103 Note this result was from a sample of only 23, however similar figures for Australia and the United States were consistent in that HFC had a higher number of median daily disconnections.

3.93.2 Average upload speed: Fibre 300 significantly outperforms all competing technologies (at least three times the average upload speed) except for HFC which performed similarly.

3.93.3 Average latency: Fibre plans outperformed (9 to 10m/s) all competing technologies in urban areas (12m/s to 53m/s).

3.94 There are two performance measures where alternatives provide comparable levels of performance with broadband services provided via Bitstream PON services:

3.94.1 Average download speeds: HFC (914Mbps) outperforms Fibre 300 (309Mbps) with respect to download speeds.

3.94.2 Average latency under load (down): HFC (44m/s) and LEO satellite (40 m/s) compare with Fibre 300 (42m/s) with respect to latency under load (and all significantly outperform 4G FWA (358m/s)).

*Consumer demand and switching behaviour*

3.95 We do not have detailed data on end-user switching behaviour between broadband technologies. Were we to undertake a deregulation review, we would consider sourcing this data, potentially in the form of a representative sample such as via data collection for the Customer Satisfaction Monitoring (**CSM**) report, to inform such a review.

3.96 As noted in paragraph 3.5, Fibre 300 remains the most popular fibre plan (two-thirds of total residential fibre connections)[104] with this share increasing from 48% to 57% for all urban broadband connections.[105] Further, as noted in paragraph 3.7, the overall trend is towards faster plans, with just over one in four fibre consumers now on a fibre plan above 300Mbps.[106]

3.97 Consistent with this, our CSM report (done every six months),[107] highlights that 70% of consumers who switched broadband plans (staying with the same provider) indicated a key reason for doing so was for faster speed (35%) or for a lower price for similar plan inclusions (35%).[108] 52% of younger consumers were likely to switch for faster speeds.

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104 Chorus "FY23 Investor Presentation" (21 August 2023), see slide 8.

105 Commission 2023 AMR.

106 26.8% of fibre plans are on speeds above 300Mbps at June 2023. Commission data.

107 Commerce Commission 'Customer Satisfaction Monitoring – Telco SAT tracking – 6 Monthly report' (December 2023), at slide 17 and 19. Note this is from a sample of 361 consumers who switched broadband plan between July 2023 and December 2023.

108 We have interpreted "lower price for similar plan inclusions" to mean the same or similar speed connection. There was a separate "lower price for less plan inclusions" option respondents could select

*Competition summary*

3.98 As discussed in paragraph 3.84, the copper network is being withdrawn so presents a diminishing current level of constraint and no competitive constraint on Bitstream PON services in the future.

3.99 While HFC compares well across price and non-price performance characteristics, because it is only available in a very limited area (in an area where two LFCs have fibre networks), and because its market share is decreasing, we do not consider it to provide a strong competitive constraint on Bitstream PON services.

3.100 As 4G FWA offers similar download speeds and lower priced plans to lower speed fibre plans, any constraint from 4G FWA is concentrated at the lower speed end of the market. However, it suffers from greater degradation during peak hours, as well as higher latency than fibre services. Capacity constraints of FWA may limit their ability to provide strong competitive constraints on Bitstream PON services, but capacity can be managed through investment by providers. Commission data shows that a number of stop sells currently exist on mobile towers in urban areas, indicating capacity is currently an issue in some locations.[109] Our view is that any competitive constraint offered by 4G FWA is limited.

3.101 5G FWA coverage is currently limited,[110] but is expected to offer higher speed (comparable to the most popular fibre plan, Fibre 300), and lower latency wireless broadband services in the future. 5G networks may be lightly loaded in the early stages of deployment, and speeds may appear high for early adopters, but may degrade as more users are added due to the shared nature of the networks (as is seen in 5G rollouts internationally).[111] However, as with 4G FWA, 5G providers do have the ability to invest in capacity if they choose, so this is not a hard limitation on the effectiveness of 5G as a competitive constraint. Our view is that the roll out of 5G FWA may increase the competitive constraint on Bitstream PON services, although the deployment remains in its early stages and the future competitive effect remains uncertain at this stage.

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which would be appropriate if they downgraded speed. Consumers surveyed were able to put down multiple key reasons for switching broadband plans so the figures in the report sum to over 100%. The results are similar for consumers switching plans between broadband providers, with 38% of such consumers (sample size 244) indicating they switched for a lower price for similar plan inclusions and 21% indicating faster speeds was one reason for the switch.

109 'Stop sells' are where an RSP will not sell a service to new consumers. In this case it is where consumers who may be able to access FWA delivered via a specific mobile tower cannot purchase such a service as there is not enough capacity at that site.

110 A report from Opensignal in October 2023 indicated that their users with a 5G device and a 5G subscription had an active 5G connection between 5.5-7.7% of the time in New Zealand.

111 'Are 5G Networks Meeting Consumers' Expectations?' Ookla Insights Articles, February 2023.

3.102 We note that we do not have any detailed information regarding the switching of consumers between FWA and fibre plans. Such information would indicate the degree to which consumers see FWA plans now (and in the future with 5G) as viable alternatives to comparable fibre plans to meet their needs. We invite any quantitative evidence on this point in submissions.

3.103 Our view is that GEO satellite based broadband services only realistically represent a valid option for consumers in remote areas, who have no/few alternatives. Our view is GEO satellite based broadband places little competitive constraint on Bitstream PON services.

3.104 LEO satellite delivers download speeds slower than the most popular fibre plan (Fibre 300) and suffers materially worse median disconnection rates which can impact core broadband uses such as video calls and meetings. It also suffers from performance degradation issues as more users join and has significantly higher upfront and ongoing costs relative to comparable FFLAS based products. In practice, it has proved more popular in rural areas where uptake has been concentrated. Only roughly one in 14 Starlink connections are in urban areas.[112] Due to this, we are of the view that LEO likely only provides a limited competitive constraint on Bitstream PON services.

3.105 Critically, if a material number of consumers were to shift off of retail fibre services to alternatives such as FWA, capacity issues would likely result. Service quality would degrade for both new and existing users, providing them with a quality of service below (or in the case of high-speed fibre plans significantly below), what they previously experienced. Users may not even be able to switch if capacity issues were significant. As noted in paragraph 3.101, this is a possibility for 5G FWA as it expands further. Similarly, satellite services would not support a sudden increase in users, with the same capacity issues present.

3.106 For these reasons, our view is that competitive constraints on Bitstream PON services are currently limited. Fibre's share of connections in urban areas continues to increase, while others (e.g., copper and HFC) decline, reinforced by the growing trend in consumer demand for faster speeds and more bandwidth. The alternatives, while representing a range of different price points and performance characteristics, are not all close substitutes for Bitstream PON services and are subject to capacity constraints. As a result, they are only likely to provide a limited competitive constraint.

[112] As of 30 June 2023 2,489 of the 35,364 Starlink connections nationally were in urban areas. Commission data.

**Ability to exercise substantial market power**

3.107 In our view, it is probable that there is little competitive constraint on the ability of regulated providers to exercise SMP in relation to Bitstream PON services.

3.108 As referred to in paragraph 3.74, with the regulated fibre networks being GPON networks, there is little cost in changing the speeds of fibre plans to compete with services offered over other technologies.

3.109 For example, 4G FWA emerged and grew quickly in response to consumer demand for performance and price at the lower end of the retail broadband market. Chorus responded by offering a Home Fibre Starter 50 plan which currently offers 50/10Mbps with a standard wholesale price of $50.43 per month.[113] Chorus has reduced the wholesale price to $35 per month if the RSP's retail price is no more than $60 per month.

3.110 Tuatahi (September 2022) and Enable (September 2023) introduced a similar service, a 50/10 "fibre starter" service at a wholesale price of $38, with a condition the retail price could not exceed $60.[114]

3.111 These discounted services provide a fibre service at a retail price point equivalent to 4G FWA, but with better non-price performance characteristics. They highlight how the regulated providers are able to adjust service offerings in order to compete with other technologies which already operate at full-speed.[115]

3.112 Figure 3.4 below highlights the speed differences between different fibre broadband plans and some alternatives in urban areas. Fibre 50 offers a service similar to 4G FWA, as seen by the near overlapping lines (blue and red).[116]

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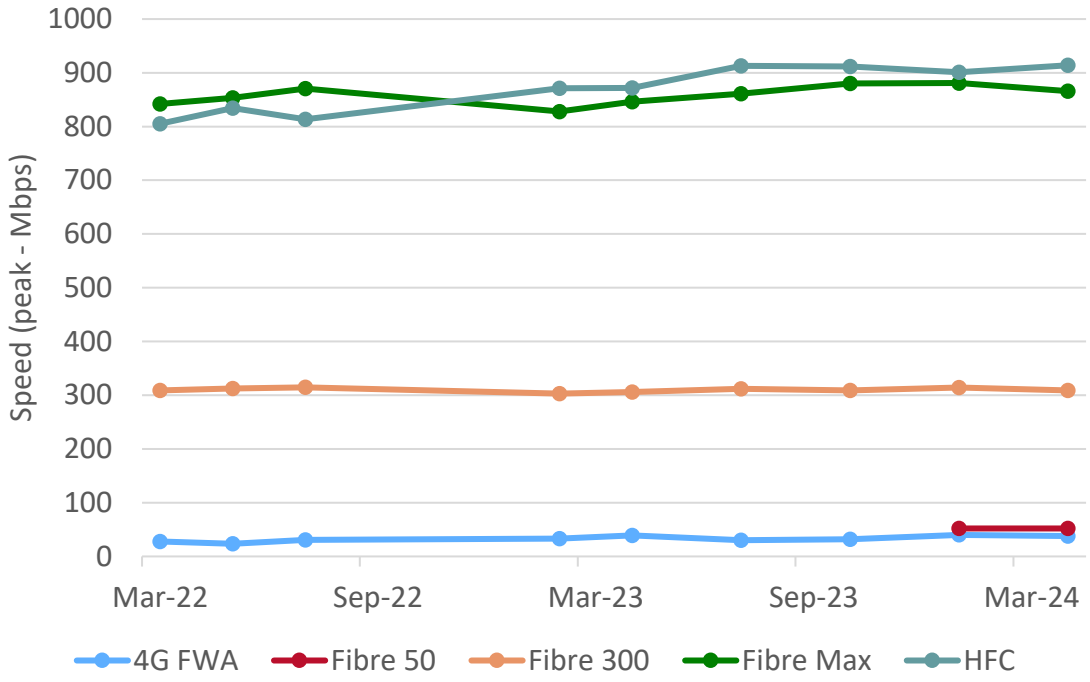
113 See Chorus website.

114 See Tuatahi and Enable websites.

115 The late 2021 free speed upgrade referenced earlier in the paper is another example of this. In that case, Chorus, Enable and Tuatahi upgraded the speeds of some of their plans for free, resulting, in some cases, in a five-fold increase in speeds.

116 The MBNZ report has only started reporting on Fibre 50 in the last two reports. It should be noted that these results come from a small sample size (17 and 16 respectively).

**Figure 3.4 Average urban download speed (peak) of different retail broadband services[117]**




**Alignment with the purpose of the regulation – sections 162 and 166(2)(b)**

3.113 We have considered whether the information before us is objectively sufficient to leave us with a view that it is likely that Bitstream PON services should no longer be regulated (or should not be subject to PQ regulation) in order to promote the purpose in section 162 and, where relevant, workable competition under section 166(2)(b).

3.114 We consider that workable competition under section 166(2)(b) is relevant for our draft decision on whether there are reasonable grounds to start a deregulation review for Bitstream PON services because of the broader impact on wider markets for telecommunications services, in particular the retail broadband market.

3.115 In light of the above discussion regarding competition in the retail broadband market and the ability of regulated providers to exercise SMP, our view is that it is likely that the purpose in section 162 would be best met if regulation of Bitstream PON services were to be continued in its existing form.[118]

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117 MBNZ data.

118 The revenue cap and expenditure scrutiny under PQ regulation means that Chorus is limited in its ability to extract excessive profits (s 162(d)). The removal of PQ regulation would remove the revenue cap and would mean that Chorus could lift its expected profitability over the long-term, and/or reduce quality, where insufficient competition existed. Similarly, the benefits to end-users of ID regulation, primarily that sufficient information is available to assess whether the purpose of Part 6 is being met, remain while the regulated providers hold SMP.

3.116 Workable competition in wider telecommunications markets would also be impacted (namely the retail broadband market). As Bitstream PON services are used by RSPs to provide retail broadband services to end-users, the ability of LFCs to exercise SMP over the wholesale Bitstream PON services would likely impact services offered by RSPs in that market. Competition in the retail broadband market may be impacted as a result, limiting workable competition for the long-term benefit of end-users. As such, our view is that it is likely that the purpose in section 166(2)(b) would be best met if regulation of Bitstream PON services were to be continued in its existing form.

3.117 Therefore, our draft decision is that there are no reasonable grounds to start a deregulation review of Bitstream PON services.

## Point-to-point services

### Draft decision

3.118 Our draft decision is that there are no reasonable grounds to start a deregulation review of Point-to-point services under section 210 of the Act.

### The market for Point-to-point services and identification of alternatives

3.119 Point-to-point services comprise single, multi-class or layer 1 point-to-point fibre access services (including, but not limited to, Bitstream 4, enhanced Bitstream 4, High-Speed Network Services, Bandwidth Fibre and Direct Fibre (DFAS)).

3.120 Point-to-point services are wholesale services supplied by the regulated providers to RSPs, who use the services to provide dedicated high-speed retail broadband services, primarily to business end-users.

3.121 Point-to-point services are primarily high grade bitstream or dark fibre, and offer secure, flexible and customisable (in the case of DFAS) options to meet large and/or complex broadband needs.

3.122 We consider the current market in which Point-to-point services compete, to comprise wholesale services that can be used to offer retail point-to-point services.

3.123 Demand for wholesale point-to-point services are derived from the demand for retail point-to-point services. We consider this retail market comprises services which can provide end-users with dedicated, tailored connectivity capable of supporting large and/or complex business end-users.

3.124 Our view is that commercial fibre networks offering point-to-point services, where they exist, are in the retail point-to-point market.

3.125 We understand particular variants of Digital Microwave Radio (**DMR**) services, under certain conditions, can offer connectivity similar to Point-to-point services, and are therefore assessed to be in the same market.

3.126 Alternative point-to-point fibre services are offered commercially in geographic pockets of New Zealand (e.g., Vector in Auckland and Network Tasman in the Tasman region). However, these pockets are limited and isolated. Our expectation is that in these areas, the regulated providers still hold significant market shares (via the regulated wholesale services), limiting the effectiveness of any alternatives to provide a genuine competitive constraint.[119] We do not see a benefit in defining a separate geographic market for Point-to-point services, and instead believe a single market where regulated FFLAS exists (the footprint of each of the four regulated fibre networks) is most appropriate.

**State of competition in the market**

3.127 As demand for Point-to-point services is derived from the downstream retail point-to-point market, we assess competition for retail point-to-point services and the competitive constraint applied to retail point-to-point services which use the regulated wholesale service as an input.[120]

3.128 We consider that assessing competition in the retail point-to-point market requires analysis of:

3.128.1 the market structure

3.128.2 whether alternatives represent close substitutes

3.128.3 consumer demand and switching behaviour.

*Market structure and close substitutes*

3.129 The regulated providers can augment their point-to-multi-point access networks to deliver Point-to-point services. This is achieved through the use of the existing infrastructure (e.g. ducts) supporting Bitstream PON services. This approach means Point-to-point services can be widely deployed at relatively low cost.

[119] A benefit of regulation is that it can often allow markets to develop by providing access to input services.

[120] No retail alternatives rely on Point-to-point services, however as noted in the Transport section, FWA services often rely on regulated Transport services (mobile access) for delivery.

3.130 Where FFLAS networks exist alongside each other (e.g., where the Chorus network overlaps with one of the other LFCs networks), we expect some competition does exist. However, for the purposes of this reasonable grounds assessment, our view is that this is a weak competitive constraint due to the small number of situations where it occurs (as stated in paragraph 3.82, only 0.27% of NZ addresses can get a fibre connection from two LFCs).

3.131 As described in paragraph 3.125, DMR is the only non-fibre technology we are aware of that provides a dedicated point-to-point connection between the end-user and the exchange. DMR requires clear line of sight between a provider tower and the end-user premises, and typically has a high upfront cost due to the need to install equipment on both the tower and at the consumer's premises. Expanding DMR (i.e., to provide services to more end-users) would likely require significant investment, with the additional cost of sites, towers and spectrum considerable.

3.132 We know of several providers of DMR point-to-point services across the country, but we have limited data on the services they provide. Full Flavour, for example, offers a dedicated 'air fibre' broadband service via DMR to locations which have line-of-sight to one of their towers in the central north Island region. We note they advertise this as a rural broadband service, focusing on those outside urban areas. Full Flavour offer unlimited 100Mbps or 1Gbps, with a minimum $11,500 installation fee. Additional fees may be included on-top where third-party rental is required.[121]

3.133 The only other source of competition comes from commercial fibre providers who also offer point-to-point fibre services.

3.134 There are four such providers we know about:

3.134.1 **Vector** in the Auckland region

3.134.2 **Vital** in the Wellington region

3.134.3 **Network Tasman** in the Nelson/Tasman region

3.134.4 **EA Networks** around Ashburton.

3.135 These providers are of varying size and we have limited data regarding the impact of these networks on competition. However, it does not appear that, for example, Chorus pricing in Auckland is constrained by the presence of Vector.

[121] Information from Full Flavour website noting the 1Gbps service does indicate installation cost. Accessed on 29/07/24.

3.136 These providers have a limited geographic footprint which does not overlap with one of the other LFC's footprints.

3.137 Were we to expand our market definition to include non-dedicated broadband services, we would be considering a similar market to that described above for Bitstream PON services. Our view would likely be that any competitive constraint from wider non-dedicated broadband technologies would be even more limited in regard to Point-to-point services, with only high-speed services capable of competing. As discussed above in the Bitstream PON analysis, only fibre services currently offer those speeds reliably. A wider market would include services which are not able to provide other characteristics an access seeker may look for in a point-to-point network, such as committed information rate and a secure connection.

*Consumer demand and switching behaviour*

3.138 We do not have any data on end-user switching behaviour between retail point-to-point services. Were we to undertake a deregulation review, we would consider sourcing this data, potentially in the form of a representative sample, to inform such a review.

*Competition summary*

3.139 Our view is that it is probable that there is limited competitive constraint on Point-to-point services. This is primarily because, as we have discussed above:

3.139.1 there are limited alternatives, and where one exists (DMR) it has high upfront costs

3.139.2 the regulated provider networks do not overlap significantly

3.139.3 Chorus is the only LFC who faces small pockets of limited competition from non-regulated providers.

**Ability to exercise substantial market power**

3.140 In our view, it is probable that there is little competitive constraint on the ability of regulated providers to exercise SMP in relation to Point-to-point services.

**Alignment with the purpose of the regulation – sections 162 and 166(2)(b)**

3.141 We have considered whether the information before us is objectively sufficient to leave us with a view that it is likely that Point-to-point services should no longer be regulated (or should not be subject to PQ regulation) in order to promote the purpose in section 162 and, where relevant, workable competition under section 166(2)(b).

3.142 We do not consider that workable competition under section 166(2)(b) is relevant for our draft decision on whether there are reasonable grounds to start a deregulation review for Point-to-point services. Point-to point services (as we have outlined in paragraphs 3.120 and 3.121) are specific high-speed, secure services which do not compete with non-dedicated broadband services, meaning their impact on competition in the wider retail broadband market is at most, minimal.

3.143 In light of the above discussion regarding competition in the market for retail point-to-point services and the ability of regulated providers to exercise SMP, our view is that it is likely that the purpose in section 162 would be best met if regulation of Point-to-point services were to be continued in its existing form.

3.144 The limited competitive constraint on the regulated services means there is the potential, were there no regulation, for SMP to be exercised by regulated providers in the longer term. This means that regulation is needed to provide long-term benefit for end-users consistent with outcomes produced in workably competitive markets, in particular:

3.144.1 regulated providers allowing end-users to share the benefits of efficiency gains, as set out in section 162(c)

3.144.2 regulated providers being limited in their ability to extract excessive profits, as set out in section 162(d).

3.145 Therefore, our draft decision is that there are no reasonable grounds to start a deregulation review of Point-to-point services.

## Unbundled PON services

### Draft decision

3.146 Our draft decision is that there are no reasonable grounds to start a deregulation review of Unbundled PON services under section 210 of the Act.

### The market for Unbundled PON services and identification of alternatives

3.147 Unbundled PON services include wholesale point-to-multipoint layer 1 fibre access services that, when combined with Co-location services, allow RSPs to use their own electronics with the regulated providers' underlying point-to-multipoint access network. Unbundled PON services are intended to drive downstream competition with the regulated providers' bitstream services.

3.148 We consider the current market, in which Unbundled PON services compete, to comprise services that allow RSPs to use their own equipment in conjunction with a high-speed access network to compete with the regulated providers' wholesale bitstream services.

3.149 Our view is that commercial point-to-multipoint fibre networks offering layer 1 services, where they exist, are in the same market as Unbundled PON services.

3.150 Alternative downstream retail broadband services, such as 4G FWA, may provide an indirect competitive constraint on Unbundled PON services, and should be considered in the same market as retail services that can be supplied using Unbundled PON services.

3.151 Similar to the approach taken for Point-to-point and Bitstream PON services, our view is that there is no benefit to defining multiple geographic markets for Unbundled PON services. While commercial fibre networks exist in pockets of New Zealand, these pockets are limited and isolated. Our view is that even in these areas, the regulated providers would capture a significant share of the market, limiting the effectiveness of any present alternatives at providing a genuine competitive constraint.

**State of competition in the market**

3.152 We consider that assessing competition in the market in which Unbundled PON services are supplied requires analysis of:[122]

3.152.1 the market structure

3.152.2 whether alternatives represent close substitutes

3.152.3 consumer demand and switching behaviour.

*Market structure and close substitutes*

3.153 At a wholesale level, we are aware that uptake of Unbundled PON services is limited, with Enable and Tuatahi stating in their submission on our draft assessment framework paper that no RSP has taken them up on their Unbundled PON service offerings since the start of 2020.[123, 124]

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122 No retail alternatives rely on Unbundled PON services, however as noted in the Transport section, FWA services often rely on regulated Transport services (mobile access) for delivery.

123 Enable and Tuatahi "Submission on deregulation draft assessment framework" (16 February 2024), at [9.16].

124 We note the previous complaints raised by RSPs, for example by Vector, against the reference offers for the unbundled point-to-multi-point service (PONFAS) from the regulated providers, and refer to the Commission's decision to not progress the investigation. See letter to Chorus "Chorus Limited PONFAS Investigation" (28 April 2023).

3.154 FWA represents a similar option for RSPs, but the difference in end-user experience across the different technologies indicates they are not close substitutes for each other. The performance differences and degradation that occurs as more users connect to FWA provides a different experience as opposed to services provided via FFLAS. Our view is therefore that, at a wholesale level, competitive constraint is limited.

3.155 As the downstream retail market for Unbundled PON services reflects elements of the downstream retail markets defined for both Bitstream PON and Point-to-point services above, the analysis completed for those services applies here too.

3.156 This previous analysis indicates that despite there being a range of alternatives available in the retail market, the collective competitive constraint these provided on the relevant FFLAS was limited.

*Consumer demand and switching behaviour*

3.157 We do not have any data on end-user switching behaviour between Unbundled PON services. Were we to undertake a deregulation review, we would consider sourcing this data, potentially in the form of a representative sample, to inform such a review.

*Competition summary*

3.158 Our view is that it is probable that there are limited competitive constraints on Unbundled PON services.

**Ability to exercise substantial market power**

3.159 In our view, it is probable that there is little competitive constraint on the ability of regulated providers to exercise SMP in relation to Unbundled PON services.

**Alignment with the purpose of the regulation – sections 162 and 166(2)(b)**

3.160 We have considered whether the information before us is objectively sufficient to leave us with a view that it is likely that Unbundled PON services should no longer be regulated (or should not be subject to PQ regulation) in order to promote the purpose in section 162 and, where relevant, workable competition under section 166(2)(b).

3.161 We consider that workable competition under section 166(2)(b) is relevant for our draft decision on whether there are reasonable grounds to start a deregulation review for Unbundled PON services because of the impact regulation of this market can have on other markets, such as the retail broadband market. As discussed in paragraph 3.147, Unbundled PON services allow RSPs to provide their own bitstream services, competing with regulated provider bitstream products.

3.162 In light of the above discussion regarding competition in the market for Unbundled PON services and the ability of regulated providers to exercise SMP, our view is that it is likely that the purpose in section 162 would be best met if regulation of Unbundled PON services were to be continued in its existing form.

3.163 The limited competitive constraint on the regulated services means there is the potential, were there no regulation, for SMP to be exercised by regulated providers. This would not provide long-term benefit for end-users consistent with outcomes produced in workably competitive markets, in particular:

3.163.1 regulated providers allowing end-users to share the benefits of efficiency gains, as set out in section 162(c)

3.163.2 regulated providers being limited in their ability to extract excessive profits, as set out in section 162(d).

3.164 Workable competition in wider telecommunications markets would also likely be impacted (namely the retail broadband and voice markets). As Unbundled PON services can be used by RSPs in conjunction with other FFLAS to provide retail voice and broadband services, the ability of LFCs to exercise SMP over Unbundled PON services could impact services offered by RSPs in those markets. This would inhibit the ability of RSPs to compete in those markets, limiting workable competition for the long-term benefit of end-users. As such, our view is that it is likely that the purpose in section 166(2)(b) would be best met if regulation of Unbundled PON services were to be continued in its existing form.

3.165 Therefore, our draft decision is that there are no reasonable grounds to start a deregulation review of Unbundled PON services.

## Transport services

### Draft decision

3.166 Our draft decision is that there are no reasonable grounds to start a deregulation review of Transport services under section 210 of the Act.

### The market for Transport services and identification of alternatives

3.167 Transport services shift voice and data traffic across and between networks, meaning RSPs can connect traffic to where their equipment is located. Traffic services can be coupled with other products to achieve end-to-end and infrastructure solutions.

3.168 There are different Transport services. For example, ICABS provides RSPs with dark fibre connectivity between exchanges within the same candidate area,[125] while the Mobile Access service provides RSPs with a high-speed, high traffic class point-to-point bitstream service suitable for connectivity to mobile cell sites and other similar non-building access points.[126]

3.169 Levels of competition can differ for these different Transport services so we touch on them separately where appropriate below.

3.170 We consider the current market, in which Transport services compete, to comprise intra-candidate area bitstream or dark fibre services between the regulated provider's exchanges, or from the regulated provider's exchanges to non-building access points (such as mobile cell sites) within the same candidate area.

3.171 We are aware that, besides the LFCs, other providers can and do provide transport services within candidate areas. The MNOs provide backhaul services to their own cellular towers and do in some cases provide backhaul for other MNOs, directly competing with the regulated providers for provision of these services. For example, One NZ has 11,000km of total fibre, with 1,200km of that as metro fibre rings in some main centres, and 4,200+km as access fibre, which is described as fibre from exchange nodes to business premises and selected mobile towers.[127]

3.172 Outside of the MNOs, non-regulated providers, such as Vector mentioned earlier in paragraph 3.134.1, provide transport services where their networks are located.

3.173 We see commercial fibre networks, including those with connectivity to mobile cell sites and non-building access points, in the same market as Transport services.

3.174 Certain wireless point-to-point bitstream services, such as those available over DMR or LEO satellite, are in the same market as Transport services, albeit competing specifically with the Mobile Access service.

3.175 Our view is that there is no benefit to defining multiple geographic markets for Transport services, as the regulated providers, leveraging their existing fibre footprint, are best placed to capture a significant share of the market. This limits the effectiveness of any present alternatives at providing a genuine competitive constraint.

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125 There are 33 candidate areas across New Zealand. These are defined by having a single POI each (the place where the RSPs network connects to the wholesale fibre provider's network). Each candidate area is serviced by one of the four LFCs.

126 The Mobile Access service is used as an input to alternatives in the Voice and Bitstream PON markets as described above.

127 One NZ investor update "Infratil Investor Day" (5 March 2024).

**State of competition in the market**

3.176 We consider that assessing competition in the market in which Transport services are supplied requires analysis of:

3.176.1 the market structure

3.176.2 whether alternatives represent close substitutes

3.176.3 consumer demand and switching behaviour.

3.177 As noted in paragraph 3.189, Transport services are used in the provision of retail voice and broadband services (FWA).

*Market structure and close substitutes*

ICABS

3.178 Our 2019 Backhaul Study found that Chorus faces no competition for the supply of intra-regional backhaul by other network operators at the majority (approximately 90%) of exchanges where it offers the ICABS product.[128] It also found that Chorus charged higher prices where it faced little or no competition, meaning the presence of competition on a minority of routes did not impact Chorus' ability to charge higher prices on other uncompetitive routes. We are not aware of any changes to this finding.

3.179 We are not aware of the state of competition in other LFC areas. We would welcome any evidence regarding competition for ICABS services, including if the position set out in paragraph 3.178, has changed.

Mobile Access service

3.180 Our understanding is that there is likely no competition 'in' the market (i.e. mobile sites are not served by competing fibre links). Where LEO satellite has coverage, because of characteristics described above in Table 3.4, it is not seen as comparable to fibre (LEO is primarily used in rural, low-traffic locations where fibre deployment cost is prohibitive and as a resiliency back-stop where required). Similarly, DMR is more likely to be used as an alternative to fibre only in rural locations due to the high cost involved.

3.181 We expect there may be some level of competition 'for' the market, or more specifically, for connecting and serving new tranches of mobile sites.

[128] Commerce Commission "Section 9A Backhaul services study" (11 June 2019), at [4.26.2].

3.182 In locations where competition for the Mobile Access service exists, we expect there are commercial drivers for commercial mobile access to be terminated at the nearest regulated provider exchange where the RSP has transport arrangements for its other services (e.g. Bitstream PON), allowing the RSP to benefit from economies of scale and scope for transport, such as ICABS.

3.183 This situation strengthens the position of the regulated providers in the market for the Mobile Access service, as they do not rely on their competitors for access to local infrastructure, such as Co-location.

*Consumer demand and switching behaviour*

3.184 We do not have any data on end-user switching behaviour for Transport services. Were we to undertake a deregulation review, we would consider sourcing this data, potentially in the form of a representative sample, to inform such a review.

*Competition summary*

3.185 Our view is that it is probable that there are limited competitive constraints on Transport services. This is primarily because, as we have discussed above for ICABS, our 2019 Backhaul Study found no competition on 90% of Chorus' routes and we have no reason to believe this has changed.

3.186 Our view holds for the Mobile Access service as well, because, as discussed above:

3.186.1 the pre-existing network footprint of the regulated providers can be leveraged to serve new and existing mobile sites

3.186.2 there is likely no competition 'in' the market

3.186.3 the commercial drivers of RSPs (economies of scale and scope) confer competitive advantage on the regulated providers whose exchanges are the preferred termination point for competing mobile access.

**Ability to exercise substantial market power**

3.187 In our view, it is probable that there is little competitive constraint on the ability of regulated providers to exercise SMP in relation to Transport services (ICABS and Mobile Access service).

**Alignment with the purpose of the regulation – sections 162 and 166(2)(b)**

3.188 We have considered whether the information before us is objectively sufficient to leave us with a view that it is likely that the Transport services should no longer be regulated (or should not be subject to PQ regulation) in order to promote the purpose in section 162 and, where relevant, workable competition under section 166(2)(b).

3.189 We consider that workable competition under section 166(2)(b) is relevant for our draft decision on whether there are reasonable grounds to start a deregulation review for Transport services. Both ICABS and the Mobile Access service are used in the provision of retail voice and broadband services meaning regulation of Transport services impacts these wider telecommunications markets.

3.190 For example, the Mobile Access service is used as an input in the provisioning of FWA. As noted by One NZ, "In respect of FWA services, these are provided using mobile networks that rely on Chorus' FFLAS in many locations (for example, in relation to the provision of backhaul to mobile sites)".[129] Deregulation of the Mobile Access service could lead to the price of FWA rising to be prohibitively expensive (inhibiting competitive constraints in the retail broadband and voice markets).

3.191 In light of the above discussion regarding the absence of competition in the market for Transport services, and the ability of regulated providers to exercise SMP in the absence of regulation, our view is that it is likely that the purpose in section 162 would be best met if regulation of Transport services were to be continued in its existing form.

3.192 The limited competitive constraint on the regulated services means there is the potential, were there no regulation, for SMP to be exercised by regulated providers. This would not provide long-term benefit for end-users that are consistent with outcomes produced in workably competitive markets, in particular:

3.192.1 regulated providers allowing end-users to share the benefits of efficiency gains, as set out in section 162(c)

3.192.2 regulated providers being limited in their ability to extract excessive profits, as set out in section 162(d).

3.193 Workable competition in wider telecommunications markets would also be impacted (namely the retail broadband and voice markets). As Transport services are used by RSPs in conjunction with other FFLAS to provide retail voice and broadband services, the ability of LFCs to exercise SMP over Transport services could impact services offered by RSPs in those markets. This would inhibit the ability of RSPs to compete in those markets, limiting workable competition for the long-term benefit of end-users. As such, our view is that it is likely that the purpose in section 166(2)(b) would be best met if regulation of Transport services were to be continued in its existing form.

[129] One NZ "Submission on deregulation draft assessment framework" (16 February 2024), at [11b].

3.194 Therefore, our draft decision is that there are no reasonable grounds to start a deregulation review of Transport services.

## Connection services

### Draft decision

3.195 Our draft decision is that there are no reasonable grounds to start a deregulation review of Connection services under section 210 of the Act.

### The market for Connection services and identification of alternatives

3.196 Connection services are services to install and enable FFLAS between communal fibre network infrastructure and an end-user's premises, building or other access point.

3.197 We consider the current market, in which Connection services compete, to comprise services to provide new fibre (including associated infrastructure and equipment such as ducts).

3.198 For the purposes of this analysis we considered each LFC area separately, but we note we do not need to reach a conclusion on the geographic market, as it does not affect our decision.

### State of competition in the market

3.199 Historically, LFCs have undertaken the connection services where their fibre network exists. As the regulated fibre networks have little overlap, competition between LFCs is non-existent.[130]

3.200 Where these services differ from Co-location and interconnection services (as discussed below) is that it is possible that competition could exist in the market for Connection services. For example, third parties could compete with the LFCs to provide Connection services. We have heard anecdotally that there have been some attempts by third parties to do this for new developments.

3.201 Providers of non-regulated FFLAS, such as Vector discussed earlier, could also compete for Connection services as they have the capability and equipment to deliver such services. If this occurred, competition would be limited to small geographic pockets, where non-regulated fibre providers operate.

[130] Due to their nature, no alternatives rely on Connection services for provisioning.

**Ability to exercise substantial market power**

3.202 While competition is possible, we see no evidence that competition exists or provides any competitive constraints on the providers of Connection services. In our view, it is probable that there is little competitive constraint on the ability of regulated providers to exercise SMP in relation to Connection services.

**Alignment with the purpose of regulation – sections 162 and 166(2)(b)**

3.203 We have considered whether the information before us is objectively sufficient to leave us with a view that it is likely that Connection services should no longer be regulated (or should not be subject to PQ regulation) in order to promote the purpose in section 162 and, where relevant, workable competition under section 166(2)(b).

3.204 We do not consider that workable competition under section 166(2)(b) is relevant for our draft decision on whether there are reasonable grounds to start a deregulation review for Connection services. Connection services are used to establish a new service instance of FFLAS and as such has limited impact on wider telecommunications markets.

3.205 In light of the above discussion regarding competition in the market for Connection services and the ability of regulated providers to exercise SMP, our view is that it is likely that the purpose in section 162 would be best met if regulation of Connection services were to be continued in its existing form.

3.206 The limited competitive constraint on the regulated services means there is the potential, were there no regulation, for SMP to be exercised by regulated providers. This would not provide long-term benefit for end-users consistent with outcomes produced in workably competitive markets, in particular:

3.206.1 regulated providers allowing end-users to share the benefits of efficiency gains, as set out in section 162(c)

3.206.2 regulated providers being limited in their ability to extract excessive profits, as set out in section 162(d).

3.207 Therefore, our draft decision is that there are no reasonable grounds to start a deregulation review of Connection services.

## Co-location and interconnected services

3.208 Co-location and interconnected services (**Co-location services**) are network equipment accommodation and management services, allowing RSPs to install equipment in Chorus exchanges.

3.209 Due to the nature of these services, as stated above in paragraph 3.15, no competition exists for Co-location services. Competitors are not able to 'build space' inside LFC's exchanges in order to offer competing services.[131] Even where a competitor could build a competing exchange, it is likely that they would need to connect to the LFC exchange to deliver services to end-users anyway.

3.210 Regulation of Co-location services supports competition for the primary services described earlier, preventing LFCs from exercising market power indirectly in those markets (via excessive prices for space in their exchanges to allow use effective use of the primary FFLAS), even if workable competition existed in them.

3.211 We have considered whether the information before us is objectively sufficient to leave us with a view that it is likely that Co-location services should no longer be regulated (or should not be subject to PQ regulation) in order to promote the purpose in section 162 and, where relevant, workable competition under section 166(2)(b).

3.212 We consider that workable competition under section 166(2)(b) is relevant for our draft decision on whether there are reasonable grounds to start a deregulation review for Co-location services. Co-location services are used to support the provision of other services (such as the 'primary' FFLAS) and thus impact workable competition in the downstream retail voice and broadband markets.

3.213 In light of the above discussion regarding competition in the market for Co-location services and the ability of regulated providers to exercise SMP, our view is that it is likely that the purpose in section 162 would be best met if regulation of Co-location services were to be continued in its existing form.

3.214 The limited competitive constraint on the regulated services means there is the potential, were there no regulation, for SMP to be exercised by regulated providers. This would not provide long-term benefit for end-users consistent with outcomes produced in workably competitive markets, in particular:

3.214.1 regulated providers allowing end-users to share the benefits of efficiency gains, as set out in section 162(c)

3.214.2 regulated providers being limited in their ability to extract excessive profits, as set out in section 162(d).

[131] Due to their nature, no alternatives rely on Co-location services for provisioning.

3.215 The limited constraint on SMP means deregulation could also negatively impact competition in wider telecommunications markets, impacting the long-term benefit of end-users. Such wider telecommunications markets include the downstream retail voice and broadband markets. Were regulation to be removed, LFCs could exercise SMP over the Co-location services. These services are used by RSPs (in conjunction with other wholesale services) to provide competition in the downstream retail voice and broadband markets (via their own service provision). As such, our view is that it is likely that the purpose in section 166(2)(b) would be best met if regulation of Co-location services were to be continued in its existing form.

3.216 Therefore, our draft decision is that there are no reasonable grounds to start a deregulation review of Co-location and interconnected services.

# Attachment A Updates to the assessment framework

A1 This section outlines the key updates we have made to the draft assessment framework based on the nine submissions and five cross-submissions we received.

A2 It also outlines our rationale for not making changes to the framework on topics raised in submissions, including the presence of a market for low-speed Bitstream PON services.

A3 Attachment B summarises and responds to additional submission points on our draft assessment framework (that are not discussed in Attachment A).

A4 Where we received submissions related to the existence of reasonable grounds, we have had regard to those submissions in reaching our draft decision (Chapter 3).

*What are considered reasonable grounds for commencing a review*

A5 In paragraph 2.11 of our draft assessment framework paper, we set out that "We consider that reasonable grounds to investigate …… exist where there is evidence that circumstances may have changed to such an extent that continued regulation, or the regulation in its current form, as the case may be, is no longer necessary to best promote the long-term benefit of end-users in markets for FFLAS".[132]

A6 Multiple submitters provided views on this aspect of the draft assessment framework, with submissions primarily covering three key elements:

- A6.1 change in circumstances
- A6.2 SMP tests
- A6.3 threshold for reasonable grounds to exist.

A7 Chorus and Northpower submitted that the purpose of Part 6 requires a broader inquiry as to "reasonable grounds" in order to make the decision that best gives, or is likely to best give, effect to section 162, and to the extent relevant, to the promotion of workable competition in telecommunications markets.[133]

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132 Commerce Commission "Fibre fixed line access service deregulation review under section 210 of the Telecommunications Act – Draft assessment framework paper" (7 December 2023), at [2.11].

133 Chorus "Submission on deregulation draft assessment framework" (16 February 2024), at [21.1], [21.2] and [21.2b]; and Northpower "Submission on deregulation draft assessment framework" (16 February 2024), at [4].

A8 Chorus submitted that a "change in circumstances" does not adequately address the matter described in section 210(4)(c) – whether the purpose of Part 6 would be better met if one or more FFLAS were no longer regulated or no longer subject to PQ regulation.[134] It submitted that assessment of the extent of any change is work that should be undertaken as part of a deregulation review, rather than a reasonable grounds assessment.[135]

A9 Chorus, Enable and Tuatahi submitted that we should adopt a low threshold for finding that reasonable grounds to review exist.[136] In particular, Enable and Tuatahi submitted that:

A9.1 it is not necessary for the Commission to be satisfied that "continued regulation is no longer necessary" as part of the reasonable grounds assessment[137]

A9.2 the threshold that should be applied is one where reasonable grounds must exist where alternatives have expanded or emerged that have significantly increased the competition faced in the wholesale FFLAS market.[138]

A10 2degrees and Spark submitted that consideration of SMP should be explicit in our assessment framework.[139]

A11 Having had regard to submissions received on our draft assessment framework paper, we have refined our framework:

A11.1 Instead of focusing on whether "circumstances may have changed" as a trigger for "reasonable grounds", we consider that we may start a review of FFLAS where the information before us is objectively sufficient to leave us with a view that it is likely that the services should no longer be regulated (or should not be regulated by PQ regulation, as the case may be) in order to promote the purpose in section 162 and, where relevant, workable competition under section 166(2)(b).[140]

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134 Chorus "Submission on deregulation draft assessment framework" (16 February 2024), at [21.2b].

135 Chorus "Submission on deregulation draft assessment framework" (16 February 2024), at [17].

136 Chorus "Submission on deregulation draft assessment framework" (16 February 2024), at [14]-[18]; and Enable and Tuatahi "Submission on deregulation draft assessment framework" (16 February 2024), at [3.1]-[3.6].

137 Enable and Tuatahi "Submission on deregulation draft assessment framework" (16 February 2024), at [3.6].

138 Enable and Tuatahi "Submission on deregulation draft assessment framework" (16 February 2024), at [3.5].

139 2degrees "Submission on deregulation draft assessment framework" (16 February 2024), page 1; and Spark "Cross-submission on fibre deregulation review draft assessment framework" (22 March 2024), at [12].

140 See paragraphs 2.8 and 2.9.

A11.2 We have also updated our framework to no longer reference “reasonable grounds to investigate” as the term “investigate” is not used in section 210.

A12 We agree with Chorus and Northpower that the focus on a ”change in circumstances” is too narrow and that the focus of a “reasonable grounds” consideration must be on the purpose of Part 6 in section 162 and, where relevant, workable competition under section 166(2)(b).[141, 142] However, as explained above in paragraph 2.15, we do not agree with submissions that suggest that we should adopt a lower threshold, nor do we consider that the reasonable grounds threshold should be automatically met if there is evidence of “the emergence and expansion of alternative networks offering services that may represent a competitive constraint on services that are offered using FFLAS”.

A13 Submissions from Chorus and Northpower pay insufficient attention to the wording and purpose of section 210. Section 210(1) provides that the Commission may only undertake a review of how services are regulated where it has “*reasonable grounds to consider*” that those services should no longer be regulated (or should not be regulated by PQ regulation, as the case may be).

A14 The purpose of the review threshold in section 210 is to strike a balance between the costs and regulatory uncertainty of reviewing regulation, and the costs of allowing regulation to exist longer than necessary. Section 210 requires a reasonable grounds assessment prior to each regulation period,[143] not a full deregulation review.

A15 While we do not consider the wording of section 210(1) sets a high threshold, nor does it set a threshold as low as suggested by Chorus and Northpower, meaning that a threshold based solely on the emergence or expansion of alternative networks offering services that may represent a competitive constraint on services is not appropriate. The threshold should not be so low as to risk unnecessary reviews.

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141 Chorus "Submission on deregulation draft assessment framework" (16 February 2024), at [21.1], [21.2] and [21.2b].

142 Chorus "Submission on deregulation draft assessment framework" (16 February 2024), at [18], [19] and [20]; and Northpower "Submission on deregulation draft assessment framework" (16 February 2024), at [4].

143 Telecommunications Act 2001, s 210(3).

A16 Rather, we consider that our reasonable grounds consideration is directed by section 166(2). While assessment of alternatives and the competition they provide is part of our assessment, as explained in paragraphs 2.14 and A11.1, we consider that we may start a review of FFLAS where the information before us is objectively sufficient to leave us with a view that it is likely that the services should no longer be regulated (or should not be regulated by PQ regulation, as the case may be) in order to promote the purpose in section 162 and, where relevant, workable competition under section 166(2)(b).

A17 We agree with Enable and Tuatahi that it is not necessary for the Commission to be satisfied that "continued regulation is no longer necessary" as part of the reasonable grounds assessment.[144] Under our updated framework, to start a review we must have reasonable grounds to consider it *likely* that the FFLAS should no longer be regulated (or should be regulated by PQ regulation, as the case may be).

A18 Our analysis of this includes consideration of 'with and without' regulation, as suggested by Spark, and supported by Enable and Tuatahi.[145]

A19 We agree with 2degrees and Spark that consideration of SMP is a key step in our reasonable grounds assessment. While 210(4) relates to a full review, as stated in paragraph 2.16, our assessment of whether there are reasonable grounds to start a review of FFLAS will consider the factors listed in section 210(4) of the Act.[146] This includes the impact of any increase or decrease on the ability of regulated providers to exercise SMP.

*Reference date for comparison*

A20 In our draft assessment framework paper, we proposed 1 January 2022 as the reference date for assessment as to a change in circumstances.[147] We considered this date the most appropriate date to compare as this is the implementation date from which PQ regulation of FFLAS came into effect.

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144 Enable and Tuatahi "Submission on deregulation draft assessment framework" (16 February 2024), at [3.6].

145 Spark "Submission on deregulation draft assessment framework" (16 February 2024), at [15]; and Enable and Tuatahi "Cross-submission on deregulation draft assessment framework" (22 March 2024), at [5.19].

146 2degrees "Submission on deregulation draft assessment framework" (16 February 2024), at [1]; and Spark "Cross-submission on fibre deregulation review draft assessment framework" (22 March 2024), at [12].

147 Commerce Commission "Fibre fixed line access service deregulation review under section 210 of the Telecommunications Act – Draft assessment framework paper" (7 December 2023), at [2.13].

A21 We received two submissions specifically disagreeing with the reference date. Chorus, and Enable and Tuatahi disagreed with 1 January 2022 as the most appropriate implementation date, instead stating the most appropriate reference date is when Cabinet made the 'final policy decisions' as to the regulatory framework that was codified in the new Part 6 of the Act, which was December 2016.[148]

A22 As described in paragraphs 2.14 and A11.1, our reasonable grounds assessment focuses on assessing whether it is likely that FFLAS should no longer be regulated (or should not be regulated by PQ regulation, as the case may be) in order to promote the purpose in section 162 and, where relevant, workable competition under section 166(2)(b). As explained in paragraph 2.17, our assessment is forward looking, and is not limited to assessing whether there has been a significant change in circumstances. We note that a significant change in circumstances may, while not the focus, nevertheless, provide reasonable grounds for us to consider it likely that regulation is no longer necessary.

A23 In carrying out our assessment, we considered evidence as to the current state of competition and anticipate, based on relevant evidence, whether this state (alongside any historical changes and trends) could be expected to continue.

A24 We disagree with Chorus, Enable and Tuatahi that, if we were to take a comparative approach, that the appropriate date should be from December 2016 when the Cabinet decision was made.[149] We consider that regulation did not occur at the time of the Cabinet decision in 2016, but occurred in the form of statutory amendments and regulatory instruments that were actually issued after that date.[150]

A25 Chorus also encouraged us to consider how markets are likely to change within the duration of the next regulatory period as markets are dynamic.[151] Our revised approach, which takes a forward-looking view, does this.

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148 Chorus "Submission on deregulation draft assessment framework" (16 February 2024), at [25] and [26]; and Enable and Tuatahi "Submission on deregulation draft assessment framework" (16 February 2024), at [4.3] and [4.10].

149 Chorus "Submission on deregulation draft assessment framework" (16 February 2024), at [26].

150 Even if this is wrong, it would not make any difference under our revised framework. Our findings would remain the same.

151 Chorus "Submission on deregulation draft assessment framework" (16 February 2024), at [37] and [38].

*Service description*

A26 In the draft assessment framework paper, our emerging view on FFLAS descriptions outlined seven categories of services within the scope of FFLAS.[152] These align with the approach taken in our 2021 PQP1 decision.[153]

A27 We have not made any changes to our description of FFLAS for the purpose of our reasonable grounds assessment under section 210 of the Act.

A28 We agree with Chorus that service market definition is a key step in a reasonable grounds assessment, and we have included this more explicitly in our assessment framework.[154]

A29 We note the views from Chorus, and Enable and Tuatahi regarding the categorisation of services, such as Bitstream PON services, and consideration of whether a single or multiple markets should exist if services face competition from a range of technologies.[155] We believe a single market remains appropriate for the consideration of reasonable grounds.

A30 We disagree that a reasonable grounds assessment requires consideration of competition for every FFLAS provided by the regulated providers.[156] Such an approach goes beyond the intent of a reasonable grounds assessment, particularly considering the cost and regulatory uncertainty of reviewing regulation.

A31 Similarly, we agree with One NZ and Spark that too narrow a view on each FFLAS, beyond the cost of reviewing regulation, risks 'false positives' – pockets of competition that are not significant enough to provide a meaningful overall competitive constraint on wholesale FFLAS.[157] A detailed analysis of pockets of competition, and whether they provide competitive constraint across a full market, may be appropriate in a deregulation review.

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152 Commerce Commission "Fibre fixed line access service deregulation review under section 210 of the Telecommunications Act – Draft assessment framework paper" (7 December 2023), Table 3.1.

153 Commerce Commission "Chorus' price-quality path from 1 January 2022 – Final decision – Reasons paper" (16 December 2021), Attachment D.

154 Chorus "Submission on deregulation draft assessment framework" (16 February 2024), at [34].

155 Chorus "Submission on deregulation draft assessment framework" (16 February 2024), at [35]; and Enable and Tuatahi "Submission on deregulation draft assessment framework" (16 February 2024), at [5.3].

156 Enable and Tuatahi "Submission on deregulation draft assessment framework" (16 February 2024), at [5.4].

157 Spark "Submission on deregulation draft assessment framework" (16 February 2024), at [8].

A32 However, we do not see this as meaning a strong constraint across a broad range of FFLAS is required to commence a review, as Chorus suggested in its cross-submission.[158] Our framework looks at FFLAS categories (e.g., Voice, Bitstream PON) together where the services provide the same/similar use to the end-user.

A33 We disagree with Chorus, and Enable and Tuatahi that we should only focus on wholesale markets.[159] Consideration of indirect constraints, such as those provided on a regulated wholesale service by downstream retail services, is a key part of competition analysis. Demand for FFLAS can be (and is) derived from such downstream markets.

*Bitstream PON services multiple markets*

A34 In submissions on our draft assessment framework paper, the question of whether there are distinct markets for Bitstream PON services was raised multiple times. In their joint submission, Enable and Tuatahi proposed that the market in which Bitstream PON services are supplied "should be further divided into fast (up to and including 300Mbps download), faster (301Mbps to 1Gbps), and fastest (more than 1Gbps) Bitstream PON services, which will better identify the competitive constraints which differ between each tier".[160]

A35 Chorus also questioned "whether there should be a single market for all speeds or a separate low-and-high-speed market.... Following the identification of the market boundaries, it can be determined which technologies and services are in the relevant market and the extent of the constraints they place on the regulated service".[161]

A36 At present, if a distinct low-speed product market was appropriate, only a relatively small number of retail fibre connections would be included in the market. As can be seen in Figure A1 below (taken from Chorus' latest quarterly Connections report), 11% of Chorus' residential connections are on speeds less than 300Mbps (the blue, yellow and purple segments), with the vast majority (the blue) under 100Mbps.[162]

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158 Chorus "Cross-submission on deregulation draft assessment framework" (22 March 2024), at [16].

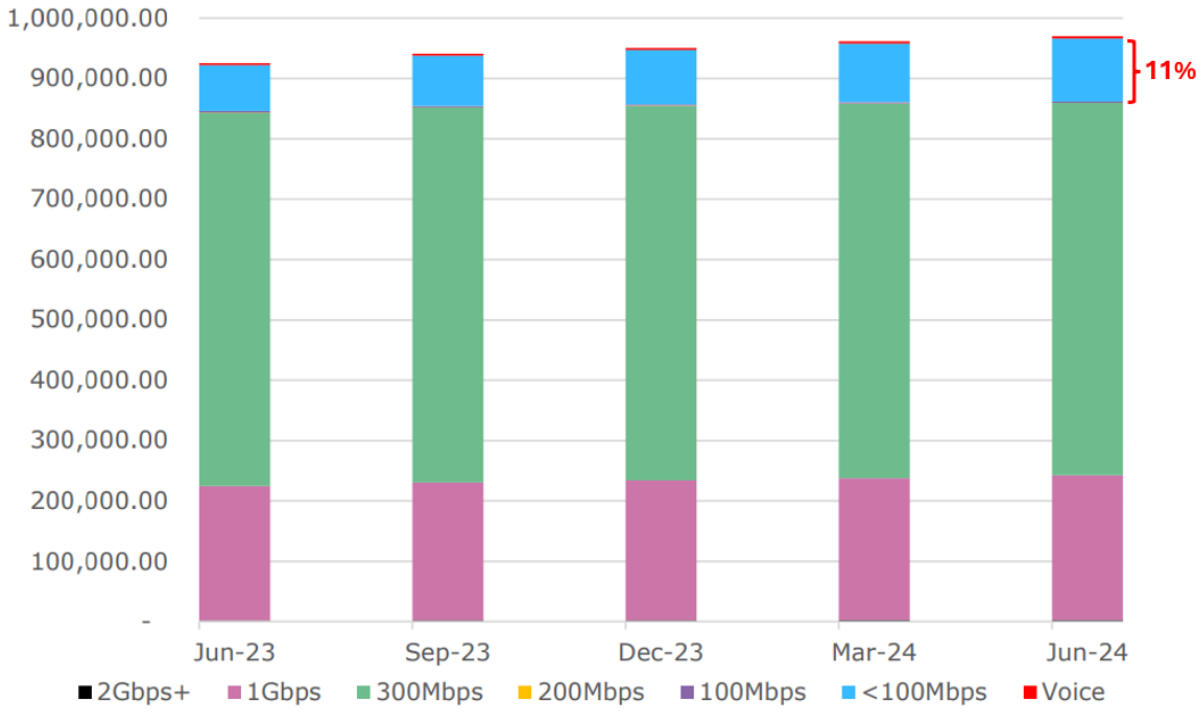
159 Chorus "Submission on deregulation draft assessment framework" (16 February 2024), at [29]; and Enable and Tuatahi "Submission on deregulation draft assessment framework" (16 February 2024), at [6.4].

160 Enable and Tuatahi "Submission on deregulation draft assessment framework" (16 February 2024), at [5.3].

161 Chorus "Submission on deregulation draft assessment framework" (16 February 2024), at [35] and [36].

162 The purple (100Mbps) and yellow (200Mbps) are in such low numbers they are hard to distinguish on the graph below the blue 300Mbps connections block. Chorus "Quarterly Connections Update – Q4 FY24" (9 July 2024), slide 6.

**Figure A1 Chorus residential fibre connections at June 2024**




A37 This, of course, depends on using 100Mbps as the boundary speed for the lowest speed category. Enable and Tuatahi argue that any boundary should be 300Mbps– but it is not obvious to us that consumers on Fibre 300, the most popular fibre plan, would regard this as a "low" speed plan.[163] Chorus' submission on the One NZ/Dense Air clearance application discusses the extent of competitive pressure arising from 4G FWA, stating that download speeds for 4G FWA and fixed line services can be similar, although only for low-speed plans. Chorus goes on to note that upload speeds and latency would not compare favourably between Fibre 50 and 4G FWA.[164] Enable has also previously noted that higher speed fibre plans (100 Mbps and above) outperform FWA in terms of speed consistency and reliability.[165]

A38 These comments outline that any difference in competitive conditions is likely to be felt only at the low end of the retail market where the Fibre 50 service is offered. This is supported by MBNZ data, which indicates that only 4G FWA services offer similar average download speeds to Fibre 50, although the former shows greater degradation during peak hours, as well as higher latency.[166] Were a low-speed broadband market to be defined, we would expect the boundary speed to be no higher than 100Mbps.

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163 Enable and Tuatahi "Submission on deregulation draft assessment framework" (16 February 2024), at [2.5] and [5.3].

164 Chorus "Submission on One NZ and Dense Air clearance application" (19 February 2024) at [6.2].

165 Enable "Submission on NZCC competition risks consultation" (25 February 2021), at [4.4].

166 MBNZ Report 20 (June 2024).

A39 In considering the competitive position of alternatives such as FWA, it is important to take into account whether these alternatives have sufficient capacity to expand. As noted in paragraph 3.105, FWA is likely to be more prone to such capacity constraints, given the shared nature of the underlying networks. These constraints can be relatively expensive to relieve (for example, through the acquisition of new spectrum or through the deployment of additional cell sites). Where such capacity constraints do exist, the incentives for FWA-based competitors to compete to acquire new end-users are likely to be reduced, as adding new end-users will likely result in degraded service levels for new and existing customers.

A40 In terms of potential benefits from deregulation of low-speed broadband, such benefits might exist where Chorus can better respond to competition because of deregulation; this supports the competitive process and provides benefit to end-users. However, given that Chorus is subject to a revenue cap (rather than individual price control), Chorus can already respond to competition from alternatives by reducing prices. As evidence of this, as covered in paragraph 3.109, Chorus introduced the 50Mbps Home Fibre Starter service, with a discounted wholesale price (initially at $38/month before dropping it to $35/month, compared to the standard wholesale price of $50.43/month) if RSPs set a retail price of no more than $60.[167] This has allowed Chorus to compete for price-sensitive customers who might otherwise take up an alternative service. We note the regulated providers subject to ID regulation are less constrained than Chorus.

A41 In terms of potential costs of deregulation of a potential low-speed broadband service, such costs would include the increased complexity of the regulatory regime, where regulation remains in place for higher speed fibre services. Where a service is deregulated, the assets that are wholly and solely employed in the provision of that service are removed from the RAB. However, all of the assets used to supply low-speed fibre services (including fibre distribution cables, electronics and other elements) are also used to supply higher speed services (up to 1Gbps),[168] which would remain subject to regulation. Appropriate cost allocation rules would therefore need to be developed and applied to these shared and common costs for both ID and PQ regulation.[169] As noted in the discussion of Voice services previously, it cannot be automatically assumed that the benefits of deregulating one service outweigh the costs, given the need to make adjustments across the rest of the remaining regulatory regime.

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167 See Chorus website.

168 Fibre services faster than 1Gbps such as Hyperfibre require different electronics.

169 This applies to Voice services too.

*Geographic area definition*

A42 Our draft assessment framework proposed the geographic area in which FFLAS is supplied for the purpose of section 210 of the Act should be described by reference to areas containing three components:[170]

A42.1 Chorus PQ

A42.2 Chorus ID-only

A42.3 Other LFC (Northpower, Tuatahi and Enable).

A43 We have amended our approach and define the geographic area separately for each FFLAS category.

A44 We agree that analysis is required to understand how competition differs by geographic region and have outlined our position in our analysis of each FFLAS in Chapter 3.[171] Our approach factors in overbuild, with address level Commission data supporting that analysis.

A45 We also agree with Chorus that an approach to defining geographic areas with regard to the UFB initiative would be outdated as regulated fibre networks do not align with the UFB footprint.[172] However, our approach does not use the UFB initiative as a basis, instead focusing on the presence of regulated FFLAS, rather than whether it was built as part of the UFB initiative or not.[173] As FFLAS regulation is derived based on type of service and physical footprint of regulated provider networks, including where they overlap, this provides a current and appropriate approach to defining geographic areas for the consideration of competition.

A46 We note the views from Spark (supported by Chorus in its cross-submission) regarding the need to consider levels of competition on a basis other than geographic as competitive constraints will likely relate to a customer segment or subset of FFLAS. The example of different data and speed requirements by broadband consumers is used.[174]

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170 Commerce Commission "Fibre fixed line access service deregulation review under section 210 of the Telecommunications Act – Draft assessment framework paper" (7 December 2023), Chapter 4.

171 Chorus "Submission on deregulation draft assessment framework" (16 February 2024), at [33].

172 Chorus "Submission on deregulation draft assessment framework" (16 February 2024), at [31] and [32].

173 We note that we do use the term LFC which was created as part of the UFB initiative. The key point is that the UFB footprint is not used as part of our framework.

174 Spark "Submission on deregulation draft assessment framework" (16 February 2024), at [7], [22] and [23]; and Chorus "Cross-submission on deregulation draft assessment framework" (22 March 2024), at [17].

A47 We agree, and where relevant, we have considered elements in addition to geographic areas. For example, our service descriptions include an end-user focus and we have discussed at length above the consideration of separate markets for Bitstream PON services based on consumer segmentation (speed requirements).

# Attachment B Response to submissions

B1 We received nine submissions and five cross-submissions from stakeholders on our draft assessment framework paper. The tables below contain our responses to additional submission points on our draft assessment framework and submissions on the type of evidence we should use in a reasonable grounds assessment which we have not already directly responded to.

B2 Specifically:

B2.1 Table B1 contains submissions on the overall framework.

B2.2 Table B2 contains submissions on the service descriptions.

B2.3 Table B3 contains submissions on the geographic area in which the services are supplied.

B2.4 Table B4 contains all of the submissions on the types of evidence.

## Table B1 Submissions on the overall framework

| Submitter(s) | Submission | Response in cross-submission | Our response |
|---|---|---|---|
| **2degrees** | 2degrees is largely supportive of the economic framework the Commission is proposing to use to assess whether there are reasonable grounds for commencing a deregulation review.[175] | - | N/A |
| **Business Technology Group (BTG)** | BTG generally agrees with what has been outlined and proposed by the review document (draft assessment framework paper).[176] | - | N/A |
| **Chorus** | The Commission should also consider any evidence:[177]<br>- indicating the costs of regulation of any FFLAS may exceed the benefits; and<br>- indicating the purposes of Part 6 would be better met if regulation were altered. | - | As explained in paragraph 2.13 we have revised our approach to consideration of whether reasonable grounds exist. As explained in paragraph 2.14, we consider that we may start a review of FFLAS where the information before us is objectively sufficient to leave with us with a view that it is likely that the services should no longer be regulated (or should not be regulated by PQ regulation, as the case may be) in order to promote the purpose in section 162 and, where relevant, workable competition under section 166(2)(b). |
| **Enable and Tuatahi** | Agree with the Commission's statement that the "reasonable grounds" threshold is satisfied if it can be shown that there has been an increase in competition that may constrain services offered using FFLAS.[178] | - | As explained in paragraph 2.13 we have revised our approach to consideration of whether reasonable grounds exist. As stated in paragraph 2.16, our assessment of whether there are reasonable grounds to start a review of FFLAS will consider the factors listed in section 210(4). As stated in paragraph 2.17, our assessment will be forward looking, and will not be limited to assessing whether there has been a significant change in circumstances. |

175 2degrees "Submission on deregulation draft assessment framework" (16 February 2024), page 1.
176 BTG "Submission on deregulation draft assessment framework" (16 February 2024), page 1.
177 Chorus "Submission on deregulation draft assessment framework" (16 February 2024), at [22].
178 Enable and Tuatahi "Submission on deregulation draft assessment framework" (16 February 2024), at [2.3].

| Submitter(s) | Submission | Response in cross-submission | Our response |
|---|---|---|---|
| **Mercury** | Believes the Commission's assessment framework is appropriate and is supportive of the Commission's interpretation.[179] | - | N/A |
| **Northpower** | Supports the Commission's proposed assessment framework and agrees with the Commission's proposal to consider whether there is evidence that any circumstances have changed.[180] | - | We have amended the framework from what was proposed in our draft assessment framework paper. As explained in paragraph 2.17, our assessment will not be limited to assessing whether there has been a significant change in circumstances. |
| **Spark** | The Commission could promote certainty by providing guidance on the wider considerations it would apply to a full review.[181] Noted that in a deregulation review the Commission would need to take into account broader change in consumer preferences, technology change, known future developments, or new information not available at the time of original decisions.[182] | - | As this is only the reasonable grounds assessment, we have not commented on what a deregulation review may consider. |
| **Spark** | The framework is a useful starting point and suggested that a review would need to consider the nature of competition and the technologies that support that competition.[183] | - | We agree. Step 2 of the economic framework outlines consideration of alternatives (which includes services over alternative technologies). Step 3 of our economic framework is about assessing competition. |

179 Mercury "Submission on deregulation draft assessment framework" (16 February 2024), page 1.
180 Northpower "Submission on deregulation draft assessment framework" (16 February 2024), at [3].
181 Spark "Submission on deregulation draft assessment framework" (16 February 2024), at [12] and [25].
182 Spark "Submission on deregulation draft assessment framework" (16 February 2024), at [14].
183 Spark "Submission on deregulation draft assessment framework" (16 February 2024), at [7].

| Submitter(s) | Submission | Response in cross-submission | Our response |
|---|---|---|---|
| **Spark** | Suggested the Commission should consider whether to develop a framework as advised by Vogel and Cave to best promote competition when applying the Part 6 framework.[184] Noted that we said that we might give regard to this framework when undertaking deregulatory reviews under section 210. | - | We disagree. Consistent with our position in the final decision on the fibre input methodologies, we consider that the fully-fledged competitive analysis of all potentially relevant markets suggested by the framework developed by the advisory panel may, as acknowledged in the panel's report, require an excessive amount of resources, including a very substantial information gathering exercise (something which would not be appropriate for a reasonable grounds assessment).[185] |

## Table B2 Submissions on the service descriptions

| Submitter(s) | Submission | Response in cross-submission | Our response |
|---|---|---|---|
| **2degrees** | 2degrees supports the FFLAS service definitions the Commission intends to apply.[186] | - | N/A |
| **Enable and Tuatahi** | Appropriate for the Commission to bear in mind the principles that were applied when the decision to impose regulation was made:[187]<br>• Regulation is only applied to the extent necessary to address a lack of competition; and<br>• Where possible, regulation should be platform and technology neutral. | - | We have kept these in mind as part of our analysis. |
| **Mercury** | Believes the Commission's view of the definition FFLAS services is appropriate and is supportive of the Commission's interpretation.[188] | - | N/A |

184 Spark "Submission on deregulation draft assessment framework" (16 February 2024), at [20].
185 Commerce Commission "Fibre input methodologies: Main final decisions – reasons paper" (13 October 2020), at [2.388]-[2.391].
186 2degrees "Submission on deregulation draft assessment framework" (16 February 2024), page 1.
187 Enable and Tuatahi "Submission on deregulation draft assessment framework" (16 February 2024), at [6.8].
188 Mercury "Submission on deregulation draft assessment framework (16 February 2024), page 1.

### Table B3 Submissions on the geographic area in which the services are supplied

| Submitter(s) | Submission | Response in cross-submission | Our response |
|---|---|---|---|
| **2degrees** | Agrees that the geographic areas utilised for Regulation 6 are a good starting point for the purpose of describing a geographic area in which FFLAS is supplied for the reasonable grounds assessment.[189] | - | N/A |
| **BTG** | To be able to provide meaningful representation it must be detailed enough to look at each property. It will need to be able to identify if a property has access to only one or multiple FFLAS providers. Comparable address by address data would be needed to see if there is competition between FFLAS providers.[190] | - | We have address based Commission data. We have used it in reaching our draft decision. |
| **BTG** | We do not agree that the FFLAS market is dynamic. There is almost no overlap/overbuild between FFLAS providers resulting in no competition between FFLAS providers. The data would need to show if overbuild is occurring to conclude the market is dynamic.[191] | - | We have included data on overlap of regulated provider networks as part of our analysis, see paragraph 3.82. |
| **Chorus** | The Commission needs to undertake analysis to define the geographic market to understand how the broadband market varies by geographic region as some areas may face materially different levels of competition. For example, Ofcom analyses competition at each postcode to define geographic markets.[192] | - | We have defined the geographic market for each FFLAS as part of our draft decision in Chapter 3. |

### Table B4 Submissions on the types of evidence to be considered when doing a reasonable grounds assessment

| Submitter(s) | Submission | Response in cross-submission | Our response |
|---|---|---|---|
| **BTG** | Important to consider the accuracy of the FWA coverage information. What the coverage map shows and what you get in the real world are not always the same.[193] | - | We agree that it is an important consideration. We note how difficult it is to have accurate data without physically checking coverage at every address. |

189 2degrees "Submission on deregulation draft assessment framework" (16 February 2024), page 1.
190 BTG "Submission on deregulation draft assessment framework" (16 February 2024), page 1.
191 BTG "Submission on deregulation draft assessment framework" (16 February 2024), page 1.
192 Chorus "Submission on deregulation draft assessment framework" (16 February 2024), at [33].
193 BTG "Submission on deregulation draft assessment framework" (16 February 2024), page 2.

| Submitter(s) | Submission | Response in cross-submission | Our response |
|---|---|---|---|
| **BTG** | Need to consider stop sells for FWA/4G/5G sites including data caps.[194] | - | We agree and have done so in reaching our draft decision, see paragraph 3.100. |
| **BTG** | Important to consider the peak load. Does the close economic substitute need to cater for the average over the year or during the peak load periods?[195] | - | We agree and have done so in reaching our draft decision, see Table 3.4. |
| **BTG, One NZ** | When deciding if a close economic substitute is truly comparable to FFLAS, if the FFLAS were withdrawn from an area would the close economic substitutes be able to provide the same level of service to all users that FFLAS had?[196, 197] | **Spark** agrees with BTG.[198] | We agree and have done so in reaching our draft decision, see paragraph 3.105. |
| **One NZ** | The extent of competition between FFLAS and alternative access technologies varies across different regions and depends on availability and capacity. In respect of FWA, these are provided using mobile networks that rely on Chorus' FFLAS in many locations.[199] | - | We agree, and have considered availability and capacity in reaching our draft decision in the relevant sections. We have also considered the reliance of alternatives on other FFLAS, see paragraph 3.189. |
| **Vector** | The Commission should include complaints from access seekers as relevant evidence to consider.[200] | - | We disagree and do not consider this part of our framework. This is not a consideration of competitive constraint nor whether regulation is likely to best promote the purpose in section 162 and, where relevant, workable competition under section 166(2)(b). |

194 BTG "Submission on deregulation draft assessment framework" (16 February 2024), page 2.
195 BTG "Submission on deregulation draft assessment framework" (16 February 2024), page 2.
196 BTG "Submission on deregulation draft assessment framework" (16 February 2024), page 2.
197 One NZ "Submission on deregulation draft assessment framework" (16 February 2024), at [12].
198 Spark "Cross-submission on fibre deregulation review draft assessment framework" (22 March 2024), at [12].
199 One NZ "Submission on deregulation draft assessment framework" (16 February 2024), at [11].
200 Vector "Submission on deregulation draft assessment framework" (16 February 2024), at [16].