DRAFT

COMMERCE COMMISSION NEW ZEALAND
Te Komihana Tauhokohoko

ISBN 978-1-997384-21-2

Review of Fixed PSTN Interconnection

Draft report on whether Fixed PSTN Interconnection should be omitted from Schedule 1 of the Act

The Commission

Tristan Gilbertson
Nathan Strong
Loretta Lovell

Date

19 November 2026



Associated documents

Publication date	Reference	Title
30 June 2016	ISSN 1178-2560	Review of Designated and Specified Services under Schedule 1 of the Telecommunications Act 2001
12 May 2021	ISSN 1178-2560	Review of Services in Schedule 1 of the Telecommunications Act 2001 - Final decision on whether to commence an investigation under clause 1(3) of Schedule 3 of the Telecommunications Act 2001
17 June 2025	ISBN 978-1-99-133262-2	Framework for reasonable grounds assessment
10 February 2026	Report Number 45012	Network Strategies - Fixed PSTN Interconnection in New Zealand Final Report for Commerce Commission
10 February 2026	ISBN 978-1-991414-58-8	Review of Fixed PSTN Interconnection - reasonable grounds assessment draft decision
6 May 2026	ISBN 978-1-99-133206-6	Review of Fixed PSTN Interconnection – reasonable grounds assessment final decision

Glossary

Terms and abbreviations

Act	The Telecommunications Act 2001
Commission	The Commerce Commission
Designated service	A service described in Part 2 of Schedule 1 of the Act, which includes both price and non-price terms for access
Fixed PSTN	(a) means a PSTN, or that part of a PSTN, that connects an end-user's building to the local switches or equivalent facilities; and (b) includes those local switches or equivalent facilities
FWA	Fixed wireless access – broadband access to a fixed location provided over a wireless mobile network
GEO	Geostationary satellite - Satellites positioned so that they remain over the same place on Earth at around 35,000km
LEO	Low earth orbit satellite - satellites deployed in constellations at lower levels (generally 500 – 1,500km above the Earth's surface)
MNO	Mobile network operator
MOS	Mean opinion score - a numerical rating from one to five that represents the perceived quality of a voice or video service, with five being "Excellent" and one being "Bad"
OIA	Official Information Act 1982
OTT	Over-the-top applications such as Facebook Messenger and WhatsApp
POTS	Plain Old Telephone Service
PSTN	Public Switched Telephone Network, defined in clause 5 of the Act as "a dial-up telephone network used, or intended for use, in whole or in part, by the public for the purposes of providing telecommunication between telephone devices"
PSTN Interconnection	Defined in part 2 of Schedule 1 of the Act as "origination and termination (and their associated functions) of voice and data calls (including dial-up Internet calls) on a fixed PSTN"
STD	Standard Terms Determination
TCF	Telecommunications Forum
VoIP	Voice over Internet Protocol
WISP	Wireless Internet Service Provider

Table of Contents

Associated documents **2**

Glossary **3**

Executive summary **6**

Chapter 1 Introduction and assessment framework **10**

Purpose of the report *10*

Structure of the report *10*

Background *10*

Legal framework **13**

Overview *13*

Requirement and process to undertake an investigation *14*

Statutory purpose and considerations *14*

Scope *15*

Economic framework **15**

Overview *15*

Evidence for the investigation *16*

Our process *17*

Chapter 2 Draft recommendation on whether to omit from Schedule 1 ..... **19**

Purpose and structure *19*

Recommendation *19*

Description of Fixed PSTN Interconnection (step 1) **19**

Origination and termination *20*

Why Fixed PSTN Interconnection was originally regulated *20*

Identification of alternatives (step 2) **21**

Wholesale alternatives *21*

Retail alternatives *22*

Coverage of retail alternatives *22*

Conclusion on alternatives *24*

Competition assessment (step 3) 25

Access to end-users: termination 25

Access to callers: origination 37

Market position of aggregators 38

Evidence from current commercial outcomes 39

Overall conclusion on competition 40

Alignment with the purpose of the regulation – section 18 (step 4) 41

Factual assessment (the future state with existing regulation) 42

Counterfactual assessment (the future state without regulation) 43

Overall assessment of the regulatory state that best gives effect to the purpose in section 18 44

Attachment A Summary of international regulatory decisions 45

Executive summary

Decision

X1 Our draft recommendation is that the Fixed PSTN Interconnection service should remain in Schedule 1 of the Telecommunications Act 2001 (**the Act**). This is a finely balanced decision. Although the relevance of fixed-line voice services has declined over time, we are not satisfied that the available evidence demonstrates that market developments have removed the underlying competition concerns that gave rise to regulation.

Nature of this decision

X2 On 6 May 2026 we published our findings that there were reasonable grounds to commence an investigation into whether Fixed PSTN Interconnection should be deregulated.[1]

X3 This investigation considers whether retaining or removing regulation would best promote competition for the long-term benefit of end-users under section 18 of the Act.

X4 Fixed PSTN Interconnection is a designated wholesale service that enables retail service providers to connect their network with a fixed PSTN operated by a different provider. It allows calls to be made between users on different networks.

Assessment framework

X5 We applied economic and legal frameworks consistent with recent Schedule 3 investigations.

X6 The economic framework is a forward-looking framework, incorporating current and expected market developments, which involves four steps:

X6.1 Description of the service - understanding how regulated Fixed PSTN Interconnection is used in delivering services (step 1).

X6.2 Identification of alternatives - assessing retail substitutes and transit options (step 2).

X6.3 Competition assessment - evaluating whether these alternatives provide sufficient competitive constraint (step 3).

---

[1] Commerce Commission, "Review of Fixed PSTN Interconnection – reasonable grounds final decision" (6 May 2026).

X6.4 Alignment with section 18 purpose - comparing outcomes with and without regulation to determine which best promotes competition for the long-term benefit of end-users (step 4).

X7 The legal framework requires us to undertake the investigation within statutory timeframes once reasonable grounds are established, and to assess whether our recommendation best promotes competition for the long-term benefit of end-users, taking into account efficiency, investment incentives, and forward-looking market conditions.[2]

Key findings

Fixed-line voice services are declining but remain relevant

X8 Fixed-line voice services are in sustained decline across both residential and business segments, with falling connections, usage, and inclusion in service bundles.

X9 However, the declining use does not remove the need for interconnection where fixed-line voice services remain a necessary part of the voice market.

X10 While the scale of potential competitive harm has reduced, the underlying source of market power has not sufficiently weakened.

Availability and uptake of alternatives

X11 Consumers and businesses have access, and are actively switching, to alternative communication services, including mobile services, over-the-top (**OTT**) applications, and cloud-based telephony.

X12 Mobile and broadband coverage is widespread, and users are actively substituting away from fixed-line services. This provides indirect competitive constraint on PSTN-based services.

X13 While the use of fixed-line voice services continues to decline, some services continue to rely on PSTN interconnection. In particular, toll-free services require origination from all major access networks to provide nationwide coverage. For these services, the availability of alternative communications platforms does not necessarily remove the need for PSTN interconnection.

---

[2] The Act, section 18.

Termination bottlenecks remain

X14 The network serving the called party continues to possess a technical monopoly over the completion of calls to that party, and traffic exchanged between fixed networks is often materially asymmetric, with some providers predominantly sending traffic, others receiving, and others transiting.

X15 While aggregation providers, transit providers and indirect interconnection arrangements provide alternative commercial pathways, they do not remove the requirement to obtain termination from the destination network. Every route ultimately depends upon the terminating provider.

Origination services raise separate concerns

X16 Origination services differ in important respects from termination services.

X17 Purchasers of origination services may have limited ability to respond to increased charges through equivalent reciprocal arrangements.

X18 In receiving-party-pays arrangements, such as toll-free services, purchasers of origination services may possess weaker countervailing bargaining power than purchasers of termination services.

Existing commercial arrangements do not establish that regulation is unnecessary

X19 Providers continue to interconnect on commercial terms and we have not observed widespread refusal to interconnect, discriminatory conduct or excessive pricing.

X20 Current commercial arrangements exist within the framework of ongoing regulation. Though there is no active determination in place regulating the price of interconnection, current regulation allows for one to be implemented should competition concerns arise. The presence of a regulatory backstop may influence commercial negotiations even where regulated pricing terms are not actively in operation.

Aggregation and transit providers remain important

X21 Aggregation and transit providers continue to facilitate connectivity between networks and reduce the need for smaller providers to establish and maintain multiple direct interconnection arrangements.

X22 However, aggregation and transit providers remain dependent on access to the relevant originating and terminating networks. Their existence therefore reduces, but does not eliminate, concerns associated with network bottlenecks.

Interpretation of PSTN Interconnection

X23 We interpret PSTN Interconnection to include Voice over Internet Protocol (**VoIP**) based fixed voice services.

X24 This reflects the technology neutral wording of the Act and the evolution of fixed-line voice services, which are now commonly delivered using IP-based technologies.

Overall conclusion

X25 With the evidence available, we are not yet satisfied that removing Fixed PSTN Interconnection from Schedule 1 would deliver outcomes that are in the long-term benefit of end-users. Declining usage of services that rely on fixed PSTN interconnection reduces the scale of exposure but does not remove the termination bottleneck. Retention preserves bargaining backstop protection while commercial negotiation and technological transition continue.

Next steps

X26 Before making a final decision, we are seeking submissions that provide sufficient evidence on:

X26.1 The ongoing reliance of business end-users on fixed-number voice services;

X26.2 The likely effects of deregulation on wholesale interconnection negotiations and outcomes;

X26.3 The extent to which deregulation could impact smaller providers, access seekers or aggregators; and

X26.4 The extent to which purchasers of origination services can constrain the terms offered by originating networks.

X27 We invite submissions on this draft recommendation by 17 December 2026.

X28 We will consider submissions before making our final recommendation to the Minister by 28 April 2027.

X29 The Minister will then decide whether to accept, reject or seek clarification in respect of our recommendation.

Chapter 1 Introduction and assessment framework

Purpose of the report

1.1 This report sets out our draft recommendation to the Minister on whether Fixed PSTN Interconnection should be omitted from Schedule 1 of the Telecommunications Act 2001 (**Act**) under section 66(1)(b) (the **Fixed PSTN Interconnection investigation**).

1.2 We are required under Schedule 3 of the Act to prepare and deliver our final report into Fixed PSTN Interconnection to the Minister by no later than 28 April 2027.[3]

1.3 The Minister may accept, reject or request clarification in respect of any aspect of our recommendation.

Structure of the report

1.4 This paper is structured as follows:

1.4.1 **Chapter 1** is an introduction which provides background to fixed PSTN interconnection and Fixed PSTN Interconnection regulation. It outlines the process for the Fixed PSTN Interconnection investigation and the framework we have applied in reaching our draft recommendation; and

1.4.2 **Chapter 2** contains the analysis and rationale for our draft recommendation on whether Fixed PSTN Interconnection should be omitted from Schedule 1.

Background

Fixed PSTN Interconnection

1.5 PSTN Interconnection is a designated wholesale service that enables retail service providers (**RSP**) to connect their network with a fixed PSTN operated by a different provider. It allows calls to be made between users on different networks.

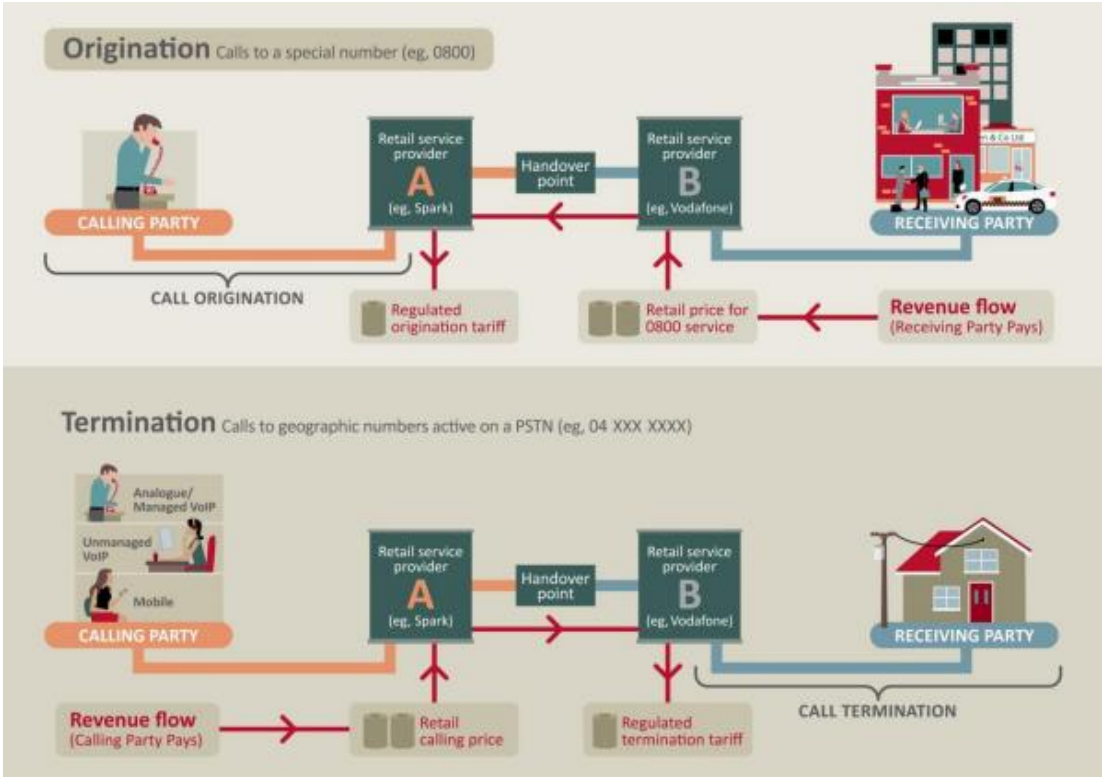
[3] 240 working days since public notice of the commencement of the investigation.

1.6 In New Zealand, a calling-party-pays system has typically applied, where the party making the call pays for the call. Under this charging model, owners of networks charge other providers for calls to be terminated on their network. This charge, known as a wholesale termination rate or tariff, is then recovered from the calling party by the calling party's network, in the form of a retail price (either a per minute price or a retail plan cost if it includes an allocation of minutes). If a PSTN determination were in effect, this charge would be capped at the regulated termination rate.

1.7 Origination rates apply in specific situations where the calling party does not pay for making the call, such as calls to a special number (eg, an 0800 number) or toll bypass. In this case, the 'receiving-party-pays' for the call. If a PSTN determination were in effect, the wholesale price for originating the call would be capped at the regulated origination rate.

1.8 These functions and the associated revenue flows with origination and termination of calls on a fixed PSTN are illustrated in Figure 1.1.

Figure 1.1 Origination and termination on a fixed PSTN



Fixed PSTN regulation

1.9 Fixed PSTN Interconnection was included as a specified service in Schedule 1 of the Act when it was enacted in 2001. It was introduced to cover:[4]

[4] Designated services are services where we set both price and non-price terms as opposed to specified services where only the non-price terms can be set.

1.9.1 Interconnection with Telecom's fixed PSTN; and

1.9.2 Interconnection with another fixed PSTN.

1.10 The service has historically been regulated due to concerns that providers of fixed networks could control access to end-users and that this could enable exclusionary conduct or the exercise of market power.

1.11 The service description in the Act was amended in 2011 to create a single designated service, Interconnection with a fixed PSTN,[5] which covers any origination and termination of voice and data calls on a fixed PSTN.

1.12 Our 2002 determination established regulated price caps for Fixed PSTN Interconnection services. It was bilateral, applying specifically to the provision of fixed PSTN interconnection between Telecom New Zealand Limited and TelstraClear Limited, and expired in 2003.[6] Since then, and following the creation of the single designated service in 2011, providers have generally relied on commercial interconnection arrangements. However, retaining the service in Schedule 1 has preserved the ability for the Commission to establish regulated terms, including pricing terms, if competition concerns were to emerge.

1.13 We have previously concluded that Fixed PSTN Interconnection should remain regulated following reviews in 2016 and 2021. In the 2016 review, we found that regulation continued to be necessary due to the lack of effective substitutes for PSTN services and the ongoing importance of those services. While our 2021 review again concluded that regulation should be retained, we noted that market conditions were changing and that the significance of PSTN services was declining. We also signalled that, as these trends continued and market conditions evolved, future assessments could lead to a different regulatory conclusion.

1.14 Since our 2021 review, a number of market developments have occurred. These developments include the continued decline in the use of fixed-line voice services, the increased availability and uptake of alternative communication services such as mobile, OTT, and cloud-based solutions, and changes in market structure and conduct. Together, these developments suggest that the competitive conditions underpinning previous decisions may have evolved and warrant reconsideration as part of this recommendation.

---

5 Telecommunications (TSO, Broadband, and Other Matters) Amendment Act 2011, Schedule 1.

6 Commerce Commission, "Telecommunications Act: Commerce Commission settles interconnection price" (5 November 2002).

Summary of the reasonable grounds assessment

1.15 Our reasonable grounds assessment found that the relevance of PSTN interconnection services has continued to decline as fixed-line voice services experience sustained reductions in connections and usage, while consumers and businesses increasingly rely on alternative communication services such as mobile, OTT, and cloud-based telephony. In coming to a view that there were reasonable grounds to commence an investigation, we noted that the widespread availability and uptake of these alternatives, including mobile services with Wi-Fi calling, may provide effective competitive constraints. We noted that end-users appear to be actively substituting away from traditional fixed-line voice services.

1.16 Independent evidence from the Network Strategies report indicated that deregulation may involve some risk but is unlikely to have a significant adverse impact on competition.[7]

1.17 We received two submissions on our draft decision that there were reasonable grounds to commence an investigation into whether Fixed PSTN Interconnection should be removed from Schedule 1 of the Act. Spark supported the draft decision to investigate whether to remove regulation, and Symbio raised concerns relating to pricing, impacts on smaller providers, reliance on PSTN pathways, international experience, and resilience.[8]

1.18 We considered these submissions and found that the concerns raised were not supported by evidence of current market conduct, did not outweigh observed market developments, and did not undermine the existence of reasonable grounds for investigation.

1.19 On 6 May 2026, we published our final decision that there were reasonable grounds to commence an investigation into whether Fixed PSTN Interconnection should be omitted from Schedule 1 of the Act.[9]

Legal framework

Overview

1.20 This section sets out the legal framework we have applied when reaching our draft recommendation and highlights the key statutory provisions governing the Fixed PSTN Interconnection investigation.

---

7 Network Strategies "Fixed PSTN Interconnection in New Zealand Final Report for Commerce Commission" (12 June 2025).

8 Submissions can be found on our website.

9 Commerce Commission "Review of Fixed PSTN Interconnection – Reasonable Grounds Assessment Final Decision" (6 May 2026).

Requirement and process to undertake an investigation

1.21 Having established that there are reasonable grounds for commencing an investigation into whether Fixed PSTN Interconnection should be omitted from Schedule 1, we have commenced the investigation.

1.22 Following public notice of the commencement of the investigation, we must prepare a draft report (this report) and prepare and deliver a final report to the Minister within the statutory timeframe of 240 working days.[10] Failure to comply with the statutory deadline does not invalidate the report.[11]

Statutory purpose and considerations

1.23 Schedule 3 investigations are governed by section 18 of the Act, which promotes competition in telecommunications markets for the long-term benefit of end-users of telecommunications services.

1.24 In conducting the Fixed PSTN Interconnection investigation under clause 1(3) of Schedule 3, we must assess whether our recommendation best gives effect to section 18, having regard to:

1.24.1 the efficiencies that will (or will be likely to) result from any act or omission must be considered; and

1.24.2 the incentives to innovate and invest, including the risks faced by providers of new, capital-intensive services.[12]

1.25 Our analysis is forward-looking, taking account of present and expected market conditions. Where relevant, we may compare these market conditions to those that existed when Fixed PSTN Interconnection was first regulated.

1.26 In making our recommendation we are required to:[13]

1.26.1 consider the purpose set out in section 18;

1.26.2 if applicable, consider the additional matters set out in Schedule 1 regarding the application of section 18; and

1.26.3 make the decision or recommendation that we consider best gives, or is likely to best give, effect to the purpose set out in section 18.

---

10 The Act, schedule 3 clause 4.

11 The Act, schedule 3 clause 4(4A).

12 The Act, section 18(2) and (2A). The High Court in *Chorus Ltd v Commerce Commission* [2014] NZHC 690 at [34] observed that section 18(1) is the "dominant" provision in section 18, and subsections (2) (focusing on efficiencies) and (2A) (focusing on the investors' incentives to innovate and risks) are "specified for the purpose of assisting analysis under section 18(1)". In this sense, subsections (2) and (2A) are not isolated considerations on their own. Rather, they form part of the consideration of whether competition is promoted for the long-term benefit of end-users.

13 The Act, section 19.

Scope

1.27 The scope of the Fixed PSTN Interconnection investigation under clause 1(3) of Schedule 3 of the Act is limited to considering whether to omit Fixed PSTN Interconnection (as a whole) from Schedule 1 (under section 66(1)(b) of the Act).

1.28 The scope of the Fixed PSTN Interconnection investigation does not extend to amendments, such as adding a new service or amending the description of an existing service. Such alterations can only be considered under clause 1(1) of Schedule 3 of the Act if we are satisfied that there are reasonable grounds for an investigation to do so.[14]

Economic framework

Overview

1.29 This section sets out the economic framework we have applied in reaching our draft recommendation. We have used the same economic framework that has been used in other recent Schedule 3 investigations.

1.30 The economic framework we applied for the Fixed PSTN Interconnection investigation includes four steps:

1.30.1 **Description of the service –** describing the regulated service, including where and how retailers use the service to offer retail services to end-users.

1.30.2 **Identification of alternatives –** identifying alternative services that could act as close substitutes for the regulated service.

1.30.3 **Competition assessment –** analysing the extent to which competition from alternatives provides competitive constraint on the regulated service.

1.30.4 **Alignment with the purpose of the regulation – section 18 –** comparing the factual (the future state with existing regulation) to the counterfactual (the future state without regulation) and considering which best gives effect to the purpose in section 18.

[14] Under clause 1(1) of Schedule 3, we may, on our own initiative or if requested to do so in writing by the Minister, commence an investigation into whether or not Schedule 1 should be altered in any of the ways set out in sections 66 or 67, if we are satisfied that there are reasonable grounds for an investigation into the matter. We refer to this type of investigation that results from our decision under clause 1(1) of Schedule 3 that there are reasonable grounds to investigate, as a 'Clause 1(1) Investigation', which is separate to the Fixed PSTN Interconnection investigation under clause 1(3).

1.31 We consider evidence as to the current state of competition and anticipate, based on relevant evidence, whether this state (alongside any historical changes and trends) can be expected to continue into the future. We then anticipate how this future may be different as a result of potential alterations to Schedule 1.

Evidence for the investigation

1.32 We use evidence such as the following in the Fixed PSTN Interconnection investigation:

1.32.1 the availability of alternatives;

1.32.2 whether alternatives rely on regulated PSTN interconnection;

1.32.3 actual update of alternatives;

1.32.4 whether alternatives represent a sufficiently close substitute to fixed PSTN interconnection (in terms of key price and non-price performance features).

1.33 This evidence for the draft recommendation has been sourced from existing Commission data sources.

1.34 Where relevant, we have also used publicly available information, including public surveys, business announcements and public disclosures.

1.35 Although our data sources were collated at different times, we have relied on the best available data and accounted for its currency in our analysis. We will continue to do so as we consider submissions and finalise our recommendation.

Voluntary information request

1.36 In addition to publicly available information, we sought information directly from major fixed network operators and wholesale aggregation providers through a voluntary information request. The information request was intended to provide quantitative evidence on market structure, usage patterns, interconnection arrangements and the ongoing role of Fixed PSTN Interconnection.

1.37 While respondents generally provided information relevant to these issues, the data supplied was not sufficiently consistent to support robust provider-to-provider comparisons or precise market-wide estimates. We found that not all respondents collect or use the information we requested and applied different definitions, reporting periods, data extraction methodologies, and in some cases provided estimates, partial datasets, or qualitative responses rather than complete quantitative information. As a result, the available evidence has limitations and does not always allow us to draw definitive conclusions on particular market characteristics or trends.

1.38 Where these limitations exist, we have used the information request responses as indicative evidence of broad market developments and industry perspectives, while placing greater weight on trends that are consistently supported across multiple sources. In several areas, the inconsistencies in the information provided mean that reliable quantitative evidence remains limited.

Our process

1.39 Table 1.1 sets out the process that we have followed to date for the Fixed PSTN Interconnection investigation.

Table 1.1 Process for the reasonable grounds assessment and investigation

Milestone	Date
Reasonable grounds assessment	
Draft reasonable grounds decision paper published	10 February 2026
Submissions published	10 March 2026
Final reasonable grounds decision published	6 May 2026
Investigation	
Draft recommendation published (this paper)	19 November 2026
Submissions due	17 December 2026
Final recommendation publication due	By 28 April 2027

Information for interested parties on making a submission

1.40 We are seeking submissions on our draft recommendation by 5pm 17 December 2026.

1.41 We encourage submitters to support their views with quantitative analysis, or evidence where possible. While we welcome all submissions, we are likely to place greater weight on submissions supported by evidence.

1.42 Matters on which we particularly seek submissions and evidence:

1.42.1 What number and proportion of business end-users continue to rely on fixed-number-based voice services? Please consider customer counts, usage data, traffic volumes, or other relevant metrics.

1.42.2 If Fixed PSTN Interconnection were removed from Schedule 1, what practical changes would providers expect to occur in wholesale negotiations?

1.42.3 Are there circumstances in which access seekers, aggregators or smaller providers would be materially disadvantaged following deregulation?

1.42.4 What is the extent to which purchasers of origination services can constrain the terms offered by originating networks? In particular, we are interested in evidence relating to purchasers' ability to switch suppliers, redirect traffic to alternative platforms, or otherwise respond to increases in origination charges or less favourable non-price terms.

1.43 You should address your responses to:

1.43.1 Toni Shuker (Manager, Fibre and Regulatory Rules)

1.43.2 c/o Telecommunications@comcom.govt.nz.

1.44 Please include “Fixed PSTN Interconnection - Submission” 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

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

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

1.47 All 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 Draft recommendation on whether to omit from Schedule 1

Purpose and structure

2.1 This chapter sets out our draft recommendation on whether Fixed PSTN Interconnection should be omitted from Schedule 1 of the Act, and the reasoning for that recommendation.

2.2 This chapter is structured as follows:

- 2.2.1 our recommendation;
- 2.2.2 description of Fixed PSTN Interconnection and how it is used **(step 1)**;
- 2.2.3 assessment of whether Fixed PSTN Interconnection should be omitted from Schedule 1, through:
  - a. identification of alternatives **(step 2)**;
  - b. competition assessment **(step 3)**; and
  - c. testing alignment with the purpose in section 18 **(step 4)**.

Recommendation

2.3 Our draft recommendation is to retain Fixed PSTN Interconnection in Schedule 1 of the Act. Continued regulation preserves protections for access seekers, supports competition for those end-users who continue to rely on fixed-line voice services, and maintains a regulatory backstop while the market continues to transition towards alternative communications technologies.

Description of Fixed PSTN Interconnection (step 1)

2.4 PSTN Interconnection is described in the Act as:[15]

> origination and termination (and their associated functions) of voice and data calls (including dial-up Internet calls) on a fixed PSTN.

2.5 Fixed PSTN is defined in the Act as:[16]

> (a) means a PSTN, or that part of a PSTN, that connects an end-user's building to the local switches or equivalent facilities; and
>
> (b) includes those local switches or equivalent facilities.

---

15 Part 2 of Schedule 1 of the Act.

16 Section 5 of the Act.

2.6 PSTN or public switched telephone network is defined in the Act as:[17]

> means a dial-up telephone network used, or intended for use, in whole or in part, by the public for the purposes of providing telecommunication between telephone devices

2.7 We interpret PSTN Interconnection to include Voice over Internet Protocol (**VoIP**) based fixed-line voice services.[18]

2.8 Taking a purposive approach to the construction of the relevant provisions,[19] we consider this interpretation reflects:

2.8.1 the technology neutral nature of the definition, which refers to the functionality, rather than one particular network technology;

2.8.2 the absence of any limitation in the statutory language to copper-based networks;

2.8.3 the reference to "voice and data calls", which is not tied to a specific technology; and

2.8.4 the evolution of fixed-line voice services, which are now commonly delivered using IP-based technologies.

Origination and termination

2.9 Origination provides access to calls made by users connected to a fixed network. Termination provides access to users receiving calls on that network.

2.10 The distinction is relevant to how providers deliver and charge for calls. In a conventional calling-party pays-arrangement, the calling party pays its retail provider, and the originating provider incurs a wholesale charge for terminating the call on the destination network.

2.11 Origination charges arise in arrangements where the calling party does not pay for the call, including toll-free services such as 0800 numbers. In these receiving-party-pays arrangements, the service supplied to the receiving party includes the cost of originating calls from another network.

Why Fixed PSTN Interconnection was originally regulated

2.12 Fixed PSTN Interconnection was originally regulated because fixed network operators controlled access to the callers and called parties connected to their networks.

---

17 Section 5 of the Act.

18 Commerce Commission "Review of Fixed PSTN Interconnection – Reasonable Grounds Assessment Final Decision" (6 May 2026) pages 14-15.

19 Section 5(1) of the Interpretation Act 1999 requires legislation to be interpreted in light of its text and purpose. Our earlier reviews did not require us to be definitive on the position of VoIP services.

2.13 When regulation was introduced in 2001, Telecom remained the dominant fixed telecommunications provider and controlled most of the relevant access, switching and call-termination infrastructure. The historical concern was that control of these access functions could create bottlenecks for providers seeking to supply services involving those users.

2.14 Termination provided access to called parties on another network. Origination provided access to calls made by users of that network, including calls supplied under receiving-party-pays arrangements.

2.15 The service was regulated because it provides access to callers and called parties, and those access functions historically created bottleneck concerns.

Identification of alternatives (step 2)

2.16 In determining whether or not to recommend that Fixed PSTN Interconnection be omitted from Schedule 1 of the Act, we have assessed the level of competition within the relevant markets.

2.17 The alternatives are available to both origination and termination on a fixed PSTN. Although providers wishing to originate or terminate calls associated with a particular fixed-number must ultimately interconnect with the network serving that number, the increasing availability of mobile services, cloud-based voice services, OTT communications platforms, and wholesale aggregation services may reduce reliance on traditional fixed PSTN interconnection.

Wholesale alternatives

2.18 Providers can obtain wholesale connectivity through direct interconnection, transit and aggregation. Transit and aggregation are alternative arrangements for obtaining direct access to a particular fixed network, rather than necessarily substitutes for every function supplied by an originating or terminating network. In practice, these arrangements may overlap. For example, a third party aggregation provider may also provide transit services, carrying traffic between networks on behalf of its customers.

Transit

2.19 Transit enables traffic to pass through an intermediary network. It provides an indirect route between the originating and terminating networks.

Aggregation

2.20 Aggregation providers combine traffic and connectivity across multiple networks and downstream customers. Their services enable RSPs to obtain connectivity through an intermediary rather than maintaining a separate direct agreement with every network.

Retail alternatives

Mobile services

2.21 Mobile services provide an alternative means of making and receiving voice calls. These services include Wi-Fi calling, which enables supported mobile services to operate over a suitable broadband connection.

OTT applications

2.22 OTT applications, such as WhatsApp and FaceTime, provide voice and video communication over an internet connection. Their use depends on connectivity and the relevant application or platform being available to the communicating parties.

Cloud telephony

2.23 Cloud-based communications services provide another way for businesses to obtain and manage voice services. Their relationship to the regulated service depends on the functions being used.

2.24 Integrated communications platforms such as Microsoft Teams use cloud telephony and combine calling with messaging, chat and video meetings. They enable some communications to take place without the need for a PSTN.

2.25 These platforms can also support telephone-number-based calling. That component may continue to require fixed PSTN interconnection.

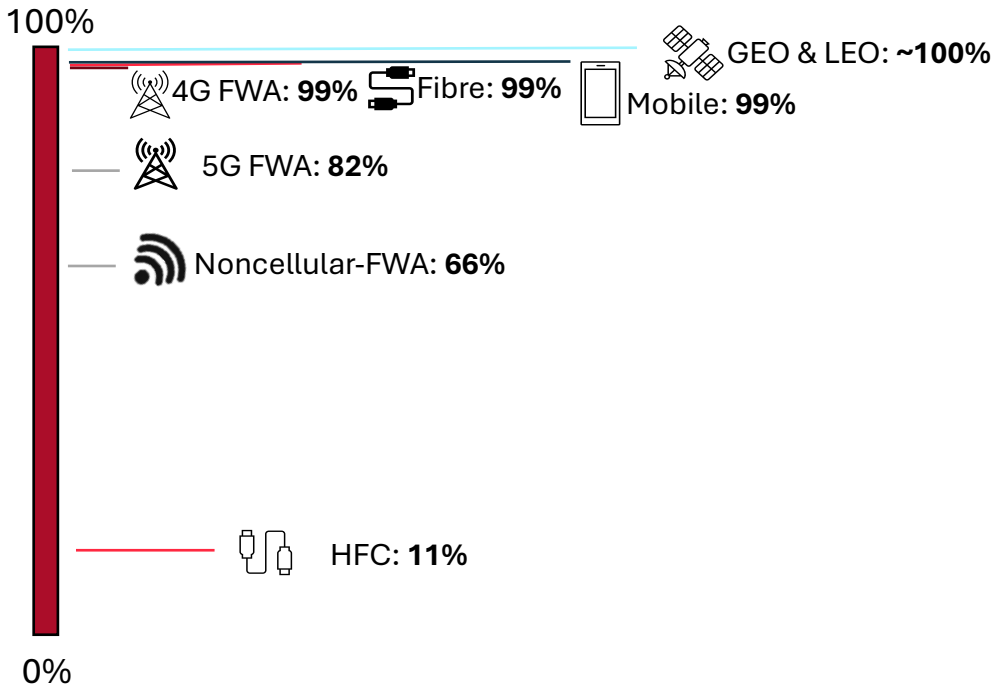
2.26 For this assessment, we distinguish communications that take place without fixed PSTN interconnection from VoIP-based fixed-line voice and telephone-number-based calling that remain dependent on it. Cloud delivery alone does not place a service outside the regulated service.

Coverage of retail alternatives

2.27 Mobile and broadband coverage is widespread, and users are actively substituting away from fixed-line voice services.

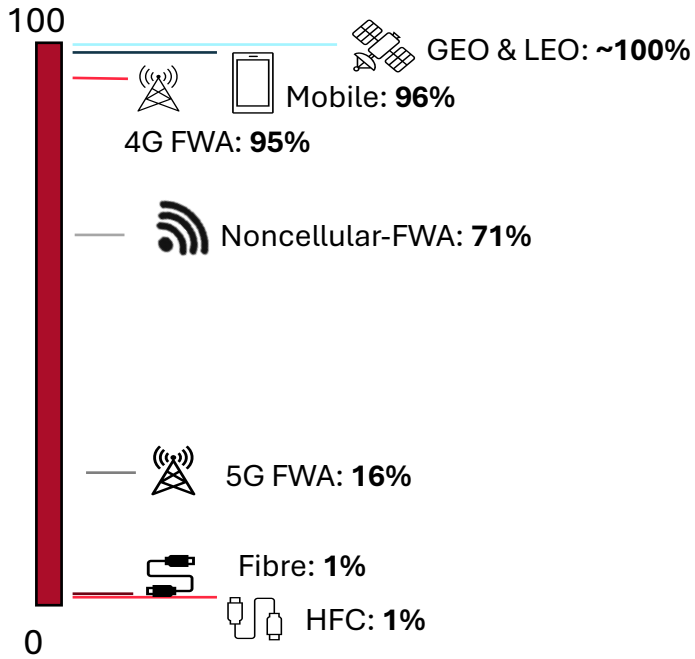
2.28 Figures 2.1 and 2.2 show the share of addresses in coverage of different broadband alternatives, demonstrating that customer experience is different between areas that have access to regulated fibre (urban) and those that do not (rural).

Figure 2.1 Coverage of urban New Zealand addresses (June 2025)[20]



Source: Commission data

Figure 2.2 Coverage of rural New Zealand addresses (June 2025)



Source: Commission data

[20] Chorus are in the process of withdrawing copper networks, meaning One NZ's HFC broadband is simultaneously being retired. HFC coverages will therefore be reducing. https://one.nz/help/broadband/chorus-copper-withdrawal/.

2.29 Mobile coverage is present for around 99% of New Zealand's population (noting this will vary in quality) and broadband coverage is widespread, meaning most users have access to alternative communication services.[21]

2.30 Most people are in coverage of more than one broadband service, which enables alternatives such as OTT applications and cloud telephony to work:

2.30.1 fibre is almost universal in urban areas,

2.30.2 FWA covers 99% of urban and 95% of rural areas,

2.30.3 nearly 70% of rural premises are covered by WISPs, and

2.30.4 satellite services (low earth orbit (**LEO**) and geostationary (**GEO**)) are available nationwide where there is clear line of sight.[22]

Conclusion on alternatives

2.31 Mobile services, OTT applications and cloud-based communications provide widespread and increasingly effective alternatives to traditional fixed-line voice services.

2.32 At the wholesale level, providers also have alternatives to direct bilateral interconnection. Aggregators and transit providers allow operators to exchange traffic through intermediary networks, reducing the need to establish and maintain direct interconnection arrangements with every network operator. The presence of these providers suggests that the market for interconnection has evolved and provides greater flexibility in how voice traffic is exchanged. However, these wholesale alternatives ultimately rely on access to originating and terminating networks and do not remove the need for those networks to interconnect traffic. Aggregation and transit services may reduce the visibility of individual counterparties but do not eliminate the underlying dependence on providers that control access to end-users.

---

21 Mobile coverage reaches about 99% of New Zealanders, although quality varies. For the remaining 1%, mobile may not be a practical option, though some may never have had fixed-line voice service. Many of these users are in remote areas but can still access broadband through wireless internet service providers (WISPs) or satellite services, allowing voice calls via OTT apps or Wi-Fi calling. Direct to cell satellite services will mean improved coverage for a large number of these consumers where they have line of sight to the sky.

22 Commerce Commission "2024 Telecommunications Monitoring Report" (30 June 2025), pages 25, 111 and 115.

2.33 While alternatives to traditional fixed-line voice services are widespread and continue to grow, the evidence indicates that some end-users remain dependent on services that rely on fixed PSTN interconnection. This is particularly relevant for certain business communications, toll-free services, and services that continue to use geographic fixed numbers. Fixed PSTN interconnection remains necessary for some wholesale providers and aggregation services that facilitate connectivity between networks. As a result, although the population of users relying on these services continues to shrink, demand for fixed PSTN interconnection has not been eliminated.

Competition assessment (step 3)

2.34 In assessing whether Fixed PSTN Interconnection should be omitted from Schedule 1 of the Act, we have considered current and expected market conditions, including the extent of competitive constraints on the provision of fixed PSTN interconnection.

2.35 This assessment examines whether deregulation would materially alter competition in wholesale interconnection and whether access seekers would retain sufficient alternatives in the event that the regulated service were omitted from Schedule 1 of the Act. Although PSTN traffic volumes are declining, the key issue is whether major network operators continue to hold market power through their control of access to end-users, and whether removing regulation would affect the structure and effectiveness of competition.

Access to end-users: termination

The termination bottleneck

2.36 The terminating network continues to possess a technical monopoly over the completion of calls to its own customers, as no alternative provider can terminate a call without access to that network. Under the calling-party-pays system, the terminating operator could raise termination rates without the risk that its subscriber would switch, as its subscriber does not pay for receiving calls.

2.37 A technical monopoly does not by itself establish that material market power is being exercised. Given the declining importance of fixed-line voice services and the increased availability of alternative communication channels, the ability of a fixed network provider to leverage control over access to end-users appears significantly more limited than at the time regulation was introduced.

Has the bottleneck weakened?

2.38 The significance of fixed-line voice calling has declined substantially since regulation was introduced. Fewer users maintain fixed-line voice connections, call volumes have fallen, and many communications now take place through mobile and internet-based services.

2.39 Information obtained during the investigation suggests that interconnection revenues represent a relatively small proportion of telecommunications revenues for major fixed network operators and have generally declined alongside fixed-line voice usage.

2.40 As a result, major fixed network operators may have limited incentives to increase termination charges, given the relatively small contribution of interconnection revenues to their overall business. However, the available evidence does not provide sufficient visibility of interconnection revenues for smaller fixed network operators. We are therefore unable to assess their incentives or ability to increase interconnection charges, or how they may respond to higher interconnection charges.

2.41 These developments reduce dependence on fixed PSTN interconnection and the overall scale of potential harm. They may also limit incentives to worsen access terms if doing so would accelerate migration away from fixed-line voice.

2.42 However, declining use does not remove the requirement to obtain termination for calls to customers who continue to use fixed-line voice. A smaller market can retain a bottleneck for the users and providers that remain dependent on it.

2.43 Internationally, where bottleneck characteristics remain or the effectiveness of future competitive constraints is uncertain, regulators have commonly retained wholesale voice regulation as a regulatory backstop.[23]

2.44 While we have previously concluded that competition concerns associated with the Mobile Termination Access Service (**MTAS**) had reduced sufficiently to support deregulation, the evidence available in this investigation does not provide the same level of confidence that commercial negotiations would adequately constrain outcomes across all remaining uses of fixed PSTN interconnection.

Constraints from retail alternatives

2.45 Mobile voice services are often available at a similar or lower monthly cost than fixed-line voice services. OTT and cloud-based services require internet connectivity and may involve application compatibility constraints but offer low cost, international reach, and increasing familiarity.[24]

---

23 See Attachment A.

24 Opensignal's 2026 study scored the three major operators an average of 80.8/100 for consistent quality. Consistent quality measures if the network is sufficient to support common mobile application requirements at a level that is 'good enough' for users to maintain (or complete) various typical tasks on their devices. Tests that pass indicate that activities such as video calling, uploading an image to social media, or using smart home applications will be possible without noticeable lag or slowdown. "New Zealand Mobile Network Experience Report – October 2026" (October 2026).

Table 2.1 Price comparison of fixed-line and alternative voice services (September 2026)[25]

Voice technology	Monthly price	NZ Landlines c/min	NZ Mobiles c/min	Notes
Mercury Fibre (voice only)	$49	$0.18	$0.48	Mercury and Spark are the only major RSPs who sell a fibre voice only plan.
Spark Fibre (voice only)	$70.50	$0.24	$0.39	
FWA (voice only)	-	-	-	There are no FWA voice only plans available.[26]
Fibre (bundled)	From $64	Unlimited	$0.17	Landlines are able to be added to an existing fibre broadband connection from $10 a month.
FWA (bundled)	From $50	$0.24	$0.39	Comes with 50GB monthly data.
LEO (bundled)	From $89.50	$0.05	$0.17	Starlink does not offer a voice service but one can be purchased from a third party to use over a Starlink LEO broadband connection. This price includes both the broadband connection and the third party.

25 Operator websites accessed September 2026.

26 Spark has a $50 landline plan over FWA that comes with 50GB per month data if you want to connect to the internet.

Voice technology	Monthly price	NZ Landlines c/min	NZ Mobiles c/min	Notes
Mobile[27] (bundled with SMS and data)	From $8 – plans with unlimited minutes from $11	Free – some plans have caps	Free – some plans have caps	Data caps may apply for cheaper plans.

2.46 Umlaut's 2025 research on New Zealand mobile voice services found an average Mean Opinion Score (**MOS**) of 4.01, indicating general user satisfaction, with high-definition voice widely available and reliability rated as "good" at 78%.[28]

2.47 The uptake demonstrates that not only do alternatives meet many user's needs, but the market power of fixed-line voice providers is also reducing, therefore weakening the bottleneck.

2.48 Additionally, while retail users may have alternatives to traditional fixed-line voice calling, some services continue to rely on origination from fixed networks. This is particularly relevant for toll-free services, where the business receiving the call pays for the call, and requires callers from all networks to be able to reach it. A purchaser of toll-free services cannot control the network used by the caller and therefore has a limited ability to avoid or substitute away from origination charges supplied by a particular network.

2.49 The availability of mobile, OTT applications and other communication alternatives may reduce the overall importance of these services but does not eliminate the need for origination where callers continue to use fixed-line voice services.

Consumer switching

2.50 Evidence of actual switching behaviour is critical to assessing whether competitive constraint exists in practice.

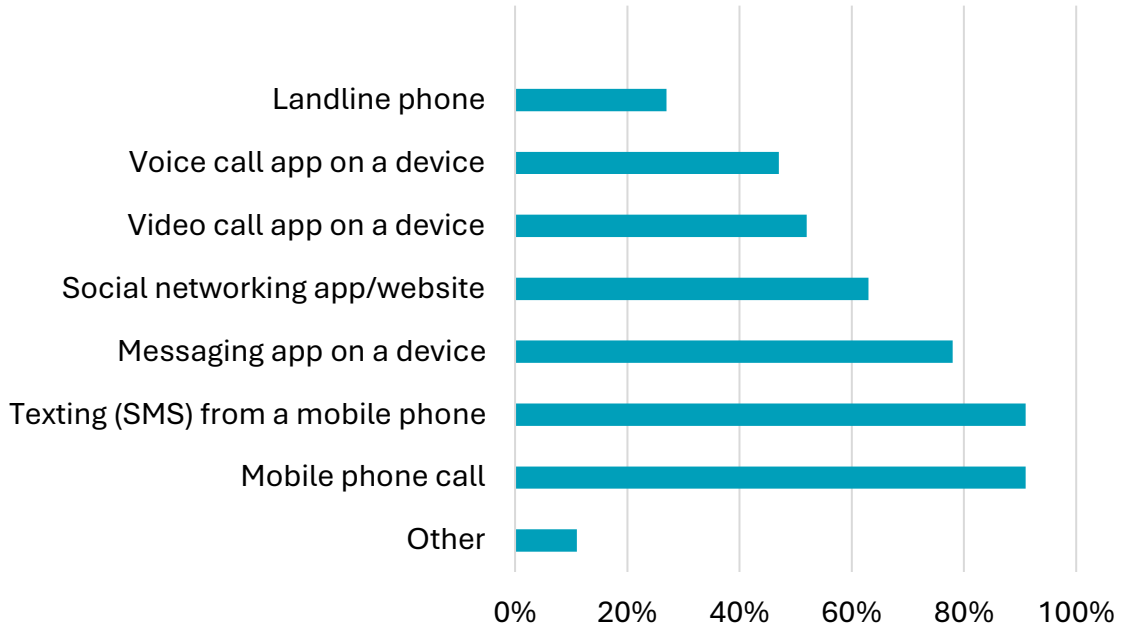
2.51 Figures 2.3 and 2.4 show a declining reliance on fixed-line services.

---

27 Some mobile RSPs offer 'monthly' plans while others offer plans for four weeks.

28 Umlaut, "Best in Test" (2025), pages 13 and 14.

Figure 2.3 Communication types used in the first quarter of 2025[29]



Source: Commission data

2.52 This shows that mobile calling is used by the large majority of users, while landline usage is significantly lower. It also shows widespread use of voice and video calling applications.

2.53 This indicates that mobile services are the dominant form of voice communication and that OTT services are widely used in practice. We expect this to continue, with few users expecting to reduce their use of OTT services, while some expect to increase it.[30]

2.54 This behaviour indicates that users are willing to substitute away from fixed-line services in response to changes in relative price or performance, which is the relevant test for competitive constraint.

2.55 Figure 2.4, showing Spark voice connections from 2017 to 2025, highlights just how significant this decline in fixed-line services has been. Most consumers do not appear to be migrating to VoIP and are likely instead using mobile or OTT apps for their voice needs.[31]

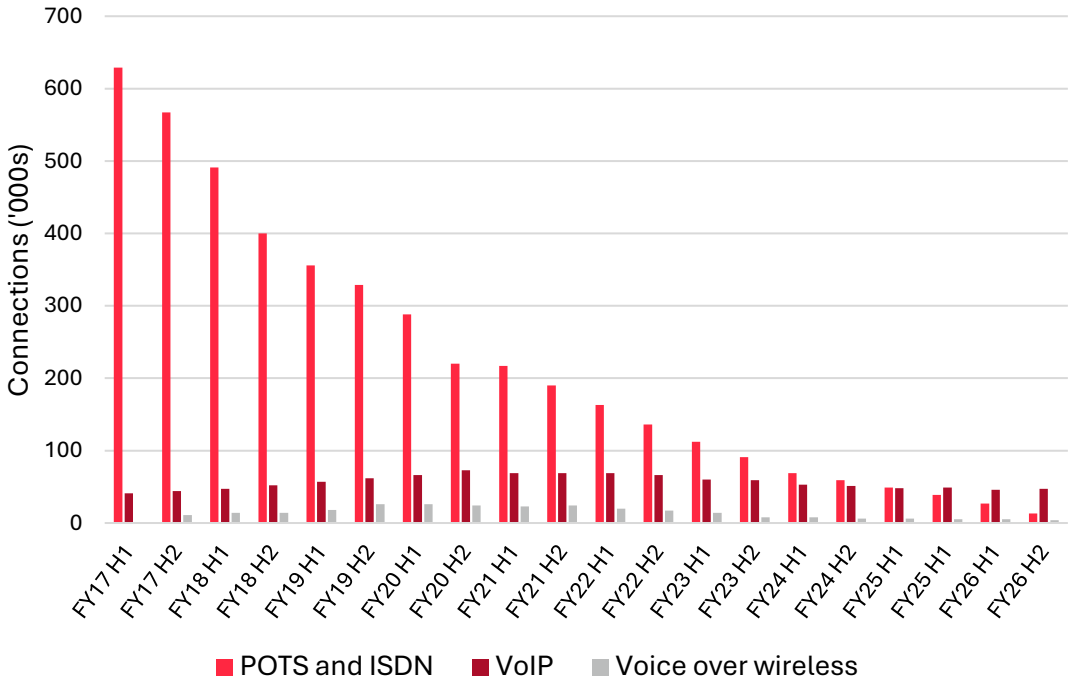
---

29 Commerce Commission, "Customer Satisfaction Tracking – Messaging Apps Quarterly Report Jan – Mar 2025" (30 October 2025), page 7.

30 Commerce Commission, "Customer Satisfaction Tracking – Messaging Apps Quarterly Report Jan – Mar 2025" (30 October 2025), page 14.

31 This is supported by the only 3% rise in mobile connections despite a 14% drop in landlines (voice reduction from 2025 Annual Monitoring Report, p. 135, mobile rise, ibid, p13). Many consumers who stop using a landline will likely already have a mobile and are using it as their primary voice service either via cellular or OTT apps.

Figure 2.4 Number of Spark voice connections 2017-2025[32, 33]



Source: Spark[34]

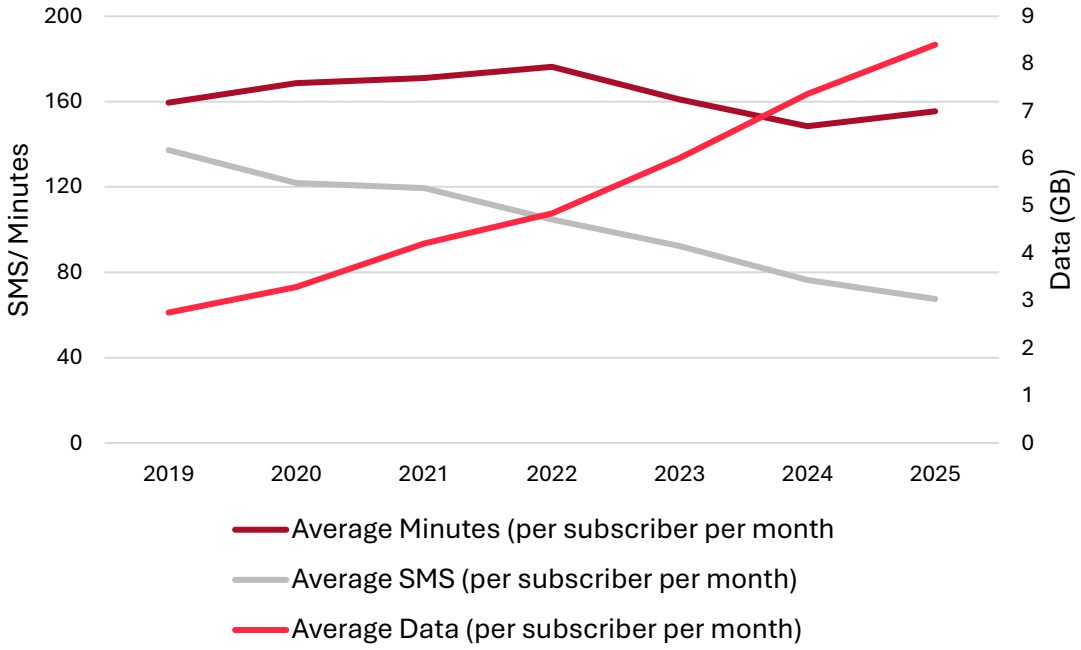
2.56 Between 2019 and 2023, the average monthly number of mobile minutes remained reasonably static, while average data use climbed (Figure 2.5). This evidence suggests that consumers are not just shifting to mobile for their voice calling, but also to OTT apps (which use an internet connection such as mobile data).

32 Spark, "FY26 Detailed Financials" (2026), "FY22 Detailed Financials" (2022), "FY19 Spark New Zealand Detailed Financials" (2019).

33 The Plain Old Telephone Service (**POTS**) and Integrated Services Digital Network (**ISDN**) are legacy systems that have been used to provide residential and business voice services for many years.

34 Spark has decommissioned almost 65% of its legacy copper-based PSTN switches and notes that that on average around 3,200 customer lines migrate off that PSTN every month.

Figure 2.5 Average monthly SMS, mobile minutes and data usage per subscriber[35]



Source: Commission data

2.57 While these services differ from fixed-line voice services in some respects, these differences do not prevent substitution in practice. The evidence on usage and switching indicates that many consumers regard these alternatives as sufficiently comparable for their communication needs.[36]

---

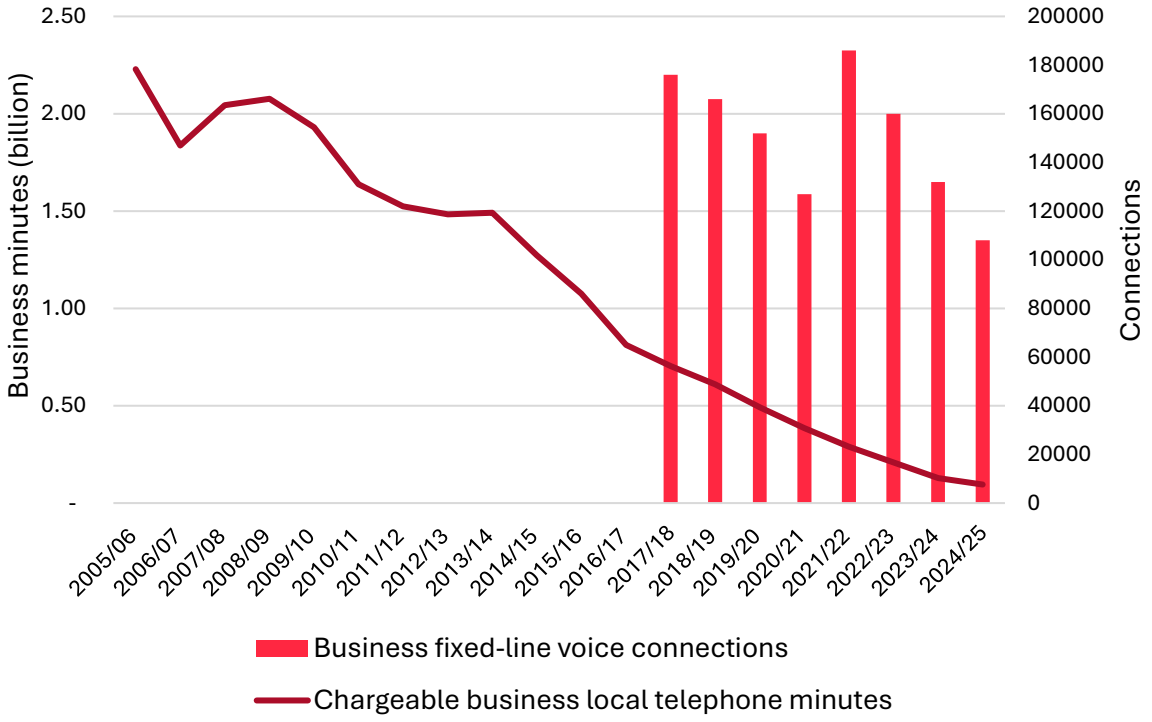
35 Commerce Commission "Mobile Termination Access Service (MTAS) investigation under Schedule 3 of the Telecommunications Act 2001 (Act) – Final report on whether MTAS should be omitted from Schedule 1 of the Act" (16 March 2026), page 54.

36 Both our Copper Services Investigation (**CSI**) final report and our Fibre Voice draft recommendation report note that voice over any technology that provides a fixed PSTN is likely to be usable by most consumers, regardless of the technology. The CSI focuses on rural premises in NZ that can access the copper network (~2/3rd of all rural premises) while the Fibre Voice report considered all urban premises across the country (anywhere there is a regulated fibre network). This means only around 137,000 premises are not directly covered by the analysis in these two reports. However, the analysis of VoIP over FWA, non-cellular FWA and satellite will be applicable for these premises, meaning all people in New Zealand who may use a PSTN are reflected. Commerce Commission, "Copper Services Investigation under section 69AH of the Telecommunications Act Recommendation to the Minister for Media and Communications on the future of copper regulation – final report" (21 August 2025) and "Fibre Deregulation Review under section 210 of the Telecommunications Act Draft recommendation to the Minister for Media and Communications on fibre Voice services" (30 October 2025).

Business use

2.58 Business users show similar trends, as seen in Figure 2.6, indicating a declining reliance on fixed-line voice services across both residential and business segments.

Figure 2.6 Business fixed-line connections and chargeable minutes[37]



Source: Commission data

2.59 Business users show similar long-term trends to residential users, with declining connections and falling call volumes, but the decline in chargeable business minutes has been significantly greater than the decline in fixed-line voice connections.

2.60 Business users often have fewer practical alternatives than residential users. While many communications can now take place through mobile services, email, messaging platforms, video conferencing, and integrated communications services, some organisations continue to require fixed-number voice services for operational, customer service or continuity reasons. Examples may include customer contact centres, government agencies, financial institutions, and other organisations that rely on widely recognised geographic or freephone numbers and need to remain reachable through the traditional telephone network.

---

[37] We do not have a figure for 2022/23 for business minutes so have assumed a straight line fall to 2023/24.

2.61 Integrated communications platforms provide a further reason why businesses may be less dependent on traditional voice as a standalone service. Platforms such as Microsoft Teams combine chat, video meetings, messaging and calling, allowing some communications to move to channels that do not require PSTN interconnection.

2.62 However, these platforms can also retain telephone-number-based calling that continues to require interconnection; their availability does not always result in the complete bypass of the regulated Fixed PSTN Interconnection service.

2.63 Many government contact channels also provide alternatives to fixed-line voice calls, such as information, forms and services publicly available on websites. For example, NZQA have rolled out a website chatbot.

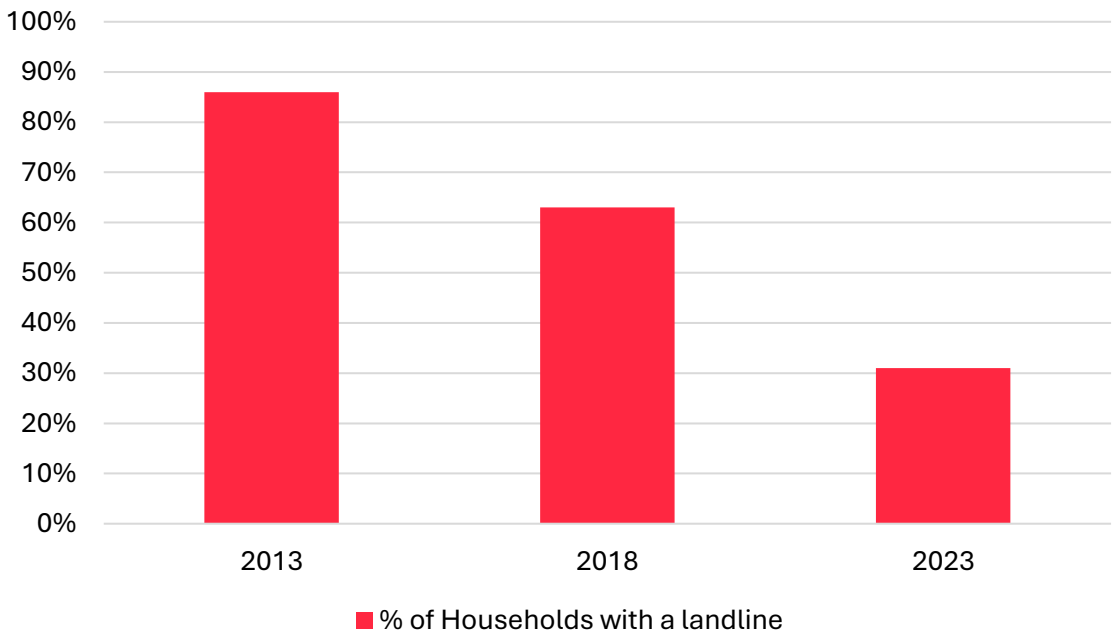
2.64 These channels can reduce reliance on PSTN interconnection for enquiries that can be handled digitally. However, such agencies continue to maintain telephone contact options.

2.65 Although the overall scale of the market has declined, the remaining users of fixed-line voice services may be increasingly concentrated among businesses and organisations with more limited alternatives. We therefore seek submissions on the nature and extent of this residual reliance.

Declining PSTN use

2.66 Landline penetration has declined substantially over time, from historically high levels to a minority of households, as shown in Figure 2.7.

Figure 2.7 Household landline penetration (2013-2023)[38]

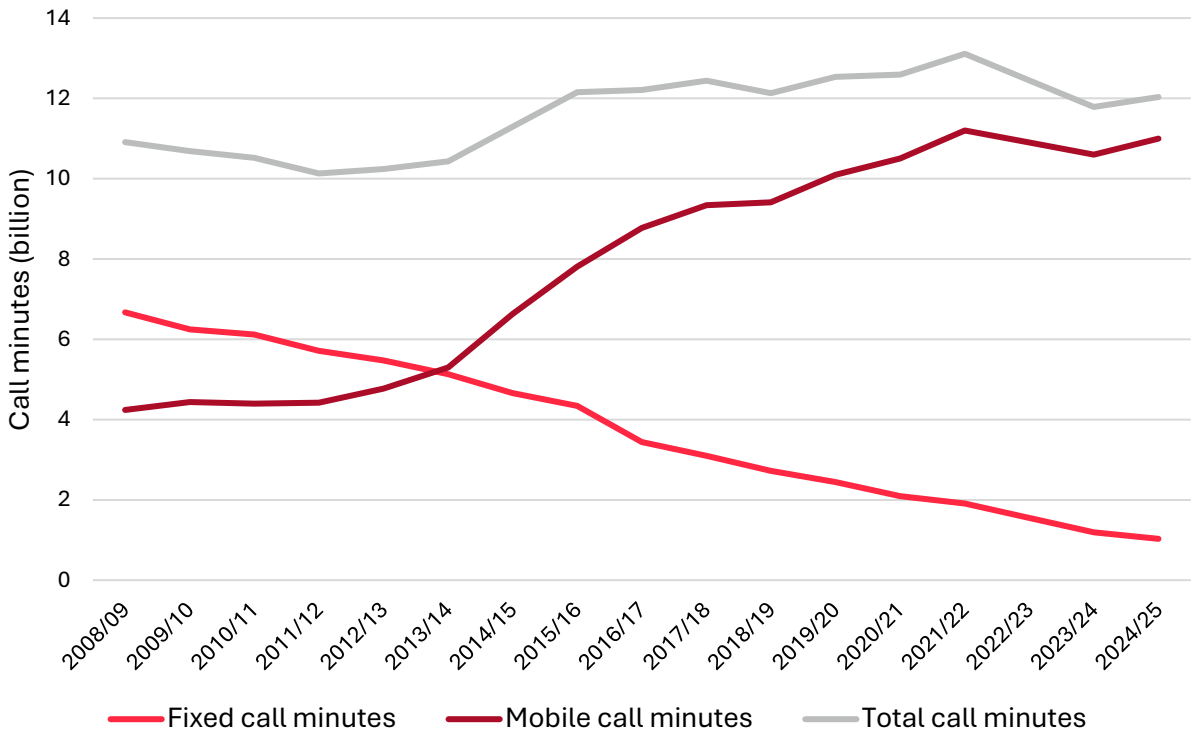


[38] Stats NZ "2023 Census Your Place, Your Data" (11 April 2025), page 13.

2.67 This indicates that a large proportion of consumers have moved away from fixed-line voice services altogether. As PSTN interconnection is only required where such services are used, this reduces the functional importance of the regulated service.

2.68 Figure 2.8 shows fixed-line call volumes have declined over a sustained period, while mobile usage has generally increased.

Figure 2.8 Mobile and fixed call minutes (2008-2024)[39]



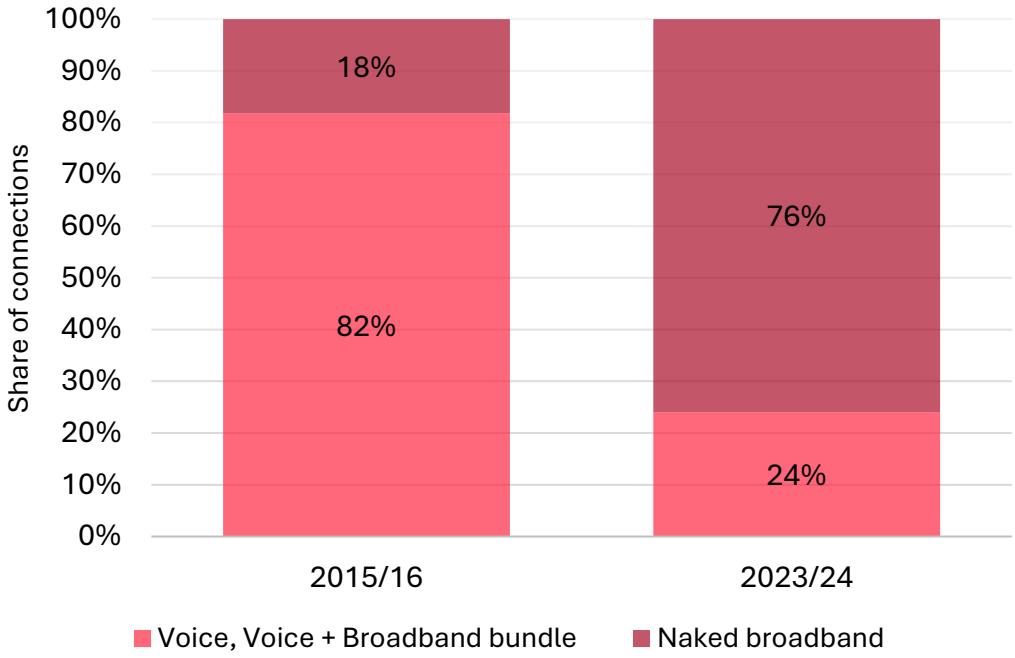
Source: Commission data

2.69 This demonstrates a clear shift in consumer behaviour away from fixed-line voice services and reduces the significance of PSTN interconnection as an input into downstream competition.

2.70 Figure 2.9 demonstrates that fixed-line voice services are increasingly excluded from service bundles, indicating they are no longer a standard component of telecommunications offerings.

[39] It should be noted that Figure 2.8 contains both residential and business minutes. Businesses also regularly use landlines. However, like residential connections, both the number of business landlines and business landline minutes have continued to fall.

Figure 2.9 Proportion of connections including fixed-line voice services[40]



Source: Commission data

2.71 This further supports the conclusion that PSTN-based services are becoming peripheral rather than central to the market.

Constraints from reciprocal dealings

2.72 Fixed network operators have commercial incentives to maintain connectivity valued by their customers. Reciprocal traffic and charging arrangements may also provide bargaining discipline.

2.73 The effectiveness of that discipline depends on traffic balances and the parties' commercial positions. The available evidence does not establish that reciprocal pricing would protect every access seeker against a deterioration of termination terms.

2.74 We recognise that some of the features identified in this investigation were also present in the Commission's review of MTAS. In particular, both services involve access to end-users connected to another network, meaning a degree of termination bottleneck remains. However, the evidence available for Fixed PSTN Interconnection suggests commercial constraints may be weaker than those observed for MTAS.

[40] Commerce Commission, "Mobile Termination Access Service (MTAS) investigation under Schedule 3 of the Telecommunications Act" (5 November 2025), page 53.

2.75 Information gathered during this investigation indicates that traffic exchanged between fixed networks is often materially asymmetric, with some providers predominantly sending traffic and others predominantly receiving it. This contrasts with services such as mobile-to-mobile calling and SMS (which are MTAS services), where traffic flows between major networks are often more balanced, creating reciprocal incentives that can help constrain wholesale pricing and access terms. As a result, the existence of a bottleneck may have different competitive implications in Fixed PSTN Interconnection than in MTAS.

Constraints from aggregators and transit

Why RSPs use aggregators

2.76 Aggregators enable RSPs to reach multiple networks without establishing and maintaining direct interconnection with each network themselves.

2.77 This is particularly important where an RSP's traffic volumes do not justify the establishment costs and operational work associated with multiple direct connections. Aggregation simplifies routing and commercial arrangements and spreads interconnection work across a broader customer base.

2.78 As a provider grows, direct interconnection may become economic. However, direct supply from one carrier does not necessarily reproduce the convenience of an aggregator's connectivity across several networks.

Ability to switch

2.79 Fixed network operators and aggregators reported multiple active interconnection partnerships, with some respondents reporting that the number of partners is increasing. This demonstrates that new interconnection arrangements can be established.

2.80 It does not establish that every provider can switch promptly or on equivalent terms. Establishment costs, technical integration, implementation work and commercial negotiations may limit switching, particularly for smaller providers.

2.81 Indirect arrangements can avoid some of the costs of direct interconnection, but their effectiveness depends on the routes and terms available.

Transit routes

2.82 Transit provides an established means of indirect connectivity. Transit routes are used when party A originates a call, sends the traffic via party B, for the call to terminate on party C's network. This reduces dependence on a particular direct relationship (ie, between party A and party C).

2.83 It also indicates that exercising bottleneck power and refusal to interconnect is unlikely, as the originating party would be anonymous, making targeted discrimination more difficult.

2.84 However, these arrangements are less likely to constrain a provider from applying higher termination charges or less favourable terms on a broad and non-discriminatory basis. While transit and aggregation therefore reduce some risks associated with the bottleneck, they do not fully eliminate the underlying dependence on access to originating and terminating networks.

Finding on termination

2.85 Retail alternatives are widely available, fixed-line voice usage continues to decline, interconnection revenues have reduced in significance, and commercial interconnection arrangements appear to be functioning effectively. These developments suggest the practical significance of the termination bottleneck has reduced substantially since regulation was introduced.

2.86 However, termination remains an unavoidable input for calls to customers who continue to rely on fixed-number voice services. Traffic flows are not always reciprocal, aggregation and transit arrangements ultimately remain dependent on originating and terminating networks, and the available evidence does not establish that commercial constraints alone would protect all access seekers if regulation were removed. On balance, while the bottleneck has weakened, we are not satisfied that it has ceased to be relevant.

Access to callers: origination

2.87 A purchaser wishing to receive calls from users of a fixed network may need that network to originate those calls.

2.88 Retail users may have alternative ways to communicate. However, a purchaser of origination cannot necessarily substitute those alternatives for access to callers who continue to use fixed PSTN services.

2.89 The existence of mobile, OTT and cloud-based communications therefore does not, by itself, remove dependence on fixed origination.

Countervailing bargaining power

2.90 The ability of origination purchasers to resist higher charges or less favourable non-price terms depends on their commercial alternatives and bargaining position.

2.91 The available evidence does not establish that all purchasers have sufficient countervailing power. In particular, a purchaser seeking access to another network's callers may have limited ability to redirect those callers to a different originating network or communication channel.

2.92 This is a limitation in the evidence, rather than a finding that every origination purchaser lacks bargaining power.

2.93 We therefore seek submissions supported by evidence on the extent to which purchasers of origination services can constrain the terms offered by originating networks.

2.94 The reciprocal discipline that may arise in termination arrangements cannot automatically be assumed to apply to origination.

2.95 Where traffic flows are asymmetric, the purchaser may be unable to respond to an increase in origination charges through equivalent reciprocal charges. The scope for retaliation therefore depends on the particular traffic flows and commercial relationships.

2.96 This issue is particularly relevant to toll-free services and other receiving-party-pays arrangements. The purchaser pays to receive calls from users of another network, while those callers may not face the origination charge directly.

2.97 As the receiving party does not control the caller's network choice, its ability to avoid an increase in origination charges may be limited.

Weight placed on mobile origination prices

2.98 We place limited weight on mobile-to-0800/0508 prices when assessing potential outcomes for fixed PSTN origination.

2.99 Mobile origination is not regulated under the Fixed PSTN Interconnection or MTAS frameworks and mobile calling charges have long been much higher than fixed calling charges, so have remained high.

Finding on origination

2.100 Originating networks retain control over access to calls made by their customers. The available evidence does not establish that retail alternatives, purchaser bargaining power or reciprocal charging would sufficiently constrain the exercise of that control, particularly where traffic is asymmetric.

Market position of aggregators

Ability and incentives for fixed networks to disadvantage aggregators

2.101 Control of network access can create opportunities for disadvantage through higher charges, poorer service quality, slower fault handling, discriminatory technical requirements or restrictive contractual terms.

2.102 However, we do not believe that a foreclosure strategy is likely. Major carriers have incentives to preserve connectivity, and declining interconnection revenues limit the apparent direct wholesale gains from exclusion.

Importance and viability of aggregators

2.103 Some aggregation providers reported growing traffic and revenues despite declining activity on major fixed networks. This supports the continuing relevance of the aggregation model under current conditions.

2.104 Growth does not establish that aggregators could absorb materially worse access terms. The responses do not establish their margins or the extent to which reciprocal pricing would offset higher input costs.

2.105 The loss or weakening of an aggregator could affect smaller RSPs through higher costs, reduced choice or migration work. However, we find it unlikely that major fixed network operators would disadvantage aggregators in such a way that it would cause them to exit the market.

Finding on aggregators

2.106 Aggregation reduces dependence on direct agreements but does not eliminate dependence on originating or terminating networks.

Evidence from current commercial outcomes

Disputes and refusals

2.107 We have not identified evidence of refusal to interconnect, discriminatory conduct or excessive pricing in the fixed PSTN interconnection market. Providers continue to exchange traffic through established commercial arrangements.

2.108 These observations provide reassurance about current market operation.

Commercial pricing

2.109 Reported fixed termination prices are broadly clustered, with reciprocal charging in some cases and limited reported use of volume discounts.

2.110 Existing agreements operate without reliance on a current regulated price determination and have been commercially negotiated. However, they were negotiated with the presence of a regulatory backstop.

2.111 The Network Strategies report identified that historically, some stakeholders have submitted that the original determination from 2002 provides a reference point for pricing, though some stakeholders note that it is largely irrelevant today.[41]

[41] Network Strategies "Fixed PSTN interconnection in New Zealand" (12 June 2025), page 21.

Weight placed on current commercial outcomes

2.112 Current commercial outcomes are relevant evidence, but they do not provide a direct observation of a market without regulation.

2.113 The threat of regulatory intervention may influence negotiations even where no current price determination is used. Accordingly, the absence of observed harm does not establish that the regulatory backstop makes no contribution to commercial outcomes.

Overall conclusion on competition

2.114 The fixed-line voice market has changed significantly since Fixed PSTN Interconnection was first regulated.

2.115 Fixed-line usage continues to decline, retail alternatives are widely available, and providers increasingly rely on commercial interconnection arrangements, aggregation providers and transit services to exchange traffic. In particular, the market is no longer characterised by the same degree of reliance on a single incumbent provider, with the position of Spark as the dominant supplier of PSTN services having declined over time.

2.116 These developments have reduced the practical significance of PSTN interconnection and support the view that competition is stronger than when the service was originally regulated. Providers of PSTN services are well aware of the availability of retail alternatives and are unlikely to take actions that are likely to hasten the departure of end-users from PSTN services.

2.117 However, the competitive concerns underlying regulation are still present.

2.118 In relation to termination, providers continue to control access to their own end-users, creating an inherent dependency for other operators seeking to complete calls. The existence of a termination bottleneck is not unique to Fixed PSTN Interconnection and was also relevant in our assessment of MTAS. However, there are important differences. In mobile markets, traffic exchanged between major networks may create reciprocal commercial incentives that constrain the exercise of market power.

2.119 By contrast, evidence gathered during this investigation indicates that fixed network traffic flows can be materially asymmetric, with some providers acting primarily as net senders of traffic and others primarily as net receivers. These asymmetries may reduce the effectiveness of reciprocal commercial constraints and weaken the bargaining position of some access seekers.

2.120 In relation to origination, access seekers may have limited practical alternatives where they require access to fixed-line customers connected to another provider's network. While the widespread availability of mobile and other communications services may constrain providers' ability to increase prices, businesses purchasing origination services may nevertheless face weaker bargaining power than providers that control access to originating networks.

2.121 The availability of aggregation and transit services has improved the range of commercial interconnection options available to providers, but these services ultimately depend on originating and terminating networks and do not remove the underlying need to obtain access to those networks. While current commercial arrangements suggest competition may provide some constraint, the evidence available to us does not provide sufficient confidence that these outcomes would continue across all relevant services and market participants if regulation were removed.

Alignment with the purpose of the regulation – section 18 (step 4)

2.122 Our final step is to determine, in light of our findings in relation to competition, whether the maintenance of regulation or the omission of Fixed PSTN Interconnection from Schedule 1 of the Act, best gives effect to the purpose in section 18.[42] Section 18 provides that the purpose of Part 2 of the Act (which relates to the designated and specified services set out in Schedule 1 of the Act) is to "promote competition in telecommunications markets for the long-term benefit of end-users of telecommunications services within New Zealand".

2.123 It also provides that, when determining whether any act or omission may contribute to or promote competition in telecommunications markets for the long-term benefit of end-users, we must consider:

2.123.1 the efficiencies that will result, or will be likely to result;[43] and

2.123.2 the incentives that exist for, and the risks faced by, investors in new telecommunications services.[44]

2.124 In this section, we compare the factual (the future state with existing regulation) to the counterfactual (the future state without regulation) and consider which would best give effect to the purpose in section 18, including the efficiencies that will result and the incentives face by investors in new services.

---

42 Section 18 outlines that "the purpose of this Part and Schedules 1 to 3 is to promote competition in telecommunications markets for the long-term benefit of end-users of telecommunications services within New Zealand by regulating, and providing for the regulation of, the supply of certain telecommunications services between service providers".

43 The Act, cl 18(2).

44 The Act, cl 18(2A).

Factual assessment (the future state with existing regulation)

2.125 Under the factual, Fixed PSTN Interconnection remains in Schedule 1. Commercial negotiations, retail substitution and technological transition would be expected to continue. Retention would preserve the possibility of regulatory intervention in price; it would not itself impose a new determination.

2.126 The principal benefit would be continued bargaining backstop protection where commercial alternatives do not adequately constrain originating or terminating network control. While no determination is currently in place which would set a price for interconnection rates, the current regulation allows for us to implement a determination if we were to see a competition issue arise in the market. For termination, alternative routes and reciprocal dealings would continue to provide discipline, while the backstop would remain available where those constraints were insufficient to protect access to customers on a particular network.

2.127 For origination, retention would preserve backstop protection where purchasers have limited ability to redirect callers or respond through equivalent reciprocal charges. This would be particularly relevant to toll-free and other receiving-party-pays arrangements, where the purchaser bears the cost of receiving calls but does not control the caller's network choice.

2.128 Aggregation and transit would continue to connect networks and reduce the need for smaller RSPs to maintain multiple direct relationships. Retention would preserve protection for the network access on which these intermediaries depend. This would reduce the risk that worse wholesale terms weaken downstream competition through higher costs, reduced choice or less favourable service conditions. It would not guarantee the viability of any particular provider.

2.129 Retail substitution and technological transition would also be expected to continue. Retention would not require users to maintain fixed-line voice services or providers to preserve legacy technology. Commercial incentives to adopt more efficient technologies and interconnection arrangements would remain.

2.130 The factual would retain the existing regulatory framework and its associated costs. We do not expect these costs to be material but we would welcome any evidence on this.

2.131 Overall, the factual would preserve bargaining backstop protection while commercial negotiation and technological transition continue.

Counterfactual assessment (the future state without regulation)

2.132 The counterfactual scenario represents the Commission's view of what is likely to occur in the absence of regulation (ie, if Fixed PSTN Interconnection was removed from Schedule 1).

2.133 Providers would continue to negotiate commercially, but the existing mechanism to implement a service-specific regulatory price would no longer be available.

2.134 We would expect interconnection to continue. Established routes, reciprocal relationships and the value customers place on connectivity provide incentives to maintain traffic exchange. As discussed in paragraphs 2.76 to 2.84, widespread refusal to interconnect, foreclosure or aggregator exit is not the expected outcome. However, continued connectivity would not necessarily mean unchanged access terms.

2.135 For termination, alternative routes, reciprocal dealings and retail substitution are likely to continue to provide some constraint on providers of termination services. Nevertheless, every route to a customer reliant on a fixed-line voice service would ultimately depend on the network serving that customer. Where switching was costly or reciprocal leverage was limited, removal would leave access seekers reliant on commercial constraints.

2.136 The available evidence demonstrates that commercial negotiations are occurring and, in many cases, producing workable outcomes. However, it does not provide sufficient confidence that commercial arrangements alone would provide effective protection against adverse outcomes in all circumstances if regulation were removed.

2.137 Origination purchasers could face greater exposure where traffic flows were asymmetric and they could not respond to higher charges through equivalent reciprocal charges. This is particularly relevant to toll-free and other receiving-party-pays arrangements. Some purchasers may retain sufficient bargaining power, but the available evidence does not establish that all purchasers could constrain less favourable terms.

2.138 Aggregation and transit would remain commercially relevant. However, an aggregator could continue operating while receiving higher charges or poorer non-price terms. If it could not avoid or absorb those changes, downstream RSPs could face higher costs or reduced choice. Alternative intermediaries or direct arrangements could mitigate these effects, but establishment costs, technical integration and implementation work may limit switching. Aggregator exit would create a more substantial migration task, although the available evidence does not establish that removal would be likely to cause such an exit.

2.139 Current commercial stability provides reassurance, but existing arrangements were negotiated with the backstop in place. It therefore does not establish that outcomes would remain unchanged after removal, as the threat of implementing regulated access by way of a determination would be diminished. The principal concern is a deterioration in access terms for some purchasers, rather than a general loss of connectivity.

2.140 The current evidence demonstrates significant market developments that support consideration of deregulation. However, it does not provide sufficient confidence that the remaining competition concerns associated with Fixed PSTN Interconnection have reduced to the point that regulation is no longer required. We therefore consider that retaining regulation remains the more appropriate course based on the currently available evidence, while inviting further evidence through submissions before reaching our final recommendation.

2.141 Removal would eliminate the existing backstop and its associated costs, though we do not believe these costs to be material. However, the available evidence does not quantify the resulting efficiency benefits or establish that removal is necessary for innovation, investment or technological transition. The comparison therefore turns on whether those incremental benefits outweigh the loss of bargaining protection where commercial alternatives remain limited.

Overall assessment of the regulatory state that best gives effect to the purpose in section 18

2.142 Our draft recommendation is therefore to retain Fixed PSTN Interconnection in Schedule 1 of the Act.

2.143 This is a finely balanced assessment. Fixed-line voice services are in long-term decline, alternative communications services are widely available, and providers increasingly rely on commercial arrangements rather than regulatory processes. These developments point towards deregulation. However, the evidence available to us does not provide sufficient confidence that competition concerns associated with access to originating and terminating networks have been fully resolved for those end-users and providers that continue to rely on fixed-number voice services. We are not currently satisfied that removing Fixed PSTN Interconnection from Schedule 1 would best promote competition for the long-term benefit of end-users.

2.144 Our draft view is therefore that retaining Fixed PSTN Interconnection in Schedule 1 best gives effect to the purpose in section 18. Although the benefits of regulation have diminished as fixed-line voice services decline, they have not disappeared. Continued regulation preserves backstop protections for access seekers, supports competition for those end-users who continue to rely on fixed-line voice services, and maintains a regulatory backstop while the market continues to transition towards alternative communications technologies.

Attachment A Summary of international regulatory decisions

A1 International experience indicates that regulators generally assess the continued need for wholesale voice regulation by reference to competition conditions and market power, rather than relying on declining traffic volumes or technological change. Across comparable jurisdictions, the existence of alternative technologies has typically been considered alongside an assessment of whether competitive constraints are sufficient such that regulation is no longer required.

A2 In Australia, the Australian Competition and Consumer Commission (**ACCC**) recently extended regulation of fixed origination and termination services for a further five years.[45] A key consideration was that some customers, particularly in rural and remote areas, continued to rely on fixed-line voice services and that effective substitutes were not available in all circumstances. At the same time, the ACCC removed regulation from some legacy services where usage had declined substantially and retained regulation only where competition concerns remained. This reflects a targeted approach in which deregulation is linked to the presence of effective competitive constraints rather than the decline of a service alone.

A3 In the United Kingdom, Ofcom has retained regulation of fixed-line voice termination services.[46] It found that providers continue to control access to their own end-users and that opportunities remain for anti-competitive conduct in the absence of regulation. The continued decline in fixed voice usage was not considered sufficient to remove these concerns.

A4 Across Europe, some jurisdictions have deregulated fixed-line voice termination services following wider regulatory reforms, including the introduction of harmonised European Union termination rates. However, deregulation has not been universal. Italy, Latvia and the Netherlands have retained regulation of fixed termination services despite declining fixed-line voice traffic, reflecting concerns that providers could still engage in non-price discrimination or other conduct arising from their control of access to end-users.

---

45 ACCC "Public inquiry into the declaration of the domestic transmission capacity service, fixed line services and domestic mobile terminating access service" (25 Match 2024).

46 Ofcom "Reviews of Call Termination Markets and End-to-End Connectivity Condition" (26 March 2026).

A5 Ireland has continued to regulate wholesale voice services where competition concerns persist through its significant market power framework. As in other jurisdictions, the focus remains on whether operators possess market power and whether sufficient competitive constraints exist, rather than on the absolute level of voice traffic or the maturity of alternative technologies.