

Specified points of interconnection

Consultation paper

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

Glossary

Act	Telecommunications Act 2001
End-user	In relation to a telecommunications service, means a person who is the ultimate recipient of that service or of another service whose provision is dependent on that service
LFC	Local fibre companies (including Chorus)
NIPA	Network Infrastructure Project Agreement
POI	Point of Interconnection
Regulated fibre service provider	A person prescribed by the Governor-General as being subject to regulation under s 226 of the Act
RSP	Retail Service Provider
SFA	Specified Fibre Area
Specified fibre service	Has the meaning given to that term in section 69AB of the Act
UFB	The New Zealand Government's Ultra-fast broadband initiative

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Introduction

Purpose and structure of this paper

1. Section 231 of the Telecommunications Act 2001 (Act) gives the Commerce Commission (Commission) the power to prescribe points of interconnection (POIs) for the purposes of establishing fibre handover points.
2. We intend to prescribe POIs by public notice before 31 December 2019. This will be the first time we exercise this power. We are intending to prescribe POIs before 31 December 2019 because POIs need to be in effect for us to assess and declare specified fibre areas (SFAs) under section 69AB of the Act. We are required to make our first declaration of SFAs by 1 January 2020.
3. The purpose of this consultation paper (Consultation Paper) is to seek feedback on the POIs we propose to prescribe.
4. This Consultation Paper has the following sections:
 - 4.1 Context for our power to prescribe POIs;
 - 4.2 Proposed specified POIs;
 - 4.3 Attachment A – List of proposed specified POIs; and
 - 4.4 Attachment B – Consolidated list of consultation questions.

Submissions

5. We are seeking submissions on this Consultation Paper, including views on the POIs we propose to prescribe.
6. Please make your submission via the Specified Points of Interconnection Project Page¹ by 5pm on **26 November 2019**. The project page will direct you to a form with instructions on how to upload your submission.
7. The protection of confidential information is something we take seriously. To continue to protect confidential submissions we are trialing a new submission process. This will require you to upload your submission via the form from the project page. You are required to provide (if necessary) both a confidential and non-confidential version of your submission and to clearly identify the confidential and non-confidential versions.
8. When including commercially sensitive or confidential information in your submission, we offer the following guidance:
 - 8.1 Provide a clearly labelled confidential version and public version. We intend to publish all public versions on our website.

¹ <https://comcom.govt.nz/regulated-industries/telecommunications/regulated-services/fibre-regulation/specified-points-of-interconnection>.

- 8.2 The responsibility for ensuring confidential information is not included in a public version of a submission rests entirely with the party making the submission.
9. If we consider information disclosed in the confidential version to be in the public interest, we will consult with the party that provided the information before any such disclosure is made.

Next steps

10. Following submissions on the Consultation Paper, we intend to make a final decision on the POIs that we will prescribe. We will then issue a public notice prescribing the POIs before 31 December 2019.
11. Table 1 provides a timeline of our process.

Table 1 – Timeline of process

Key step	Date
Consultation Paper published	12 November 2019
Submissions on Consultation Paper due	26 November 2019
Final decision on POIs published and public notice in the <i>Gazette</i>	Before 31 December 2019

Context for prescribing POIs

12. Section 231, which is in Part 6 of the Act, gives the Commission the power to prescribe POIs. It provides:

231 Specified points of interconnection

- (1) The Commission may, by public notice, prescribe points of interconnection for the purposes of establishing fibre handover points.
- (2) The notice may prescribe a point of interconnection by reference to 1 or more of the following:
- (a) a regulated fibre service provider's network;
 - (b) a geographical location;
 - (c) the UFB initiative.
- (3) The Commission may amend or revoke a notice in the manner in which it was made.

- (4) However, the Commission must not amend a specified point of interconnection unless the amendment—
- (a) is for an appropriate technical purpose; and
 - (b) is consistent with the purpose in section 162.
- (5) The first notice made under this section—
- (a) must prescribe points of interconnection based on the points of interconnection that apply as at the close of 31 December 2019 under the UFB initiative; and
 - (b) may prescribe additional points of interconnection.
- (6) A notice under this section is neither a legislative instrument nor a disallowable instrument for the purposes of the Legislation Act 2012 and does not have to be presented to the House of Representatives under section 41 of that Act.
13. Section 5 of the Act defines ‘specified point of interconnection’ as a POI prescribed under section 231.
14. As section 231(1) states, the purpose of prescribing POIs is to establish fibre handover points. The term ‘fibre handover point’ is defined in section 5 of the Act:
- fibre handover point** means the external network-to-network interface (or equivalent facility) located at the specified point of interconnection for the relevant end-user’s premises, building, or other access point that enables access to, and interconnection with, a regulated fibre service provider’s fibre network
15. The definition of ‘fibre network’ in the Act indicates that the fibre handover point defines the upstream boundary of a fibre network, with the downstream boundary demarcated by the user-network interface:
- fibre network** means a network structure used to deliver telecommunications services over fibre media that connects the user-network interface (or equivalent facility) of an end-user’s premises, building, or other access point to a regulated fibre service provider’s fibre handover point
16. POIs therefore determine the scope of a regulated fibre service provider’s² fibre network, in combination with the user-network interfaces (or equivalent facilities).

² A regulated fibre service provider is a person who is prescribed in regulations made under section 226 of the Act as being subject to information disclosure regulation and/or price-quality regulation (section 5 of the Act).

17. In reporting back on the Telecommunications (New Regulatory Framework) Amendment Bill (Amendment Bill), the Economic Development, Science and Innovation Select Committee (Select Committee) described POIs as follows:³

POIs are the places where the retail service provider's network connects to the wholesale fibre provider's network. A feature of the Ultra-fast Broadband (UFB) architecture is a single POI per candidate area, driving competition and supporting open access.

We must prescribe POIs in order to declare SFAs

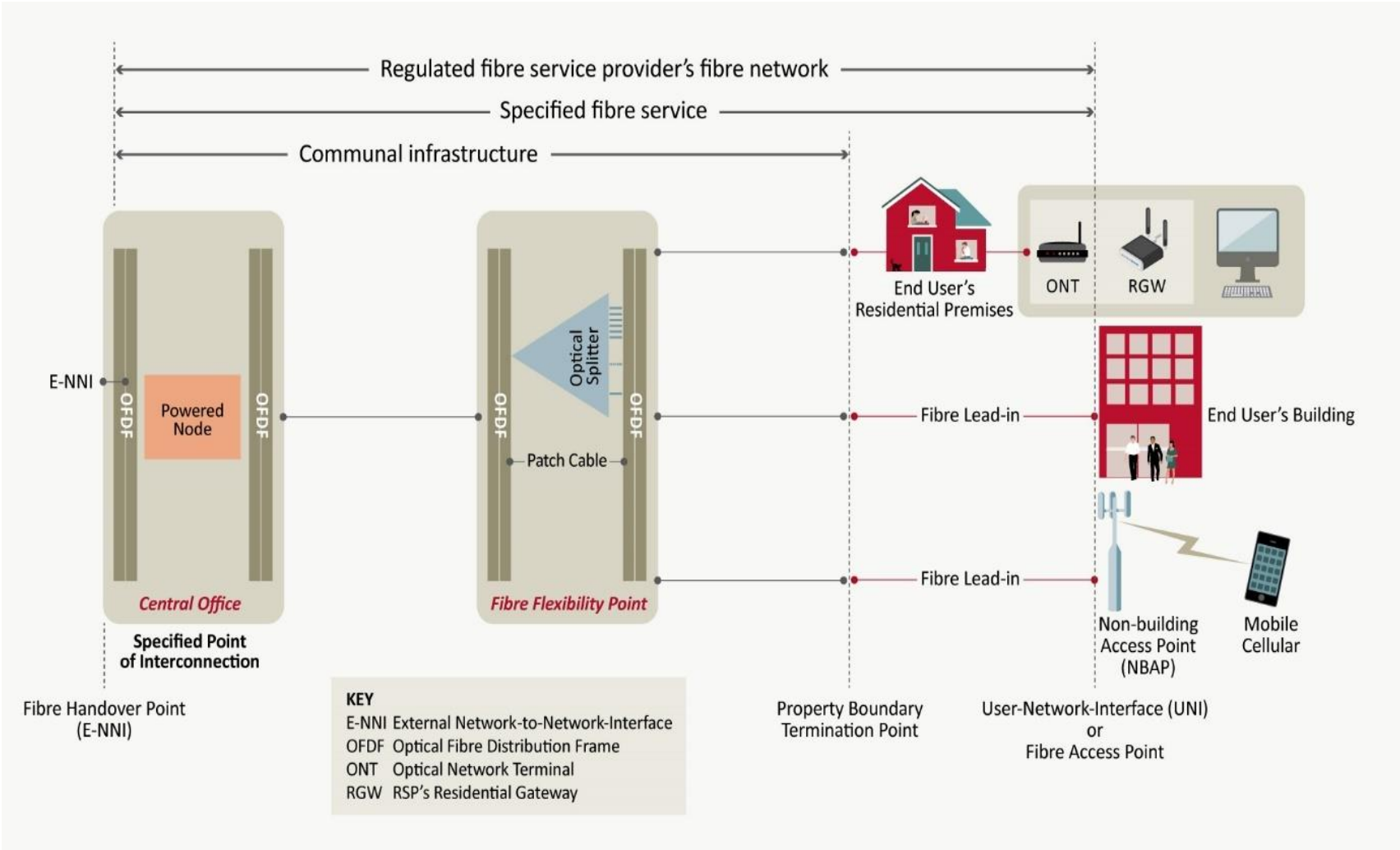
18. We have separately consulted on our function under section 69AB of the Act to assess and declare SFAs, which we must do by 1 January 2020.⁴ We intend to make our first declaration of SFAs by public notice before 1 January 2020, with an effective date for the SFAs of 1 February 2020.
19. SFAs are areas where a 'specified fibre service' is available to end-users. We need to prescribe POIs in order for us to be able to declare SFAs. As we explained in our paper, 'Determining specified fibre areas – Framework and initial approach', a specified fibre service will be available where the key components of that service exist, ie, a regulated fibre service provider, a fibre network and a fibre handover point.⁵
20. Because POIs establish fibre handover points and determine the scope of a regulated fibre service provider's fibre network, POIs must be in effect for a specified fibre service to exist. We must therefore prescribe POIs before we declare SFAs by 1 January 2020.
21. Figure 1 below shows a fibre handover point in the context of a fibre network and specified fibre service.

³ Select Committee Report on Telecommunications (New Regulatory Framework) Amendment Bill, p. 6.

⁴ Commerce Commission, Specified Fibre Areas Project Page: <https://comcom.govt.nz/regulated-industries/telecommunications/projects/specified-fibre-areas>

⁵ Commerce Commission, Determining specified fibre areas: Framework and initial approach, 31 October 2019, at paragraphs 43-44. Available at <https://comcom.govt.nz/regulated-industries/telecommunications/regulated-services/consumer-protections-for-copper-withdrawal/specified-fibre-areas>.

Figure 1 – Scope of specified fibre services



Proposed specified POIs

22. A prerequisite to us prescribing POIs is the making of regulations under section 226 of the Act prescribing regulated fibre service providers and the services in respect of which they are subject to regulation under Part 6 of the Act. We anticipate that the regulations will be in force before the end of the year, enabling us to prescribe POIs before 31 December 2019.
23. This will be the first time we exercise our power to prescribe POIs. Section 231(5) of the Act specifies that, for the first notice under section 231, we:
 - 23.1 must prescribe POIs based on the POIs that apply as at the close of 31 December 2019 under the UFB initiative (UFB initiative POIs); and
 - 23.2 may prescribe additional POIs.
24. The UFB initiative is defined in the Act as follows:

UFB initiative—

- (a) means the competitive tender programme, known as the Ultra-fast Broadband Initiative, to develop fibre-to-the-premises broadband networks connecting 75% of New Zealand households, with the support of \$1.5 billion of Crown investment funding; and
 - (b) includes—
 - (i) the extension to that programme known as UFB 2, to develop fibre-to-the-premises networks connecting at least 80% of New Zealand households (which, to avoid doubt, includes the extension to UFB 2 known as UFB 2+); and
 - (ii) any other extension to the programme
25. For this first notice, we propose to prescribe only the UFB initiative POIs. In the next section we explain our view of the UFB initiative POIs.

UFB initiative POIs

26. Our preliminary view is that the UFB initiative POIs are those POIs that were implemented to satisfy the single POI per candidate area requirement under the Network Infrastructure Project Agreements (NIPAs⁶) entered into by local fibre companies (including Chorus) (LFCs) and Crown Infrastructure Partners.

⁶ The NIPAs are available at <https://www.crowninfrastructure.govt.nz/ufb/who/>.

27. The single POI per candidate area requirement under the NIPAs is that every end-user within a UFB candidate area must be accessible by a retail service provider (RSP) from a single POI.⁷ As the Select Committee noted when it reported back on the Amendment Bill, a feature of UFB architecture is a single POI per candidate area, “driving competition and supporting open access”.⁸
28. We have listed the UFB initiative POIs that we propose to prescribe in Attachment A.
29. The UFB initiative POIs listed in Attachment A are all at handover points for layer 2 bitstream services.⁹ In its submission on the Fibre Emerging Views Paper, Chorus submitted that we should prescribe POIs at handover points for layer 1 and layer 2 services, saying that it is “important that the specified POIs reflect the differing handovers for our layer 1 and layer 2 services, as recognised in our UFB agreements”.¹⁰
30. Our preliminary view is that the UFB initiative POIs are limited to POIs at layer 2 handover points. The NIPAs consistently make a distinction between layer 2 handover points, which are called POIs, and layer 1 handover points, which are referred to as being located at a Central Office (which is not also a POI). For example, Chorus’ NIPA for UFB 2 states that “[t]he [Central Office] is the point at which RSPs connect to the Dark Fibre Services. Access to the bitstream services is not available from a [Central Office], unless that [Central Office] is also a POI”.¹¹ A Dark Fibre Service is a layer 1 direct fibre access service; a Bitstream Service is a layer 2 service.
31. We consider that this provides a clear indication that the UFB initiative POIs are limited to POIs at layer 2 handover points.

Consultation questions

1	Do you agree that the UFB initiative POIs are those POIs that were implemented to satisfy the single POI per candidate area requirement under the NIPAs?
2	Do you agree that the UFB initiative POIs are limited to POIs at layer 2 handover points?
3	Is the list of UFB initiative POIs and their associated details in Attachment A complete and correct?

⁷ For example, Chorus’ NIPA for UFB 1 (dated 24 May 2011), Annexure 2: Requirements, specifies that “[a]ll Layer 2 End Users within a Candidate Area must be accessible from a single POI”.

⁸ Select Committee Report on Telecommunications (New Regulatory Framework) Amendment Bill, p. 6.

⁹ Which may also be the location for interconnection to layer 1 services.

¹⁰ Chorus, Submission in response to the Commerce Commission’s fibre regulation emerging views dated 21 May 2019, at paragraphs 72-77.

¹¹ Network Infrastructure Project Agreement between Chorus and Crown Infrastructure Partners, 26 January 2017, at Annexure 1: Network Requirements, clause 2.4. Available at <https://www.crowninfrastructure.govt.nz/wp-content/uploads/2018/07/Network-Infrastructure-Project-Agreement-NIPA-26-January-2017-redacted....pdf>.

Discretion to prescribe additional POIs

32. As we indicated above, at this stage we are not proposing to prescribe additional POIs under section 231(5)(b).
33. For the UFB initiative POIs, we will identify in the public notice those end-user premises, buildings, or other access points that the POI relates to. We consider this necessary because the definition of fibre handover point makes it clear that each specified POI must be related to an end-user premises, building, or other access point.
34. We are considering two ways to achieve this. Our preferred approach at this stage is, for each specified POI, to specify that its related end-user premises, buildings, or other access points are:
 - 34.1 those end-user premises, buildings, or other access points that are within the POI's associated geographic area/s under the UFB initiative (either as at the date of the public notice or in the future). These will be the fibre build areas as set out in LFCs' (including Chorus) respective NIPAs and associated documents. For Chorus, these will be the POI areas¹² and, for the other LFCs, will be either the candidate areas or coverage areas (as those terms are used in the NIPAs and associated documents); and
 - 34.2 any other end-user premises, buildings, or other access points that are associated with the POI, ie, the POI is where the layer 2 traffic for those other end-user premises, buildings, or other access points is handed over to RSPs.
35. We have assumed that we do not need to prescribe additional POIs as the UFB initiative POIs would, on the basis of the proposal in paragraph 34 above, capture all end-user premises, buildings, or other access points for whom fibre fixed line access services are available. However, as set out in consultation questions 4 and 5 below, we are interested in views on this issue.
36. An alternative approach is to identify the related end-user premises, buildings, or other access points by reference to SFAs. As part of the SFA process, Chorus and the other LFCs will provide us with information on the associated POI for each end-user premises, building, or other access point, and we intend to publish that information on our website.¹³
37. A reason why this is not our current preferred approach is that any end-user premises, buildings, or other access points which have not been declared as SFAs (due to, for example, delay between specified fibre services becoming available and us declaring the area as an SFA) would not have an associated specified POI.

¹² Chorus' POI areas include UFB 1 and UFB 2 candidate areas.

¹³ This will likely take the form of an interactive map. Anyone using the map will be able to select individual end-user premises, buildings, or other access points, and bring up related information including the associated POI.

38. Finally, while at this stage we are not proposing to prescribe additional POIs for the first POI notice, we may prescribe additional POIs in the future.

Consultation questions

4	Do you agree with our proposal in paragraph 34 above? That is, for each specified POI, to specify that its related end-user premises, buildings, or other access points are those that are within the POI's associated geographic area/s under the UFB initiative, plus any other end-user premises, buildings, or other access points that are associated with the POI.
5	Are you aware of any end-user premises, buildings, or other access points for whom fibre fixed line access services are available but that are not, or cannot be, associated with a UFB initiative POI? If so, how should we treat these?
6	Do you see any advantages in the alternative approach of identifying related end-user premises, buildings, or other access points by reference to SFAs?
7	In circumstances where there is a future extension to a fibre network outside of the UFB initiative, rather than specifying a new POI, should we specify that end-user premises, buildings, or other access points served by the new fibre network be related to an existing UFB initiative POI?

Content of the first POI notice

39. Our preliminary view is that the first notice will include the following information for each prescribed POI:
- 39.1 Name of the POI;
 - 39.2 POI identifier (where available);
 - 39.3 The name of the related regulated fibre service provider;
 - 39.4 The region that the POI is located in; and
 - 39.5 The POI's associated geographic area under the UFB initiative.
40. We also intend to include in the notice a confidential annexure with the physical address for each POI. This approach was adopted by the Australian Competition and Consumer Commission for its list of POIs for the National Broadband Network, where it cited concerns about the security of infrastructure assets. RSPs will be able to obtain these confidential details from the relevant regulated fibre service provider under appropriate confidentiality arrangements.

Consultation questions

8	Are there any other details we should provide for each POI?
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Timing

41. The requirement under section 231(5)(a) is to prescribe the UFB initiative POIs that apply as at the close of 31 December 2019. However, we intend to prescribe the UFB initiative POIs by public notice before 31 December 2019. This means we will need to anticipate the UFB initiative POIs that will apply as at the close of 31 December 2019.

Consultation questions

- | | |
|---|---|
| 9 | Are you aware of any UFB initiative POIs that are not in the list in Attachment A but will exist as at the close of 31 December 2019? |
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Attachment A – List of proposed specified POIs

Chorus POIs¹⁴

	POI ID	Name	Region	UFB initiative geographic area
1	AR	Ashburton Exchange	Canterbury	Ashburton
2	BM	Blenheim Exchange	Marlborough	Blenheim
3	CH	Christchurch Central Exchange	Canterbury	Christchurch
4	DN	Dunedin Exchange	Otago	Dunedin
5	FG	Feilding Exchange	Manawatu-Whanganui	Palmerston North
6	GS	Gisborne Exchange	Gisborne	Gisborne
7	GLF	Glenfield Exchange	Auckland	Auckland
8	GM	Greymouth Exchange	West Coast	Greymouth
9	HN	Hamilton Exchange	Waikato	Hamilton
10	HS	Hastings Exchange	Hawkes Bay	Napier
11	IN	Invercargill Exchange	Southland	Invercargill
12	LVN	Levin Exchange	Manawatu-Whanganui	Levin
13	MS	Masterton Exchange	Wellington	Masterton
14	MDR	Mayoral Drive Exchange	Auckland	Auckland
15	MOD	Mount Eden Exchange	Auckland	Auckland
16	NP	Napier Exchange	Hawkes Bay	Napier
17	NN	Nelson Exchange	Nelson	Nelson
18	NU	New Plymouth Exchange	Taranaki	New Plymouth
19	OA	Oamaru Exchange	Otago	Oamaru
20	PM	Palmerston North Exchange	Manawatu-Whanganui	Palmerston North
21	PRM	Paraparaumu Exchange	Wellington	Paraparaumu
22	POR	Porirua Exchange	Wellington	Wellington
23	PUK	Pukekohe Exchange	Auckland	Auckland
24	QST	Queenstown Exchange	Otago	Queenstown
25	RIC	Riccarton Exchange	Canterbury	Christchurch

¹⁴ Source document: [Chorus UFB Services Agreement Bitstream Services: Operations Manual for Bitstream Reference Offer \[Approved at Product forum and published as interim pending CIP Approval, June 2018](#)

	POI ID	Name	Region	UFB initiative geographic area
26	RO	Rotorua Exchange	Bay of Plenty	Rotorua
27	SOD	South Dunedin Exchange	Otago	Dunedin
28	TPO	Taupo Exchange	Waikato	Taupo
29	TG	Tauranga Exchange	Bay of Plenty	Tauranga
30	TU	Timaru Exchange	Canterbury	Timaru
31	WHK	Waiheke Exchange	Auckland	Auckland
32	WKU	Waiuku Exchange	Auckland	Auckland
33	WN	Wellington Central Exchange	Wellington	Wellington
34	WHK	Whakatane Exchange	Bay of Plenty	Whakatane
35	WG	Whangarei Exchange	Northland	Whangarei

Enable Networks POIs¹⁵

	POI ID	Name	Region	UFB initiative geographic area
1		Riccarton (Tower Junction)	Canterbury	Christchurch
2		Hornby	Canterbury	Christchurch, Rangiora and Rolleston

Northpower POIs¹⁶

	POI ID	Name	Region	UFB initiative geographic area
1		Whangarei Central	Northland	Whangarei

Northpower LFC2 POIs¹⁷

	POI ID	Name	Region	UFB initiative geographic area
1		Whangarei Central	Northland	Whangarei

¹⁵ Source document: [Enable Networks UFB Services Agreement Bitstream Services: Operations Manual](#)

¹⁶ Source document: [Northpower Fibre UFB Services Agreement Bitstream Services: Operations Manual](#)

¹⁷ Source document: [Northpower Fibre UFB Services Agreement Bitstream Services: Operations Manual](#)

Ultra-fast Fibre POIs¹⁸

	POI ID	Name	Region	UFB initiative geographic area
1	HMW	Hamilton West	Waikato	Hamilton
2	HME	Hamilton East	Waikato	Hamilton
3	CAM	Cambridge	Waikato	Cambridge
4	TAW	Te Awamutu	Waikato	Te Awamutu
5	TOK	Tokoroa	Waikato	Tokoroa
6	NPL	New Plymouth	Taranaki	New Plymouth
7	HAW	Hawera	Taranaki	Hawera
8	WAN	Whanganui	Manawatu-Whanganui	Whanganui
9	TGW	Tauranga West	Bay of Plenty	Tauranga
10	TGE	Tauranga East	Bay of Plenty	Tauranga

¹⁸ Source document: [Ultrafast Fibre UFB Services Agreement Bitstream Services: Operations Manual](#)

Attachment B – Consolidated list of consultation questions

Q#	Consultation question
1	Do you agree that the UFB initiative POIs are those POIs that were implemented to satisfy the single POI per candidate area requirement under the NIPAs?
2	Do you agree that the UFB initiative POIs are limited to POIs at layer 2 handover points?
3	Is the list of UFB initiative POIs and their associated details in Attachment A complete and correct?
4	Do you agree with our proposal in paragraph 34 above? That is, for each specified POI, to specify that its related end-user premises, buildings, or other access points are those that are within the POI's associated geographic area/s under the UFB initiative, plus any other end-user premises, buildings, or other access points that are associated with the POI.
5	Are you aware of any end-user premises, buildings, or other access points for whom fibre fixed line access services are available but that are not, or cannot be, associated with a UFB initiative POI? If so, how should we treat these?
6	Do you see any advantages in alternative approach of identifying related end-user premises, buildings, or other access points by reference to SFAs?
7	In circumstances where there is a future extension to a fibre network outside of the UFB initiative, rather than specifying a new POI, should we specify that end-user premises, buildings, or other access points served by the new fibre network be related to an existing UFB initiative POI?
8	Are there any other details we should provide for each POI?
9	Are you aware of any UFB initiative POIs that are not in the list in Attachment A but will exist as at the close of 31 December 2019?