

New Zealand Government

**Ultra-Fast Broadband
Initiative**

Invitation to Participate

in

Partner Selection Process

October 2009



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PART A – OVERVIEW AND ITP OBJECTIVE, PROCESS AND CONDITIONS

1. INTRODUCTION AND OBJECTIVES

1.1 Ultra-fast Broadband Initiative

- (a) The government's overall objective for the ultra-fast broadband¹ investment initiative (**UFB Initiative**) is:

To accelerate the roll-out of ultra-fast broadband to 75 percent of New Zealanders² over ten years, concentrating in the first six years on priority broadband users such as businesses, schools and health services, plus greenfield developments and certain tranches of residential areas (**UFB Objective**).

- (b) The UFB Objective will be supported by government investment of up to \$1.5 billion, which is expected to be at least matched by private sector investment and will be directed to open-access infrastructure.
- (c) The achievement of the UFB Objective will be consistent with the following principles:
- (i) making a significant contribution to economic growth;
 - (ii) neither discouraging, nor substituting for, private sector investment;
 - (iii) avoiding 'lining the pockets' of existing broadband network providers;
 - (iv) avoiding excessive infrastructure duplication;
 - (v) focussing on building new infrastructure, and not unduly preserving the 'legacy assets' of the past; and
 - (vi) ensuring affordable broadband services.
- (d) An overview of the UFB Initiative can be found on the ITP Website.

1.2 The objective of this Invitation to Participate

- (a) This Invitation to Participate (**ITP**) has been issued to invite potential partners to submit proposals on how they would co-invest with the government to achieve the UFB Objective in one or more Candidate Areas.
- (b) On receipt of such proposals, potential co-investors who meet certain minimum criteria will be selected to enter into discussions to further

¹ Ultra-fast broadband is defined as a minimum uncontested 100 Mbps downlink and 50 Mbps uplink.

² For the purposes of the UFB Initiative, 75 percent of New Zealanders means 75 percent of the New Zealand population. Refer to Section 11.2.

explore, and may be offered an opportunity to refine, their proposals. Following this, there may be negotiations with selected parties on the terms of agreements to form the basis of offers to be made by the potential co-investors to co-invest with the government in the UFB Initiative.

- (c) If the government does not enter into arrangements with any party, or the government does not enter into arrangements that it considers will achieve the UFB Objective in full, further invitations to submit proposals to co-invest with the government in the UFB Initiative may be issued. However, to avoid doubt, if as a result of the selection process contemplated by this ITP, the government does enter into arrangements that it considers will collectively achieve the UFB Objective in full, the government will not issue further invitations to submit proposals for the UFB Initiative.

1.3 Roles of the Ministry and CFH

- (a) This ITP has been prepared by the Ministry of Economic Development (**Ministry**) and the partner selection process (**PSP**), by which potential co-investment partners will be selected, will be initially conducted by the Ministry.
- (b) The government's investment in the UFB Initiative will be managed through a new Crown-owned investment company, Crown Fibre Holdings Limited (**CFH**). The Ministry is currently in the process of establishing CFH.
- (c) Once CFH is operationally functional, CFH will take over responsibility for this ITP and the PSP. When this occurs, Participants will be notified by means of a Participant Notice.
- (d) Until CFH takes over responsibility for this ITP and the PSP, all references in this ITP to CFH should be read as references to the Ministry, except where the context makes it clear that they are still intended to be references to CFH.
- (e) Once responsibility for this ITP and the PSP transfers to CFH, the Ministry may provide support and assistance to CFH in connection with the management of the PSP, but overall responsibility and decision-making will be with CFH.
- (f) In addition, CFH will work closely with the Ministry on matters that have a direct bearing on the wider regulatory framework and the competitive environment for telecommunications in New Zealand. The responsibility and role of the Ministry in relation to these matters remains unchanged.
- (g) Finally, the Ministry and the Treasury will have an ongoing oversight and monitoring role in relation to CFH.

1.4 Parts to this ITP

This ITP comprises the following parts:

Part A Overview and ITP Objectives, Process and Conditions

Part A provides an overview of the UFB Objective, the objective of this ITP, the terms on which this ITP is issued and how the PSP will be conducted.

Part B CFH, Investment Process and Structure

Part B sets out an overview of the role of CFH, how the government's investment in the UFB Initiative will be made and the proposed arrangements to be entered into by CFH with co-investment partners.

Part C PSP Stages, Eligibility Requirements and Evaluation Criteria (including LFC Requirements)

Part C sets out details of the Eligibility Criteria and the Evaluation Criteria that Proposals will be evaluated against and provides a more detailed outline of the PSP.

Appendices

There are seven appendices to this ITP, being:

Appendix 1	Form of Notice of Intention to Participate
Appendix 2	Preferred Commercial Model
Appendix 3	Technical Specifications
Appendix 4	Equivalence and Non-Discrimination
Appendix 5	Eligibility Criteria
Appendix 6	Evaluation Criteria
Appendix 7	Form of Response to Invitation to Participate in Partner Selection Process

1.5 Definitions and guide to interpretation

Definitions of terms used in this ITP and a guide to interpretation of this ITP are set out in section 7.

2. SELECTION PROCESS AND TIMING

2.1 Overview of the partner selection process

- (a) An overview of the PSP is set out below. A more detailed description is set out in Part C of this ITP.
- (b) On issue of this ITP, persons interested in responding and submitting a Proposal should submit a Notice of Intention to Participate in accordance with section 4.1. There will be an opportunity for Participants to ask questions and seek clarifications before Proposals are required to be submitted. This is discussed in section 3.4. Once Proposals have been submitted, there will be five stages to the PSP. These are summarised in the following table.

STAGE 1 –PRELIMINARY SHORTLIST OF PROPOSALS

CFH will assess Proposals against the Eligibility Criteria.

Proposals satisfying all of the Eligibility Criteria will be included in the preliminary shortlist of Proposals. Other Proposals will be excluded from further consideration in the PSP, subject to CFH's discretion to include in the preliminary shortlist of Proposals a Proposal that has not satisfied the Eligibility Criteria.

STAGE 2 – DISCUSSIONS WITH RESPONDENTS ON THE PRELIMINARY SHORTLISTED PROPOSALS

Once the preliminary shortlist of Proposals has been determined, CFH will enter into discussions with each Respondent who has submitted a preliminary shortlisted Proposal to gain a better understanding of that Respondent's preliminary shortlisted Proposal.

Following such discussions, these Respondents may, at CFH's discretion, be offered an opportunity to refine their preliminary shortlisted Proposals within a time period to be confirmed by CFH.

STAGE 3 – EVALUATION OF PROPOSALS

CFH will evaluate the preliminary shortlisted Proposals against the Evaluation Criteria. CFH may also undertake such reference checks of the relevant Respondents, and any other Significant Contributors identified in the preliminary shortlisted Proposals, as CFH considers appropriate.

Once the evaluation has been completed, CFH will identify from the preliminary shortlisted Proposals a shortlist of Proposals, being the Proposals CFH is interested in considering further as the basis on which the relevant Respondent may co-invest in the UFB Initiative (each such Proposal and Respondent being a **Shortlisted Proposal** and a **Shortlisted Respondent** respectively).

STAGE 4 –SHORTLISTED RESPONDENTS AND NEGOTIATIONS

CFH will enter into negotiations with each Shortlisted Respondent on the formal agreements, based on the Shortlisted Respondent's Shortlisted Proposal, that CFH will require the Shortlisted Respondent to enter into if that Shortlisted Respondent is selected as a co-investor with CFH in the UFB Initiative.

This is expected to be a focused period of substantive negotiations on all key terms of the formal agreements that will form the basis of the final binding offers from Shortlisted Respondents to co-invest with CFH in the UFB Initiative. Without limiting its ability to conduct due diligence as part of stage 5 below, CFH may also commence due diligence of the Shortlisted Respondent and the Significant Contributors set out in that Shortlisted Proposal.

Following such negotiations each Shortlisted Respondent is to submit a final binding offer which will remain open for acceptance by CFH for not less than 90 Business Days.

STAGE 5 – SELECTION OF PREFERRED PARTNER(S)

Based on the terms of the final binding offers, and the result of any due diligence CFH considers appropriate, CFH will make a decision on whether or not it wishes to accept any offer submitted by a Shortlisted Respondent.

CFH must then seek shareholder approval for the acceptance of any such offer(s) from the Shareholding Ministers before accepting the offer(s).

- (c) If formal agreements are not entered into on terms, or within a time period satisfactory to CFH, CFH may pursue alternatives.

2.2 Timetable

- (a) Key indicative milestones for this ITP are set out below.

MILESTONE	DATE
ITP released	21 October 2009
Last date for submission of Notices of Intention to Participate	13 November 2009
Last date for Participants to ask questions	11 December 2009
Answers to all outstanding Participant questions provided	18 December 2009
Closing date for submission of Proposals	29 January 2010
Preliminary shortlist of Proposals identified and notified	To be determined by CFH
Shortlisted Proposals identified and Shortlisted Respondents notified	To be determined by CFH
Negotiation of the terms of formal agreements completed with Shortlisted Respondents	To be determined by CFH
Final binding offers received from Shortlisted Respondents for consideration by CFH	To be determined by CFH
Formal agreements with successful Shortlisted Respondent(s) completed and signed	To be determined by CFH

- (b) The milestones and dates set out above are indicative only and are subject to change at the sole discretion of the Ministry or, as the case may be, CFH. The Ministry or CFH will give notice of any changes it considers may affect Participants, through a Participant Notice.

3. COMMUNICATIONS IN RELATION TO THIS ITP AND THE PSP

3.1 Contact Person and contact details

- (a) All enquiries from Participants regarding this ITP or the PSP must be in writing and directed to Nick Manning (**Contact Person**). The Contact Person's contact details are:

Nick Manning
c/- Ministry of Economic Development
ICT Regulatory Group
Energy and Communications Branch
33 Bowen Street
PO Box 1473
Wellington 6014
NEW ZEALAND

Email: itp@med.govt.nz
Telephone: +61 4 472 0030
Facsimile: +61 4 499 0969

- (b) The Ministry or CFH may change the Contact Person or update the above contact details at any time. Notice of any such change will be given by a Participant Notice.

3.2 Communication to be limited to Contact Person and Authorised Representatives

- (a) The Contact Person and any person authorised by the Contact Person (**Authorised Representative**) are the only people from the Ministry and CFH authorised to discuss this ITP and the PSP with Participants.
- (b) The preferred method of communication in relation to this ITP or the PSP is email. The Ministry or CFH will acknowledge receipt of any communication within five Business Days. If an acknowledgement of receipt of any communication sent by a Participant is not received within five Business Days, the Participant should call the Contact Person to check that the communication has been received.

3.3 No contact with other persons

- (a) Participants may not discuss this ITP or the PSP with any officer, employee or advisor of CFH or the Ministry other than an Authorised Representative.
- (b) CFH may, in its absolute discretion, exclude any Participant from further participation in the PSP if the Participant breaches this requirement.

3.4 Questions from Participants

- (a) Participants may ask questions on any matters relating to this ITP from the date of issue of this ITP up to 5.00 pm on 11 December 2009. CFH may at its discretion respond to questions received after this time.
- (b) All questions must be in writing. Emailed questions sent to the Contact Person are acceptable.

- (c) CFH will post any questions received from a Participant, together with the responses to those questions, on the ITP Website so they may be viewed by all other Participants. Questions posted on the ITP Website may be reworded to provide greater clarity or relevance to other Participants. While CFH will not indicate which Participants submitted the questions that have been posted on the ITP Website, CFH will not be required to take any particular steps to disguise the identity of those Participants. Answers to questions received will be given at CFH's discretion and CFH may elect not to respond to any particular questions.

3.5 Participant Notices

All notices to Participants in relation to this ITP and the PSP (each such notice a **Participant Notice**) will be given by publishing them on the ITP Website. All Participants who have completed and submitted a Notice of Intention to Participate in accordance with section 4.1 will be notified that a Participant Notice or additional information in relation to this ITP or the PSP is available on the ITP Website. CFH reserves the right to communicate directly with any Participant.

4. HOW TO PARTICIPATE IN THE PSP

4.1 Notice of Intention to Participate

- (a) Participants are required to first indicate their intention to participate in the PSP by sending a Notice of Intention to Participate in the form set out in Appendix 1. That notice must be received by CFH by 13 November 2009.
- (b) The notice can be either scanned and e-mailed, faxed, posted, couriered or hand delivered to the Contact Person using the contact details recorded in section 3.1. Email is preferred.

4.2 Submission of Proposals

- (a) Proposals must be received by CFH by 4:00pm on the Closing Date. Proposals are to be delivered to:

Crown Fibre Holdings Limited
c/- Ministry of Economic Development
ICT Regulatory Group
Energy and Communications Branch
33 Bowen Street
PO Box 1473
Wellington 6140
NEW ZEALAND

Attention: Nick Manning
- (b) All Proposals should be submitted in a sealed envelope marked "**CONFIDENTIAL: PROPOSAL FOR ULTRA-FAST BROADBAND INITIATIVE**". Proposals submitted by email or facsimile will not be accepted for consideration.
- (c) Each Respondent must submit:
 - (i) six (6) numbered and bound paper copies of that Respondent's Proposal; and

(ii) an electronic copy of the Respondent's Proposal in both PDF format and in a Microsoft compatible format on a CD-ROM or DVD-ROM including:

- all parts, appendices or schedules, which are required to be included as part of the Proposal; and
- all geospatial information provided in a file format capable of being read by a standard desktop GIS software package, such as MapInfo.

All copies of the Proposal become the property of CFH and will not be returned.

(d) If there is any discrepancy between any of the copies of the Proposal submitted, CFH may, in its discretion, choose which copy to consider as the Respondent's Proposal. CFH has no obligation to bring any discrepancy between copies to the attention of the Respondent or to engage in any discussions with the Respondent about which copy CFH has chosen to consider as the Respondent's Proposal.

4.3 Late Proposals

CFH may in its absolute discretion, but will be under no obligation to, consider Proposals received after the Closing Time.

4.4 Extensions of time

CFH may consider requests for an extension of time for the submission of Proposals, but will only grant an extension of time in exceptional circumstances and where the request is received prior to the Closing Date. If such a request is granted, the extension of the Closing Date will be granted to all Participants. CFH may also, independent of any request for an extension of time, consider that an extension of time for submission of Proposals is appropriate, in which case CFH may in its absolute discretion grant an extension of the Closing Date. Again any such extension will be granted to all Participants. Notice of any extension granted will be given by means of a Participant Notice.

4.5 Proposal content and format

(a) All Proposals must include a response for every requested item of information in this ITP and a completed "Form of Response to Invitation to Participate in Partner Selection Process" as set out in Appendix 7 (and including all of the information requested in Appendix 7).

(b) If a response for one section is identical to that for another, the response should be repeated in full in each section rather than cross-referencing. Any assumptions made in preparing a Proposal must be clearly stated in the relevant sections of the Proposal.

(c) Proposals must follow the structure set out in the tables contained in Appendix 7, with the contents of the Proposal presented in the same order as in those tables. Each Respondent should include sufficient information in that Respondent's Proposal to enable the Proposal to be assessed and evaluated against the Eligibility Criteria and the Evaluation Criteria. Respondents may include in their Proposals additional

information that they consider relevant to the consideration and evaluation of their Proposals.

4.6 Conflicts of interest

- (a)** Each Respondent must disclose, both at the time of submitting its Proposal and on a continuing basis, any conflict of interest, or potential conflict of interest, that exists or is likely to arise in relation to:
- (i)** the Respondent's Proposal; or
 - (ii)** any subsequent arrangement that may be entered into by the Respondent in connection with the subject matter of this ITP or the PSP.
- (b)** Subject to section 4.6(c), interests which must be disclosed include any interest that the Respondent (including the officers, employees, contractors, agents and subcontractors of the Respondent):
- (i)** might have in who may be selected as a Partner including for example, the fact that the Respondent is a related or associated entity of another Respondent;
 - (ii)** has in:
 - the way in which the UFB Objective is achieved;
 - whether the UFB Objective is achieved; or
 - whether the Respondent is selected as a Partner;including for example, if a related or associated entity of the Respondent is working on a competing project; and
 - (iii)** is aware that any person involved in assessing and evaluating Proposals may have in the Respondent being selected as a Partner (other than that person's interest in the selection of Respondents that are likely to best achieve the UFB Objective) including for example, if an officer of a Respondent is related to, or associated with a member of the Board or a senior officer of CFH.
- (c)** The interest that a Respondent (or its officers, employees, contractors, agents or subcontractors) has:
- (i)** in the Respondent itself being selected as a Partner;
 - (ii)** in the Respondent's normal commercial interests, in its reputation, minimising its costs and performing in accordance with its contractual obligations; and
 - (iii)** as a general member of the public, in the UFB Objective being achieved and the manner in which the UFB Objective is achieved;

is not considered to create a conflict of interest.

4.7 Consortia

CFH will accept bids from consortia. If a consortium Proposal is submitted, the following information is required:

- (a) a detailed description of the proposed:
 - (i) legal relationship between each member of the consortium;
 - (ii) management structure of the consortium; and
 - (iii) manner in which the consortium will enter into contracts, including the proposed party or parties to enter into agreements with CFH; and
- (b) confirmation that either:
 - (i) each member of the consortium:
 - appoints a nominated member to represent that member of the consortium in all discussions and negotiations with the Ministry and/or CFH in relation to this ITP and the PSP;
 - authorises that nominated member to bind that member of the consortium in relation to those matters; and
 - is jointly and severally liable for the performance of all members of the consortium under any agreement that may be entered into with CFH; or
 - (ii) one member of the consortium is fully liable for the performance of all members of the consortium; and
- (c) confirmation that the establishment and operation of the consortium does not contravene the requirements of Part 2 of the Commerce Act 1986, and the basis for this confirmation.

5. PREFERRED COMMERCIAL MODEL

5.1 Preferred Commercial Model Proposals and Alternative Commercial Model Proposals

- (a) Respondents must respond to this ITP by submitting a Proposal that complies in all respects with the Preferred Commercial Model (**Preferred Commercial Model Proposal**). The Preferred Commercial Model is detailed in Appendix 2.
- (b) A Respondent submitting a Preferred Commercial Model Proposal may also submit a Proposal that does not comply with the Preferred Commercial Model (**Alternative Commercial Model Proposal**), but if a Respondent does so, the Respondent must demonstrate (in both quantitative and qualitative terms) that the Alternative Commercial Model Proposal is likely to more effectively contribute to the achievement of the UFB Objective than that Respondent's Preferred Commercial Model Proposal.

- (c) In particular, the Alternative Commercial Model Proposal must:
- (i) provide a detailed explanation and specific detail as to how it differs from the Respondent's Preferred Commercial Model Proposal, and why it is preferable (in the Respondent's view) over that Respondent's Preferred Commercial Model Proposal;
 - (ii) clearly identify, explain and detail how, notwithstanding these differences, the UFB Objective will be more effectively achieved through adoption of the Alternative Commercial Model Proposal; and
 - (iii) provide sufficient information to allow the Alternative Commercial Model Proposal to be assessed and evaluated, including:
 - a response to each of the Eligibility Criteria and Evaluation Criteria;
 - a detailed response to all of the information requested in the Form of Response to Invitation to Participate in Partner Selection Process set out in Appendix 7;
 - specific detail of the cost implications of adopting the Alternative Commercial Model Proposal as opposed to proceeding with the Respondent's Preferred Commercial Model Proposal; and
 - the Respondent's proposed contribution to the execution of the Respondent's Proposal and the proposed valuation methodology for determining the value of that contribution.
- (d) Whether or not an Alternative Commercial Model Proposal is considered by CFH will be determined by CFH in its absolute discretion.
- (e) If an Alternative Commercial Model Proposal is submitted it must be clearly identified as an Alternative Commercial Model Proposal, and must be submitted separately to that Respondent's Preferred Commercial Model Proposal.

6. ITP CONDITIONS

6.1 Agreement by Participants to be bound by ITP conditions

By submitting a Notice of Intention to Participate or a Proposal, a Participant will be deemed to have reviewed and acknowledged the terms and conditions set out in this section 6 without reservation or variation. In the event of any inconsistency between this section 6 and any other section or provision of this ITP, this section 6 will prevail.

6.2 Responsibilities of Respondents

- (a) The information contained in this ITP or otherwise provided to Participants by the Ministry and/or CFH in connection with this ITP or the PSP is for the purpose of the Participants considering, and responding to, this ITP and participating in the PSP. The Ministry and CFH have

taken reasonable steps to ensure that the information provided is accurate, complete and not misleading, but do not warrant or represent that this is the case.

- (b) Each Respondent acknowledges that it is its own responsibility, before submitting a Proposal, to:
- (i) examine this ITP, any documents referenced by this ITP and any other information made available to it by the Ministry or CFH;
 - (ii) identify and obtain all information it may require to prepare and submit its Proposal;
 - (iii) obtain independent advice (including legal and accounting advice);
 - (iv) consider all the risks, contingencies, impacts and other circumstances which may affect its Proposal and its ability to perform in accordance with it; and
 - (v) satisfy itself as to the correctness of its Proposal, including the costings and prices stated in the Proposal, and all information provided with its Proposal.
- (c) Without limiting section 6.2(b), in submitting a Proposal, each Respondent acknowledges and agrees that it has not relied on any express or implied statement, representation or warranty as to the truth, accuracy or completeness of the information contained in this ITP or otherwise provided to the Respondent by the Ministry or CFH.

6.3 Submission of Proposals

- (a) Proposals must be submitted in accordance with, and must comply with, the terms of this ITP.
- (b) Each Respondent warrants and represents to the Ministry and CFH that:
- (i) the information contained in, and submitted with, its Proposal is complete and accurate in all material respects and may be relied upon by CFH; and
 - (ii) the provision of the information contained in, and submitted with, its Proposal, and the use of it by CFH, the government or any third party to whom CFH may make such information available to:
 - for the evaluation of, and discussions in respect of, the Proposal or any offer by the Respondent to co-invest in the UFB Initiative; and /or
 - in the negotiation of the terms of any contract in relation to that co-investment (whether or not resulting in a contract between the Respondent and CFH);

will not breach any third party intellectual property rights;

and indemnifies the Ministry and CFH against all direct losses incurred by the Ministry and CFH as a result of a breach of such warranties or the representations being incorrect.

- (c) A Proposal, once submitted to CFH, may be varied by the Respondent only on the request of CFH, and will remain open for consideration by CFH without modification for 90 days or for any longer period specified in the Proposal.
- (d) If a Respondent becomes aware of any error or omission in its Proposal, it must immediately notify CFH of that error or omission. If CFH considers such error or omission to be material, CFH may cease consideration and/or evaluation of the Proposal and, where applicable, cease discussions and negotiations with that Respondent. Alternatively, CFH may in its absolute discretion allow the Respondent to correct the error or omission.

6.4 Costs

All costs incurred by any Participant in connection with this ITP, its Proposal or its participation in the PSP, are the sole responsibility of that Participant. Each Participant expressly acknowledges and agrees that neither the Ministry nor CFH will have any liability in relation to any such costs incurred directly or indirectly by that Participant.

6.5 Participant confidentiality obligations

- (a) Each Participant will maintain as confidential at all times, and will not at any time, directly or indirectly:
 - (i) disclose or permit to be disclosed to any person;
 - (ii) use for itself; or
 - (iii) use to the detriment of the Ministry or CFH;any Confidential Information received in connection with this ITP or its participation in the PSP except:
 - (iv) as required by law;
 - (v) if it is, or becomes, public knowledge otherwise than as a result of a breach by the Participant of its obligations of confidentiality under this ITP;
 - (vi) as authorised in writing by the Ministry or CFH; or
 - (vii) to the extent reasonably required by this ITP (and, without limiting the effect of this section, a Participant may disclose Confidential Information only to those of its officers, employees, contractors, professional advisors and (if applicable) joint Participants or consortium members, on a "need to know" basis, as is reasonably required for the preparation of a Proposal intended to be submitted by that Participant).
- (b) Notwithstanding the above, the Ministry and/or CFH may, if the Ministry and/or CFH considers it appropriate to do so, require any Participant to

sign a confidentiality deed before releasing any confidential or commercially sensitive information to that Participant.

6.6 Information supplied by a Participant

Each Participant expressly acknowledges and agrees:

- (a)** Neither the Ministry nor CFH will be under any obligation to treat information supplied by a Participant as commercially sensitive or as Confidential Information unless (but subject to section 6.6(b)) specifically requested by the Participant in writing. Where such request relates to information supplied in or with a Proposal, the request must specify the relevant sections within the Proposal or particular information supplied with the Proposal, and the request may be disregarded by CFH if it simply specifies all or substantially all of the Proposal.
- (b)** Information received by the Ministry or CFH may, even if it is identified as commercially sensitive or as Confidential Information, be disclosed:
 - (i)** to Ministers of the Crown and to any officials or other persons advising or assisting CFH, a Minister of the Crown or an advisor to a Minister of the Crown, in relation to the UFB Initiative, this ITP or the PSP; and
 - (ii)** as may be required by the Official Information Act 1982 or any other law.
- (c)** CFH is not required to keep the name of any Participant confidential.

6.7 Ownership and intellectual property rights

- (a)** All Proposals become the property of CFH on receipt by CFH and will not be returned to the Respondent.
- (b)** As between CFH and a Respondent, the intellectual property rights in the information contained in the Respondent's Proposal belong to the Respondent, but CFH may use any information contained in a Proposal for the purposes of assessing and evaluating the Proposal or any offer by the Respondent to co-invest in the UFB Initiative, and for the negotiation and preparation of any related agreements.
- (c)** All intellectual property rights in:
 - (i)** this ITP, the PSP and in any materials prepared by the Ministry and distributed with, or in connection with, this ITP and the PSP belong to, and remain with, the Ministry; and
 - (ii)** any materials prepared by CFH and distributed with, or in connection with, this ITP and the PSP belong to, and remain with, CFH.

6.8 Security, probity and other checks

- (a)** CFH may perform such investigations of Respondents, including security, probity and financial investigations, as it determines are necessary in relation to any Respondents, their officers, employees,

contractors, partners, associates, subcontractors or related or associated entities and their officers, employees, contractors and subcontractors.

- (b) Respondents should promptly provide, and authorise any third party to provide, CFH with such information or documentation as CFH requires to undertake the investigations referred to in section 6.8(a).

6.9 Ministry and CFH have no obligations

- (a) No legal or other obligations shall arise between a Participant and the Ministry in relation to this ITP or the process, conduct or outcome of the PSP.
- (b) No legal or other obligations shall arise between a Participant and CFH in relation to this ITP or the process, conduct or outcome of the PSP unless and until that Participant and CFH have entered into binding written agreements for the purposes of section 21.2 and such agreements are, or become, unconditional in which case they will be binding on the parties only in accordance with their terms.
- (c) This ITP does not constitute an offer by the Ministry or CFH to acquire services, buy or sell assets or enter into any arrangement with any person.
- (d) This ITP does not commit the Ministry or CFH to proceed with, or follow, the process outlined in this ITP or to evaluate any particular Respondent's Proposal or enter into any discussions, negotiations or contractual arrangements with any Respondent.

The provisions of this section 6.9 apply notwithstanding any other provision of this ITP and in the event of any inconsistency, this section 6.9 shall take precedence.

6.10 Liability

- (a) Neither the Ministry, CFH, nor their respective employees, contractors or agents, will be liable (in contract, tort (including negligence), equity or otherwise) for any direct or indirect damages, losses, costs or expenses (including wasted costs, loss of profits or loss of business opportunity) incurred by a Participant or any other person and arising in any way in connection with this ITP or the PSP, including in connection with:
 - (i) the evaluation of Proposals;
 - (ii) the preparation of any Proposal;
 - (iii) any investigations of, or by, any Participant;
 - (iv) the rejection of any Proposal;
 - (v) the variation, suspension or cancellation of the PSP; or
 - (vi) any information given, or not given, to a Participant.
- (b) By submitting a Notice of Intention to Participate, each Participant waives any rights it may have to make a claim against the Ministry or CFH, or their respective officers, employees, contractors, agents or advisers arising out of or in connection with this ITP or the PSP.

- (c) If, notwithstanding sections 6.9, 6.10(a) and 6.10(b), a court of competent jurisdiction holds the Ministry or CFH, (or their respective officers, employees, contractors, agents or advisers personally) liable in respect of any matter arising under or incidental to this ITP, such liability shall be limited to the actual direct costs reasonably incurred by a Respondent in preparing and submitting its Proposal up to a maximum of \$30,000.
- (d) Nothing contained or implied in, or arising out of, this ITP shall be construed as legal, financial or other advice of any kind.

6.11 No influencing or undisclosed benefits

Respondents must not directly or indirectly seek to influence any Authorised Representative, the Shareholding Ministers or any representative of the Ministry, CFH or any other person who is directly or indirectly involved in decision making under this ITP or the PSP (**Decision Maker**) by:

- (a) offering any form of personal inducement or reward to that Decision Maker;
- (b) threatening any legal action against any Decision Maker or the organisation which they represent; or
- (c) threatening any commercial or other action which would be detrimental to the interests of the Decision Maker or the organisation which they represent.

6.12 No anti-competitive behaviour

Respondents must not engage in collusive, deceptive or improper conduct in the preparation of their Proposals or in their participation in the PSP, or in any discussions or negotiations with the Ministry and/or CFH in breach of the Commerce Act 1986 and/or the Fair Trading Act 1986 or otherwise.

6.13 Rights reserved by CFH

CFH reserves the right, at its absolute discretion, to:

- (a) consider any Proposal in full, or in part where parts have been identified, even if it is received after the Closing Date or does not comply with the requirements of this ITP;
- (b) waive any irregularities or failure by any Participant to comply with any of the requirements set out in this ITP;
- (c) reject or not consider any Proposal, including one which complies with the requirements of this ITP;
- (d) not give any reason to any person for the rejection or failure of any Respondent or Proposal, any suspension or cancellation of this process or any other decision under this ITP or in relation to the PSP;
- (e) seek clarification of any Proposal;
- (f) change any date set out in this ITP by Participant Notice;

- (g) amend any part of this ITP (including the scope of requirements to be met) by a Participant Notice;
- (h) exclude any Participant at any time from the PSP for any reason, including (but not limited to) capability, price, operational requirements or otherwise;
- (i) not enter into any agreement in relation to the matters described in this ITP or to enter into one or more agreements in relation to such matters;
- (j) suspend or cancel this ITP and/or issue a new ITP;
- (k) re-advertise for proposals;
- (l) contact, liaise, negotiate or contract with any Participant, which may be to the exclusion of any other Participant, at any time and upon any terms and conditions;
- (m) evaluate each Proposal against criteria, and in accordance with an evaluation process, determined by CFH;
- (n) take account of any other relevant information that CFH or the Ministry may have in their possession and to make enquiries of any person to assist it in the evaluation process; and
- (o) conduct the PSP in such manner as it sees fit.

6.14 Governing law

This ITP is governed by, and shall be construed in accordance with, New Zealand law, and each Participant agrees to submit to the exclusive jurisdiction of the New Zealand courts.

7. DEFINITIONS AND INTERPRETATION

7.1 Definitions

The terms used in this document shall have the following meanings:

Access Seeker means, in relation to a Permitted Service, a person that has a contractual relationship with an LFC for the provision of a Permitted Service (and may include a Service Provider);

Alternative Commercial Model Proposal is defined in section 5.1(b);

Authorised Representative is defined in section 3.2(a);

Board means the board of directors;

Business Day means any day other than a Saturday, Sunday or Public Holiday (as defined in the Holidays Act 2003) in Wellington;

Candidate Area means a candidate coverage area for the UFB Initiative as recorded in section 11;

CCPM means, in respect of an LFC, the maximum amount that LFC will be entitled to charge an Access Seeker per month for providing the Specified Layer 1 Service;

Central Office is defined in paragraph 100 of Appendix 3;

CFH is defined in section 1.3(b);

Communal Infrastructure is defined in paragraph 32 of Appendix 2;

CPPC means, in respect of an LFC, the cost per premise connected which is calculated as the forecast weighted average cost of installing the End User-Specific Infrastructure, based on all potential End User connections to that LFC's communal infrastructure across the LFC Coverage Area;

CPPP means, in respect of an LFC, the cost per premise passed which is calculated as the total forecast cost to build out and/or acquire all of the Communal Infrastructure required by that LFC to meet the coverage committed to by the Partner for that LFC for the LFC Coverage Area, divided by N_{passed} ;

Closing Date means 29 January 2010 or such other date as may be determined by CFH;

Closing Time means 4.00pm on the Closing Date;

Concession Period means, in respect of an LFC, the first 10 years of that LFC's operations;

Confidential Information means information that:

- (a) by its nature is confidential;
- (b) is designated by the party providing the information as confidential; or
- (c) the receiving party knows or ought to know is confidential;

but does not include information which is or becomes public knowledge other than by breach of this ITP or of any obligation to maintain confidentiality of confidential information.

Contact Person is defined in section 3.1(a);

Crown means Her Majesty the Queen acting in right of New Zealand;

Eligibility Criteria means the criteria intended to be used for determining a preliminary shortlist of Proposals, being the criteria set out in Appendix 5 as amended by CFH from time to time in its sole discretion;

End User means, in relation to a Telecommunications Service, a person that has a contractual relationship with a Service Provider for the provision of a Telecommunications Service and who is the ultimate recipient of that service;

End User-Specific Infrastructure is defined in paragraph 59 of Appendix 2;

Evaluation Criteria means the criteria intended to be used for assessing Proposals, as set out in Appendix 6, and as amended by CFH from time to time in its sole discretion;

GST means goods and services tax in terms of the Goods and Services Tax Act 1985;

ITP is defined in section 1.2(a);

ITP Conditions means the provisions set out in section 6;

ITP Website means the website established by the Ministry for the purposes of providing Participants and the general public with information relating to the UFB Initiative, this ITP and the PSP, being at the time of issue of this ITP located at <http://www.med.govt.nz/ultra-fast-broadband>;

Layer 1 means layer 1 of the OSI Model, which is normally associated with passive fibre optic network infrastructure;

Layer 1 Service means any service which operates at Layer 1;

Layer 2 means layer 2 of the OSI Model, which is normally associated with active fibre optic network infrastructure;

Layer 2 Service means any service which operates at Layer 2;

LFC means a local fibre company, being an entity in which CFH, the government and a Partner will hold shares, and through which the investment of CFH and the Partner in relation to the UFB Initiative will be effected;

LFC Coverage Area, in respect of any LFC, means the coverage area over which that LFC's Network will be deployed;

Ministry is defined in section 1.3(a);

N_{passed} means, in respect of an LFC, the number of premises expected to be passed by the LFC's Network at the expected date of completion of the agreed network build programme for the LFC Coverage Area;

Network means, in respect of any LFC, the fibre-optic communications network which is, or will be, owned and/or operated by that LFC;

Network Procurement Agreement is defined in section 10.4;

Notice of Intention to Participate means a notice of intention to participate in the PSP, being in the form set out in Appendix 1, and which is to be delivered in accordance with section 4.1(b);

Open Access Requirements means the requirements set out in section 13.1;

OSI Model means the seven-layer model of network architecture known as the Open Systems Interconnection Model;

Participant means:

- (a) until the last date on which Notices of Intention to Participate may be given, any person who is interested in participating in the PSP, and after that date means any person who has delivered a Notice of Intention to Participate; or

- (b) in the case of a Notice of Intention to Participate delivered on behalf of a consortium, any person who is a member of that consortium regardless of whether that person joins the consortium before or after the Notice of Intention to Participate has been delivered to CFH;

and includes a Respondent;

Participant Notice is defined in section 3.5;

Partner means a person selected by CFH to co-invest with CFH in the UFB Initiative and with whom CFH enters into formal agreements in relation to that investment;

Permitted Services means the services that may be provided by an LFC, being any Layer 1 Service and, subject to CFH consent, any Layer 2 Service;

Preferred Commercial Model means the LFC structure and commercial arrangements to be entered into by an LFC, CFH, the government and the relevant Partner as set out in Appendix 2;

Preferred Commercial Model Proposal is defined in section 5.1(a);

Priority Users means businesses (of any size, including private sector health providers), schools (including state, state integrated and independent schools) and health service providers (hospitals and significant health care provider sites, for example emergency and medical centres, and radiologists);

Proposal means a proposal in relation to the UFB Initiative which is submitted in response to this ITP, and includes:

- (a) any Proposal varied or modified by the relevant Respondent at the request of CFH; and
- (b) any refined Proposal CFH may permit a Respondent to submit;

and includes, as the context requires, a Preferred Commercial Model Proposal or an Alternative Commercial Model Proposal;

Proposed Coverage Area, in respect of any Proposal, means the geographic coverage area over which it is intended that the Network under that Proposal will be deployed;

PSP means partnership selection process, as defined in clause 1.3(a);

Respondent means any person who has submitted a Proposal, and in the case of a Proposal submitted by a consortium, each member of that consortium;

Service Provider means any person who provides a Telecommunications Service to an End User;

Shareholding Ministers means the Minister for Communications and Information Technology and the Minister of Finance;

Shortlisted Respondent means each Respondent who has a Proposal that has been shortlisted at "stage 3" of the PSP, as contemplated in section 2.1 and in section 19.3;

Significant Contributor means, in respect of any Proposal, any person that would have significant responsibilities in order for the Proposal to be effective in contributing to the achievement of the UFB Objective in the manner recorded in the Proposal;

Specified Layer 1 Service means a Layer 1 Service which complies with the Specified Layer 1 Service technical product specification recorded in section 3 of Appendix 3;

Specified Layer 2 Service means a Layer 2 Service which complies with the Specified Layer 2 Service technical product specification recorded in section 4 of Appendix 3;

Telecommunications Service means a telecommunications service as defined in the Telecommunications Act 2001;

UFB Initiative is defined in section 1.1; and

UFB Objective means the government's overall objective for the UFB Initiative as set out in section 1.1.

7.2 Rules of interpretation

In this ITP, unless the context indicates otherwise:

- (a) expressions defined in the main body of this ITP have the defined meaning throughout this ITP, including the appendices;
- (b) section and other headings are for ease of reference only and will not affect the interpretation of this ITP;
- (c) references to sections and appendices are references to sections in, and appendices to, this ITP and references to paragraphs are references to paragraphs within an appendix;
- (d) references to a **person** include an individual, company, corporation, partnership, firm, joint venture, association, trust, unincorporated body of persons, governmental or other regulatory body, authority or entity, in each case whether or not having a separate legal identity;
- (e) references to a **related entity** or **associated entity** include, in relation to any party:
 - (i) any company or other corporation which, in accordance with any statement of standard accounting practice from time to time approved by the New Zealand Institute of Chartered Accountants, is considered to be associated with that party; and
 - (ii) any person who controls, or is controlled by, that party;
- (f) references to one person being **controlled** by another person mean that the other person (whether directly or indirectly and whether by the ownership of share capital, the possession of voting power, contract or otherwise) has the power:
 - (i) to appoint and/or remove the majority of the members of the governing body of that person;

- (ii) to appoint a member or members of the governing body of that person, with the power to exercise, or control the exercise of, more than 50% of the maximum number of votes that might be cast at a meeting of the governing body or the members of that person; or
- (iii) to control, by any other means, the affairs and policies of that person,

and **control** and **change in control** have corresponding meanings;

- (g) references to the singular include the plural and vice versa;
- (h) all monetary amounts in this ITP are, and all monetary amounts recorded in a Proposal will be, stated exclusive of GST and in New Zealand currency;
- (i) references to any statutory provision are to statutory provisions in force in New Zealand and include any statutory provision which amends or replaces it, and any bylaw, regulation, order, statutory instrument, determination or subordinate legislation made under it;
- (j) any obligation not to do anything includes an obligation not to suffer, permit or cause that thing to be done; and
- (k) the term **includes** or **including** (or any similar expression) is deemed to be followed by the words **without limitation**.

PART B – CFH, INVESTMENT PROCESS AND STRUCTURE

8. CROWN FIBRE HOLDINGS

8.1 Management of the government's investment

The government's investment in the UFB Initiative will be managed through CFH. CFH is likely to be a wholly-owned Crown company constituted under Schedule 4 to the Public Finance Act 1989. A core role of CFH will be to conduct the PSP and to manage the government's investment in Networks.

It is expected that as part of its role in managing the government's investment in Networks, CFH will facilitate and, where appropriate, lead the development of operational and technical standards for LFCs. It is expected that this will facilitate:

- (a) consistency and standardisation of technical specifications for Networks across Candidate Areas that may be serviced by different LFCs or other network providers; and
- (b) compliance with the Open Access Requirements in relation to LFC Networks.

8.2 CFH Board

The Board of CFH will be appointed by the Shareholding Ministers on the basis of relevant commercial and technical expertise. The Board of CFH will be accountable to the Shareholding Ministers.

9. LOCAL FIBRE COMPANIES

9.1 Investment entity

- (a)** It is intended that the investment of the government and each successful Respondent will be effected through an LFC in which CFH and a Partner will hold shares, and in which the government will hold one share as set out in section 9.6.
- (b)** Each LFC will be the operational entity that deploys, owns and operates a Network in one or more Candidate Areas and sells access to Layer 1 Services and, if the LFC chooses to do so (and CFH consents to the LFC doing so), Layer 2 Services.

9.2 Preferred structure

The preferred structure for each LFC is the Preferred Commercial Model and includes the following requirements:

- (a)** The LFC will be a newly incorporated limited liability company incorporated under the Companies Act 1993.
- (b)** Both CFH and the Partner will hold shares in the LFC. There will also be one share held by the government that will not have any dividend rights or ordinary voting rights but will have the right to prohibit changes to certain provisions of the LFC's constitution (refer to section 9.6).
- (c)** The LFC will operate independently of its shareholders with its own premises, staff and operational systems.
- (d)** The LFC is expected to own its network infrastructure and is expected to manage and direct the operation and maintenance of its network.

9.3 Overriding objectives

The overriding objectives of an LFC will be to:

- (a)** maximise the availability³ of fibre infrastructure within the LFC Coverage Area;
- (b)** generate widespread uptake of services delivered on the fibre infrastructure within the LFC Coverage Area, including by residential end-users (and therefore pricing services in a way which is competitive with alternative technologies);
- (c)** maximise the availability of Layer 1 Services within the LFC Coverage Area;

³ In this context, 'availability' means making the Network available to any End User within the LFC Coverage Area, so that ultimately an End User is able to purchase a Telecommunications Service provided on the Network from a Service Provider.

- (d) where the LFC decides that it wishes to invest in Layer 2 Services, and CFH consents to the LFC providing Layer 2 Services, make Layer 2 Services available within the LFC Coverage Area;
- (e) to comply with any matters that may be agreed between CFH, the relevant Partner and the LFC; and
- (f) subject to sections 9.3(a), 9.3(b), 9.3(c) and 9.3(e), to operate on a purely commercial basis.

9.4 Specific commercial objectives

The specific commercial objectives for each LFC will be recorded in the formal agreements entered into between CFH and the relevant Partner at the time the LFC is established. In particular, it is expected that the agreements will reflect objectives in relation to matters such as:

- (a) coverage targets;
- (b) capital requirements;
- (c) performance milestones;
- (d) profit policy; and
- (e) reporting requirements.

9.5 Shareholder rights and restrictions on LFC activities

- (a) The contributions of each of CFH and the Partner as shareholders in an LFC, together with their rights as shareholders in the LFC (including voting rights, profit policy and pre-emptive rights) will be recorded in the formal agreements to be entered into between CFH and that Partner (refer to section 10).
- (b) The contribution of a Partner may be direct monetary contributions and/or assets.
- (c) The constitution of the LFC (which is to be adopted on incorporation) will contain a number of broad requirements on what the LFC must do, may do and must not do in the course of business. These will include:
 - (i) an LFC must:
 - deploy and make fibre available⁴ in the Proposed Coverage Area;
 - provide open access⁵ to all services provided on the LFC's Network; and
 - provide the Specified Layer 1 Service; and
 - (ii) an LFC may provide:

⁴ As defined in footnote 3 above.

⁵ As discussed in section 13.

- any Layer 1 Service in addition to the Specified Layer 1 Service; and
 - any Layer 2 Service, but only where CFH consents and the Specified Layer 2 Service is to be provided by the LFC; and
- (iii) an LFC must not provide any other services (using the LFC's Network or otherwise).
- (d) During the Concession Period, the Board of the LFC will be made up of seven directors, comprising three directors appointed by CFH, three directors appointed by the Partner and a mutually agreed independent chairperson.
- (e) After the Concession Period:
- (i) Where a Partner, or a related or associated entity of a Partner, owns or controls a business which provides any Telecommunications Services other than the Permitted Services⁶, the Board of the LFC will be made up of seven directors, comprising three directors appointed by CFH, three directors appointed by the Partner and a mutually agreed independent chairperson.
- (ii) Where a Partner, or a related or associated entity of the Partner does not own or control a business which provides any Telecommunications Service other than the Permitted Services, LFC shareholder rights to appoint directors will be in proportion to the parties' relative shareholdings. In such case it is expected that CFH will appoint one or two of the directors on all LFC Boards, along with other directors selected from a small pool depending on the specific requirements of the LFC.

9.6 Government's share

Each LFC will issue the government with a single share which the government will retain even if CFH ceases to be a shareholder in the LFC. The government's share will have no rights to dividends, and will not have ordinary voting rights, but it will have the right to prohibit any changes to provisions in the LFC's constitution, which will set out certain undertakings in relation to:

- (a) compliance with the Open Access Requirements;
- (b) the LFC's obligation to connect any End User who seeks a Layer 1 Service and, if applicable, a Layer 2 Service from the LFC within the LFC Coverage Area;
- (c) the restrictions on the composition of the Board of the LFC if a shareholder of the LFC, or a related or associated entity of a shareholder of the LFC, owns or controls a business that provides Telecommunications Services other than the Permitted Services; and
- (d) the adjustment mechanism for CCPM;

⁶ See section 13.4 for an explanation of the restrictions on director appointments which may apply where a Partner controls a business which provides fibre optic network services other than the Permitted Services.

and will have such other rights as is necessary to ensure that the LFC's Network remains subject to the above requirements.

10. COMMERCIAL ARRANGEMENTS

10.1 Formal agreements

It is anticipated that in respect of each LFC, formal agreements will be entered into by CFH, the Partner and/or the relevant LFC (as applicable) covering the following key commercial arrangements in relation to the LFC's structure and operations. The form of such agreements will be negotiated with Shortlisted Respondents, and will be based on term sheets which will be provided to Shortlisted Respondents. Indicative matters to be recorded in the formal agreements, based on the Preferred Commercial Model, are set out below.

10.2 Shareholders' Agreement

A Shareholders' Agreement between CFH, the Partner and the LFC will regulate the way in which the LFC is operated, including:

- (a) the rights and obligations of each of CFH and the Partner as shareholders in the LFC, including their respective obligations to fund the LFC; and
- (b) the way in which CFH and the Partner will exercise those rights.

This agreement will require the LFC to adopt and maintain a constitution in the required form (refer to section 9.5(c)). It is not anticipated that the government will be a party to the Shareholders' Agreement, but this will be confirmed in the course of negotiations with Shortlisted Respondents.

10.3 Obligation to meet objectives

Each of the LFC and the Partner will have contractual obligations under the Shareholders' Agreement in relation to the LFC's objectives as follows:

- (a) the LFC will have contractual obligations to carry out its objectives (refer section 9.3), including its specific commercial objectives (refer section 9.4). These obligations will also be reflected in the LFC's constitution (refer section 9.5(c)); and
- (b) the Partner will have obligations under the Shareholders' Agreement tied to the LFC's objectives, based on the specific terms of the Partner's Proposal.

10.4 Network Procurement Agreement

The LFC will enter into a procurement agreement with the Partner, under which the LFC will acquire from the Partner the Network infrastructure required by the LFC in order to meet its objectives, including achieving the agreed level of coverage in respect of the LFC Coverage Area, which is anticipated to be based on the level of coverage set out in the Partner's Proposal for the Proposed Coverage Area (**Network Procurement Agreement**). The Partner may provide existing infrastructure or build new infrastructure in order to meet the LFC's requirements under this agreement.

10.5 Network operation and maintenance

Although the LFC will have the overall responsibility to operate and maintain its Network, it may contract out certain aspects of these activities. To the extent that any of these arrangements are with the Partner, or any entity related to or associated with the Partner, these will be on arms'-length commercial terms.

11. CANDIDATE AREAS

11.1 CFH role in relation to Candidate Areas

The primary obligation on CFH will be to achieve the 75% coverage target over the life of the UFB Initiative. Proposals should be focussed on the roll out of ultra-fast broadband to specified Candidate Areas. The preference is for Proposals to cover the whole of a Candidate Area, but CFH:

- (a)** will consider Proposals that cover any part of a Candidate Area. Situations where this may be appropriate are:
 - (i)** where there is a Candidate Area with rural fringe areas of low population density or with very high-cost areas;
 - (ii)** where a Respondent wishes to include areas close to, but outside, the listed Candidate Areas as it may make clear economic sense to connect adjacent areas (for example, by extending Blenheim to include Picton, or Queenstown to include Wanaka); or
 - (iii)** where a Respondent wishes to combine Candidate Areas, or parts of Candidate Areas (for example, Wellington and Kapiti); and
- (b)** may agree to variations to boundaries of particular Candidate Areas in order to maximise the overall value received from all Proposals. For example, a relatively high-cost area may be removed from one Candidate Area in order to allow expansion of the coverage in a lower-cost Candidate Area.

11.2 List of Candidate Areas

- (a)** The list of Candidate Areas is provided in the table below. The Candidate Areas have been selected on the basis of population numbers using 2021 population projections⁷ to ensure the population figures are in keeping with the expected population coverage at project completion.
- (b)** The list of Candidate Areas includes just under 80 percent of the population, in recognition of the fact that approximately 4.5 percent (220,000) of the projected 2021 population will live outside high-density population centres and may not be economic to serve with fibre.
- (c)** Respondents may submit Proposals for Proposed Coverage Areas that are focussed on:
 - (i)** single Candidate Areas;

⁷ Statistics NZ projections, medium forecast.

- (ii) a part of a Candidate Area (or parts of more than one Candidate Area);
- (iii) any combination or aggregation of Candidate Areas; or
- (iv) all Candidate Areas.

Urban area	2021 projected population ⁸	2021 projected population (%)	Cumulative coverage (%)
Auckland ⁹	1,587,200	33.269	33.269
Christchurch	417,800	8.757	42.026
Wellington ¹⁰	409,600	8.586	50.612
Hamilton ¹¹	227,100	4.760	55.372
Tauranga	142,700	2.991	58.363
Napier-Hastings	127,700	2.677	61.040
Dunedin	118,500	2.484	63.524
Palmerston North	88,100	1.847	65.371
Nelson	63,700	1.335	66.706
Rotorua	57,500	1.205	67.911
Whangarei	53,200	1.115	69.026
New Plymouth	52,300	1.096	70.122
Invercargill	45,700	0.958	71.080
Kapiti	45,100	0.945	72.026
Wanganui	38,500	0.807	72.833
Gisborne	34,800	0.729	73.562
Blenheim	31,000	0.650	74.212
Pukekohe	30,900	0.648	74.860
Timaru	26,600	0.558	75.417
Taupo	22,900	0.480	75.897
Masterton	19,800	0.415	76.312
Whakatane	19,400	0.407	76.719
Levin	19,300	0.405	77.123
Ashburton	17,800	0.373	77.496
Feilding	14,950	0.313	77.810
Rangiora	13,750	0.288	78.098
Queenstown	13,100	0.275	78.373
Tokoroa	12,200	0.256	78.628
Oamaru	11,650	0.244	78.873
Hawera	10,500	0.220	79.093
Waiheke Island	10,000	0.210	79.302
Waiuku	9,730	0.204	79.506
Greymouth	9,490	0.199	79.705
Total	3,802,570	79.706	79.705

⁸ Based on Statistics NZ medium forecast projections. Total population for New Zealand is projected to be 4,770,800 in 2021.

⁹ Includes North Auckland, West Auckland, Central Auckland and South Auckland.

¹⁰ Includes Wellington area, Upper Hutt, Lower Hutt and Porirua.

¹¹ Includes Cambridge and Te Awamutu.

12. PROVISION OF LAYER 2 SERVICES

12.1 Optional Layer 2 Services

- (a) LFCs will, with the consent of CFH, be permitted to optionally provide Layer 2 Services. This will be a decision for the Board of the LFC.
- (b) Where an LFC chooses to provide any Layer 2 Service, this will be a trigger for a requirement that the LFC provides the Specified Layer 2 Service as one of the Layer 2 Services provided. This is addressed in section 13 below.
- (c) A Partner will not be restricted from being involved in the provision of a Layer 2 Service separate from the LFC.

12.2 Layer 2 Services to be funded by Partner

- (a) The government does not intend its funding to be used for the provision of Layer 2 Services. The government believes that, in contrast to the position with Layer 1 Services, the market can be expected to provide Layer 2 Services on a commercial basis without government intervention. Therefore, the rationale for government intervention to encourage the provision of Layer 1 Services does not extend to Layer 2 Services.
- (b) If an LFC chooses to provide any Layer 2 Services, and CFH consents to the LFC doing so, it will be expected that the relevant Partner will fully fund the provision of such services including the cost of all electronic and optical equipment and technology required to be connected to the dark fibre in Layer 1 in order for Layer 2 Services to be made available.

13. OPEN ACCESS REQUIREMENTS

13.1 Open Access Requirements

In the context of this ITP open access means compliance with the following requirements:

- (a) LFCs must comply with the equivalence and non-discrimination requirements set out in Appendix 4;
- (b) LFCs must comply with the co-location and access to Central Office requirements set out in paragraphs 7 to 12 of Appendix 3;
- (c) LFCs must provide the Specified Layer 1 Service;
- (d) where it is proposed an LFC will provide Layer 2 Services, the LFC must obtain CFH consent and provide the Specified Layer 2 Service; and
- (e) LFCs must operate consistently with the open access guiding principles set out in section 13.2.

These are the **Open Access Requirements**.

13.2 Open access guiding principles

A key principle underlying the UFB Initiative is that the Network infrastructure owned by an LFC is open access. Open access is one of the Eligibility Criteria. The guiding principles of open access that an LFC will be required to adhere to are as follows:

- (a) *any-to-any connectivity*: allowing different networks to interoperate and interconnect over each service layer and between the service layers;
- (b) *any network technology*: technology choices are market driven and the open access framework should be designed to outlive the technology choices;
- (c) *low cost to change providers*: End Users are entitled to competition among LFCs and other network providers, application and service providers, and content providers and are easily able to switch between providers, subject to the commercial terms such End Users have with their existing network providers (i.e. there should be competition at all layers in the IP network allowing for a wide variety of physical networks to be able to interact in an open architecture); and
- (d) *equality of access*: services provided by an LFC should be offered to all Access Seekers on the same terms and conditions and provisioned to all Access Seekers using the same processes, even if the Access Seeker is a competitor or a downstream arm of a network competitor.

13.3 Equivalence and non-discrimination

The LFC will be required to abide by the equivalence and non-discrimination requirements set out in Appendix 4. This obligation will not substitute or limit the obligations on the LFC to comply with the Commerce Act 1986, the Telecommunications Act 2001, or any other applicable legislation or regulation.

13.4 Impact of current telecommunications operations

In the event that a prospective Partner, or a related or associated entity of the Partner, currently (or at any time while a Partner) owns or controls a business which provides any Telecommunications Service other than the Permitted Services, the Partner:

- (a) must fully divest, or must ensure that the Partner's related or associated entity fully divests, itself of that business; or
- (b) may not appoint the majority of directors to the Board of the relevant LFC, and the chair of the LFC Board must be an independent chair agreed to by all shareholders.

14. PHASING CONSIDERATIONS

14.1 Risk management

To manage risk and ensure that achievable goals are set for the UFB Initiative, it is expected that the build of an LFC's Network will be based on a phased network roll-out.

14.2 Project plan

- (a)** It is expected that each Proposal will include a proposed project plan to complete the relevant LFC's Network roll-out for the whole of the Proposed Coverage Area with the phases and the scope, coverage, timeframes and pricing of each phase clearly identified and recorded.
- (b)** The decision of whether or not to proceed with a phase will be made by the LFC prior to the commencement of that phase and will be subject to business case approval, satisfaction of pre-agreed criteria (which may include by way of example, validation of assumptions, confirmation of cost and proposed pricing) and confirmation of funding contributions from each of CFH and the Partner.
- (c)** Respondents should include in their Proposals the matters they consider should be addressed by an LFC in deciding whether or not to proceed with a phase.
- (d)** The specific details of phasing and phasing requirements will be recorded in the formal agreements referred to in section 10.1.

15. COMPLIANCE WITH REGULATORY FRAMEWORK

15.1 Regulatory requirements

Any Network to be constructed and/or operated by an LFC must be operated in accordance with all applicable laws and regulatory requirements relating to the operation of a telecommunications network, and the provision of services of the type and nature to be provided by the LFC, with immediate effect from the commencement of the LFC's operations.

15.2 Interception capability and emergency services

Without limiting the generality of section 15.1, each LFC must:

- (a)** comply with the obligation to have interception capability in accordance with the Telecommunications (Interception Capability) Act 2004; and
- (b)** meet any obligation it may have as a lifeline utility provider under the Civil Defence Emergency Management Act 2002;

with immediate effect from the commencement of operation of the LFC's Network or the provision of Telecommunications Services by the LFC.

PART C – PSP STAGES, ELIGIBILITY REQUIREMENTS AND EVALUATION CRITERIA

16. GENERAL APPROACH

16.1 PSP stages

Following the submission of Proposals, there will be five stages to the PSP which will involve the assessment of Proposals against the Eligibility Criteria and the Evaluation Criteria.

As part of this process it is anticipated that, following an initial assessment of Proposals, a preliminary shortlist of Proposals will be selected. Following further assessment, Shortlisted Proposals will be identified. CFH will enter into negotiations with the Respondents who submitted Shortlisted Proposals on the terms on which those Respondents will make offers to co-invest in LFC businesses. Each of the five stages to the PSP are recorded in more detail in sections 17 to 21 (inclusive).

16.2 Assessment against Eligibility Criteria and Evaluation Criteria

- (a)** As part of the PSP, it is intended that Proposals will be assessed in two phases on the basis of the following two categories of criteria:
 - (i)** Eligibility Criteria which, subject to section 17.1, must all be satisfied before a Proposal will be considered for the next phase of assessment; and
 - (ii)** Evaluation Criteria.
- (b)** The Eligibility Criteria and the intended method of assessing eligibility is set out in section 17. The Evaluation Criteria and the intended method of evaluation is set out in section 19. In each case CFH may, at any time, including after receipt of Proposals:
 - (i)** add additional Eligibility Criteria and/or remove Eligibility Criteria if it sees fit; and
 - (ii)** add additional Evaluation Criteria and/or remove Evaluation Criteria if it sees fit.
- (c)** If CFH changes the Eligibility Criteria or Evaluation Criteria before the Closing Date, it will notify Participants of the change by a Participant Notice.
- (d)** In addition, CFH reserves the right to depart from the methods of assessment and/or evaluation set out in sections 17 and 19 at its discretion.

17. STAGE 1 – PRELIMINARY SHORTLIST OF PROPOSALS

17.1 Preliminary shortlist

It is anticipated that Proposals satisfying the Eligibility Criteria will form the preliminary shortlisted Proposals. CFH reserves the right in its absolute discretion to:

- (a)** exclude from the preliminary shortlisted Proposals any Proposal even if the Proposal satisfies the Eligibility Criteria; and
- (b)** include in the preliminary shortlisted Proposals any Proposal, even if that Proposal does not satisfy the Eligibility Criteria.

17.2 Eligibility criteria

Subject to section 16.2(b)(i), there are five preliminary criteria against which each Proposal will be assessed to determine their eligibility to be considered further in the PSP. These five criteria are that:

- (a) The Respondent has the technical and commercial ability to construct, own and/or invest in infrastructure network businesses.
- (b) The Respondent has the financial capability to execute its Proposal.
- (c) The Network the Respondent proposes to supply to the LFC will:
 - (i) meet or exceed the network technical specifications set out in Section 2 of Appendix 3; and
 - (ii) comply with, and will be capable of operating in accordance with, all applicable laws and regulatory requirements with immediate effect from the commencement of provision of services by the LFC on that Network.
- (d) The LFC will comply with the Open Access Requirements.

These criteria are set out in more detail in Appendix 5.

18. STAGE 2 – DISCUSSIONS WITH RESPONDENTS ON THE PRELIMINARY SHORTLISTED PROPOSALS

18.1 Discussions on preliminary shortlisted proposals

- (a) CFH will enter into discussions with each Respondent of a preliminary shortlisted Proposal to enable CFH to obtain a better understanding of the preliminary shortlisted Proposal.
- (b) Following such discussions, CFH may, at its discretion, offer the Respondent of a preliminary shortlisted Proposal an opportunity to refine that Proposal and resubmit it to CFH for consideration within a time period to be confirmed by CFH.

19. STAGE 3 – EVALUATION OF PROPOSALS

19.1 Overview of the Evaluation Criteria

CFH is open to considering any Proposals that meet the Eligibility Criteria. Subject to section 16.2(b)(ii), such Proposals will be evaluated against the Evaluation Criteria, which are, in summary:

- (a) the number of premises in the Proposed Coverage Area and the proportion of the population that will be able to access the LFC's services in the Proposed Coverage Area;
- (b) the amount of the CPPP and CPPC (lower amounts will be evaluated more favourably);
- (c) the amount of the CCPM (lower amounts will be evaluated more favourably);
- (d) the build and acquisition schedule for the Communal Infrastructure;
- (e) improvements to the competitiveness of relevant markets;

- (f) avoiding excessive duplication of existing networks; and
- (g) additional benefits proposed by the Respondent.

These criteria are set in more detail in Appendix 6.

19.2 Reference checks

- (a) As part of the evaluation of a preliminary shortlisted Proposal, CFH may undertake such reference checks of the relevant Respondents, and any other Significant Contributors identified in a preliminary shortlisted Proposal, as CFH considers appropriate. CFH may contact some or all of the referees provided in the relevant Proposals.
- (b) All Respondents should appropriately brief any person they have identified as a referee, and authorise that person to talk freely with CFH. Any obligations of confidentiality which that referee or CFH have to the Respondent are waived by the Respondent, except to the extent that they relate to commercially sensitive pricing information.
- (c) CFH may, if it feels that the referees provided are not able to provide sufficient information for its purposes, request the names of further referees who are able to provide the further information CFH requires. When CFH makes such a request, a Respondent is required to co-operate fully in identifying, and assisting CFH in obtaining information from, such further referees.

19.3 Shortlisted Proposals and Shortlisted Respondents

Following the evaluation of Proposals, CFH may shortlist one or more Proposals, being Proposals in respect of which it is interested in entering into negotiations with the Respondents who submitted such Proposals, on the terms on which those Respondents will make offers to co-invest in the UFB Initiative. These Proposals will be Shortlisted Proposals and the Respondents who submitted them will be the Shortlisted Respondents.

20. STAGE 4 – SHORTLISTED RESPONDENTS AND NEGOTIATIONS

20.1 Negotiations on formal agreements

- (a) In respect of each Shortlisted Proposal, CFH may elect to enter negotiations with the relevant Shortlisted Respondent on the terms of the formal agreements that CFH will require that Shortlisted Respondent to enter into if that Shortlisted Respondent is selected as a co-investor with CFH in the UFB Initiative on the basis of the Shortlisted Proposal.
- (b) CFH will provide the relevant Shortlisted Respondents with the terms of the formal agreements CFH will require a Partner to enter into. These agreement terms, the Eligibility Criteria, the Evaluation Criteria and the relevant Shortlisted Respondent's Shortlisted Proposal will form the basis for the negotiations.
- (c) It is acknowledged that the terms of the formal agreements negotiated may include conditions for the benefit of CFH, including by way of example, the completion of due diligence to the satisfaction of CFH.

- (d) CFH may discontinue negotiations with any Shortlisted Respondent in respect of its Shortlisted Proposal at any time and may elect to commence negotiations with any other person at any time.

20.2 Final offers

Following such negotiations each Respondent is to submit a final binding offer incorporating the terms of the formal agreements that the Shortlisted Respondent proposes CFH enter into with that Shortlisted Respondent if the Shortlisted Respondent is selected as a co-investor of CFH in the UFB Initiative. Such offer will be open for acceptance by CFH for not less than 90 Business Days.

21. STAGE 5 – SELECTION OF PREFERRED PARTNER(S)

21.1 Consideration of final binding offers

The final binding offers received will be considered by CFH. If CFH wishes to proceed with any offer, CFH will seek shareholder approval for the acceptance of such offer from the Shareholding Ministers.

21.2 No legally binding obligations

No legally binding obligations will arise between CFH and any Respondent in respect of any Proposal (including any Shortlisted Proposal) until such time as CFH and the Respondent have signed the formal agreements required by CFH to record the terms upon which CFH and that Respondent will co-invest in the UFB Initiative.

APPENDIX 1

FORM OF NOTICE OF INTENTION TO PARTICIPATE

Date:

Crown Fibre Holdings Limited
c/o ICT Regulatory Group
Energy and Communications Branch
Ministry of Economic Development
33 Bowen Street
PO Box 1473
Wellington 6140
NEW ZEALAND

Attention: Nick Manning

ULTRA-FAST BROADBAND INITIATIVE - NOTICE OF INTENTION TO PARTICIPATE IN PARTNER SELECTION PROCESS

We hereby notify you of our intention to participate in the partner selection process for the "Ultra-Fast Broadband Initiative", as contemplated by the "Invitation to Participate in Partner Selection Process" dated 21 October 2009 (ITP).

Our contact details for all communications relating to the ITP are:

NAME: _____

CONTACT PERSON: _____

ADDRESS: _____

TELEPHONE: _____

FAX: _____

EMAIL ADDRESS: _____

We confirm that we have read, and agree to comply with the conditions set out in section 6 of the ITP, together with all other conditions and requirements set out in the ITP.

Authorised Person Signature

Name

APPENDIX 2

PREFERRED COMMERCIAL MODEL

1. THE UNDERLYING PHILOSOPHY

1. The underlying philosophy of the preferred commercial model outlined in this Appendix is for the commercial arrangements relating to the structure and funding of the LFC to place responsibility for particular risks associated with achieving the UFB Objective on the government (through CFH) and the Partner in a way that directly reflects their respective objectives.
2. The government's objective is to accelerate the build of dark fibre infrastructure.
3. This model therefore provides that CFH will take on the risks associated with an immature market, specifically where there may be an initial period during which the LFC's Network has insufficient End User take-up and revenues to deliver an economic return on the LFC's investment in fixed infrastructure. This will occur through CFH funding the acquisition by the LFC of its Communal Infrastructure in anticipation of End User demand. CFH's funding will be capped at a level the Partner proposes as being sufficient to fund this Communal Infrastructure.
4. In return for the government taking the above risks, the Partner will:
 - (a) fund the LFC's costs in connecting End Users;
 - (b) take the risk that there might be over-runs in the forecast cost of the LFC's build of its Communal Infrastructure; and
 - (c) take on the risk associated with the operational effectiveness of the LFC.
5. As each End User connects to the Communal Infrastructure, the Partner will fund the cost of physically connecting the End User and, during the first 10 years of the LFC's operations (the **Concession Period**), will also buy from CFH shares in the LFC equivalent to a "per End User" portion of the Communal Infrastructure funded by CFH. The government expects that over the Concession Period this mechanism will see the Partner progressively buy out a significant portion of CFH's shares in the LFC.
6. During the Concession Period, the Partner will receive all of the dividends paid by the LFC from its operating profits.
7. These commercial arrangements mean that, effectively, during the Concession Period the Partner will only be required to fund that portion of the LFC's Network that is 100% utilised.
8. This preferred commercial model has been developed with the intent of:
 - (a) providing prospective Partners with the greatest possible level of clarity and certainty as to the LFC's economics;
 - (b) creating long-term incentives for the Partners to drive End User take-up and to press for the LFC to operate as efficiently as possible; and
 - (c) delivering the cheapest possible fibre access for End Users.

2. LOCAL FIBRE COMPANIES

Purpose

9. The investment of the government (through CFH) and the Partner will be effected through an LFC.
10. The LFC's only business operations will be to:
 - (a) deploy, own and operate the Network in the LFC's Coverage Area;
 - (b) sell access to Layer 1 Services over this Network; and

- (c) if the LFC chooses to do so, and CFH consents to the LFC doing so, sell Layer 2 Services, including the Specified Layer 2 Service, over this Network.

11. The LFC will be compelled to:

- (a) connect all End Users in the LFC Coverage Area who wish to take service over the LFC's Network¹; and
- (b) charge the relevant Access Seeker, in respect of that End User, no more than an amount equal to CCPM plus agreed adjustments for inflation, as per paragraphs 98 and 99.

Structure

12. The LFC:

- (a) will be a newly incorporated limited liability company incorporated under the Companies Act 1993, in which the government, CFH and the Partner will be shareholders;
- (b) will operate independently of its shareholders, with its own premises, staff and operational systems (any services provided by a shareholder to the LFC must be on arms-length commercial terms and disclosed to the other shareholders);
- (c) is expected to own its own Network infrastructure²;
- (d) is expected to manage and direct the operation and maintenance of its own Network; and
- (e) is expected to recruit and employ its own workforce capable of managing and executing the LFC's business operations.

Governance

- 13. During the Concession Period the LFC will be governed by a board made up of seven directors, comprising three directors appointed by CFH, three directors appointed by the Partner, and a mutually agreed independent Chairperson.
- 14. After the Concession Period the composition of the Board may be revisited to more directly reflect then-current shareholdings. However, if and for so long as a shareholder in the LFC, or a related or associated entity of a shareholder in the LFC, owns or controls a business which provides Telecommunications Services other than the Permitted Services, then the requirements for the composition of the LFC Board during the Concession Period will apply.

Classes of Shares

15. The LFC will issue and maintain the following classes of shares:

- (a) "A" shares, which will have voting rights but will have no rights to ordinary dividends funded from the LFC's operating profits; and
- (b) "B" shares, which will be non-voting shares but which will have rights to ordinary dividends funded from the LFC's operating profits.

16. There will also be a Government Share, as set out in paragraphs 21 and 22.

17. The "A" shares will still retain rights to any distributions of surplus value that might arise in the event of a sale or liquidation of the LFC, and the Board of the LFC will still have the right to declare a special dividend to the "A" shares.

18. The issue price for all "A" and "B" shares will nominally be \$1.00 per share, although this value will be adjusted for inflation as per the mechanisms set out in paragraphs 92 to 97.

¹ Subject only to the LFC already having completed the build-out of the Communal Infrastructure past that End User's premises and the relevant Access Seeker agreeing to the LFC's standard network access terms.

² Leasing of existing assets is discussed in paragraphs 34 and 61.

Conversion to Ordinary Shares

19. At the end of the Concession Period all of the outstanding “A” and “B” shares on issue will convert to a single class of ordinary shares, on a 1:1 ratio. The Government Share will not convert at any time.
20. No further “A” or “B” shares will be issued after the Concession Period has ended.

Government Share

21. Separately from any CFH shareholding, the LFC will issue the government with a single share of a separate class (**Government Share**). The Government Share will be retained by the government even beyond the eventual sale of all of CFH’s “A” shares and/or ordinary shares.
22. This Government Share will have no rights to dividends, will not have ordinary voting rights, will not be entitled to any distribution of surplus value that might arise in the event of a sale or liquidation of the LFC, but will hold veto powers over any adjustments to the provisions in the LFC’s constitution setting out undertakings regarding:
 - (a) compliance with the Open Access Requirements;
 - (b) the obligation to connect each End User who seeks service;
 - (c) restrictions on the composition of the LFC Board as set out in paragraphs 13 and 14; and
 - (d) the adjustment mechanism for CCPM (see paragraphs 98 and 99);

and will have such other rights as necessary to ensure that the LFC's Network remains subject to the above requirements.

LFC Debt

23. The LFC will be encouraged to take out prudent levels of debt. While the decisions on LFC gearing will ultimately be made by the board of the LFC, indicatively CFH expects that the LFC will target a level of debt commensurate with a Standard & Poor's “A” or “BBB” credit rating.
24. During the Concession Period CFH is prepared to allow the benefit of the debt funding to accrue solely to the Partner. CFH expects that this debt funding will be able to be used to offset some or all of the costs of connecting End Users.

LFC Ordinary Dividends

25. CFH will support an LFC dividend policy that is consistent with good industry practice for network infrastructure businesses, subject to the LFC continuing to meet the solvency test as defined in the Companies Act 1993.
26. CFH will also support the payment of a special dividend to the “B” shares immediately before their conversion to ordinary shares to the extent that the LFC holds retained earnings in excess of that required to fund the LFC’s expected financial commitments (such as any committed capital expenditure) and working capital requirements.

Exit Mechanisms for the Government

27. CFH will give the Partner a call option over CFH’s shares which can be exercised if CFH’s holding of shares falls below 25% of the total voting shares on issue.
28. The Partner will give CFH a put option over CFH’s shares which can be exercised if CFH’s holding of shares falls below 10% of the total voting shares on issue.
29. Both the call and the put option will be executed at the market price of the shares.
30. The Government Share will be held by the government separately from any CFH shareholding and will not be included in either the call option or the put option described above.

Exit Mechanisms for the Partner

31. The Partner may transfer its shares in the LFC, subject to provisions in the LFC's shareholders' agreement, setting out pre-emptive rights for existing shareholders.

3. THE LFC'S COMMUNAL INFRASTRUCTURE

The Communal Infrastructure

32. The LFC's Network will contain communal infrastructure, being the network infrastructure in the Proposed Coverage Area which is deployed independently of any specific End User commitment and which is not located on End Users' sites or premises (the **Communal Infrastructure**). The Communal Infrastructure will include any of:
 - (a) interconnection points;
 - (b) Central Offices;
 - (c) cabinets;
 - (d) intra-LFC Coverage Area backhaul fibre connecting the interconnection points, Central Offices and cabinets (as appropriate);
 - (e) distribution fibre running along each street, past End User premises; and
 - (f) the associated ducts and other fixed civil infrastructure required to deploy these fibre assets.
33. The Communal Infrastructure does not include any of the End User-Specific Infrastructure discussed in paragraphs 59 to 76 of this Appendix.

Establishing The Communal Infrastructure

34. CFH prefers for the LFC to own and control items listed in paragraph 32, unless there is a commercial rationale for the LFC to lease some of these assets. The LFC may lease some of the assets referred to in paragraph 32 where that infrastructure is already in situ and will be shared by the LFC and other networks. But the LFC is broadly expected to build and own assets referred to in paragraph 32 where those do not already exist and so must be built out to support the LFC's Network.
35. Where the Partner, or a related or associated entity of the Partner, already has existing Communal Infrastructure in situ in the LFC's Coverage Area and this existing infrastructure will solely be used by the LFC, CFH expects the Partner will ensure this existing infrastructure is sold to the LFC as part of the Communal Infrastructure to be acquired by the LFC under the Network Procurement Agreement.
36. Where the Partner, or a related entity of the Partner, already has existing Communal Infrastructure in situ in the LFC's Coverage Area and this existing infrastructure will be shared by the LFC and other networks, CFH will accept the LFC entering into lease agreements for these assets provided the lease terms and conditions are on an arms'-length basis and are approved by CFH.
37. The Partner will be responsible for the build of all other Communal Infrastructure required by the LFC. The Partner will negotiate and enter into a contract with the Partner's preferred network build partner(s) to build the Communal Infrastructure assets for the Partner.
38. The LFC will enter into a Network Procurement Agreement with the Partner to acquire each stage or segment of the Communal Infrastructure from the Partner as it is completed. Each stage or segment may include a mix of existing Communal Infrastructure and new build Communal Infrastructure appropriate to the geographic area and Network components covered by the stage or segment.
39. The Network Procurement Agreement will cap the overall price the LFC will pay the Partner for the full agreed Communal Infrastructure, including any existing Communal Infrastructure. This capped price will be calculated as set out in paragraph 46. Any over-runs where the actual cost of building the Communal Infrastructure exceeds this capped price will be the Partner's responsibility.

40. CFH, the Partner and the LFC will need to agree on the appropriate staging and sequencing of the Communal Infrastructure build and acquisition programme, with the objective of passing every premise in the LFC Coverage Area. They will also need to agree on the pre-conditions for entering into each stage of the build and acquisition programme. The LFC's commitment to each stage is likely to be contingent on the board of the LFC being satisfied that agreed milestones and objectives have been achieved.
41. The specific agreement between CFH, the Partner and the LFC for each stage or segment will also cap the price the LFC will pay the Partner for that stage or segment. CFH expect this capped price will be calculated using the approach set out in paragraph 46 (i.e. on the basis of the number of premises passed in that stage or segment).
42. The Partner and LFC will each have responsibility for ensuring each stage or segment of the Communal Infrastructure is complete and ready for service (including that the Communal Infrastructure complies with the relevant technical specifications). In the case of the Partner, this will be by the Partner accepting the infrastructure under its build contract, where relevant. In the case of the LFC, this will be by the LFC accepting the infrastructure under the Network Procurement Agreement. When each stage or segment of the Communal Infrastructure has been accepted for service by both parties the LFC will acquire the existing Communal Infrastructure and completed new build Communal Infrastructure from the Partner.
43. All of the agreed Communal Infrastructure for the LFC's Proposed Coverage Area will need to be built out within 10 years of the LFC being formed, and preferably within 6 years. The LFC will commit to a programme of works to achieve this, including appropriate staging and sequencing.

Number of Premises Passed

44. Respondents are required to state in their Proposals the number of premises expected to be passed by the LFC's Network at the expected date of completion of the agreed network build programme for the LFC Coverage Area (N_{Passed}).

Cost Per Premises Passed

45. Respondents are required to propose in their Proposals a Cost Per Premises Passed (**CPPP**) for the LFC. CPPP is calculated based on the total estimated cost to build out and/or acquire all of the Communal Infrastructure required to meet the coverage committed to in the LFC's Proposed Coverage Area, divided by N_{passed} .

46. So the total forecast cost of the LFC's Communal Infrastructure will be expected to be:

$$\text{Total forecast cost of LFC Communal Infrastructure} = N_{\text{passed}} \times \text{CPPP}$$

47. CFH is prepared to fund up to 100% of the total forecast cost of the LFC's Communal Infrastructure.
48. That said, CFH would prefer to co-invest with Partners who are prepared to contribute at least 10% of the forecast total cost of the LFC's Communal Infrastructure. So, in addition to setting out the CPPP, Respondents will also need to break out the value of CPPP into that portion they expect CFH to fund (CPPP_C) and the portion they are prepared to fund (CPPP_P), where:

$$\text{CPPP} = \text{CPPP}_C + \text{CPPP}_P$$

CFH Funding of the LFC's Communal Infrastructure

49. CFH will direct its funding towards the LFC's Communal Infrastructure. CFH will cap its funding to the LFC at the level set by:

$$\text{CFH funding cap to LFC} = N_{\text{passed}} \times \text{CPPP}_C$$

50. If the actual cost of the Communal Infrastructure exceeds this funding cap then the over-run must be met by the Partner (see paragraphs 54 and 55).
51. The LFC will issue CFH with "A" shares in consideration for CFH's funding towards the establishment of the LFC's Communal Infrastructure. Therefore:

$$\text{Expected number of "A" shares to be issued to CFH} = N_{\text{passed}} \times \text{CPPP}_C$$

Partner Funding of the LFC's Communal Infrastructure

52. The Partner's contribution towards the forecast cost of building the Communal Infrastructure could be made up of two components:
- (a) any existing Communal Infrastructure in the LFC's Proposed Coverage Area owned by the Partner, or a related entity of the Partner; and
 - (b) any cash contribution to the cost of the new build Communal Infrastructure.
53. The value of this contribution is to be expressed as a "per premises" contribution, $CPPP_P$, by dividing the sum of the two components by N_{passed} .
54. The Partner must also fund any over-runs where the actual cost of establishing the LFC's Communal Infrastructure exceeds the forecast cost.
55. So:
- $$\text{Partner's funding obligation for LFC Communal Infrastructure} = N_{passed} \times CPPP_P + (\text{Actual cost} - N_{passed} \times CPPP)$$

Payment by the LFC for the Communal Infrastructure

56. The LFC will acquire the Communal Infrastructure from the Partner, as each stage or segment is completed and is accepted by both the Partner and the LFC. The amount payable by the LFC under the Network Procurement Agreement will be satisfied via:
- (a) issuing the Partner with "A" shares to the value of $CPPP_P$ times the number of premises passed in that stage or segment; and
 - (b) paying the Partner in cash up to the value of $CPPP_C$ times the number of premises passed in that stage or segment.
57. Where the agreed amount payable for a stage or segment is less than the number of premises passed in that stage or segment times $CPPP$, then the cash amount will be reduced accordingly.
58. No "A" shares will be issued by the LFC to the Partner in respect of the Partner's obligation to meet any cost over-runs where the actual cost of establishing the Communal Infrastructure exceeds the forecast cost based on $CPPP$.

4. THE LFC'S END USER-SPECIFIC INFRASTRUCTURE

The End User-Specific Infrastructure

59. The LFC will need to install further infrastructure and systems to provide service to End User connections as those services are contracted for by Access Seekers. This End User-specific infrastructure (**End User-Specific Infrastructure**) will include:
- (a) fibre from an End User's premises to the LFC's Communal Infrastructure already in place outside the boundary of an End User's premises;
 - (b) any electronics and/or optical equipment the LFC may be required to install on an End User's premises;
 - (c) any electronics and/or optical equipment the LFC may be required to install in the LFC's cabinet and/or Central Office;
 - (d) the associated ducts and other fixed civil infrastructure required to deploy these End User-specific fibre assets; and
 - (e) any capitalised investment directly associated with each marginal End User (for example, the value of any software licenses that might be supplied to the LFC on a "per End User" basis).

60. If the LFC intends to offer a Layer 2 service, the End User-Specific Infrastructure will also include any active electronics required to provide the Specified Layer 2 Service.

Establishing the End User-Specific Infrastructure

61. CFH prefers for the LFC to own and control its End User-Specific Infrastructure. The LFC may lease some of the assets referred to in paragraphs 59(a) or 59(d) where that infrastructure is already in situ, but should be expected to build and own assets in paragraphs 59(a) or 59(d) where those do not already exist and so must be built out to support the LFC's End User connections.
62. Where the Partner, or a related or associated entity of the Partner, already has existing End Users and End User-Specific Infrastructure in situ in the LFC's Coverage Area then CFH expects the Partner will ensure this existing infrastructure is sold to the LFC in return for "B" shares.
63. The Partner will be responsible for the build of the new End User-Specific Infrastructure. The Partner will negotiate and enter into a contract with the Partner's preferred network build partner(s) to build the End User-Specific Infrastructure for the Partner.
64. Under the Network Procurement Agreement the LFC will acquire the End User-Specific Infrastructure from the Partner as it is ready for service. The LFC will pay the Partner for the End User-Specific Infrastructure using cash (which may be funded by debt taken out by the LFC) and/or "B" shares.
65. The Network Procurement Agreement will cap the price the LFC will pay the Partner for each End User connection at the value outlined in paragraphs 67 and 68 plus any adjustments for inflation as per the mechanisms set out in paragraphs 96 and 97.
66. End User-Specific Infrastructure need only be installed once the LFC has received confirmation of the requirement for a new End User connection from the relevant Retail Service Partner.

The Cost Per Premises Connected

67. Respondents will have to set out in their Proposals the Cost Per Premises Connected (**CPPC**), being the forecast weighted average cost to the LFC of installing the End User-Specific Infrastructure, based on all potential connections to the Communal Infrastructure across the Proposed Coverage Area.
68. If the Respondent proposes that the LFC offer the Specified Layer 2 Service then the Respondent must also set out the Cost Per Premises Connected For Layer 2 (**CPPC_{L2}**), reflecting the extra investment required to provide the Specified Layer 2 Service.

Funding the LFC's End-User-Specific Infrastructure

69. CFH does not intend to fund the LFC's End User-Specific Infrastructure.
70. The Partner will be responsible for funding the actual costs of connecting End Users to the Communal Infrastructure.
71. The LFC will acquire the End User-Specific Infrastructure from the Partner, as each End User is connected to the Communal Infrastructure. The amount payable by the LFC for that End User-Specific Infrastructure under the Network Procurement Agreement will be the lesser of:
- (a) the actual cost to the Partner of providing the End User-Specific Infrastructure, in dollars; or
 - (b) the CPPC or CPPC_{L2} (as appropriate).
72. The amount set out in paragraph 71 will be satisfied by the LFC:
- (a) paying the Partner cash consideration; and/or
 - (b) issuing the Partner with "B" shares to the value of any shortfall in the amount set out in paragraph 71 that is not covered by the cash consideration.

Existing End User Connections

73. CFH recognises that Partners with existing fibre optic networks will have End User connections which they can assign to the LFC.
74. The LFC will value any existing End User connections on the basis of the CPPC or CPPC_{L2} value proposed by the Partner (as appropriate to the type of service the End User is contracted for).
75. The LFC will then acquire from the Partner any existing End User-Specific Infrastructure used to provide service to that End User, with the acquisition funded by the LFC issuing “B” shares to the Partner, and take an assignment of the arrangements the Partner has with the relevant Access Seeker.
76. The LFC may refuse to acquire any End User connection and End User-Specific Infrastructure where the relevant Access Seeker does not agree to the LFC's standard network access terms.

5. THE LFC'S ESTABLISHMENT COSTS AND CAPITAL INJECTIONS

Establishment Costs

77. The LFC will face establishment costs associated with items which might include, for example:
 - (a) premises and furnishings;
 - (b) IT systems;
 - (c) plant such as vehicles and other mobile equipment; and
 - (d) working capital.

Additional Capital Injections

78. From time to time the LFC may also require additional injections of working capital and/or expansion capital associated with items such as those listed in paragraph 77. The board of the LFC will be responsible for determining if and when any such injections of additional equity capital are required.

Funding The LFC's Establishment Costs And Capital Injections

79. CFH does not intend to fund the LFC's establishment costs or any additional capital injections required by the LFC.
80. The Partner will be responsible for funding the LFC's establishment costs and any additional equity capital injections determined to be required by the board of the LFC.
81. The LFC will issue the Partner with “B” shares in consideration for funding the LFC's establishment costs and also for funding any additional equity capital injections.

Existing Systems and Plant Owned By the Partner

82. If the Partner wishes to sell any existing premises, systems (for example billing systems) and/or plant (for example vehicles) to the LFC, the LFC will value these assets at the book value of these assets. Any such acquisition will be subject to the approval of the LFC board, taking into account the operational requirements of the LFC and its scope of business.
83. The LFC will then acquire these assets from the Partner with the acquisition funded by the LFC issuing “B” shares to the Partner.

6. ACTIONS WHEN A NEW CUSTOMER SEEKS FIBRE SERVICE

Commitment to Provide Service

84. The LFC will provide Layer 1 Services (and, if provided, the Specified Layer 2 Services) to End Users in the LFC's Proposed Coverage Area in response to requests from Access Seekers.

85. The LFC only be able to refuse to provide services to a End User where:
- (a) the LFC's Communal Infrastructure required to extend service to that End User's premises has not yet been completed; or
 - (b) the relevant Access Seeker has not agreed to the LFC's standard network access terms.

Issues and Transfers of LFC Shares

86. When an Access Seeker requests the LFC to provide services to a End User, the following will occur:
- (a) the LFC will procure the installation of the appropriate End User-Specific Infrastructure from the Partner, under the terms of the Network Procurement Agreement;
 - (b) the LFC will acquire the completed End User-Specific Infrastructure from the Partner, in consideration for which the LFC will provide the Partner with a mix of cash and/or "B" shares, as set out in paragraph 72; and
 - (c) the Partner will then acquire "A" shares from CFH, with the number of "A" shares equal to CPPP_C committed to by the Partner, at a price equal to their \$1.00 par value plus any adjustments for inflation as per paragraphs 92 to 95.

Timing

87. CFH expects that the issue of "B" shares to the Partner, payment of cash to the Partner, and the sale of "A" shares from CFH to the Partner will occur either monthly or quarterly, depending on the size of the particular LFC.
88. The board of the LFC may require the Partner to pre-fund a portion of the expected End User connection costs at the start of the period, rather than injecting all of the funding at the end of the period.

LFC Charges

89. Respondents will be required to propose in their Proposals a Customer Charge Per Month (**CCPM**), which will be the maximum amount the LFC will be entitled to charge an Access Seeker per month for providing the Specified Layer 1 Service in respect of an End User.

7. INFLATION

Adjusting For Relevant Inflation

90. Before the LFC is formed CFH and the Partner will commit to set values for CPPP, CPPC and CCPM.
91. CFH recognises these values will need to be adjusted during the Concession Period to reflect the effect of inflation. CFH proposes that these values will be reset at the beginning of each financial year for the LFC, to reflect the movement in the relevant index over the just-completed financial year.

Adjusting CPPP

92. If the Partner and the LFC agree to fix the cost of the Network build over a multi-year contract it will not be necessary for CFH's capped funding to the LFC to rise over that period. This is more likely in smaller coverage areas where it may be possible to fix or cap the entire build programme. However, in larger coverage areas the Network build programme may span such an extended time that it is not practical to fix the cost over the full term of the build of the LFC's Communal Infrastructure.
93. At the beginning of the LFC's financial year the value of CPPP will be adjusted to reflect movement in the Consumer Price Index (all groups) (**CPI**) over the just-completed financial year.
94. The adjusted value of CPPP will be used to calculate CFH's capped funding to the LFC during that financial year. The actual costs of any over-runs above this capped funding will continue to be to the Partner's account. However, the number of "A" shares CFH will subscribe for will continue to be based on the original unadjusted value of CPPP in force when the LFC was formed. The value of each "A" share then will adjust to reflect the movement in the CPI.

95. This adjusted value of each “A” share will be used to calculate the value of each “A” share acquired from CFH by the Partner as per paragraph 86(c).

Adjusting CPPC

96. At the beginning of the LFC’s financial year the value of CPPC and CPPC_{L2} will be adjusted to reflect movement in the CPI over the just-completed financial year.
97. The adjusted value of CPPC and CPPC_{L2} will be used to calculate the cap on the amount payable by the LFC for End User-Specific Infrastructure as per paragraph 71(b). The value of each “B” share then will adjust to reflect the movement in the CPI.

Adjusting CCPM

98. At the beginning of each financial year of the LFC, the value of CCPM will be adjusted to reflect movement in the Communication Services group (group J) of the Producers Price Index over the just-completed financial year.
99. The adjusted value of CCPM will be the maximum price the LFC will be entitled to charge an Access Seeker per month for providing the Specified Layer 1 Service in respect of an End User.

8. THE PRACTICAL EFFECT OF THE LFC COMMERCIAL ARRANGEMENTS

What this Structure Means for the Government

100. This structure targets the government’s funding at the specific hurdles to commercial investment. CFH will fund the unused portion of the LFC’s communal assets, which have been built out in anticipation of future End User demand. If this demand is not forthcoming then CFH carries these unused assets for up to 10 years.
101. This structure caps CFH’s total funding commitment to any LFC. Furthermore, as End User take-up increases CFH receives funds back (via the Partner acquiring “A” shares from CFH) and so CFH’s actual net commitment to the LFC is not likely to reach its total capped commitment to that LFC.
102. This structure sets up a natural exit mechanism for CFH from the LFC. As End User take-up increases the Partner progressively buys CFH out of its interest in the LFC. There are further mechanisms for CFH to completely exit its remaining shareholding, once this shareholding drops below an agreed percentage of the total shares on issue.

What this Structure Means for the Partner

103. This structure ensures the Partner only need invest in the LFC:
- (a) in order to establish the LFC; and
 - (b) when there is a clear End User commitment to take service.
104. The Partner does take some risk in that it is required to meet the LFC’s Network build costs where these exceed the values proposed by the Partner when the LFC is formed.
105. This structure effectively provides that the Partner only funds that portion of the Network in respect of which an End User has been connected. The Partner only has to invest in the LFC’s infrastructure in proportion to End User take-up, does not have to carry an investment in unused infrastructure, and so is isolated from the risk of uncertain End User take-up.
106. However, this structure means the Partner carries the risk that the actual costs to the LFC of the Network will exceed the agreed forecasts. The Partner must meet any over-runs in the LFC’s build costs, and will receive no shares in the LFC in return for funding these over-runs. The Partner then has strong incentives to ensure that the Network build costs it proposes are accurate and that the Network build programme is well planned and managed.

107. This structure sets up strong positive incentives on the Partner to drive End User take-up. As End User take-up increases the Partner receives all of the commercial returns during the Concession Period, and acquires an increasing percentage of the LFC's voting shares.

How LFC Funding, Ownership and Control are Anticipated to Evolve Over Time

108. Initially CFH will control the majority of the LFC's voting shares (the "A" shares) – in return for CFH's large equity commitment to fund the Communal Infrastructure build out (effectively a build out of "fibre past the premises").
109. As the LFC begins to secure End User connections, an increasing amount of the LFC's voting shares (the "A" shares) will be acquired by the Partner, effectively reducing CFH's level of control. As these "A" shares are acquired from CFH this returns funds which can then be re-invested in further broadband infrastructure elsewhere.
110. During the Concession Period the economic profits accrue to the "B" shares. These "B" shares are held by the Partner, so the Partner receives the full economic value generated by the LFC during this period. CFH does not hold any "B" shares and does not stand to receive ordinary dividends during this period – this is the concessionary equity return offered by the government.
111. At the end of the Concession Period the "A" and "B" shares convert to ordinary shares which carry equal voting rights and equal rights to dividends. At that point in time the Partner is likely to receive effective control of the LFC, if they have not already achieved this via their holding of "A" shares. Equally, at that point in time CFH gains entitlements to the LFC's operating profits

The Incentives

112. The government considers that this structure establishes several incentives on the Partner.
113. First, there is a strong incentive to ensure the Network build contracts are well negotiated, well structured and well managed – since the Partner is responsible for meeting any cost over-runs.
114. Second, there is a strong incentive to drive End User uptake as rapidly as possible since the Partner's pathway to eventual control and ownership of the LFC is primarily via driving End User take-up during the Concession Period.
115. Third, there is another strong incentive to drive End User uptake as rapidly as possible since, during the Concession Period, the Partner receives the economic value generated by these End Users.

APPENDIX 3

NETWORK TECHNICAL SPECIFICATIONS, SERVICE DEFINITIONS AND INTERCONNECTION REQUIREMENTS

1. INTRODUCTION

1. CFH will maintain a set of technical and operational standards relating to the services provided by LFCs. These will be developed in consultation with the industry and, once finalised by CFH, will apply to all LFCs.
2. The following Network technical specifications, service definitions and interconnection requirements will form the basis of these standards.

2. NETWORK TECHNICAL SPECIFICATIONS

Fibre Optic Cable

3. All dark fibres must comply completely with the ITU-T G.652C/D standards for single-mode optical fibre and cables. The LFC may optionally deploy dark fibres that comply with the ITU-T G.657B standard for single mode high bend fibres that are completely compatible with the ITU-T G.652C/D specification.
4. Dark fibre termination must be provided by SC type connectors as defined by the IEC 61754-4 standard.
5. Dark fibre lengths between the ONU and MUX or OLT must not exceed distance specifications for single mode unamplified fibre as per the IEEE 802.3 Section 5 standard OR distance specifications as per the ITU-T G.984 (GPON) standard as appropriate. Note that IEEE 802.3 Section 5 specifications in this context make reference to the IEC 60793-2 B1.1/B1.3 standards for AON configurations (point-to-point). These are fully consistent with the specifications in the ITU-T G.652 standards referenced above.

Central Offices

6. The LFC is required to connect dark fibres from large numbers of individual End User premises back to Central Offices in the LFC's Coverage Area. The Central Office is the point of interconnection to the LFC's Network.

Co-location

7. The Central Offices are where Access Seekers will locate their OLTs and/or MUXs (as applicable). The LFC must provide co-location services to Access Seekers to support Access Seekers locating their equipment in the Central Office.
8. The Central Offices then must:
 - (a) provide housing for the appropriate infrastructure and/or network equipment;
 - (b) enable the convenient linking of terminal equipment and/or systems to enable the provision of inter-network connectivity;
 - (c) make provision for the LFC to be able to provide a co-location service for equipment of Access Seekers accessing the LFC's Layer 1 Services; and
 - (d) provide the environmental services required to support the above.
9. The Access Seeker is responsible for deployment and management of the OLT/MUX at the Central Offices.
10. Co-location services are separate from the Layer 1 Services covered elsewhere in this Appendix and the ITP document, and the LFC may charge Access Seekers for their co-location services.

Access to Central Offices

11. The LFC must provide Access Seekers with access to the Central Offices in order for the Access Seekers to connect the Central Office with other networks, including providing connections to intra-LFC Coverage Area backhaul.
12. Inter-network connectivity access is a separate service from the Layer 1 Services covered elsewhere in this Appendix and the ITP, and the LFC may charge Access Seekers for their inter-network connectivity access.

Multi-Tenant Buildings

Fibre connections to multi-tenant buildings

13. Some building types, such as apartments, commercial offices or residential campuses, contain a number of interconnected premises. Each premise represents a potential End User who can elect to take service independently of the other premises in the multi-tenant building. The LFC must be able to provide service to any or all of the premises in the multi-tenant building.
14. In some cases it will make practical sense, from a deployment point-of-view, for the LFC to provide an individual fibre connection for each individual residence or commercial tenancy in a multi-tenant building.
15. Where this does not make practical sense, such as for a large apartment building, then the LFC must provide sufficient fibre to that building to meet the needs of the entire building, consistent with:
 - (a) the number of premises in the building;
 - (b) the chosen network architecture; and
 - (c) the need to support multiple Service Providers each with End Users in the building.
16. Any such infrastructure the LFC deploys will be considered as Communal Infrastructure under the Preferred Commercial Model.

Termination point

17. The LFC must terminate the fibre(s) to the building inside the multi-tenant building at a location that makes sense to the LFC (CFH expects that in most cases this is likely to be a utilities or services room).
18. The LFC is not responsible for designing or installing the technology solution to extend service from the termination point within the building to each individual premises. This will be the responsibility of the building owner or body corporate (as appropriate). The LFC may choose to provide services and offer solutions to the building owner or body corporate, but is not obliged to do so.

3. THE SPECIFIED LAYER 1 SERVICE

General Requirements

19. The LFC must offer the Specified Layer 1 Service and make it available on equivalent terms and conditions to all Access Seekers.
20. The Specified Layer 1 Service must be designed to support a Layer 2 Service delivering downlink bandwidth of at least 100 megabit/s and uplink bandwidth of at least 50 megabit/s using standards and equipment routinely available today.
21. The Specified Layer 1 Service must be designed to support future growth via an upgrade path to speeds at least 10× these levels.

Termination Points

On LFC premises

22. The termination point on the LFC's premises is to be at a Central Office site, which will typically terminate the fibre strands that service several thousand, or potentially tens of thousands, of End User premises. Specifically, the termination point will be the SC connector which plugs into the OLT or MUX (as appropriate) in the LFC's Central Office.
23. For the avoidance of doubt, if a fibre distribution hub, cabinet or similar is used as part of the Network architecture then the service extends beyond that point to the Central Office.

On End User's premises

24. The termination point on the End User's premises is to be inside the End User's premises, at such location as best makes sense to the LFC. Specifically, the termination point will be the SC connector which plugs into the ONU inside the End User's premises.

Network extent

25. The Specified Layer 1 Service must include all of the network elements between and including these two termination points. The price of the Specified Layer 1 Service must be based on all these network elements.
26. However, co-location services for equipment in the LFC's premises are not a part of the Specified Layer 1 Service and can be covered by separate charges.

Network Topology

27. CFH is open to proposals based on Passive Optical Network (**PON**) topologies or Active Optical Network (**AON**) topologies or a mix of PON and AON, providing the Network is architected to meet or exceed the bandwidth requirements set out in paragraph 20.
28. In a mixed PON/AON network, differential pricing is permitted, but only to the extent that it reflects actual cost differentials between the two network topologies.

Service Provider to Choose Terminal Equipment

29. It is up to the Access Seeker to choose suitable MUX and ONUs to connect to the LFC's AON-based Specified Layer 1 Service and/or suitable OLTs and ONUs to connect to the LFC's PON-based Specified Layer 1 Service (as applicable).

Operational Standards

30. Operational standards, for example provisioning and restoration response times, are to meet industry best practice.

Specific Requirements for the Specified Layer 1 Service Over a Passive Optical Network

Standards

31. Any PON-based networks must, at a minimum, support the Layer 1 requirements of GPON (ITU-T G.984).

Splitter ratios

32. The splitter ratio adopted must be consistent with meeting or exceeding the Layer 2 download/upload requirements identified in paragraph 20.

Splitter location

33. If splitters are located in a fibre distribution hub or cabinet (i.e. in a location other than a Central Office) then the LFC must provide sufficient fibres and/or duct space from the fibre distribution hub/cabinet back

to the Central Office in order to support multiple Service Providers, each with their own splitter, in each fibre distribution hub or cabinet area.

Support for point-to-point links

34. If a PON architecture is chosen, the LFC must still provide for point-to-point connections to any Priority Users and other concentrations of demand (such as cellsites) within the PON coverage area.

Meeting Access Seeker requirements

35. A key element of the passive design is its ability to support a competitive market. To this end, the passive architecture must provide for multiple Access Seekers, and enable each Access Seeker to make efficient use of their own OLTs.
36. The effectiveness of the measures proposed by Respondents will be included in CFH's assessment of the competitive benefits of their Proposals.

4. THE SPECIFIED LAYER 2 SERVICE

Statement of Principles

37. The requirements set out here for the Specified Layer 2 Service should best be viewed as a statement of principles rather than as a final statement of the specification.
38. CFH expects to finalise a detailed specification for the Specified Layer 2 Service as part of an industry-wide consultation process.

Specified Layer 2 Services

39. If an LFC elects to offer Layer 2 Services then it must, at minimum, offer the Specified Layer 2 Service outlined in this section.
40. The LFC is able, with CFH's consent, to offer other Layer 2 Services in addition to the Specified Layer 2 Service.

Multiple Service Providers

41. The most significant requirement for the Specified Layer 2 Service is that it must enable multiple Service Providers to deliver services to an individual End User directly.

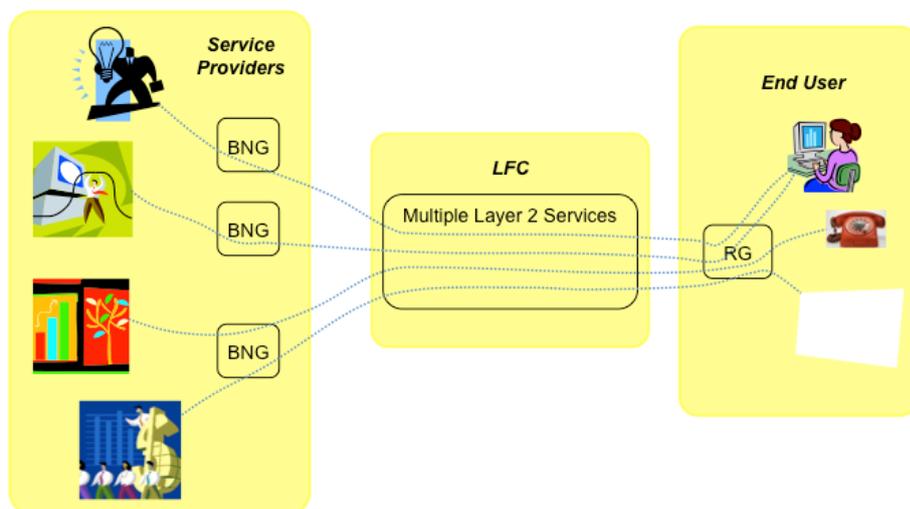


Figure 1 - Multiple Service Providers for each End User

42. Figure 1 illustrates this requirement. Four Service Providers are shown, with the top two each having a physically separate Broadband Network Gateway (**BNG**) interface and the lower two adopting a commercial arrangement in which they share a single BNG for access to the LFC's Layer 2 Service.
43. It is not intended to stipulate any particular requirement for Service Provider equipment configuration, other than compliance with interface standards which are discussed throughout this specification, for access to the Layer 2 Service.
44. A Residential Gateway (**RG**) is also shown as the primary point of access to the Layer 2 Services for the End User's equipment (a computer, telephone, and television in this illustration). This specification presents requirements specific to the interface between the Layer 2 Service equipment and the End User's equipment, which provides some restriction to equipment configuration (e.g. RG configuration). These restrictions are highlighted in a later section.
45. The LFC and the Service Providers are free to negotiate different sets of parameters for governing how the Layer 2 Service will manage delivery of data traffic to and from End User equipment.
46. Service Providers will purchase Layer 2 Service options with agreed data traffic performance characteristics that suit the type of service purchased by the End User. It is expected that LFCs will offer attractive "packages" of data traffic performance parameters that suit all Service Provider requirements.

The Specified Layer 2 Service Over an Active Optical Network

47. Layer 2 Services based on an AON network can provide very high symmetrical bandwidth between Service Providers and End Users (much higher than those that can be provided using Gigabit Passive Optical Network (**GPON**)). This allows End Users to purchase very high bandwidth services, as well as for Service Providers to offer configurations for multi-tenant buildings in which individually connected End Users enjoy bandwidths as high as (or superior to) those provided across GPON.
48. The minimum scope for the Specified Layer 2 Service utilising an AON is shown in the following figure:

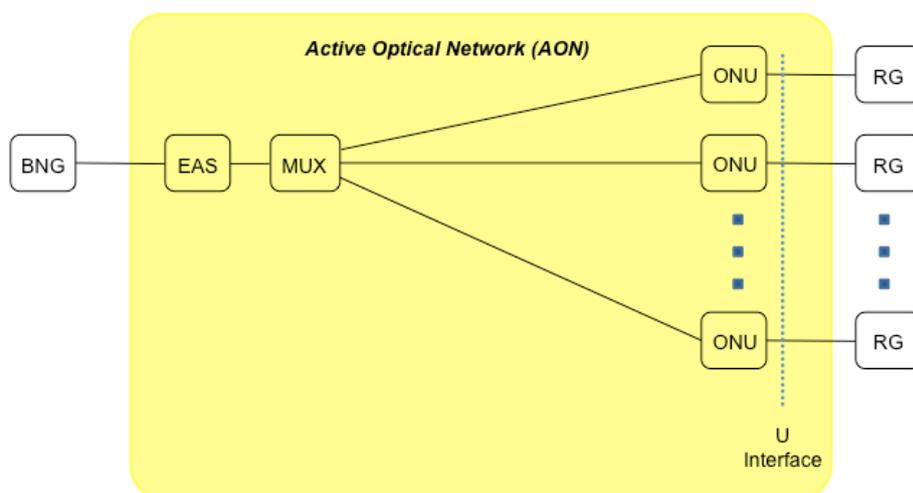


Figure 2 - Minimum scope for the Specified Layer 2 Service over an AON

49. This architecture is compliant with the TR-101 standards and provides an end-to-end IEEE 802.3 Ethernet path between the Service Provider and End User equipment.
50. In this case, the BNG and RG components are outside the scope of the LFC business.
51. The ONU must provide a TR-101 U Interface compliant with the IEEE 802.1ad standard in such a way that S-VLAN-ID, C-VLAN-ID, and P-Bit assignments can be used to deliver multiple Service Provider services to a single End User according to the data traffic performance characteristics associated with the Layer 2 Service option purchased by each Service Provider. It is outside the scope of this specification to determine an industry-wide standard for management of the IEEE 802.1ad name space in this context.
52. The Ethernet Aggregation Switch (**EAS**) must also provide an IEEE 802.1ad compliant interface to BNGs (or other similarly deployed equipment) for connectivity to Service Providers.

- 53. It is noted that the required interface point at the EAS for connectivity between Service Providers and the LFC business is very similar to the IEEE 802.1ad compliant interface that exists for today's regulated Enhanced Unbundled Bitstream Access (**EUBA**) service. It is likely that the yet-to-be-agreed industry wide standard for management of the IEEE 802.1ad name space may provide subtle modifications to that agreed for EUBA today. LFCs and Service Providers will therefore be well prepared for implementation of new name space conventions.
- 54. Note also that the ONU must provide a single physical port for connection to the RG (see the paragraphs later in this Appendix on the point of delivery requirements for the Specified Layer 2 Service).

Implementing the Specified Layer 2 Service to a multi-tenant building under AON

- 55. Under an AON network architecture, the LFC is permitted to implement the Specified Layer 2 Service to a multi-tenant building using a single ONU with multiple physical ports, where each End User of the Specified Layer 2 Service is connected to an individual port on the ONU.

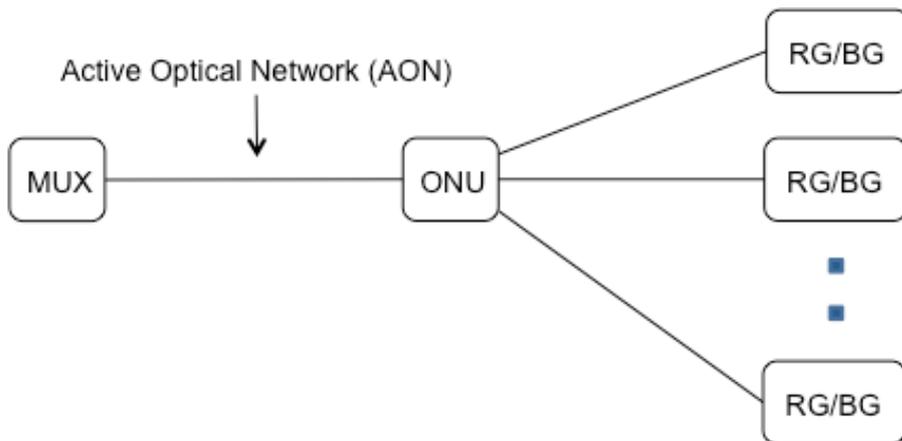


Figure 3 - The ONU in a multi-tenant building can support multiple physical ports

- 56. Each individual port on the ONU must be compliant with the 1000Base-T Gigabit Ethernet capability.

The Specified Layer 2 Service Over a Passive Optical Network

- 57. The Specified Layer 2 Services based on an PON network must, at a minimum, be based on the Gigabit Passive Optical Network (**GPON**) standard set out in ITU G.984, and should also be able to readily accommodate future iterations of this standard.

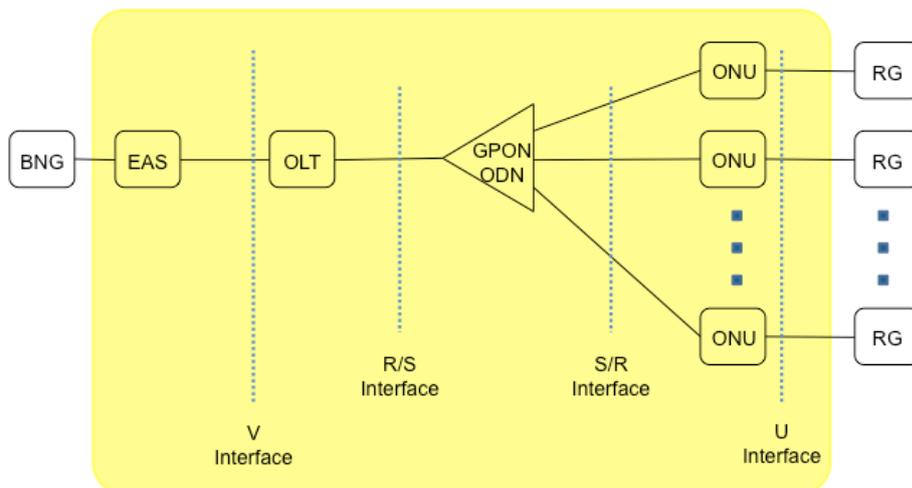


Figure 4 - Minimum scope for the Specified Layer 2 Service over a PON

58. Figure 4 shows the minimum scope for a basic Layer 2 Service infrastructure utilising a GPON Optical Distribution Network (**ODN**) for provision of Service Provider service offerings to large numbers of End Users. This architecture is compliant with the TR-101 and TR-156 standards and provides an end-to-end IEEE 802.3 Ethernet path between the Service Provider and End User equipment.
59. The V and U Interfaces must comply with the IEEE 802.1ad standard in such a way that S-VLAN-ID, C-VLAN-ID, and P-Bit assignments can be used to deliver multiple Service Provider services to a single End User according to the data traffic performance characteristics associated with the Layer 2 Service option purchased by each Service Provider. It is outside the scope of this specification to determine an industry-wide standard for management of the IEEE 802.1ad name space in this context.
60. The OLT and ONU must comply with the TR-156 standard for mapping of the IEEE 802.1ad S-VLAN-ID, C-VLAN-ID, and P-Bit assignments to GPON Encapsulation Method (**GEM**) Port transport/convergence facilities across the R/S and S/R interfaces.
61. Note also that the ONU must provide a single physical port for connection to the devices at the End User's premises (see the paragraphs later in this document on the point of delivery requirements for the Specified Layer 2 Service).
62. In the context of this specification, the requirements for provision of a Layer 2 Service across a GPON configuration are effectively the same as those pertaining to Layer 2 Services provided across AON. The same Layer 2 Service requirements exist at the U Interface as for the AON architecture, as well as at the interface point between Service Providers and the LFC (using an EAS) although there may be additional and/or differing equipment deployed within the boundaries of the LFC business. For example, GPON introduces OLTs whilst AON uses an appropriate type of MUX for aggregation of large numbers of ONUs to one or more EASs.

Implementing the Specified Layer 2 Service to a multi-tenant building under PON

63. Under a PON network architecture the LFC is permitted to implement the Specified Layer 2 Service to a multi-tenant building by locating splitters in the multi-tenant building itself, provided:
 - (a) the LFC provides sufficient cabinet space and fibre links to support multiple Service Providers with End Users in the multi-tenant building; and
 - (b) the LFC ensures there is appropriate support for any point-to-point connections to any Priority Users and other concentrations of demand (such as cellsites) within the multi-tenant building.

Point of Delivery Requirements

U Interface is the point of delivery

64. The U Interface, which sits between the ONU and the BG/RG, is the point of delivery of Layer 2 Services to End Users.

U Interface must support the 802.1ad standard in both BGs and RGs

65. The U Interface must support the IEEE 802.1ad standard.
66. It is noted that TR-101 and TR-156 discuss two types of "gateway" – the RG and the BG. In the context of this specification the most significant differentiator is that these standards state that RGs must support the IEEE 802.1Q standard for single VLAN-ID tagging and P-Bit processing, whilst BGs must support the IEEE 802.1ad standard. Neither standard (currently) states that RGs must support the IEEE 802.1ad standard.
67. However, industry and standards trends are toward stipulation of a requirement for RGs to comply with the IEEE 802.1ad standard. BGs compliant with IEEE 802.1ad have been on the market for quite some time, and RG manufacturers are already selling RGs that are IEEE 802.1ad compliant.
68. This specification states that RGs must be IEEE 802.1ad compliant.

ONU must be separate from BG and RG

69. TR-156 provides options for equipment that delivers the ONU and RG/BG functions, where this equipment could be provided:
- (a) using physically separate units (e.g. an ONU connected via 1000Base-T or 100Base-T Ethernet cable to the RG/BG); or
 - (b) combined into a single unit such that the U interface is internalised and potentially non-existent.
70. This specification states that RGs and BGs must comply with the IEEE 802.1ad standard at the UInterface, and so must be physically separated from the ONU. The ONU is therefore a part of the Layer 2 Service within the scope of the LFC business, while the RGs and BGs are not. So the combined option is not allowed.

Single port interface on the ONU

71. The ONU must provide a single port interface which must support:
- (a) the IEEE 802.1ad standard at the U Interface through a single port interface with the ONU; and
 - (b) a 1000Base-T Gigabit Ethernet connection.

If the ONU is connected to an RG or BG which supports a lower speed standard (such as 100Base-T Ethernet) then the ONU must automatically “step down” and synchronise to the speed supported by the RG/BG.

72. Service Providers are free to agree equipment configuration and management practices on the End User side of the U Interface as they see fit, within these constraints.

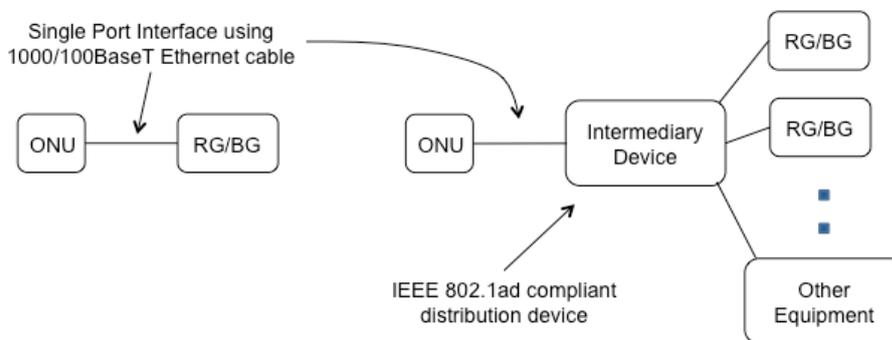


Figure 5 - Options for implementing the single port interface on the ONU

73. Figure 5 illustrates the requirement for an ONU to deliver a single port interface to the RG/BG for all single End User premise connections.
74. In this case, the RG/BG must be IEEE 802.1ad compliant, and is responsible for ensuring that data traffic from the ONU (delivered by one or more Layer 2 Service instances) is directed toward the appropriate End User equipment.
75. Additionally, the RG/BG is responsible for ensuring that traffic from End User equipment is delivered to the ONU using S-VLAN-ID, C-VLAN-ID, and P-Bit assignments that map the traffic into the appropriate Layer 2 Service instances.
76. Figure 5 also illustrates the possibility for Service Providers to agree some form of “Intermediary Device” as an IEEE 802.1ad compliant mechanism at the U Interface for connecting multiple End User devices (RGs, BGs, routers, PCs, televisions, etc) to the single port interface on the ONU. In this case, the Intermediary Device may provide multiple physical ports for connectivity to End User equipment, and may have primary responsibility for directing data traffic to/from Layer 2 Services (using the S-VLAN-ID, C-VLAN-ID, and P-Bit conventions) as required.

77. Practical examples of such a device include BGs, Ethernet Switches, and RGs that are compliant with the IEEE 802.1ad standard. These are all capable of being configured to play some type of Intermediary Device role.
78. To be clear, this specification does not state any particular cabling requirements within the End User's premises beyond provision of a single port interface on the ONU supporting 1000Base-T. This does not mean that Service Providers are required to provide cabling and RG/BGs that also support 1000Base-T Gigabit Ethernet connectivity.

Provider Bridges

79. There are special technical considerations for the LFC Network infrastructure in support of End User equipment connection to the services provided by Service Providers. These considerations are specific to Layer 2 Service provision – they do not apply to Layer 1 Service products.
80. There are two special considerations for the Layer 2 Service:
 - (a) At the time a Service Provider purchases a Layer 2 Service, the business transaction must agree values for the S-VLAN-ID, C-VLAN-ID, and P-Bits that are to be used for identification and management of the Layer 2 Service instance. In support of secure End User authentication by the Service Provider, it is likely that some form of Service Identifier is agreed, which can be linked in some way to the End User location. Additionally, some form of Handover Point Identifier is likely to be required to identify the LFC equipment/port to which the Service Provider equipment is connected.
 - (b) At the time the End User's RG is powered on, it will complete a cycle of start-up procedures that include establishing the Layer 2 Service connections, and obtaining an IP address (or possibly more than one) from the Network. In an IEEE 802.1ad context, there are a number of implementation choices to be made by RG manufacturers within the standards frameworks for management of these activities. The LFC's equipment will have a part to play in support of the end-to-end flow of data traffic in support of this.
81. Satisfaction of these considerations is outside the scope of this specification, and must be agreed at industry level.

Data Traffic Performance Parameters

82. It is expected that LFCs will offer attractive "packages" of data traffic performance parameters that suit all Service Provider requirements through an appropriately sized set of Layer 2 Service purchase options.

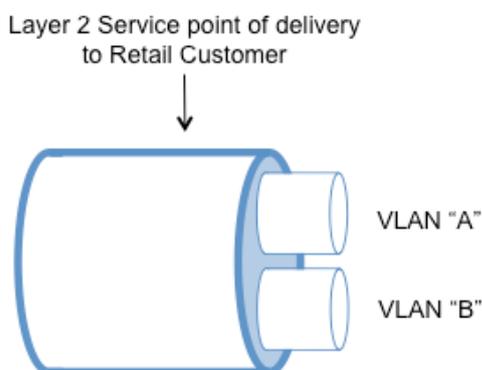


Figure 6 - Basic VLAN traffic separation

83. Figure 6 illustrates a basic Layer 2 Service configuration in which an End User has two VLANs providing services to their equipment (this means two Layer 2 Services – one for each VLAN).
84. Note that the fact that there are two VLANs in this illustration does not mean that there must be two Service Providers. LFCs are free to negotiate with Service Providers as they see fit, and Service Providers are free to negotiate with each other for service aggregation as they see fit. In this illustration,

the End User has entered into a purchase agreement with at least one (and possibly two or more) Service Providers who, in turn, have purchased two instances of the Specified Layer 2 Service for delivery of services to the End User's equipment.

85. There are two options around traffic prioritisation and shaping for these VLANs:
 - (a) VLAN "A" and VLAN "B" may have equal performance commitments (essentially provided using the same Layer 2 Service option); or
 - (b) VLAN "A" and VLAN "B" may have differing performance commitments (essentially provided using two Layer 2 Service options).
86. These two VLANs must be identified and managed using industry name space conventions for S-VLAN-ID, C-VLAN-ID, and P-Bit assignments which are outside the scope of this specification.
87. It is expected that LFCs and Service Providers will agree performance commitments based on the usual attributes such as Class of Service (**COS**), Peak Information Rate (**PIR**), Committed Information Rate (**CIR**), jitter, latency, and rules around discarding data packets when traffic flows exceed the boundaries of these performance commitments.
88. In particular, Service Providers are required to shape ingress data traffic to match these performance parameters to avoid unwanted discard of data packets by the LFC's Layer 2 Service equipment.
89. To be clear, the LFC is required to "police" data traffic flows according to the agreed performance commitments – this means that the LFC is required to discard data packets from Service Providers that fall outside the boundaries of the agreed performance commitments.
90. LFCs must report on Layer 2 Service capacities available to individual End Users to enable Service Providers to understand (prior to purchase by the End User) whether or not their retail service offering can be delivered effectively. In other words the LFC has a responsibility to aid in the assessment of Layer 2 Service delivery capabilities against prospective purchase decisions by Service Providers – it is not appropriate for an additional Layer 2 Service instance to be agreed for delivery to an End User if doing so is likely to destroy or otherwise negatively impact existing Layer 2 Service instances.
91. Whilst this section discusses the situation with two VLANs delivered by two Layer 2 Service instances, the upper limit on the number of VLANs (and hence number of Layer 2 Service instances) that can be provided to an individual End User is, in practice, limited to the number of Layer 2 Service instances that can be delivered without destroying or otherwise negatively impacting each other (i.e. it is a function of avoiding conflict between combinations of differing PIR, CIR, jitter, and latency parameters).
92. Emphasis is placed on the requirement for the LFC to provide one or more Layer 2 Service options that allow Service Providers to manage their own traffic prioritisation schemes (using P-Bits in the C-VLAN-ID) as they see fit (this prioritisation must take place within the boundaries of the agreed performance parameters of the associated Layer 2 Service option).
93. To be clear, this does not mean that LFCs cannot themselves use P-Bits within the C-VLAN-ID for management of Layer 2 Services – the details around this will form part of an industry agreement around usage of the IEEE 802.1ad S-VLAN-ID, C-VLAN-ID, and P-Bit name space conventions.

Multicast Traffic

94. The Specified Layer 2 Service must provide multicast traffic management facilities for services deployed across either GPON or AON.
95. This allows Service Providers to offer services of a "broadcast" or "one-to-many" nature suitable for efficient transport using multicast facilities.

5. INTERCONNECTION REQUIREMENTS

Intra-coverage area backhaul

96. The LFC may provide, but is not required to provide, intra-LFC Coverage Area backhaul as an additional service available to Access Seekers.

Interconnection

97. The LFC may provide, but is not required to provide, direct connection to neutral points of interconnection within the LFC's Coverage Area. That said, CFH notes that since any neutral point of interconnection represents a premises in the LFC's Coverage Area the LFC should inevitably provide fibre to that premises.

6. DEFINITIONS

98. The terms used in this Appendix 3 shall have the following meanings. Where a capitalised term is used in this Appendix 3 which is not defined below, it has the meaning defined in the main body of the ITP.

Term	Definition
AON	Active Optical Network – a general term that describes any network configuration in which Multiplexors (MUXs) are used to connect multiple Optical Network Units (ONUs) via dark fibres – emphasis is on direct connection to each ONU, in which case each dark fibre provides a direct point-to-point physical connection between the MUX and each ONU.
BG	Business Gateway – a more sophisticated form of the Residential Gateway (RG) which is described below. BGs contain extra features and often have more physical connection points, which make them more suitable to some businesses than a standard RG.
BNG	Broadband Network Gateway – a general term for a piece of network equipment that terminates Layer 2 Services at the Service Provider part of the Network. BNGs provide Service Providers with mechanisms for management of data traffic on a per End User basis. They are described in more detail in the TR-101 standard.
Central Office	The termination point for the LFC's Network. The Central Office is where the OLTs and/or MUXs (as applicable) are installed. Central Offices are expected to connect to at least several thousand End User premises.
C-VLAN-ID	Customer VLAN Identifier – defined in the IEEE 802.1ad standard, and applied for separation of data traffic from the perspective of an individual customer (e.g. an End User).
EAS	Ethernet Aggregation Switch – a specialised piece of network equipment used to aggregate data traffic to/from many Multiplexors (MUXs) or Optical Line Terminals (OLTs). EASs provide a connection mechanism to Broadband Network Gateways (BNGs).
Ethernet	Described by the IEEE 802.3 standards, "Ethernet" is a particular style of data traffic management and formatting for Layer 2 Services, and is increasingly being established as the dominant Layer 2 Service technology throughout the world.

Term	Definition
EUBA	Enhanced Unbundled Bitstream Service – a regulated Layer 2 Service in the New Zealand market today.
GEM	GPON Encapsulation Method – a mechanism for the management of data traffic transport between multiple Optical Network Units (ONUs) and an Optical Line Terminal (OLT) in a GPON network configuration.
GPON	Gigabit Passive Optical Network – a specific standard for connection of Optical Line Terminals (OLTs) to multiple Optical Network Units (ONUs) in which groups of ONUs are connected to an OLT using a shared dark fibre configuration. This is described in the ITU-T G.984 standard.
GPON Splitter	A specialised piece of network equipment that connects a single dark fibre from one side to many dark fibres on the other. It is used in the GPON network configuration to allow many Optical Network Units (ONUs) to share a single port on an Optical Line terminal (OLT) – hence the use of the word “Splitter” – splitting one dark fibre into many.
Handover Point Identifier	An as-yet-to-be-determined information tag than can be used for identifying a physical network point at which the LFC’s Layer 2 Service is “connected” to the network equipment that is owned and operated by a Service Provider.
MUX	Multiplexor – a general term used to describe a piece of network equipment that terminates many dark fibres in an Active Optical Network (AON) configuration, and is installed in centralised locations within the LFC business.
ODN	Optical Distribution Network – a general term for the specialised dark fibre configuration of a GPON network in which many ONUs share a single dark fibre for connection to an OLT. This is described in the ITU-T G.984 standard.
OLT	Optical Line Terminal – a general term for a specialised piece of GPON network equipment that terminates many dark fibres and is installed in centralised locations within the LFC Network. An OLT terminates the dark fibres from many Optical Network Units (ONUs), and is described in more detail in the TR-156 standard.
ONU	Optical Network Unit – a general term for a specialised piece of network equipment that terminates a single dark fibre and is located at the End User premises (described in more detail in the TR-156 standard).
P-bit	Priority bit(s) – a data traffic priority value between 0 and 7 set in the 3-bit tag field of the C-VLAN-ID and/or S-VLAN-ID fields (both of these fields can carry P-bit values).
RG	Residential Gateway – a mass produced piece of network equipment (often referred to as “the customer’s modem”) which sits in the home or office, connects to the Layer 2 Service on one side, and to the End User’s equipment (PCs, telephones, etc) on the other. This is described in more detail in the TR-101 standards.

Term	Definition
R/S Interface	A specific standard interface point described in the ITU-T G.984 standard for GPON.
S/R Interface	A specific standard interface point described in the ITU-T G.984 standard for GPON.
SC type connector	A special type of connector installed on the ends of a dark fibre cable. SC type connectors provide a very easy “set and click” style of operation for pushing a dark fibre into/out-of network equipment.
S-VLAN-ID	Service VLAN Identifier – defined in the IEEE 802.1ad standard, and applied for separation of data traffic from the perspective of a service provider (e.g. a Service Provider).
U Interface	A point between an Optical Network Unit (ONU) and a Residential/Business Gateway (RG/BG) at which a set of interface standards are applied (including the IEEE 802.1ad standard). The U Interface is described in the TR-101 standard.
V Interface	A point between a Multiplexor/Optical Line terminal (MUX/OLT) and an Ethernet Aggregation Switch (EAS) at which a set of interface standards are applied (including the IEEE 802.1ad standard). The V Interface is described in the TR-101 standard.

APPENDIX 4

EQUIVALENCE AND NON-DISCRIMINATION

1. INTRODUCTION

1. Each LFC is required to deal with all Access Seekers in a fair and equitable manner, including in any dealings where the Partner may be an Access Seeker. In particular, an LFC must meet the equivalence and non-discrimination requirements set out in this Appendix.
2. The government's preference is for the equivalence and non-discrimination requirements to be implemented through behavioural undertakings made by the LFC to the government by means of a Deed of Undertaking.
3. The government intends for the Commerce Commission (**Commission**) to monitor compliance with any such undertakings on the government's behalf. Enforcement procedures will be put in place. This approach has been adopted to avoid a material conflict of interest that CFH would otherwise have in overseeing the market conduct of LFCs.
4. Note that detailed undertakings have not been developed at this stage. The final shape of the undertakings, or any other approach for meeting the equivalence and non-discrimination requirements that may be agreed with a Respondent, including the monitoring and compliance regime, will be negotiated with Shortlisted Respondents. The government has an interest in ensuring that the approaches adopted are consistent between the LFCs.
5. Respondents must include in their Proposals key elements of the approach they propose to adopt to ensure that the equivalence and non-discrimination requirements in this Appendix will be met by the LFC. The expected effectiveness of the measures proposed by Respondents will be a consideration in CFH's assessment of the competitive benefits of their Proposals.
6. For the avoidance of doubt, CFH will not have the ability to agree to changes to Telecom's Operational Separation Undertakings.

2. EQUIVALENCE AND NON-DISCRIMINATION REQUIREMENTS

Where the LFC Provides Layer 1 Services Only

7. Where the LFC will provide only Layer 1 Services, the LFC must provide the Layer 1 Services on non-discriminatory terms.
8. Non-discrimination ensures that like Access Seekers are treated in a like manner, and that any differences are objectively justifiable by differences in costs, the Access Seeker's needs or the Access Seeker's characteristics. It is also essential that any differences in treatment do not harm competition.

Where the LFC Provides Both Layer 1 Services and Layer 2 Services

9. Where the LFC will provide both Layer 1 Services and Layer 2 Services, the LFC must:
 - (a) provide Layer 1 Services to itself and to all other Access Seekers on equivalent terms, where the standard of equivalence will be "equivalence of inputs", meaning the LFC must offer the same service at the same price and using the same operational processes to all Access Seekers, including itself (**Eol**); and
 - (b) the Layer 2 Services must be supplied on non-discriminatory terms.
10. Eol provides an assurance that all Access Seekers receive the same products and services on the same terms. It is a measure to ensure that the LFC does not give itself an unfair advantage (whether explicit or implicit, direct or indirect) when both the LFC and its Access Seeker customers compete in the marketplace for the provision of Layer 2 Services.

3. SUGGESTED MEASURES FOR MEETING THESE REQUIREMENTS

11. This section provides an overview of a set of measures that Respondents could choose to adopt as the basis of meeting the EoI and non-discrimination requirements in circumstances where the LFC provides both Layer 1 Services and Layer 2 Services. Adopting these measures is likely to meet the requirements outlined in paragraph 9. Respondents are free to propose alternative measures that meet those requirements.
12. Many of the EoI and non-discrimination requirements (e.g. governance and financial disclosure) are greatly simplified if an LFC operates its Layer 2 operations (**Layer 2 Business Unit**) through a subsidiary or through a separate company that is operated independently from the LFC.
13. The following suggested measures are provided to assist Respondents in developing their responses to the above requirements. Respondents may choose to follow the approach outlined below, but they are also free to propose alternative arrangements. The following guidance assumes that the Layer 2 Business Unit is operated as a subsidiary. However, for the avoidance of doubt, this is not a compulsory requirement.
14. A Respondent could meet the equivalence and non-discrimination requirements by agreeing to the LFC structuring and operating on the basis of:
 - (a) *Organisational Design* – The LFC will provide Layer 1 Services but Layer 2 Services will be provided through a separate subsidiary.
 - (b) *Arm's Length Dealings* – The LFC will deal with the Partner on arm's length terms, and the LFC and the Layer 2 Business Unit will deal with each other on arm's length terms. Arm's length terms means that the relationships between the parties do not include elements that the parties would usually omit, and do not omit elements that the parties would usually include, if the parties were acting independently.
 - (c) *Product* – The LFC will offer the same Layer 1 Services at the same price to all Access Seekers, including the Layer 2 Business Unit.
 - (d) *Operational Processes* – The LFC will deliver the Layer 1 Services using the same operational processes for all customers and the Layer 2 Business Unit will deliver the Layer 2 services using the same operational processes for all Access Seekers.
 - (e) *Standard Terms* – The LFC and the Layer 2 Business Unit will maximise the use of standard terms for all commercial arrangements, and any non-standard terms will be non-discriminatory.
 - (f) *Confidential Information* – The LFC will not disclose confidential information relating to its external Access Seekers to the Layer 2 Business Unit.
 - (g) *Access to Information* – The LFC's external Access Seekers will have the same access to information and the same ability to influence the LFC's plans as the Layer 2 Business Unit does.
 - (h) *Transparency* - The LFC and the Layer 2 Business Unit will disclose to the Commission and CFH all financial and non-financial information reasonably necessary to demonstrate compliance with these requirements.

APPENDIX 5

ELIGIBILITY CRITERIA

1. The following are the Eligibility Criteria. Subject to CFH's right to add or remove Eligibility Criteria as it sees fit (as provided in Section 16.2(b)(i) of the ITP), CFH will assess each Proposal it receives against each of these Eligibility Criteria.
2. To meet the Eligibility Criteria, a Respondent and that Respondent's Proposal must satisfy all of the Eligibility Criteria.

1. THE RESPONDENT MUST HAVE THE TECHNICAL AND COMMERCIAL ABILITY TO EXECUTE THE PROPOSAL

Technical and Commercial Ability

3. A Respondent must demonstrate to the satisfaction of CFH that it has the technical and commercial ability to construct, own and/or invest in infrastructure network businesses.
4. A Respondent must also demonstrate that Significant Contributors to the Respondent's Proposal, for example network build partners, are competent to reliably complete the tasks they will be responsible for under the Respondent's Proposal.
5. To demonstrate this, the Respondent will need to show, at a minimum, that:
 - (a) the Respondent has sufficient experience and expertise in the operation and/or ownership of infrastructure networks;
 - (b) each Significant Contributor has sufficient experience and expertise for the specific tasks they are proposed for;
 - (c) the Respondent's proposed appointees to the board of the LFC have sufficient experience, expertise and availability; and
 - (d) the key personnel the Significant Contributors propose to assign to the work performed for the LFC have sufficient experience, expertise and availability.

Supporting Information

6. Without limiting the information a Respondent should include in its Proposal, to assist CFH in assessing the Respondent's technical and commercial ability the Respondent must include in its Proposal the following information:
 - (a) details of the Respondent's experience and credentials in the construction, ownership and/or operation of large-scale infrastructure network businesses;
 - (b) details of the Respondent's proposed strategy and arrangements for construction, maintenance and operation of the proposed network infrastructure and services including matters such as:
 - (i) network rollout strategy;
 - (ii) network construction arrangements; and
 - (iii) network maintenance and operation arrangements;
 - (c) the Respondent's proposed candidates for the three positions on the board of the LFC able to be appointed by the Respondent, and their credentials;
 - (d) the name and current role of any candidates the Respondent would propose for senior executive roles within the LFC;

- (e) the proposed role and responsibilities of each Significant Contributor;
- (f) the experience of each Significant Contributor in performing the roles and delivering the types of outputs for which they would be responsible for under the Proposal; and
- (g) the names of the key people at each Significant Contributor who would be involved in delivering the outputs contemplated by the Proposal, their credentials, and confirmation of their availability.

2. THE RESPONDENT MUST HAVE THE FINANCIAL CAPACITY TO EXECUTE THE PROPOSAL

Financial Capacity

7. A Respondent must demonstrate to the satisfaction of CFH that it has the financial capacity to execute the Respondent's Proposal.

Supporting Information

8. Without limiting the information a Respondent should include in its Proposal, to assist CFH in assessing the Respondent's financial capacity, the Respondent must include in its Proposal the following information:
- (a) audited accounts for the last completed financial year, and the most recent interim financial accounts (as applicable);
 - (b) a schedule setting out the funding the Respondent forecasts it will have to inject into the LFC in each year of the Concession Period, broken out by:
 - (i) the Respondent's contribution to fund the LFC's Communal Infrastructure;
 - (ii) the Respondent's contribution to fund the LFC's End User-Specific Infrastructure; and
 - (iii) the Respondent's contribution to fund the LFC's establishment capital and expansion capital;
 - (c) the proposed sources of that funding;
 - (d) a summary of the authorisations and approvals the Respondent would need to secure before it could invest in the LFC, including any authorisations and approvals required from the Respondent's board, shareholders and/or regulators;
 - (e) to the extent that the funding would be reliant on external parties (that is, parties who are not already significant shareholders in the Respondent) such as third party financiers and/or new issues to capital markets, details of any commitments that the Respondent has in place (or anticipates having in place) regarding that funding, including:
 - (i) the quantum of the funding the Respondent expects to raise from external parties;
 - (ii) the identity of these external parties; and
 - (iii) when it is expected that the fundraising will be completed;
 - (f) a summary of current or planned financial commitments the Respondent has to other projects and initiatives; and
 - (g) an outline of any guarantees (performance and financial) the Respondent proposes to provide in support of the Respondent's obligations under the Respondent's Proposal.

3. THE PROPOSAL MUST COMPLY WITH MINIMUM TECHNICAL SPECIFICATIONS

Compliance With Minimum Technical Specifications

9. A Respondent must demonstrate to the satisfaction of CFH that the Network the Respondent proposes to supply to the LFC under the Respondent's Proposal will:
 - (a) meet or exceed the network technical specifications set out in section 2 of Appendix 3; and
 - (b) comply with, and will be capable of operating in accordance with, all applicable laws and regulatory requirements with immediate effect from the commencement of the provision of services by the LFC on that Network.

Supporting Information

10. Without limiting the information a Respondent should include in its Proposal, to assist CFH in assessing the Respondent's likely compliance with the network technical specifications, the Respondent must include in its Proposal the network technical specifications for the Network to be delivered under the Proposal, and detail how they match the requirements set out in section 2 of Appendix 3. This detail should include:
 - (a) detailed network architecture diagrams showing, for example, overall network hierarchy and proposed equipment;
 - (b) details of network infrastructure elements;
 - (c) capacity;
 - (d) scalability;
 - (e) future proofing; and
 - (f) network redundancy.

4. THE PROPOSAL MUST COMPLY WITH THE OPEN ACCESS REQUIREMENTS

Compliance With Open Access Requirements

11. A Respondent must demonstrate to the satisfaction of CFH that the LFC will comply with the Open Access Requirements. In particular, a Respondent must demonstrate how its Proposal:
 - (a) complies with the equivalence and non-discrimination requirements set out in Appendix 4;
 - (b) complies with the co-location and access to Central Office requirements set out in paragraphs 7 to 12 of Appendix 3;
 - (c) will involve the LFC providing the Specified Layer 1 Service;
 - (d) where it is proposed the LFC will provide Layer 2 Services, will involve the LFC providing the Specified Layer 2 Service; and
 - (e) will involve the LFC operating consistently with the open access guiding principles set out in Section 13.2 of the ITP.

Supporting Information

12. Without limiting the information a Respondent should include in its Proposal, to assist CFH in assessing the Respondent's likely compliance with the Open Access Requirements, the Respondent must include in its Proposal the following information:
 - (a) an overview of how the Respondent proposes the LFC will comply with the equivalence and non-discrimination requirements set out in Appendix 4;

- (b) details of how the Respondent proposes the Network's Central Offices will support co-location and open access for Access Seekers, including an overview of how the Respondent proposes the LFC would charge Access Seekers for these co-location and open access services;
- (c) confirmation that the network the Respondent proposes to supply to the LFC will enable the LFC to provide the Specified Layer 1 Service, and that the Specified Layer 1 Service will be supplied by the LFC. All non-price terms for the supply of the Specified Layer 1 Service must be detailed; and
- (d) if the Respondent intends the LFC to offer Layer 2 services, confirmation that the network the Respondent proposes to supply to the LFC will enable the LFC to provide the Specified Layer 2 Service. All non-price terms for the supply of the Specified Layer 2 Service must be detailed.

APPENDIX 6
EVALUATION CRITERIA

1. The following are the Evaluation Criteria. Subject to CFH's right to add or remove Evaluation Criteria as it sees fit (as provided in section 16.2(b)(ii) of the ITP), CFH will assess preliminary shortlisted Proposals against these Evaluation Criteria.
2. CFH will evaluate preliminary shortlisted Proposals using the weighted attribute model. CFH reserves the right to place any weight on the Evaluation Criteria as it considers appropriate in its evaluation of preliminary shortlisted Proposals.

1. THE NUMBER OF PREMISES IN THE PROPOSED COVERAGE AREA (N_{PASSED})

3. Each Proposal will be assessed on how many premises it will cover, and what proportion of the population will be able to access the LFC's services, in the Proposed Coverage Area.
4. The Candidate Areas outlined in this ITP represent New Zealand's major population centres. The exact boundaries of these Candidate Areas have not been fixed. CFH would prefer that Respondents identify for themselves the boundaries they would prefer the LFC to target.
5. A Respondent will need to identify the boundaries of its Proposed Coverage Area in detail in its Proposal.
6. CFH reserves the right to discuss, test, negotiate and refine a Respondent's Proposed Coverage Area with that Respondent.

2. THE COST OF THE COMMUNAL INFRASTRUCTURE PER PREMISE PASSED (CPPP)

7. Each Proposal will be assessed as to the capped cost the LFC will pay to the Partner for the Communal Infrastructure in the Respondent's Proposed Coverage Area, calculated on a per premise basis.

3. THE COST OF THE COMMUNAL INFRASTRUCTURE TO BE MET BY CFH (CPPP_c)

8. Each Proposal will be assessed as to the amount of CFH funding required to provide the LFC's Communal Infrastructure.
9. CFH will cap its funding to the LFC at the level set by:

$$\text{CFH funding cap to LFC} = N_{\text{passed}} \times \text{CPPP}_c$$

4. THE COST TO CONNECT EACH END USER PREMISES (CPPC)

10. Each Proposal will be assessed as to the forecast average cost of connecting each End User premises to the LFC's Communal Infrastructure.

5. THE MONTHLY CHARGE TO ACCESS THE LFC'S NETWORK (CCPM)

11. Each Proposal will be assessed as to the proposed Customer Charge Per Month (**CCPM**) which will be the maximum monthly price the LFC will be entitled to charge Access Seekers for each End User to whom the LFC's Specified Layer 1 Service is provided.

6. BUILD SCHEDULE FOR THE LFC'S COMMUNAL INFRASTRUCTURE

12. Each Proposal will be assessed as to the timing and duration of the forecast programme of building out the LFC's Communal Infrastructure.

13. In particular, CFH will consider:
 - (a) the number of premises passed by the end of each year;
 - (b) the staging and sequencing of the forecast network build programme;
 - (c) how quickly the Respondent is able to commence the build of the Network once the appropriate commercial arrangements are in place between the LFC, CFH and the Respondent; and
 - (d) the depth of resource and experience the Respondent and its preferred network build partner can dedicate to the build of the Network.
14. CFH reserves the right to discuss, test, negotiate and refine with a Respondent and, where relevant, their preferred network build partner, the forecast programme of building out the LFC's Communal Infrastructure.

7. IMPROVEMENTS TO THE MARKET'S COMPETITIVENESS

15. Each Proposal will be assessed to see how much it is likely to increase competition in relevant markets.
16. Without limiting the information a Respondent should include in its Proposal, a Respondent should explain how it considers its Proposal is likely to increase competition in relevant markets. Supporting data and other information on which the Respondent's views are based should be provided.

8. AVOIDING EXCESSIVE DUPLICATION OF EXISTING NETWORKS

17. Each Proposal will be assessed to see to what degree it avoids the excessive duplication of existing high-speed broadband networks with performance characteristics which are reasonably similar to those of the proposed network build.
18. Any duplication of networks that is identified must be justified by the Respondent, in terms of the following:
 - (a) the proposed network build will provide greater performance than the existing network; and/or
 - (b) access cannot be gained to the existing network by the Respondent; and/or
 - (c) access can be gained, but the price and non-price terms for such access are commercially unreasonable.
19. Without limiting the information a Respondent should include in its Proposal, Respondents should provide the following information:
 - (a) details of any existing high-speed broadband networks that will be used under the Proposal and the terms (including price) on which they will be able to be used;
 - (b) details of any existing high-speed broadband networks which are within the Proposed Coverage Area, but which the Respondent does not propose the LFC to use; and
 - (c) if existing high-speed broadband networks within the Proposed Coverage Area are not used, the justification for not using them (in terms of the categories described in the paragraph above).

9. OTHER BENEFITS

20. Each Proposal will also be assessed on whether there are any additional benefits provided by the Proposal which are not covered by the evaluation criteria above.

APPENDIX 7

FORM OF RESPONSE TO INVITATION TO PARTICIPATE IN PARTNER SELECTION PROCESS

To: Crown Fibre Holdings Limited c/- Ministry of Economic Development Attention: Nick Manning	From: <i>Insert name of Respondent</i> <i>Insert address of Respondent</i> <i>Insert Respondent's contact person</i>
Proposal for: Invitation to Participate in Partner Selection Process for the Government's Broadband Investment Initiative Closing at 4pm on 29 January 2010 (Closing Date)	
Having examined the above ITP and being fully satisfied that the Respondent has the necessary skills and experience to satisfy the requirements of the ITP, the Respondent hereby submits this Proposal to CFH to be selected as a potential co-investor with CFH for the deployment and provision of access to fibre-optic network infrastructure in the Proposed Coverage Area set out in this Proposal on the basis of, and in accordance with, the terms and conditions set out in the ITP. This Proposal is open for consideration for a period of not less than 90 days after the Closing Date referred to above. By submitting this Proposal, the Respondent acknowledges and covenants that:	
<ol style="list-style-type: none"> 1. The Respondent: <ul style="list-style-type: none"> ○ has observed all relevant statutory and other regulatory authority requirements in the formulation of this Proposal; ○ has not accepted or provided secret commissions; ○ does not have any conflict of interest in terms of section 4.6 of the ITP that has not been expressly disclosed in this Proposal; ○ has not entered into any improper commercial arrangements with any other Respondent; ○ has not colluded with other Respondents or engaged in any anti-competitive or otherwise unethical, improper or unlawful conduct; and ○ has not sought to influence decisions by improper means. 2. The Respondent has secured all appropriate authorisations to submit this Proposal, and is not aware of any impediment to its ability to negotiate and enter into a formal contract with CFH incorporating the terms of this Proposal. 3. The Respondent has the knowledge, skills, experience, resources and capacity to co-invest with CFH in respect of the LFC's proposed deployment and provision of access to the fibre network infrastructure on the basis set out in this Proposal. The Respondent expressly acknowledges and confirms that it has read and understood: <ol style="list-style-type: none"> (a) section 6.2 of the ITP and acknowledges that it has made its own independent assessment of the ITP and its requirements; and (b) section 6.9 of the ITP and acknowledges that there is no legal or other relationship between the Respondent and CFH or the Crown enforceable by the Respondent arising from the ITP or the conduct or the outcome of the PSP. 4. All information provided by the Respondent in this Proposal is complete and accurate in all material respects. 5. The provision of information by or on behalf of the Respondent to CFH in this Proposal or otherwise in connection with this Proposal, and use of such information by CFH, the Crown or any third party to whom CFH 	

may make this Proposal available to for the evaluation of the Proposal in accordance with the terms of the ITP, will not breach any third party intellectual property rights.

6. It is confirmed that all capitalised terms in this Proposal that are defined in the ITP have the same meaning in this Proposal as in the ITP.

7. All monetary amounts recorded in this Proposal are stated exclusive of GST and in New Zealand dollars.

Signed for and on behalf of the Respondent by a director or duly authorised representative of the Respondent having the authority to make the declarations set out above and to bind the Respondent.

Signature:	
Title of Signatory:	
Name of Respondent:	
Date:	

1. RESPONDENT'S DETAILS

The Respondent is required to provide the requested information in the right hand column of the table provided below.

Section	Question	Respondent's Response
A	Consortia	
1	Is this Proposal on behalf of a consortium? <i>Yes or No</i>	
2	If so, who are the consortium members and what are their respective roles in the consortium? <i>List each consortium member and briefly describe their role and area of specific responsibility.</i>	
3	What is the legal structure of the consortium?	
4	What is the management structure of the consortium?	
5	How does the consortium propose to enter into contracts and agreements with CFH?	
6	Who is the consortium's primary contact person?	Name: Title: Address: Phone: Email:
7	For each member of the consortium, who are the nominated representatives who will represent the consortium member in all discussions and negotiations with CFH in relation to this ITP and the PSP?	Name: Title: Address: Phone: Email: Name: Title: Address: Phone: Email: <i>(repeat as necessary)</i>
8	Confirm whether each member of the consortium is jointly and severally liable for the performance of all members of the consortium under any agreement that may be entered into with CFH; or whether one member of the consortium is fully liable for the performance of all members of the consortium.	

Section	Question	Respondent's Response
9	Confirm that the establishment and operation of the consortium does not contravene Part 2 of the Commerce Act 1986, and the basis on which this confirmation is provided.	
B	Company Information	<i>In the case of a consortium the information requested in this section must be provided separately for each consortium member</i>
10	Company name	
11	Trading name	
12	Company incorporation number	
13	Company website	
14	Address of registered office	
15	Address of place of business	
16	Name(s) of parent company/investors	
17	Nominated point of contact for this Proposal	Name: Title: Address Phone: Email:
18	Contracting authority <i>State the person(s) authorised to negotiate and finalise the terms of any agreement between CFH and the Respondent.</i>	Name: Title: Address Phone: Email:
19	Core business description <i>A brief description of the nature of the Respondent's core business.</i>	
20	Background and experience <i>Describe the Respondent's background, services, experience and qualifications.</i>	
21	Domicile/areas of operation <i>Include a brief statement, detailing where the Respondent's main operations are based and listing all significant points of representation, both domestically and, where relevant, internationally.</i>	

Section	Question	Respondent's Response
22	Key Persons <i>Provide a list of key persons (name, title and role) involved in the preparation of this Proposal and the ongoing role (if any) that they will have if the Respondent is selected as a potential Partner.</i>	
23	Identify any conflicts of interest (actual or potential) that the Respondent may have (refer to section 4.6 of the ITP).	
24	Describe how the conflicts identified above will be managed.	
25	Provide a list of at least three (3) referees, including contact names, addresses, phone numbers and a brief description of the Respondent's association with the nominated referee. <i>For each nominated referee, provide:</i> <i>Company name</i> <i>Contact name</i> <i>Phone number</i> <i>Brief description of relationship with the Respondent</i>	

2. TECHNICAL AND COMMERCIAL ABILITY TO EXECUTE

The Respondent is required to provide the requested information in the right hand column of the table provided below.

Section	Question	Respondent's Response
A	Respondent's Experience & Credentials	
1	Background and experience <i>Describe the Respondent's relevant background, services, experience and qualifications in the construction, ownership & operation of infrastructure network businesses.</i>	
2	Detail the Respondent's strategy for the construction of the LFC's network <i>Including identifying who the Respondent proposes will build the network, and the likely sequencing & staging.</i>	
3	Provide an overview of the construction arrangements the Respondent has begun to put in place.	
4	Detail the Respondent's strategy for the ongoing maintenance & operation of the LFC's network.	

Section	Question	Respondent's Response
5	Who are the Respondent's proposed candidates for the three positions on the board of the LFC able to be appointed by the Respondent?	Name: Current role: Credentials: Name: Current role: Credentials: Name: Current role: Credentials:
6	List any candidates the Respondent would propose for executive roles within the LFC.	Name: Current role: Proposed role: Credentials: Name: Current role: Proposed role: Credentials: <i>(repeat as necessary)</i>
B	Significant Contributors	<i>The information requested in this section must be provided for each Significant Contributor</i>
7	Company name	
8	Trading name	
9	Company incorporation number	
10	Company website	
11	Description of core business <i>A brief description of the nature of the Significant Contributor's core business.</i>	
12	Proposed role & responsibility <i>A brief description of the role the Respondent expects this Significant Contributor to fill.</i>	
13	Background and experience <i>Describe the Significant Contributor's relevant background, services, experience and qualifications.</i>	

Section	Question	Respondent's Response
14	<p>Key persons at the Significant Contributor</p> <p><i>Provide a list of the key persons (name, title and role) from the Significant Contributor who will be involved in delivering the outputs contemplated in this Proposal, their credentials, and confirm their availability.</i></p>	<p>Name:</p> <p>Title:</p> <p>Role:</p> <p>Credentials:</p> <p>Availability:</p> <p>Name:</p> <p>Title:</p> <p>Role:</p> <p>Credentials:</p> <p>Availability:</p> <p><i>(repeat as required)</i></p>

3. FINANCIAL CAPACITY

The Respondent is required to provide the requested information in the right hand column of the table provided below.

Section	Question	Respondent's Response
A	Financial credentials	
1	<p>Provide copies of the Respondent's audited accounts for the last completed financial year, and the most recent interim financial accounts.</p>	
2	<p>Forecast funding from the Respondent</p> <p><i>Set out the Respondent's view of the likely equity injections required from the Respondent into the LFC over the first 10 years of the LFC's operations broken out by:</i></p> <p><i>(i) the Respondent's contribution to fund the LFC's Communal Infrastructure (CPPP_p);</i></p> <p><i>(ii) the Respondent's contribution to fund the LFC's End User-specific infrastructure (CPPC); and</i></p> <p><i>(iii) the Respondent's contribution to fund the LFC's establishment costs.</i></p>	
3	<p>What are the Respondent's investment and capital expenditure approval processes for an investment of this size and nature?</p> <p><i>Including any authorisations and/or approvals required from the Respondent's board, shareholders, debt providers and/or regulators.</i></p>	
4	<p>Proposed sources of funding</p> <p><i>Describe how the Respondent proposes to fund these equity injections into the LFC.</i></p>	

Section	Question	Respondent's Response
5	Outline how much, if any, of this funding will be dependent on external parties, including third-party financiers and/or new issues to capital markets, and the identity of those third parties.	
6	What, if any, arrangements and/or commitments does the Respondent have in place regarding any funding that is dependent on external parties?	
7	What are the Respondent's current and planned financial commitments to other capital intensive projects unconnected with its Proposal? <i>Set out what other demands on the Respondent's capital the Respondent expects to have to service during the Concession Period.</i>	
8	What guarantees does the Respondent propose to extend to the LFC and to CFH in support of the Respondent's obligations to fund the LFC?	

4. CONFIRMATION THE RESPONDENT ACCEPTS KEY PROVISIONS

The Respondent is required to either confirm acceptance of the following items or to propose alternatives which would be acceptable to the Respondent. The Respondent should record their responses in the right hand column of the table provided below.

Section	Item	Confirmation of Acceptance or Proposal of Alternative
A	LFC Commercial Arrangements	
1	Confirm the Respondent's acceptance that the LFC's only business operations will be to: <ul style="list-style-type: none"> ▪ deploy, own & operate the Network; ▪ sell Layer 1 Services; and ▪ sell Layer 2 Services. <i>See paragraph 10 of Appendix 2</i>	
2	Confirm the Respondent's acceptance that the LFC will be compelled to connect any and all End Users in the LFC Coverage Area who wish to take service over the LFC's Network (subject only to Communal Infrastructure being in place to service the End User and the relevant Service Provider agreeing to the LFC's standard network access terms). <i>See paragraph 11 of Appendix 2</i>	
3	Confirm the Respondent's acceptance that the LFC will cap its connection charge per month for the Specified Layer 1 Service at the value of CCPM set out in the Respondent's Proposal (subject only to the agreed adjustments for inflation). <i>See paragraph 11 of Appendix 2</i>	

Section	Item	Confirmation of Acceptance or Proposal of Alternative
4	<p>Confirm the Respondent's acceptance that the LFC will be a newly incorporated limited liability company which will operate independently from its shareholders.</p> <p><i>See paragraph 12 of Appendix 2</i></p>	
5	<p>Confirm the Respondent's acceptance that during the Concession Period the Board of the LFC will comprise three directors appointed by CFH, three directors appointed by the Respondent, and an independent Chairperson.</p> <p><i>See paragraph 13 of Appendix 2</i></p>	
6	<p>Confirm the Respondent's acceptance that after the Concession Period, if a shareholder in the LFC (or a related entity of a shareholder) owns or controls a business which provides Telecommunications Services other than the Permitted Services then the composition of the LFC board shall be as during the Concession Period.</p> <p><i>See paragraph 14 of Appendix 2</i></p>	
7	<p>Confirm the Respondent's acceptance that, during the Concession Period, the LFC will issue "A" and "B" shares as described in paragraph 15 of Appendix 2.</p>	
8	<p>Confirm the Respondent's acceptance that at the end of the Concession Period these "A" and "B" shares will convert to ordinary shares on a 1:1 ratio.</p> <p><i>See paragraph 19 of Appendix 2</i></p>	
9	<p>Confirm the Respondent's acceptance that the LFC will issue the government a single Government Share, which will have the rights set out in paragraphs 21 and 22 of Appendix 2.</p>	
10	<p>Confirm the Respondent's acceptance that the LFC will take out debt, and provide the Respondent's views on the LFC targeting debt levels commensurate with a Standard & Poors "A" or "BBB" credit rating.</p> <p><i>See paragraph 23 of Appendix 2</i></p>	
11	<p>Confirm the Respondent's acceptance of the call and put options set out in paragraphs 27 through 30 of Appendix 2.</p>	
12	<p>Confirm the Respondent's acceptance that it will be responsible for building the Communal Infrastructure, which will then be acquired by the LFC once each agreed stage has been accepted by both the Respondent and the LFC.</p> <p><i>See paragraphs 34 through 43 of Appendix 2</i></p>	

Section	Item	Confirmation of Acceptance or Proposal of Alternative
13	Confirm the Respondent's acceptance that the cash price the LFC will pay for the Network will be capped as per paragraph 46 of Appendix 2.	
14	Confirm the Respondent's acceptance that the Respondent must fund any over-runs where the actual cost of establishing the LFC's communal infrastructure exceeds the forecast cost ($N_{\text{passed}} \times \text{CPPP}$) and that the Respondent will receive no "A" shares for this over-run funding. <i>See paragraphs 50, 54, 55 and 58 of Appendix 2</i>	
15	Confirm the Respondent's acceptance that the Respondent will be responsible for building the End User-Specific Infrastructure for each End User who contracts for service, and that this End User-Specific Infrastructure will then be acquired from the Respondent by the LFC once it has been accepted by both the Respondent and the LFC. <i>See paragraphs 61 through 66 of Appendix 2</i>	
16	Confirm the Respondent's acceptance that the Respondent must fund the actual costs of connecting End Users to the Communal Infrastructure, and that in return the Respondent will receive the consideration as set out in paragraphs 71 and 72 of Appendix 2.	
17	Confirm the Respondent's acceptance that if the Respondent vends in existing End User connections and the related End User-Specific Infrastructure then in return the Respondent will receive a number of "B" shares equal to the number of End User connections \times CPPC or CPPC _{L2} (as applicable to the various End User connections). <i>See paragraphs 73 through 76 of Appendix 2</i>	
18	Confirm the Respondent's acceptance that the Respondent must fund the establishment costs of the LFC and any further equity capital injections required by the board of the LFC to fund the expansion of the LFC's non-network assets and working capital. <i>See paragraphs 77 through 83 of Appendix 2</i>	
19	Confirm the Respondent's acceptance that the value of CPPP will be adjusted for inflation to reflect the movement in the CPI. <i>See paragraphs 92 through 95 of Appendix 2</i>	
20	Confirm the Respondent's acceptance that the value of CCPM will be adjusted for inflation to reflect the movement in the Communication Services group of the CPI. <i>See paragraphs 98 through 99 of Appendix 2</i>	

Section	Item	Confirmation of Acceptance or Proposal of Alternative
B	Technical Standards	
21	Confirm the Respondent's acceptance that the dark fibres in the Network will comply with ITU-TG.652C/D, or optionally with ITU-T G.657B. <i>See paragraph 3 of Appendix 3</i>	
22	Confirm the Respondent's acceptance that the dark fibres in the Network will be terminated with SC type connectors. <i>See paragraph 4 of Appendix 3</i>	
23	Confirm the Respondent's acceptance that the dark fibre lengths in the Network will not exceed the distance standards set out in IEEE 802.3 Section 5 (for AON networks) or ITU-T G.984 (GPON for PON networks). <i>See paragraph 5 of Appendix 3</i>	
24	Confirm the Respondent's acceptance that at the End User's end the Network will terminate inside the End User's premises. <i>See paragraphs 17 and 24 of Appendix 3</i>	
25	Confirm the Respondent's acceptance that the Network architecture and infrastructure must be structured such that it supports multiple competing Access Seekers. <i>See paragraphs 35 and 36 of Appendix 3</i>	
C	Open Access	
26	Confirm the Respondent's acceptance that the LFC will provide co-location services to Access Seekers wishing to locate their equipment in the LFC's Central Offices. <i>See paragraphs 7 through 10 of Appendix 3</i>	
27	Confirm the Respondent's acceptance that the LFC will provide Access Seekers with access to the LFC's Central Offices in order to connect these with other networks. <i>See paragraph 11 of Appendix 3</i>	
D	Equivalence and Non-Discrimination	
28	Confirm the Respondent's acceptance that, where the LFC provides only Layer 1 Services, it will do so on non-discriminatory terms. <i>See paragraph 7 and 8 of Appendix 4</i>	
29	Confirm the Respondent's acceptance that, where the LFC provides both Layer 1 Services and Layer 2 Services, that it will provide the Layer 1 Services on equivalent terms (based on equivalence of inputs) and provide the Layer 2 Services on non-discriminatory terms. <i>See paragraphs 9 and 10 of Appendix 4</i>	

5. PROPOSALS BASED ON PREFERRED COMMERCIAL MODEL

The Respondent is required to provide the requested information on each option it proposes be based on the Preferred Commercial Model, in the form set out in the table below.

The Respondent can propose a range of options, each of which may be characterised, for example, by different:

- (a) Proposed Coverage Areas (for example, 80% coverage of Auckland vs 90% coverage of Auckland, Queenstown alone vs Queenstown and Wanaka, individual Candidate Area vs national coverage etc);
- (b) network layouts and technologies (for example, undergrounding vs overhead or PON vs AON etc);
- (c) commercial arrangements (for example, varying levels of Respondent contribution to the communal infrastructure); and/or
- (d) any other variable the Respondent expects would be attractive to the government, CFH and/or End Users.

Option	Description	Coverage N_{passed}	Communal Infrastructure			End User-Specific Infrastructure		Connection Charges CCPM	Establishment costs E
			CPPP	CPPP _P	CPPP _C	CPPC	CPPC _{L2}		
1									
2									
3									

Insert as many rows as necessary into this summary table to provide for the range of options the Respondent is proposing.

The Respondent is also required to complete a copy of the table on the following pages for each individual option summarised in the table above.

The Respondent is required to provide the requested information in the right hand column of the table provided below for each option the Respondent is proposing in its Preferred Commercial Model Proposal, noting the following:

(a) no rows are to be deleted; and

(b) Respondents must provide a response to all questions.

Section	Question	Respondent's Response
A	Identification	
1	Option number	
2	Description	
B	Proposed Coverage Area	
3	Description of the Proposed Coverage Area	
4	Provide a hardcopy map clearly showing the external and, if appropriate, internal boundary of the Proposed Coverage Area under this option. Also, provide an electronic file (in ESRI shapefile format) setting out these boundaries of the Proposed Coverage Area. <i>For convenience the hardcopy map can be provided on a separate sheet. Provide a clear reference here so that the correct map can be clearly identified.</i>	
5	How many premises are in this Proposed Coverage Area?	Schools: Hospitals: Commercial & industrial: Residential: Other:
C	Communal Infrastructure	
6	Describe the proposed nature and arrangement of the Communal Infrastructure in this option. <i>Including, but not limited to:</i> <ul style="list-style-type: none"> ▪ network topology diagrams; ▪ PON vs AON; ▪ underground vs overhead; ▪ location of Central Offices; and ▪ how the Proposal provides for scalability, future proofing and redundancy. <i>For convenience the detailed information can be provided on a separate sheet or document. Provide a summary here and a clear reference so that the correct detailed information can be clearly identified.</i>	

Section	Question	Respondent's Response
7	<p>Detail how this proposed Communal Infrastructure will support or exceed the Specified Layer 1 Service.</p> <p><i>See section 3 of Appendix 3</i></p>	
8	<p>Clearly identify and describe any existing Communal Infrastructure the Respondent, or a related party of the Respondent, owns in the Proposed Coverage Area, including setting out how many premises this existing Communal Infrastructure already passes.</p>	
9	<p>Set out how the Respondent proposes the remaining Communal Infrastructure will be built out, including details of:</p> <ul style="list-style-type: none"> ▪ who will build it; ▪ a description and a map for each of the expected stages in the build programme; ▪ a project plan showing the timing of each stage; ▪ how many premises will be covered in each stage; and ▪ the forecast cost of each stage. <p><i>For convenience the detailed information can be provided on a separate sheet or document. Provide a summary here and a clear reference so that the correct detailed information can be clearly identified.</i></p>	
D	End User-Specific Infrastructure	
10	<p>Set out how many End Users the Respondent already provides service to in the Proposed Coverage Area, including details of:</p> <ul style="list-style-type: none"> ▪ the number taking a Layer 1 Service from the Respondent; and ▪ the number taking a Layer 2 Service from the Respondent. 	
11	<p>If the Respondent has existing customers taking a Layer 2 Service, set out the details of that Layer 2 Service.</p>	
12	<p>Confirm whether or not the Respondent wishes the LFC to offer Layer 2 Services.</p>	
13	<p>If so, detail how the proposed Network will support offering the Specified Layer 2 Service.</p> <p><i>See section 4 of Appendix 3</i></p>	
E	Establishment Costs	
14	<p>Describe your proposed strategy for establishing the LFC facilities, equipment & operations.</p>	

Section	Question	Respondent's Response
15	<p>Detail how the establishment costs shown in the summary table are made up.</p> <p><i>In particular provide detail on how the establishment costs break out into premises, physical plant (vehicles etc), IT & telecommunications costs, inventory & working capital.</i></p>	
F	Forecast Funding From Respondent	
16	<p>Provide a schedule setting out the funding the Respondent forecasts it will have to inject into the LFC in each year of the Concession Period, broken out by:</p> <ul style="list-style-type: none"> ▪ contribution to fund Communal Infrastructure; ▪ contribution to fund End User-Specific Infrastructure; and ▪ contribution to fund establishment costs and expansion capital. <p><i>CFH recommends the Respondent set out several scenarios based on differing levels of End User take-up.</i></p>	
G	Equivalence and Non-Discrimination	
17	<p>Provide an overview of how the Respondent proposes the LFC will comply with the equivalence and non-discrimination requirements set out in Appendix 4.</p>	
18	<p>Provide an overview of how the Respondent proposes the LFC will support co-location and access for inter-connections, and how the Respondent proposes the LFC would charge for these services.</p> <p><i>See paragraphs 7 through 12 of Appendix 3</i></p>	
H	Other	
19	<p>Explain how the Respondent considers its Proposal is likely to increase competition in relevant markets.</p>	
20	<p>Provide an overview of any existing high-speed broadband networks in the Proposed Coverage Area and outline to what extent those existing networks are utilised in the Proposal.</p>	
21	<p>Set out any other matters the Respondent believes are material to the Respondent and CFH being able to execute the Proposal.</p>	

6. PROPOSALS BASED ON ALTERNATIVE COMMERCIAL MODEL

Respondents submitting Alternative Commercial Model Proposals must provide the information set out in sections 1 through 4 of this Appendix.

Respondents submitting an Alternative Commercial Model Proposal do not have to provide all of the information set out in section 5 of this Appendix but are required to:

- (a) provide such information set out in section 5 of this Appendix as is appropriate to their Alternative Commercial Model Proposal;
- (b) clearly identify, explain and detail how, notwithstanding the fact that the Alternative Commercial Model Proposal does not comply with the Preferred Commercial Model, the UFB Objective will be more effectively achieved through adoption of the Alternative Commercial Model Proposal; and
- (c) ensure they have provided sufficient information to allow the Alternative Commercial Model Proposal to be evaluated, including:
 - (i) addressing each of the Eligibility Criteria and Evaluation Criteria; and
 - (ii) providing specific detail of the cost implications of adopting the Alternative Commercial Model Proposal as opposed to proceeding with the Respondent's Preferred Commercial Model Proposal.