

# Briefing on Provincial Growth Fund (PGF) fibre optic build projects:

Fox Glacier-Haast-Lake Hāwea  
Te Anau- Milford Sound

March 2019

# Contents

- Disclaimer
- Provincial Growth Fund (PGF) background
- Objectives
- Routes and Communities
- Services to be delivered
- IRU pricing indications
- Operating cost recovery and SLA approach
- Anticipated breakout options along route
- Mains power availability
- Request For Proposals approach
- Nominal timeline and CIP contact arrangements

# Disclaimer

- Crown Infrastructure Partners (CIP) provides the information in this document in good faith to parties who may be interested in the fibre build projects for the Fox Glacier-Haast-Lake Hāwea and Te Anau-Milford Sound routes (West Coast and Southland Fibre Link projects). A Request for Proposals (RFP) will be subsequently released to seek formal proposals to build and operate either or both optical fibre systems and services on these routes.
- CIP has endeavoured to ensure the integrity of such information. However, it has not been independently verified.
- No warranty express or implied is provided by information in this document. CIP will not be liable in contract, tort, equity, or in any other way whatsoever for any direct or indirect damage, loss or cost incurred by any party in respect of any reliance they may place on this document.
- Nothing contained in this document or implied in this or any other communication by CIP to any potential party responding to the RFP shall be construed as legal, financial or other advice.
- To the extent that liability cannot be excluded, the maximum aggregate liability of CIP, its agents and advisors is \$1.
- This presentation and discussion covers preliminary views on these fibre build projects - the RFP issued will be the definitive document outlining CIP's requirements.
- Parties who wish to learn about Government broadband programmes are advised to refer to the Ministry of Business Innovation and Employment information available at <http://www.mbie.govt.nz/science-and-technology/it-communications-and-broadband/fast-broadband/> and <https://www.mbie.govt.nz/business-and-employment/economic-development/regional-economic-development/provincial-development-unit/>.

# Provincial Growth Fund (PGF) - improving broadband reach, performance and reliability

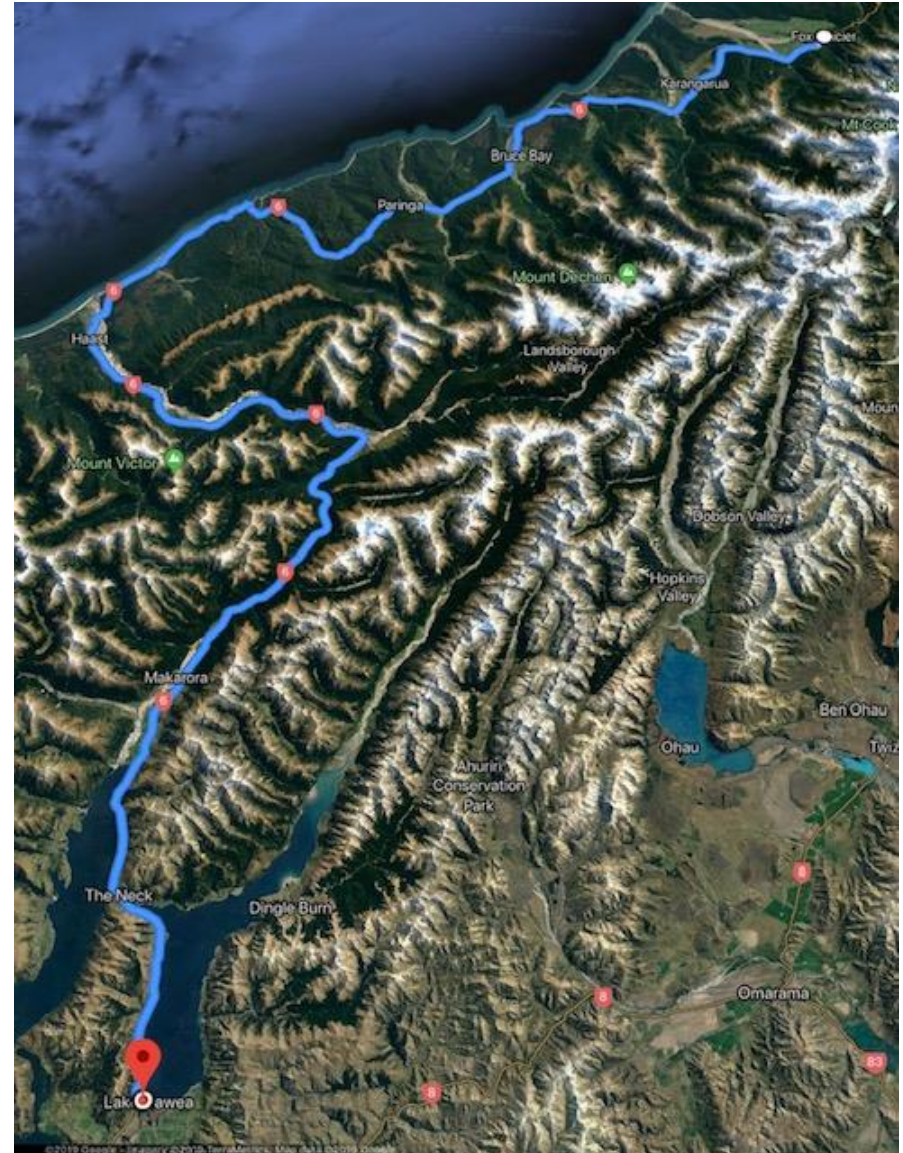
- Provincial New Zealand is the heartland of Aotearoa and home to some of our most creative and innovative people. New Zealand's export economy has important contributions from tourism, forestry and primary industries so there are strong incentives to build our regional economies.
- These projects will appeal to organisations who see themselves as part of the heartland fabric and who recognise the unique economic and social challenges of supporting businesses and communities in these areas. Both projects, in addition to the potential for a reasonable economic return from telecommunication services over the life of the infrastructure, also offer participation in various natural hazard monitoring, education and science initiatives with other government agencies.
- Specifically the West Coast and Southland Fibre Link projects are designed to improve the reach, performance and reliability of broadband and mobile services on the West Coast and in Southland.
- Funding:
  - In parallel with phase two of the Rural Broadband Initiative (RBI2) and Mobile Black Spot Fund (MBSF) expansion project, up to \$40M has been approved from the PGF for infrastructure upgrades, mobile service extension and UFB acceleration on the West Coast and in Southland.
  - Programme Service Providers will be compensated for the West Coast and Southland fibre links by grant funding for agreed project progress and costs incurred. The grant payments are not returned to CIP.
- Project target completion by 3Q 2020, but no later than 4Q 2020

# Objectives

- Improved reach and performance for broadband access services available to consumers, businesses, schools, aeronautical services, emergency services and Crown Research Institutes (CRIs);
- Improved mobile and fixed wireless broadband coverage of tourism areas and along state highways;
- New high capacity backhaul options for regional and mobile network operators;
- Improved highway and traffic monitoring network elements for NZTA;
- Route redundancy options for West Coast and lower South Island backbone networks;
- Improved networking arrangements for existing and new natural hazard and weather monitoring programmes – NZTA, NIWA, GNS; and
- Fibre-based seismic monitoring arrangements along various route sections.

# Fox Glacier – Haast-Lake Hāwea

- Route length approximately 250km on SH6 (excluding any laterals). CIP is not specifying the detailed route.
- Preliminary breakout and/or service locations
  - Karangarua\*
  - Jacobs River\*
  - Bruce Bay#
  - Lake Paringa\*
  - Lake Moeraki\*
  - Ship Creek\*
  - Haast #
  - Cron Creek\*
  - Pleasant Flat campsite\*
  - Gates of Haast\*
  - Fantail Falls\*
  - Blue Pool\*
  - Makarora
    - Visitor Centre, Campsite area\*
    - Township #
  - The Neck\*
  - Lake Hāwea/Hāwea Flat #
- Breakout and service locations are subject to change
  - \* Mobile Blackspot
  - # Target bitstream drop off points



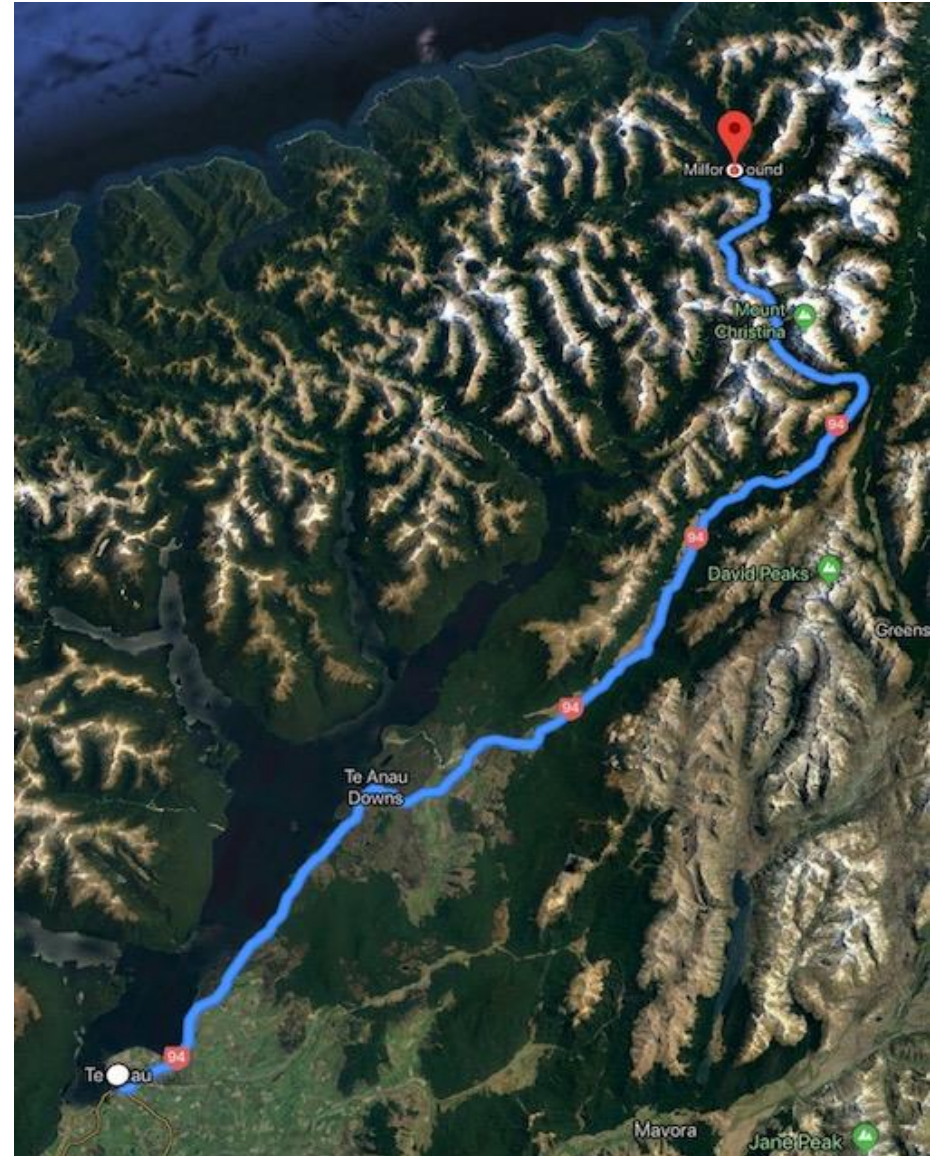


# Te Anau – Milford Sound

- Route length approximately 120km on SH94 (excluding any laterals). CIP is not specifying the fibre route.
- Preliminary breakout and/or service locations
  - Te Anau Downs\*
  - Knobs Flat (Campground)\*
  - Cascade Creek\*
  - The Divide Shelter (Routeburn Track)\*
  - Lower Hollyford Road (Hollyford Gunn camp)\*
  - Homer Tunnel
    - Portals \* #
    - NZTA “new Chapel” \* #
  - Milford Sound
    - Freshwater Basin area #
    - Deepwater Basin area #
    - Airport #
- Breakout and service locations subject to change

\* Mobile Blackspot

# Bitstream Dropoff



# Services to be Delivered

- Indefeasible Rights of Use (IRUs) on fibres:
  - Some fibres for the Crown Reserve and Crown agencies
  - IRUs to Crown funded Programme Developers that provide government-sponsored telecommunications services e.g. UFB, RBI2 and MBSF
  - IRUs for commercial sale
- Route end points chosen to allow for competitive connection to existing fibre based wholesale service providers;
- Wholesale Bitstream Services from designated breakout locations to be provided to industry POIs – terms likely to be covered by Deed;
- Dark Fibre wholesale leases over route sections;
- Breakout points at defined locations for each route for mobile blackspot and interconnection;
- Backhaul services to industry POIs; and
- Defined cost framework (e.g. open book plus margin) for IRUs, additional fibre breakouts along routes after system design freeze, etc.



# Key Project Terms: General

- The successful respondent (the Company) will be required to enter into a network infrastructure project agreement (NIPA) with CIP;
- The Company is required to deliver under the NIPA within a specified time:
  - A binding build schedule; and
  - A finalised network design plan.
- Payment of Grant Funding is by way of milestones against the build. Exact payment structure is to be agreed. A defect period percentage of the Grant Fund will be retained by CIP;
- The Company is required to report to CIP monthly on the actual build against the build schedule;
- Should the Company materially fall behind the build schedule CIP reserves the right to step in and have the build completed at the Company's cost;
- There will be user acceptance testing (UAT). Which may include observing Company commissioning/UA tests, CIP carrying out its own UAT, Company providing UAT reports to CIP; and
- Contractor must have appropriate Health & Safety management systems in place, certified staff and contractors and report monthly to CIP.

# Key Project Terms: IRU

IRU owner	Capital Cost Contribution with margin (full route length)	Operational Costs (with margin)	Conditions
Crown Reserve by Deed	Nil	No	<ul style="list-style-type: none"> <li>n% (TBD) of sheath fibres for pricing management;</li> <li>allocation to crown projects and/or agencies for non-commercial purposes</li> <li>(operating costs shared only on activated fibres)</li> </ul>
Crown Agency by Deed e.g. NZTA, Police, DOC, Airways, GNS	Nil	Yes	Sole internal use - no fibre resale or sale of telecommunications services
Crown funded Programme Developer by Contract e.g. UFB, RBI, Schools	Nil	Yes	For implementing and operating wholesale broadband bitstream, tail and backhaul services to industry recognised POI- no fibre resale.
Programme Service Provider by contract	TBD	Yes	Self-consumption on an arm's length non-discrimination basis
Third Party by contract	TBD	Yes	None

The pricing considerations are a balance between achieving a reasonable economic return for the Programme Service Provider and providing access to services (including fibre IRUs) on terms consistent with the intentions of the PGF initiatives for these parts of the West Coast and Southland.

# Key Project Terms: Costs and SLAs

- **Maintenance Costs:**
  - Actual annual maintenance costs (open book) plus n% mark-up (TBD) shared across all connected fibre IRU holders including any activated Crown Reserve fibres.
  - Sheath related break-fix costs recovered from all connected fibre IRU holders including any activated Crown Reserve fibres.
- **Fibre IRU availability target breach remedies may include:**
  - Developer/operator will forego a proportion of recoverable annual maintenance costs (where those costs are not caused by force majeure events).
  - Repeated or systemic breach without satisfactory remediation may trigger Crown step in (where those breaches are not caused by force majeure events).
- **Bitstream SLAs:**
  - TBD – e.g. SLA breaches would reduce annual operating costs eligible for recovery from IRU holders.

# Route Considerations and Network Requirements

- Minimum fiber count on each route TBD;
- Best practice in outside plant design for long life assets (i.e. 50 years) particularly those measures taken to mitigate risk and impact or improve restorability from high rainfall events and other natural hazards;
- Optical budgets to state allowance assumptions for additional breakouts and whole-of-life repair and rerouting on these routes;
- Route design to be informed by CRIs that are expert in relevant natural hazard risks;
- Route design and breakout locations to be informed by NZTA traffic management and hazard considerations;
- Additional cables (telecommunications or power) installed in conjunction with the project construction should be identified and intended use stated;
- Able to scale efficiently both in reach and capacity;
- Defined cost approach to accessing cable along routes after design freeze and commissioning;
- Use of standard technology families under active development; and
- Alignment generally with applicable UFB service technical specifications.

# Existing mains power on proposed routes

- Fox Glacier-Haast-Lake Hāwea
  - No grid power south of Lake Paringa on SH6 (Westpower);
  - Haast area power provided by Turnbull River hydro scheme; and
  - No grid power between Makarora near Pipson Creek (Aurora Energy) and Haast on SH6.
- Te Anau – Milford Sound
  - Milford Sound power provided by local hydro scheme and private engine-alternator units;
  - Knobs Flat camp SH94 has mains power available from local hydro scheme and engine-alternator system; and
  - Reticulated power (Powernet) reaches to just north of Te Anau Downs on SH94-about 32km from Te Anau.
- This information is only approximate and may be incomplete.
- Developers can consider extending power reticulation along some route sections through design and construction partnering with lines companies when responding to the RFP.



# RFP evaluation considerations

Key factors (subject to change - the RFP will provide the reference detail for the evaluation process):

- Ability to design, build and operate a fibre network to meet the requirements;
- Grant amount requested by respondent;
- 'Price book' for services (e.g. cost of IRUs, operating cost charges);
- Communities and locations reached with broadband services along and near the state highway routes;
- Other outcomes delivered in coordination with proposal (e.g. extending power supply, extension of fibre to other non-core locations);
- Health & Safety – keeping workers and public safe;
- Quality of responses to RFP; and
- Plan to meet completion target of 3Q 2020 (no later than 4Q2020).

# Preliminary Project timeline (subject to Finalisation)

Milestone/Activity	Target Date	Elapsed Time
RFP Release	April 2019 (GETS)	
Q&A Period		~4 weeks from release
Responses Due (RFP Close)	End June 2019	up to 10 weeks from release
Evaluation		~2 weeks from RFP close
Award Contracts	September 2019	
Build Complete (no later)	December 2020	12~14 months

# Questions?

CIP contact: [HaastMilford@crowinfrasturcture.govt.nz](mailto:HaastMilford@crowinfrasturcture.govt.nz)