

BRIEFING

Local Digital Connectivity: Regional Digital Hubs and Marae Connectivity

Date:	24 January 2019	Priority:	Medium
Security classification:	In Confidence	Tracking number:	2159 18-19

Action sought		
	Action sought	Deadline
Hon Grant Robertson Minister of Finance	Agree the proposed investment in digital connectivity in the RED Ministers meeting on 29 January 2019.	29 January 2019
Hon Phil Twyford Minister of Transport		
Hon David Parker Minister for Economic Development		
Hon Shane Jones Minister for Regional Economic Development		

Contact for telephone discussion (if required)				
Name	Position	Telephone		1st contact
Ben Dalton	Head of Regional Development, PDU	s 9(2)(a)		✓
Di Grennell	Deputy Chief Executive, Regional Partnerships, TPK	s 9(2)(a)		
Rohan MacMahon	Consultant, PDU	9(2)(a)		



The following departments/agencies have been consulted

DPMC, Treasury, PDU/ MBIE, TPK, Crown Infrastructure Partners

Minister’s office to complete:

- | | |
|---|--|
| <input type="checkbox"/> Approved | <input type="checkbox"/> Declined |
| <input type="checkbox"/> Noted | <input type="checkbox"/> Needs change |
| <input type="checkbox"/> Seen | <input type="checkbox"/> Overtaken by Events |
| <input type="checkbox"/> See Minister’s Notes | <input type="checkbox"/> Withdrawn |

Comments

PROACTIVELY RELEASED

BRIEFING

Local Digital connectivity: Regional Digital Hubs and Marae Connectivity

Date:	24 January 2019	Priority:	Medium
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Purpose

The purpose of this paper is to seek agreement to Provincial Growth Fund (PGF) investments in local, digital connectivity that will include Regional Digital Hubs and marae.

Executive summary

This briefing sets out the key elements and proposed investment approach for digital connectivity:

- establishing local digital business/civic hubs (Regional Digital Hubs) in identified Surge regions; and
- providing digital connections and associated technical support to marae.

Funding of up to \$21m is available for these initiatives, including up to \$20m from the PGF and \$1m from Crown Infrastructure Partners (CIP). The latter is from the Ultra Fast Broadband (UFB) budget and would be specifically for UFB “lead-ins” i.e. fibre from the street into sites in towns/cities that have UFB. At present we expect around \$7m may be allocated to connect Regional Digital Hubs and \$14m to Marae Connectivity. Note that while the funding amounts identified are not definitive, they indicate the investment level that officials expect will provide investments that align well with the PGF’s objectives.

Any investment will be consistent with existing connectivity policies, which include Government funding for connections to identified high-priority sites.

Recommended action

The Provincial Development Unit recommends that you:

- a) **Note** that portfolio Ministers have been provided with briefings relevant to this project, are familiar with the outlined approach ;

Noted

- b) **Note** that while existing government programmes and the PGF have invested in digital infrastructure provision, there have been few initiatives (other than N4L) to ensure



users get connected and use the internet effectively to increase business productivity, which is the focus of this proposal;

Noted

- c) **Agree** the overall strategy for local digital connectivity as described, (covering both Regional Digital Hubs and marae) and associated funding totalling \$20m from PGF (with an additional \$1m being allocated from the RBI2 rollout);

Agree / Disagree

- d) **Agree** the approach outlined in the table Components of Proposed Connectivity packages for Regional Digital Hubs and Marae Connectivity;

Agree / Disagree

- e) **Approve** the investment allocations approach outlined in the table Estimated Funding Allocations;

Agree / Disagree

- f) **Note** that subject to approval by RED Delegated Ministers, details of the proposed investments into Regional Digital Hubs and Marae Connectivity are planned to be announced by the Prime Minister as part of her Waitangi package in February 2019;

Noted

- g) **Agree** that PDU explore establishing 1 – 3 Regional Digital Hubs in surge regions through upcoming regional packages;

Agree / Disagree

- h) **Agree** that at Waitangi the Government announce a Regional Digital Hub will be formed at Kaitaia, with further Northland hubs to be developed in Kaikohe and Dargaville, as well as an intention to roll out this model in other Surge regions;

Agree / Disagree

- i) **Agree** that at Waitangi the Government announce three marae are prepared to be engaged in the initial roll-out of Marae Connectivity and include: Te Houhanga Marae; Oromahoe Marae; and Te Huki Marae.

Agree / Disagree

- j) **Agree** that for the initial marae and Regional Digital Hubs to be connected all essential components including line rental (retail broadband connection) should be fully subsidised by the PGF, with co-investment for additional digital devices;

Agree / Disagree

- k) **Agree** that a review be conducted after 6 months to gauge progress, approach, costs, benefits and usage to inform a wider rollout with the findings of the review to be reported back to Ministers;

Agree / Disagree

- l) **Note** that while skills enablement is not within the scope of PGF investment, it is a major part of building digital capability and improving connectivity use - and is an

important element of transforming the productivity potential of the regions over the long term. Skills enablement options will be further explored by officials.

Noted

m) **Agree** to forward this briefing to Ministers Mahuta and Faafoi, for their information as the briefing is relevant to both their Ministerial responsibilities.

Agree / Disagree



Ben Dalton
Head of Regional Development Branch
Provincial Development Unit

/ 01 / 2019

Hon Grant Robertson
Minister of Finance

..... / /



Di Grennell
Deputy Chief Executive, Regional
Partnerships
Te Puni Kōkiri

/ 01 / 2019

Hon David Parker
Minister for Economic Development

..... / /

Hon Shane Jones
**Minister for Regional Economic
Development**

Hon Phil Twyford
Minister of Transport

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Local Digital Connectivity: Regional Digital Hubs and Marae Connectivity

Background

1. The Government established the PGF in December 2017. The aim was to lift regional productivity and boost New Zealand's economic growth. Investments have included among other things extending the reach and quality of infrastructure in rural regions.
2. Digital connectivity has become an expected part of doing business and as such the PGF's investment plan has three components:
 - Expansion of the Rural Broadband Initiative Phase Two (RBI2) and Mobile Black Spots Fund (MBSF), announced 18 December 2018;
 - West Coast & Milford Sound connectivity, announced in November 2018; and
 - Local digital connectivity (the purpose of this paper).
3. The PGF's investments in local digital connectivity will contribute to its objectives related to creating jobs and sustainable economic development, social inclusion and participation, Maori development and economic resilience. Anticipated benefits include increased productivity of local businesses through access to digital technology and greater connection with other businesses, greater access to connectivity for tourism, greater civic engagement in towns through having a place to connect, cultural connections, social engagement and service access.
4. In October [CAB-18-MIN-0516] Regional Economic Development (RED) Ministers agreed to a set of principles for PGF investment in digital connectivity.
5. We agreed that local connectivity involving Regional Hubs and Marae Connectivity would be a priority focus, including marae and digital hubs. The proposed investment approach to regional digital hubs and marae connectivity will be a significant catalyst for fostering productive, sustainable and inclusive growth, and aligns well with the PGF's objectives, and wider Government's objectives on closing the digital divide.
6. A briefing paper was provided to Ministers Jones, Mahuta and Fafoi on 21st December 2018 on local connectivity initiatives, Regional Digital Hubs and Marae Connectivity.
7. This paper provides further detail regarding digital connectivity involving Regional Digital Hubs and Marae Connectivity.

Digital Connectivity Overview

8. The Provincial Growth Fund (PGF) has invested in extending the reach and quality of infrastructure in rural and remote New Zealand to support greater business activity in the regions.
9. National investment programmes such as Ultra-Fast Broadband (UFB) and the Rural Broadband Initiative (RBI) have mostly focussed on funding the deployment of "communal" network infrastructure. However, to ensure these sites were connected,

the Government funded high-priority connections such as schools (N4L), health centres and libraries.

10. Small towns across New Zealand have benefited greatly from the UFB and RBI programmes. A marked improvement has been noted in broadband and mobile connectivity, in boosted business ventures and new employment opportunities available in regions.
11. For some towns however, the extent of internet penetration is still well below average. By providing improved digital connections regions can support the growth of tourist traffic, people visiting on business, and linking local businesses to each other and emerging economic opportunities.
12. In addition, there are over 1,000 marae throughout New Zealand. Marae are used as fundamental meeting hubs for whānau, hapū and iwi, and more often for local communities. Also, other activities, such as te kōhanga reo and papakāinga, are often co-located on marae sites.
13. At present, the information available indicates that most marae are not connected to the internet.
14. Improving the connectivity of marae will lift the productivity potential of their communities and support an overall goal of productive, sustainable and inclusive growth.
15. This proposal focuses on ensuring digital connectivity is available at marae and digital hubs to realise PGF objectives for improving economic productivity.
16. Separately and more generally, there is also Government work underway to address the affordability of digital connectivity for communities. The Department of Internal Affairs is leading development of a Blueprint for Digital Inclusion, which will set out a framework for bridging the digital divide in New Zealand. It is suggested that cross-pollination between digital inclusion and local digital connectivity initiatives occur when the Blueprint is available later in 2019.

PGF Investment in Local Digital Connectivity

17. This initiative involves in investing in two elements of local digital connectivity:
 - establishing local digital business/civic hubs (Regional Digital Hubs) in identified Surge regions; and
 - providing digital connections and associated technical support to Marae.
18. Funding of up to \$21m is available for these initiatives, including up to \$20m from the PGF and \$1m from Crown Infrastructure Partners (CIP). The latter is from the UFB budget and would be specifically for UFB “lead-ins” i.e. fibre from the street into sites in towns/cities that have UFB. At present we expect around \$7m may be allocated to connect Regional Digital Hubs (Regional Hubs) and \$14m to Marae Connectivity. Note that while the funding amounts identified are not definitive, they indicate the

investment level that officials expect will provide investments that align well with the PGF's objectives.

19. The PGF will invest in local digital connectivity alongside community based partners. Whilst certain components will be PGF funded, in-kind and/or co-contribution from industry partners, sponsors, rūnanga and Local Government Agencies will be explored and encouraged.
20. In allocating the PGF budget to fund local connectivity including Regional Hubs and Marae Connectivity there are several choices open to Ministers in the types of service components subsidised and the amount sites are subsidised. In determining how PGF funding is allocated it will be necessary for Ministers to make trade-offs between the following elements:
- Number of Regional Hubs and marae subsidised (coverage)
 - Range of service components subsidised for each Regional Hub or marae (some or all of the connectivity service components: infrastructure and connection, hardware, support)
 - Level of subsidy for each service component (full or partial subsidy e.g. 100% or 50%)
 - Period of subsidy for each service component (e.g. 2 years to 10 years).
21. Partial funding options would enable the PGF to extend funding to a greater number of sites. However, partial funding could lead Marae and Regional Hubs to discontinue their connection when faced with ongoing costs. This would reduce the benefits gained from the Government's investment in digital infrastructure as well as this initiative.
22. The following table summarises the trade-offs:

Options	Benefits	Challenges
Option 1: Marae and Regional Hub partners/ sponsors are required to contribute to some essential components, e.g. 50% of monthly line rental charges	<ul style="list-style-type: none"> • Ensures marae and Regional Hub partners have an incentive to make the most of their connection • Stretches available funding further 	<ul style="list-style-type: none"> • Affects likely uptake as some marae and Regional Hub partners may be unable to participate • Runs counter to policy objective to "connect the unconnected" and close the digital divide • Uptake may fluctuate over time, depending on priorities of Marae committee
Option 2: PGF fully subsidises all essential components of marae connectivity and Regional Hubs	<ul style="list-style-type: none"> • Guarantees strong uptake • Well-aligned with broad policy objective to close the digital divide • Minimises risk of service being relinquished at a later date • Minimises administrative overhead • Marae and Regional Hub partners/ sponsors can always invest in other areas e.g. more devices, more training 	<ul style="list-style-type: none"> • Exhausts available funding more rapidly



23. On this basis officials consider that fully subsidising a designated initial set of Regional Hubs and marae for their basic connectivity requirements over 5 years would be the most beneficial for achieving PGF productivity outcomes as this will provide uninterrupted and reliable services in the regions.
24. Where additional hardware and devices are deemed necessary beyond essential requirements these will be funded by marae and Regional Hubs with PDU facilitating bulk-purchasing.
25. While skills enablement is not within the scope of PGF investment, it is a major part of building digital capability and improving connectivity use - and is an important element of transforming the productivity potential of the regions over the long term. Skills enablement options will be further explored by officials.
26. The following table presents the components, levels of subsidy and indicators for co-contribution that officials recommend be provided for Regional Hubs and for marae. Asterisked items indicate that in-kind co-contribution by marae or Regional Hubs sponsors/partners is the preferred funding source.

Component	Item and description	Funding Provider	Marae	Regional Hub
Infrastructure and connection	<i>Connectivity installation:</i> trenching and ducting for fibre; installation of an external antenna for wireless.	100% PGF	✓	✓
	<i>Connectivity rental:</i> monthly line rental and other ongoing charges.	100% PGF	✓	✓
	<i>Fit-out:</i> non-ICT essential hub items such as chairs, desks and whiteboards.	Potential co-contribution	*	*
	<i>Facilities rental:</i> payment for use of buildings, building management.	Potential co-contribution	*	*
Hardware	<i>Essential devices:</i> hardware essential to effective installation as well as safe, secure use. This may include: a gigabit router, 2x Wi-Fi access points, 2x HD cameras for security & streaming; optional femto cell for marae in areas without cellular coverage.	100% PGF, specifications negotiable	✓	✓
	<i>Optional additional hardware:</i> digital devices which may connect to the internet such as smartphones, tablets, Smart TVs, further cameras, web publishing technology as well as extra Wi-Fi devices.	¹ Not subsidised, but facilitated bulk purchasing	*	*

¹ Essential hardware only to be subsidised.



Support	<i>Technical support and training:</i> A level of technical training for Regional Hub & marae staff, local community and whānau to enable them to use the service effectively including using key functions/ applications plus basic troubleshooting.	100% PGF	✓	✓
	<i>Essential Business Training:</i> Further training to ICT effectively, broaden understanding of uses.	Co-contribution	*	*

Estimated Funding Allocations

27. Fund allocations are estimated at this stage and will be informed by information collected through the initial roll-out.
28. Discussions with Regional Hub partners will inform the most effective co-funding model. Some costs however can more easily be met by the PGF, such as capex funding for installation, while other costs will be ongoing in nature.

Component	Opex and/or Capex	Estimate Marae	Estimate Regional Hubs
1. Infrastructure and Connection	Capex	Up to \$8m	Up to \$4m
2. Hardware	Mostly capex	Up to \$3m	Up to \$2m
3. Technical Support and Training	Opex	Up to \$3m	Up to \$1m
Total:		Up to \$14m	Up to \$7m

Regional Digital Hubs Connectivity

29. Access to the internet and digital capability has become a normal part of daily business. In remote communities, there are not always locations where local business people can access the internet or where local and visiting business people can come together. There would be benefit in some towns from bringing together business and local government activity, to create a 'civic heart' to the town where economic activity can be undertaken. In such towns, investment by the PDU could increase business activity, ICT usage, and improve community amenity.
30. The PGF investment approach proposes to support 1 to 3 RDHs per PGF Surge region. Locations would preferably be in key service towns in rural areas, where investment in digital connectivity will create a place for business and community activity to take place and come together. The PGF investment would cover the costs of connectivity and essential hardware and technical support, as outlined in para 26 above. Local communities will provide physical space and ongoing support for the Hub beyond the lifetime of the PGF.
31. Regional Digital Hubs (Regional Hubs) are a place-based resource that can provide beneficial services to local communities. For business and community groups alike,

the advantages of digital hubs are many and include social connectivity, versatile working arrangements and shared learning opportunities. Potential services offered by Regional Hubs may include free internet connections via Wi-Fi, shared work spaces, space for business training programmes, and collaborative project development.

32. International precedents support a Regional Hub approach in small population centres. For example, the *European Union European Network for Rural Development (ENRD)* describes the benefits achieved by rural digital hubs in Ireland, Scotland and France. According to the ENRD², “rural digital hubs are efficient tools for overcoming the digital divide in rural areas: they can improve digital opportunities and skills of both rural businesses and the wider rural community.” In India, as part of a broader programme to establish e-Government service centres in rural areas³, around 700 “digital villages” were offered subsidised connectivity and digital literacy programmes with noted success and high uptake.

Rollout of Regional Digital Hubs

33. The initial Regional Hubs will be set up in Northland as part of the Northland regional package being announced in February. Other Surge regions will be considered for Regional Hubs as their regional packages are developed over the next six months.

34. 9(2)(g)(i)

These towns are key service towns and are preferred locations for initial deployment. All three towns receive fibre under UFB2, with Dargaville already completed. Discussions are most progressed in relation to Kaitia. 9(2)(g)(i)

If work with these towns can be progressed in time for announcement in February, officials will work with Minister Jones’ office to the details that can be announced.

Approach

35. It is anticipated that the information collected from the initial roll-out will inform future deployment.
36. If agreed to by Ministers, the full roll-out approach for Regional Hubs will be developed in the first six months of 2019. This will allow time to consider the different and unique needs of each town and region, explore the benefits of business and community co-location, gain support from local partners and sponsors and to create links and connections between local and regional activities.
37. A review is suggested after 6 months which may influence and inform the future approach to partnering, costings and benefits realisation.

² https://enrd.ec.europa.eu/sites/enrd/files/tg_rural-businesses_case-study_rural-digital-hub.pdf (Sept 2017)

³ <https://www.opengovasia.com/india-to-set-up-about-700-digital-villages-by-end-of-2018> (May 2018)



Marae Digital Connectivity

38. Māori are materially under-represented in ICT and digital connectivity provides a means to overcome this challenge. Without it these communities will be further disadvantaged. Improving connectivity through marae will enhance the ability of Māori to access key services and skills necessary for improved economic participation.
39. Marae Connectivity contributes to the productivity objectives of the PGF and aligns with its objectives for social inclusion and Māori development.
40. There are 306 marae that have or are scheduled to receive coverage through RBI2 and are best suited for the Marae Connectivity initiative. Further eligibility was determined using social, cultural and technical criteria. While definitive totals are not currently available it is estimated that a third or 120 marae could be ready to participate in the overall Marae Connectivity initiative within PGF timeframes. Should indications be received that this will be oversubscribed, we will come back to RED Ministers for decisions on further investments.
41. The PGF investment would provide connection into the Marae, essential hardware and technical support. Marae committee will ensure ongoing commitment to digital connectivity and will contribute their physical space.

Approach

42. Three marae have indicated their interest in being involved in the initial deployment and have agreed to be engaged in the process.
43. Of note, approximately 35 marae are beyond the reach of the RBI2 expansion contracts and are likely to require additional infrastructure costs that sit outside of PGF investment scope.
44. A review is suggested after 6 months which will inform future deployment approaches.

Commercial Providers and Potential Partners

45. Already a number of potential partners and providers have indicated their interest in delivering Marae Connectivity and Regional Hubs including District Councils, fibre networks, and iwi.
46. Potential partners have expressed a level of interest in collaborating with the Government in delivering such a service in the proposed initial locations.
47. Officials are exploring commercial provider options including Māori providers who are experienced and familiar working in community based digital connectivity contexts.

Risks and Mitigations

48. Several risks have been identified so far, relating to both the Regional Hubs and Marae Connectivity initiatives and are presented next:

Risks	RDH or Marae	Mitigation
Discontent over choice of locations in initial announcement	Both	Clear criteria for selection and transparency about selection process
Tight timeframe towards February announcements	Both	Project plan weighted towards pre-Christmas and early January.
Regional Hub concept not fully articulated	RDH	Key area of current focus including partnering, specifications etc.
Perceived inequities between marae for those who receive connections and those who do not	Marae	Ensure connectivity selection processes are consistent, robust and transparent across the programme
Applicant uncertainty about the procurement process	Both	PDU and CIP to confirm procurement approach and decision-making
Post June 2020 implementation steps	Both	Priority will be given to projects that can be undertaken in PGF timeframes
Fund drawdown timeline	Both	Working to agree method for drawdown of funds from PGF to CIP by announcement date

February Announcement

49. Officials recommend that announcements on 4 February (in Kaikohe) include:

- 9(2)(g)(i) [redacted]
[redacted]
[redacted] Officials will work with Minister Jones' office in the lead-up to the announcement to keep the Minister informed 9(2)(g)(i) [redacted]
[redacted]
[redacted]
- That there is an intention for future roll-out of Regional Digital Hubs to other PGF Surge regions.
- That the first three marae to be engaged in the process of the initial roll-out for Marae Connectivity are:
 - Te Houhanga Marae, Dargaville, Northland;
 - Oromahoe Marae, Kaitaia, Northland; and
 - Raupunga Te Huki Marae, Hawkes Bay.



- That the announcement expressly requests further applications from interested, commercial providers who are able to deliver all or part of the components listed in the connectivity package above, particularly Māori providers.

PROACTIVELY RELEASED