TelstraClear Limited

Submission on Broadband Investment Fund: *Draft Criteria and Proposed Process for Consultation*

30 June 2008

Executive Summary

1. This submission sets out TelstraClear's response to the Government's Broadband Investment Fund *Draft Criteria and Proposed Process*.

2. TelstraClear agrees that advanced broadband services have the ability to generate high-value weightless products created in New Zealand, such as research, design and digital media, to be provided to customers anywhere in the world.

3. TelstraClear has concerns with the proposed structure and terms of the Broadband Investment Fund (BIF), and the risk that public sector investment, rather than complementing private sector investment, will simply replace it. BIF parameters must be carefully designed to maintain the incentives for ongoing private sector investment and competition.

    - The BIF will need to carefully account for existing infrastructure and competition that supply services to these entities, whether open access or not. Failure to properly take account of other forms of competition will significantly deter future investment.

    - Further clarity will be required to the specific definition of "open access". Broadband Infrastructure attracting BIF funding requires that the infrastructure is operated on an open access basis at the ducting and fibre level, and on a non-discriminatory basis. It is unclear whether the open access is required at both the ducting and dark fibre level in any project.

    - A greater weighting (up to 30%) should be given to the sustainability and the ability for future investment of an applicant. The economics of networks are generally scale based. Future opportunities for scalability are important to ensure that high-cost fragmented pockets of infrastructure do not result.

    - The proposed timeframe for initial expressions of interest ("EoI") is tight. Potential applicants may be excluded because they are unable to develop a business case in partnership with others and secure capital funding for the purposes of submitting an EoI by August. For this reason, the EoI process should be made voluntary, or dispensed with completely.

    - It may be appropriate to loosen the BIF requirements for rural areas around both broadband speeds and also the type of technology deployed, to ensure that the best outcomes is achieved for the greatest number of rural customers, at least cost.

4. The BIF paper notes that the Government is considering a number of policy mechanisms regarding demand aggregation and will announce its decisions at a later date. TelstraClear intends to make submissions on demand aggregation initiatives at that time.

THE URBAN FUND

5. The Broadband Investment Fund will make up to $250m available over five years to facilitate high speed connections to businesses and key public users in urban centres, through the deployment and wholesaling of open access passive broadband infrastructure.

Prioritisation

6. TelstraClear supports the proposed priority in urban centres to "support the delivery of high-bandwidth services to business, health organizations, tertiary institutions schools and other public or municipal entities in a manner that supports competition and future investment in fibre".

7. To achieve these objectives, any funding will need to carefully account for:

- Existing infrastructure and competition to supply services to these entities, whether open access or not. Failure to properly take account of other forms of competition will significantly deter future investment.

- Investment in open access ducts will provide for ongoing investment in fibre by competitors. Micro ducting, for example, will provide opportunities for entrants to economically lay competing fibre in the future.

The Application Process

8. The proposed application process sets out a two-stage process for urban funding, with initial expressions of interest (EOI) and a subsequent full application stage. EOIs will be assessed by the Broadband Investment Sub-Group of the Digital Strategy Steering Group. The full application will be assessed by independent evaluators based on the Broadband Investment Fund relevant criteria. Cabinet will then be responsible for making the final funding decisions.

Timing

Question:	*Will the proposed timeframes provide Applicants with sufficient time to fully complete the application requirements?*

9. The first stage, the EoI, requires that applicants seeking funding submit a preliminary application and outline supporting documentation. The proposed timetable will require that EoIs be placed by the end of August 2008.

10. While TelstraClear considers that an EoI would be a useful vetting process, we

consider that the timing is likely to be too short for the following reasons:

- Many applications will require that a local authority partners with a service provider in a bid. This will require that both parties to a bid are able to develop a reliable business case before committing to an EoI. This includes costing, obtaining capital funding commitments and commercial analysis.

- A number of parties may have previously developed plans that were unsuccessful in the Broadband Challenge funding rounds. While it may be possible for those parties to quickly amend existing proposals to conform to the Broadband Challenge requirements, sufficient time must be provided for new applicants as well.

- Sufficient time to prepare a proposal must be allowed for both new applicants and previous applicants under the Broadband Challenge. This will ensure that the Broadband Investment Sub-Group of the Digital Strategy Steering Group has the greatest number of applications, and can make decisions on the proposals that will best deliver of the desired outcomes, rather than simply giving money to those who have previously prepared unsuccessful proposals under the Broadband Challenge.

11. An EoI is a useful vetting process to ensure that applicants develop realistic and within scope proposals. However, to avoid the risk that new applicants 'miss out' on the EOI timeframe, the EOI process could either be made voluntary, or dispensed with completely. Applicants who chose to skip that EOI process would do so at their own risk. However, TelstraClear expects that officials and consultants would be available to provide advice and necessary guidance to developing a within-scope full application.

12. Furthermore, the final date of the full application, currently March 2009, could be bought forward if the EOI stage was made voluntary.

Eligibility Criteria

13. Section 2.1 of the eligibility requirements allows an application to relate to investment in new and/or upgraded infrastructure. TelstraClear supports this flexibility.

14. However, where a BIF funding proposal is used to augment an existing network, it is unclear whether the open access terms would apply only to the network addition that was subject to BIF funding, or whether the applicant

would be required to make other parts of its existing network open access as well.

15. TelstraClear considers that the open access requirements should be limited to the network augmentation part funded by the BIF itself. This would allow existing infrastructure investors to receive BIF funding to augment existing network to areas that have not been commercially viable. This is likely to deliver the required BIF outcomes in a cost efficient way, without unduly impacting or undermining infrastructure investment already made.

Assessment Criteria

Question:	*Do you agree with the percentage weightings in the urban criteria?*

16. The proposed indicative weighting for the assessment criteria are:

- 30% - Demonstration of the Project's Benefits;
- 30% - Commitment of the Applicant, including any partners;
- 25% - The Capability of the Applicant; and
- 15% - The Network Entity's Sustainability and Potential for Expansion.

17. TelstraClear is broadly supportive of the proposed parameters. Each parameter individually is important, so an overall assessment that scores well on an aggregate basis must also demonstrate strong scores across all four parameters.

18. TelstraClear recommends a greater weighting (up to 30%) is given to the sustainability and the ability for future investment of an applicant. The economics of networks are generally scale based. Future opportunities for scalability are important to ensure that high-cost fragmented pockets of infrastructure do not result.

Defining "Open Access"

Question:	*Are any amendments needed to the draft criteria to improve the outcome of the Urban Fund?*

19. Further clarity will be required to the specific definition of "open access". Broadband Infrastructure attracting BIF funding requires that the infrastructure is operated on an open access basis at the ducting and fibre level, and on a non-discriminatory basis.

20. It is unclear whether the open access is required at both the ducting and dark fibre level in any project. For example, an applicant may seek BIF funding to subsidise the building of micro-ducts.

21. Micro-ducts allow providers to push fibre through those ducts in the future, without the risk of needing to dig up the neighbourhood at a later date. Consistent with the principles of open access, third parties would be able to access the subsidized micro-ducting as required to provide fibre services.

22. The applicant might use that ducting to lay fibre (unsubsidized by the BIF) – a necessary requirement to satisfy the requirements of the subsidy. It is unclear whether the applicant would then also be required to also provide open access to that dark fibre if the ducting provides open access for a third party to deploy its own fibre through those ducts.

23. Future users of the open access ducts would have no obligation to wholesale dark fibre, potentially putting the initial applicant at a competitive disadvantage to latter fibre entrants in a duct if open access was required for both the ducts and the fibre. To maximise the incentives for investment in open access ducting, the applicant should not be required to provide **both** open access to the ducts **and** open access to dark fibre, where BIF funding subsidises the building of open access ducts only.

Assessing competition

24. Under the current definition of open access, it is unclear what would be deemed to be competition within an urban area. Limiting the definition of competition to open access networks when assessing BIF applications will significantly undermine existing investment and provide a chilling effect on further investment in those areas.

25. There are few current providers of open access that would adhere to the BIF requirement of open access at the ducting and fibre level. Velocity in Hamilton and CCNL currently provide dark fibre. However, to TelstraClear's knowledge, there are no current open access duct operators. Consideration must be given to all types of competition operating within a market at the time that the BIF is assessed. Competition of all forms delivers benefits to end-users, and to ignore such competition is to ignore the significant private sector investment made, and the benefits that flow for different forms of competition.

26. For example, in Wellington, Kapiti and Christchurch, TelstraClear has invested in Hybrid Fibre Co-axial ("HFC") technology to deliver triple play services to

residential customers. This network competes against Telecom's PSTN services. The benefits of this competition are clear, including broadband speeds up to 25Mbps, and lower residential phone services than Telecom offers in areas of New Zealand where TelstraClear doesn't have network.

27. At the same time, a number of telecommunications providers, including TelstraClear, have announced intentions to undertake investments in Unbundled Local Loops.

28. Telecom is undertaking its fibre to the node (FTTN) build, that it states will "by 2012… have installed more than 3,600 roadside cabinets connected by 2,500km of fibre-optic cable to create a network that supports higher broadband speed for 80% of New Zealand homes."

29. Vector has announced its investment in fibre and "…is currently building a high-speed fibre network on Auckland's North Shore, as part of the Government's Broadband Challenge. The network will link over 40 North Shore Schools into a single high performance network." TelstraClear understands that Vector's investment, subsidized under the terms of the Broadband Challenge, would not be eligible under the new open access terms of the Broadband Investment Fund.

30. This private sector investment is bringing significant benefits to New Zealand. As has been noted previously, the BIF has the potential to supplement such investment, but must not stand in its place.

31. Furthermore, as this competition develops, increasingly there will be incentives to provide wholesale capacity. For example, TelstraClear currently provides significant wholesale capacity, despite having no requirement to do so. In a competitive environment, it is efficient to utilise network capacity, and with competition comes new services and pricing discipline.

32. International experience has shown a similar phenomena with the development of Mobile Virtual Network Operators (MVNOs) where cellular operators wholesale capacity to others.

Question:	*Should successful Applicants be prevented from offering Application Services across the supported broadband infrastructure?*

33. The BIF states the "[t]he urban criteria will not preclude applications from entities wishing to also provide services to end-users, but have been designed to attract a wide range of potential investors and to prevent the emergence of vertically integrated monopolies".

34. The prerequisite of BIF funding is the provision of open access. Accordingly, there is little reason why applicants should not be able to provide application services over the infrastructure. The ability of an applicant to also provide application services would be likely to improve the business case for applying for BIF funding in the first instance.

Addressing bottlenecks with the Resource Management Act

35. A material impediment, both in terms of time and cost, remains the Resource Management Act, and the different approaches taken by different territorial authorities. To maximize the efficiency of the BIF, current roadblocks under the Resource Management Act must also be effectively managed.

RURAL FUNDING

36. The Government has concluded that "the most appropriate mechanism is a contestable and technology process that has sufficient flexibility to support the deployment of backhaul links, 'last mile' broadband solutions and demand-pull initiatives".[1] In the proposed rural criteria, it further notes that "[p]rojects are unlikely to be commercially viable without funding".

Question:	*Given the significant cost increases to deploy high-speed broadband in rural and remote areas and the better potential coverage that may be provided at lower cost but also lower speeds (including potentially by wireless rather than fibre) should the rural criteria be set at a lower speed than urban?*

37. The Government is currently reviewing the Telecommunications Service Obligation ("TSO"). The industry, via the Telecommunications Carriers Forum ("TCF"), is working on a joint proposal for the Minister of Communications to deliver essential telecommunications services to rural customers.

38. As part of that analysis, the TCF is considering the benefits of technology neutrality and contestability to supply uneconomic customers. Emerging technologies, including wireless and satellite, have the capability to deliver services, including broadband, more cost effectively than fixed infrastructure.

Question:	*Given the significant cost increases to deploy high-speed broadband in rural and remote areas and the better potential coverage that may be provided at lower cost but also lower speeds (including potentially by wireless rather than fibre) should the rural criteria be set at a lower speed than urban?*

39. The BIF guidelines acknowledge that broadband delivery is unlikely to be commercially viable without BIF funding. TelstraClear considers that it may be appropriate to loosen the BIF requirements for rural areas around both broadband speeds and also the type of technology deployed, to ensure that the best outcomes are achieved for rural customers, at least cost.

40. BIF funding must be sufficiently flexible to allow the lowest cost technology, including satellite, to serve those customers. Rigorous adherence and consistency with the proposed urban criteria may result in a few targeted high-cost applications, soaking up the entire $75m funding, that does not address the broader issues for the rural community more generally.

[1] Broadband Investment Fund: Draft Criteria and Proposed Process for Consultation, p. 5

Question:	*Do you think that mobile / wireless solutions would provide the required level of broadband service?*

41. The key and immediate challenge for rural areas is to ensure that rural customers have access to broadband and calling services. The well identified challenge is the cost to deliver such services, which have developed in urban areas through natural competition.

42. Mobile, wireless and satellite services have the capability to deliver broadband services to underserved rural areas in a cost efficient manner. While these technologies do not have the same speed capability as fibre-based services, they nonetheless have the capability to deliver and/or significantly improve broadband experiences to the rural community.

43. Furthermore, the rapid growth in mobility suggests that the demand and usage patterns of customers are changing. The 2006 census shows that more than 80,000 New Zealand households use an alternative to the traditional telephone for telecommunications purposes.[2]

44. For example, Telstra's Next G™ cellular network offers third generation mobile coverage in Australia covering more than 1.9 million square kilometres. The network provides mobile broadband access to 99 per cent of Australians, spanning city to country including many remote coastal and rural communities. Next G™ delivers with peak rated devices of 7.2Mbps downlink and 1.9Mbps uplink. Typical customer download speeds range from 550kbps to 3.0Mbps aand the typical customer uplink speeds range from 300kbps to 1Mbps.[3]

45. TelstraClear considers that the BIF criteria in rural areas should allow for mobile and wireless solutions as these are likely to be credible alternatives to fixed infrastructure in remote areas. Wireless technologies have the capability to significantly improve broadband for rural communities cost effectively.

[2] http://www.stats.govt.nz/census/2006-census-data/classification-counts/about-households-families-dwellings/access-to-telecommunications-systems.htm

[3] http://www.telstra.com.au/business/products/internetanddata/mobilebroadbandlaptopdevices/index.htm

Question:	Do you agree that rural applicants should be required to offer open access to their infrastructure, bearer and/or application services?

46. TelstraClear considers that the open access requirement could be relaxed for remote rural customers, to maximise the incentives for BIF applications in those areas, by flexibility of solutions to deliver improved broadband and voice services to rural customers in a cost efficient manner.

Question 6:	The rural criteria do not specify percentage weightings but rather are ranked in order of priority. This has been proposed in order to retain the greater level of flexibility that is required in rural areas. Do you consider that percentage weightings should be specified at the expense of flexibility?

47. TelstraClear agrees that the rural criteria should be ranked in order of priority rather than specific percentage weighting used for urban BIF funding. As discussed above, it is important that maximum flexibility is provided to ensure that rural broadband outcomes, in areas where private sector investment is uneconomic, are achieved at least-cost. This will, necessarily, require maximum flexibility in the assessment of rural funding applications.