

Broadband Connect

In the Broadband Connect discussion papers, issues for comment have been identified with a topic number

eg Q1. How can the design and delivery of Broadband Connect be optimised?

These numbers have been used to identify the issue under discussion.

Background Information

Communications Experts Group has provided consulting services to carriers and corporations on the development of telecommunication infrastructure. This has given CEG insight into the costs of building fibre optic and mobile telephone infrastructure in a variety of environments.

An analysis of costs of different projects, and “What if” cost estimates has shown that 80% to 90% of the costs of providing telecommunication infrastructure are for non-telecommunication services such as land, electrical power, buildings, masts, security, access to premises, etc. Most of the non-telecommunication infrastructure can be shared with other services, eg FM radio, or TV, etc. Similar studies in the UK have come to the same conclusions. (ref Broadband Study Group Reports [UK])

There are significant additional opportunities to lower the cost of providing mobile services, and, in some cases, improving competition by adopting a Common Use Telecommunication Infrastructure Policy (CUTI). This policy enables non-telecommunication infrastructure to be shared across differing services, technologies and providers.

Response to Discussion Paper

Q9. What can be done to further overcome barriers to capital investment in less viable areas?

The two major inhibitors are the non telecommunication infrastructure costs (including cost of access to customers’ premises) and backhaul costs to capital cities or major regional centres.

By sharing infrastructure (eg masts, ducts, conduits, buildings, electric power, etc) the initial capex can be reduced, making it easier to justify investment.

The Broadband connect programme could be significantly enhanced if greater emphasis was placed on the priority, inclusion and recognition of CUTI policy.

Q10. High Cost of Technologies and increasing customer expectations

Customer expectations will continue to increase and today's technologies will need to be replaced at some point in time. The non-telecommunication infrastructure should be designed to support at least three systems to allow the reuse of the infrastructure as well as supporting the parallel operation of old and new technologies.

Q11. Mandatory Additional Information

Many of the questions are not relevant to smaller regional carriers, but may be applicable to the Tier 1 and Tier 2 carriers, especially the question on intended future service areas.

Much of the information would be based on estimates and would be subject to a number of caveats, which may reduce the value of the data for aggregation or analysis.

The most relevant information is a summary of the broad nature of the technology that will be employed for the project.

It will be difficult to define "the viable geographic reach" as it is dependent on many factors (eg percentage of take up, value of take up, use of local agents, etc).

A question that will provide useful information would be the percentage cost of backhaul costs for the proposed project, assuming the minimum viable number (and value) of customers are connected.

Q18, Q19, Q20, Q21, Q22 Payment Regime

Parts of the current payment regime should be retained, however the HiBIS does not take into account the cost structures incurred by carriers. All the projects where Communications Experts Group have been involved, have had the following cost structure for both capex and operational costs:

Fixed Costs (independent of customer numbers).

Unit Cost per premises passed.

Unit Cost per customer connected.

The methods of payments to providers should reflect this cost structure, but with some incentives

eg 60% of Fixed Capex Cost.

50% of Capex Costs per premise passed (incentive to build efficient network).

60% of Capex Costs per customer connected (rewards cost effective services).

Q23. Methods of Payment

The method proposed in Stage 1 of the HiBIS scheme will be particularly onerous on providers using wireless technologies, but is fair for ADSL providers. The difference is primarily due to the fact that a Wireless Provider is providing 100% of the infrastructure, whereas an ADSL or copper wire solution is making use of existing infrastructure (see also Q24). If the provider was offering to install copper or fibre networks then a 3 year limit would be more appropriate.

Q24. Threshold Model for Speed

A major difficulty for specifying minimum speeds is that ADSL does not guarantee a minimum speed, but only a possibility of reaching a maximum upper speed. We have conducted tests which show that at some locations dial-up speeds of more than 40kBit/s were achieved but for 90% of the time ADSL achieved less than 35kBit/s due to throttling on the backhaul link. Some Wireless links can suffer from the same level of service degradation due to backhaul congestion and/or the velocity of the customers' receiver (eg laptop in a moving car).

Q26 Two Subsidy Levels

There is a case for introducing differing subsidy levels based on the systems that have a system aggregation factor of less than 5 and those that are greater than 5 (some carriers employ aggregation levels of more than 20).

Other issues for consideration:

Carrier Cap Limit

The current cap or limit on the proportion of funds that any one carrier can receive under Broadband Connect should be 40% (reduced from 60%).

Broadband Connect needs to ensure that the Telstra Fibre Network is not subsidized by Federal Government especially where any form of access restrictions are proposed or implemented.

There is a strong case for excluding submissions and providers who engage in anti competitive practices such as "single supplier only" contracts (ie a second carrier can exclude, or reduce the viability of a project because of contractual arrangements with customers within the expected coverage area of the project).

