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Submission to the Broadband Connect and Clever Networks review

In response to the discussion paper issues November 2005 HaleNET would like to offer the following responses to the questions raised in the discussion paper, plus the following comment regarding the limitations on the timeframes in which a provider can claim incentive payments.

With regards to the incentive payment timeframe limitation as it is understood by us, we feel that this will lead to less investment in terrestrial infrastructure and more emphasis on the use of satellite infrastructure.

This issue appears to have been put in place to cater for, if not favour, one technology, satellite.

Satellite has a valid niche, but in many cases it is not the best solution. Satellite, though it has an advantage in "being able to be deployed virtually anywhere, anytime", has two unsurmountable drawbacks, latency, which is technological, and an ongoing high operation cost of "air time". In effect, if considered as a general solution, it is subject to the pitfalls of many expedient short term options, being short sightedness.

Terrestrial technologies on the other hand have typically low latency and much lower ongoing costs and as such should be deployed wherever possible for the greater long term benefit.

However, by treating it in the way DCITA has, it is overplaying the significance of satellite and has produced an inherently discriminatory policy to the detriment of other technologies.

The result of this is that satellite, a technically inferior and overall more expensive technology would tend to be deployed in situations where, under a more impartial and objective policy, a service with better performance and superior long term economics could have been deployed.

Such technologically bias in policy stifles competition, impedes innovation and reduces diversity, thereby producing an overall degradation of results of the Department's project.

One of the fundamental principles governing Australian communications policy is called 'technology neutrality' The idea is that the Government should avoid picking winners among competing technologies or service providers. The market should determine these things in the interest of the consumer,

and the policy department, DCITA, and regulator, ACMA, should avoid any implementation policy that acts to prevent the market from deciding.

The 12 month rule will in our opinion lead to providers having to set demand register requirements in relation to the number of customers that express interest. This will in many cases then lead to broadband customers either being denied a terrestrial service or having to wait longer than they would at present. This would be necessary in order to ensure as reliably as possible that the terrestrial deployment would satisfy the viability criteria. While we can recognize that the 12 month rule has been introduced to address the issue of DSL deployment, where the major provider requires customer numbers prior to deployment, it has raised the need for an urgent determination of what is classified as network availability. In the case of ADSL where it uses existing copper network infrastructure it could be said that the network is available. However in the case of wireless or cable solutions that may cover or pass a property but not be connected until the network is upgraded to connect a property, there is a need for a determination as to what constitutes network availability. In the case of wireless or optical fibre cable the costs associated with connecting each customer are similar to or in excess of what is required to connect a satellite customer, however it should in many cases provide a longer term benefit. Therefore we feel there is an urgent need for clarification on the 12 month rule. The current measures in place will address the issues of over payments.

Q1 How can the design and delivery of Broadband Connect be optimised to achieve long term sustainable quality broadband solutions for regional, rural and remote Australians?

The design of the scheme could be changed, so as to not favour one technology through the use of the 12 month sunset clause on terrestrial deployments where the network connection does not exist.

The limitation on the timeframes in which incentive payments can be claimed needs to be lifted and replaced with incentives that allow providers to make risk decisions based on a longer timeframe to attract and connect customers. It may be possible to introduce a clause to say that where the customer is connected and a network extension is required that the incentive payment is still applicable past the 12 month time period. This would overcome the situation, where a provider has terrestrial infrastructure in place for over 12 months, which would be excluded from claiming an incentive payment where there are substantial network extension costs involved in connecting customers. I.e. Wireless network premises equipment or cable network premise equipment. Not to do so will result in providers favouring the use of satellite based solutions. In the case of services provided by ADSL then the same costs do not apply, because the network is already in situ. The 12 month time limit on terrestrial may have been introduced to address the ADSL situation, however it has caught other terrestrial options in the same net.

The other issue that became apparent at the end of the HiBIS scheme was that there were a number of providers using wholesale providers to deliver their ADSL solutions and a large proportion of the HiBIS subsidies were being spent on advertising. The guidelines could be further tightened to ensure that 90% of the

subsidies where in fact being spent on infrastructure and infrastructure installation costs.

Q2 What means can/should be used to encourage further capital investment in infrastructure that will support competitive networks and services under Broadband Connect and beyond?

See Q1

Q3 How can Broadband Connect funding be structured to provide the best incentives for investment?

See Q1

Q4 Is terrestrial or satellite the most appropriate means of delivering broadband in regional, rural and remote areas?

Terrestrial is the best method and should be used in areas where the population densities make it a viable option. Terrestrial delivery provides higher throughput speeds, lower latency and a lower cost of operation over time

In 4 years time it will be debateable whether 256/64 or even 512/128 is considered broadband.

Q5 Can satellite be delivered as competitively as terrestrial services?

No

Q6 Should participating providers be required to commit formally to service the areas they identify in registration applications?

No, because if the provider has identified an area to service and then finds that the customer demand is not sufficient to be viable then it would be irresponsible to spend funds on a investment that may not be sustainable

Q7 Should annual renewal of funding agreements specify timeframes for commencement of services in areas of greatest need?

No. How would this be assessed? It would be very difficult for anyone other than the provider to assess the viability of an area

Q8 Should a system of prioritised funding for services connected in areas of greatest need (beyond what has been provided under the HiBIS two-tiered incentive structure) be introduced?

How would this be assessed?

Q9 What can be done further to overcome barriers to capital investment in sustainable technologies in less commercially viable regional areas?

Get rid of the timeframe limits and impose the same conditions as under HiBIS in that the provider must spend the money on “infrastructure” or be faced with paying back the money.

Q10 How can the high cost of some technologies be reconciled with increasing customer expectations for higher speeds and usage allowances especially in more remote areas?

In these cases the only real solution is for the use of broadband connect funds and clever network funds to be used to achieve the desired outcomes. It will be very expensive but will involve the rollout of high speed wireless and optical fibre networks that can be used for broadband, school of the air, telemedicine and a variety of other applications. It would need to be a long term project with long pay back periods. There are no short term fixes

Q11 Should it be mandatory for program participants under Broadband Connect to provide additional information as listed below as a condition of registration?

- intended future service areas (with approximate dates of commencement of supply;

No that is commercial in confidence

- the viable geographic reach of broadband services from central transmission points for service delivery;

No

- technical barriers limiting the application of providers’ technology in regional communities;

Yes

- the capacity of providers' technology to support varying types of broadband traffic and use;

Yes

- the range of service speeds providers' technology would be able to support;

Yes

- the capacity of providers' technology to provide services now and to accommodate new developments such as increased speed , usage and applications in the future;

Yes

- the particular relevance of the technology to other communication services (for example, capacity to be used also for supporting mobile telephony services);

No

- a summary of the broad nature of technology they employ; and

Yes

- anticipated timing and target areas for their technology deployment in regional Australia.

No commercial in confidence

Q12 On what basis would you argue that certain specific technologies will have the most impact on the delivery of regional broadband services in the next three to five years?

ADSL will have the most customers connected to it over the next 3 to 5 years, however I believe that wireless and fibre to the home will start to make inroads into the ADSL numbers. It is my belief that fibre to the home will be the end game as it will support much faster speeds than either ADSL or wireless and given that some research is suggesting that homes will need 10 to 20 MB to provide the converged communications needs of households that FTTH is the only means of reliably delivering this sort of speed.

Q13 How would you compare the effectiveness of these technologies to others in the market place?

See Q12

Q14 To what extent will broadband technologies be able to augment capacity to meet rapidly expanding consumer expectations for higher bandwidth and more advanced applications?

See Q12

Q15 Can complementary technologies provide better solutions for delivery of services in regional Australia?

Possibly

Q16 What innovative approaches should Broadband Connect adopt in its program design to utilise these technologies most efficiently and effectively?

Ultimately it will be for the market to decide. As far as consumers are concerned they want a solution now and providers must work towards providing solutions within the timeframes of customers. That said, providers also need to be planning now for the upgrade of any solutions deployed today in order to be able to meet the expectations of customers in the future.

Overseas we are seeing the deployment of FTTH infrastructure to replace some ADSL and cable infrastructure. There now seems to be a focus on reducing the long term maintenance costs while at the same time being able to provide triple play solutions. For Broadband connect to force providers to use such technology may slow the deployment of broadband solutions and reduce the number of providers willing and able to deploy such solutions.

Q17 What capacity do existing technologies have to accommodate the introduction of new developments, such as increased speeds, usage and other applications?

ADSL technology has a number of distance and other network impairment issues. There is work being undertaken to increase the speeds that can be supported under ADSL2. However this too has distance and network impairment issues.

Wireless also has a number of issues including the availability of spectrum and line of site issues. It can support similar speeds to ADSL

FTTH home is slow to deploy and is costly to deploy, it can support very fast speeds with low latency, high reliability and has a very long lifespan

Satellite, though it has an advantage in "being able to be deployed virtually anywhere, anytime", has two unsurmountable drawbacks, latency, which is technological, and an ongoing high operation cost of "air time". In effect, if considered as a general solution, it is subject to the pitfalls of many expedient short term options, being short sightedness.

Q18 Should the current system of incentive payments to providers for the supply of broadband services be retained?

Yes, without the 12 month restriction on claiming incentive payments

Q19 Would an up front method of payment be more effective?

In some cases yes, however it may involve more administration in which case the costs would outweigh the benefits

Q20 How else could the method of payments to providers be adjusted to achieve more satisfactory outcomes for providers and people living in regional, rural and remote Australia?

Q21 Should funding be provided:

- based on the number of customers connected?

Yes, without the 12 month timeframe. Let the market decide

- the number potential premises with potential access?

No

- a combination of both methods?

No

Q22 If funding was based on the number of premises with potential access should it then only be provided for infrastructure?

Yes as it should be now.

Q23 How can methods of payment under Broadband Connect be better structured to ensure that providers are not overcompensated for the supply of broadband services?

Providers could be required to provide 12 monthly infrastructure cost returns and only be able to claim up to the amount actually spent on Compliance costs, Cost incurred in advance of signing up customers and costs incurred in actually signing up customers. This would then be limited to the sum of the higher and standard incentive payments.

Providers should not be able to claim advertising and admin costs in excess of 10% of the incentive payments

Q24 Should the current HiBIS threshold model for speed and usage be maintained at existing levels under Broadband Connect?

Yes, however there will need to be a migration path to 512/128 in 2 years and probably 1MB in 4 years. This will give providers the time to provision their backhaul to cater for the extra bandwidth requirements.

Q25 Should the model be retained with increased minimum speed and/or usage requirements?

No

Q26 Should two separate minimum speeds with two subsidy levels be introduced?

No However providers should be required to offer a 512/128 service in addition to the 256/64 service

Q27 Do threshold requirements need to be expanded to accommodate other issues such as latency?

Yes

Q28 Should the Broadband Connect Stage 1 price caps be retained under Stage 2?

Yes, there needs to be certainty for providers and customers

Q29 Should a greater range of price caps be introduced than the two currently available?

No. Use the KISS principle, and reduce unnecessary administration

Q30 Should the current funding cap level of 60 per cent continue under Broadband Connect?

Yes or it could be lowered to 40%