



Capital Region Development Board

Broadband Connect and Clever Networks

Response to Discussion Paper

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Capital Region Community Broadband Demand Aggregation
Broker Program**

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Introduction

The Capital Region Community Broadband Demand Aggregation Broker Program covers the following local and territory government areas in South East NSW

Australian Capital Territory, Bega Valley, Bombala, Booroowa, Cooma- Monaro, Eurobodalla, Goulburn-Mulwarree, Harden, Palerang, Queanbeyan City, Snowy River, Tumut, Upper Lachlan, Yass Valley, and Young Councils.

The region is extremely diverse in character containing areas ranging in population density from regional centres such as Canberra, Goulburn, Cooma, Bega, Queanbeyan, to a large number of sparsely populated rural and remote areas.

The roll out of Broadband services has generally been adequate in most of the urban areas however there is a considerable lack of affordable broadband in the rural and remote areas of the region. The primary focus of the programs should be clearly on rural and remote areas excluding areas already serviced by ADSL or similar broadband technologies.

The following response to the Broadband Connect and Clever Networks Discussion Paper is aimed at addressing the telecommunications needs of consumers in the whole of region especially those people living in the rural and remote areas. The aim of the response being to facilitate the provision of sustainable broadband services and applications in rural and remote areas at the same cost to the consumer as they would pay in metropolitan areas.

The suggestions contained in this response are consistent with other government policy objectives including those concerning;

- Support of the non-profit sector, emergency services and volunteerism in general;
- Increased concern with the environment particularly water management;
- The provision of increased on-line service delivery to rural and remote areas;
- Recognition and support of the important role of on-line access centres in the diffusion of ICT related innovation in rural and remote areas;
- Development of partnership between all levels of Government (Local, State and Federal) to ensure the equitable and cost-effective diffusion of high bandwidth infrastructure and services to rural and remote areas of the region.
- Ensure sustainability of wireless broadband provision to low density rural settlement areas by securing low cost access to transmission sites and bandwidth back-haul.

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Broadband Connect/Clever Networks Submission:

General Ideas and Principles

Extension of NSW Government Backbone Network to Local Government and non-profit groups

By extending the NSW Government's GOVNET Network from existing regional hubs to all local government offices there is a possibility of developing an innovative approach to assist in the provision of broadband services to public Internet Access points and outlying rural and remote communities. This initiative could be the basis for providing adequate bandwidth to, Public Libraries, Community Technology Centres (CTCs), Rural Transaction Centres (RTCs) Emergency Services including Rural Fire Service (RFS), State Emergency Service (SES) locations and environmental management organisations especially Catchment Management Authorities (CMAs) in a cost-effective way that recognises their contribution to the generation of public goods.

This approach overcomes a number of the barriers to sustainable service provision such as the high cost of site leases and the long-term viability of some wireless operators once HiBIS funding has ceased. Councils could acquire sites and through the tendering out of three competitive contracts (build, operate, maintain) could ensure the sustainability of a service. If an operator folds the council just lets out another contract to operate using the council infrastructure. The operator as specified in the tendered contract would undertake billing and management of the service. Any surplus income streams would then help make the operation cost neutral to the council.

Such a model would only be suitable for certain situations i.e. proactive councils, adequacy of back-haul, lack of comparative service provision in area. But it is an idea that has appeal to many local governments in this region concerned about service provision to their outlying rural and remote ratepayers. One issue that would need resolution is whether such a model would saddle councils with Carrier obligations as a declared service.

Provision of subsidised/free bandwidth

Ensure all online access centres and similar institutions such as Rural Transaction Centres (RTCs) and Public Libraries etc; in the region are provided with low-cost sustainable high bandwidth (2mb/sec) e.g. Eden, Bermagui, Wallaga Lake, Bombala, Delegate, Booroowa, Braidwood, Araluen, Nerriga, Majors Creek, Towamba, Bigga.

Also efforts should be made to provide low-cost sustainable high bandwidth (2mb/sec) to selected emergency service (RFS and SES) locations (training and incident management) in conjunction with bandwidth provision to surrounding communities. In some cases this may require the electrification of selected publicly accessible community reception sites (e.g. RFS/SES buildings, community halls, emergency evacuation and refuge points etc;)

Electrification of regionally significant transmission sites (Mt Budawang etc) to enable them to provide more advanced services eg mobile telephony, broadband transmission and back-haul. These sites are currently solar powered and connection to mains power will provide not only greater transmission capacity but also more secure duty cycles especially for emergency services communications networks e.g. Police, Ambulance, RFS, SES located on these sites. Existing solar systems can then be employed to provide back-up power in the case of power outages.

Barriers to the cost-effective provision of broadband infrastructure to rural and remote areas.

- costs of site lease for towers,
- existing financial arrangements for co-location,
- cost of back-haul provision from remote locations- the need for new exchanges.

These issues are critical to resolve before any meaningful business plan for broadband provision to remote areas can be formulated. Evidence from the Rural Fire Service has shown that recently there has been a large increase in tower site fees. One example involved an increase from \$1.5K to \$8K in annual lease costs for a tower. This figure does not include maintenance the cost of which is on top of the lease costs. In many cases these lease costs are interagency matters most typically involving NSW National Parks. These costs are significant impediments to the establishment of broadband services.

The establishment of new exchanges/terrestrial fibre terminations in emergent growth areas would allow for a greater take of cable based ADSL. Many older exchanges are inappropriately sited in relation to population densities. In rural and remote areas siting of exchanges in close proximity to Rural Fire Service facilities may be an efficient strategy to pursue.

Relationship to other Government programs

The possible provision of bundled services based on Telstras 3G mobile telephony platform to a number of the smaller communities in region raises a number of questions about the joint operation of the Broadband Connect, Mobile Connect, and Clever Networks programs. It is possible to argue that service provision in could draw on the three funds simultaneously. That being the case it would be better that Mobile Connect program works closely with other Australian Government programs to holistically meet the broader telecommunication needs of particular localities. A particular example may be the use of mobile infrastructure to facilitate remote environmental sensing (wireless telemetry for water monitoring etc;). Remote sensing could provide not only additional justification for the establishment of a mobile service but also a financial contribution from interested environmental agencies.

Mobile Connect/Clever Networks/ Broadband Connect (Overlaps)

Because of overlaps in service delivery the following comments have been included in both the Mobile Connect and Clever Networks/Broadband Connect Discussion paper responses.

Electrification of regionally significant transmission sites (e.g. Mt Budawang to enable the provision of mobile service to Kings Highway on the highly dangerous Clyde Mountain, significant coverage black spots in the Mongarlowe Valley as well as a significant improvement to existing solar-powered radio services operating from the site). The cost of electrification is considerable as most of these sites are located in National Parks which because of obvious environmental constraints means that the power supply has to be buried under existing access roads. In the case of Mt Budawang the cost would be \$1.2m. However, it would still be the most cost-effective way of solving a large number of significant telecommunications problems in a very large area. Without electrification of this site a large number of towers would have to be built to provide equivalent coverage and given the rugged geography supply of electricity would still be a significant barrier.

One of the issues would be if the site is electrified how are the costs for electrification shared between different users of the site? The site is currently solar-powered with a number of radio services for emergency services, Police and national parks. Also, if Telstra or another mobile operator builds a tower on the site what are the arrangements for co-location given public money was involved in the establishment of mobile telephony service through the funding of electrification?

Gaps in coverage on regional roads

In the South East of NSW there are a number of coverage gaps on regionally significant road transport corridors. The most significant occurring on the Princess Highway, Kings Highway and the Snowy Mountains Highway. In general most of these cases provision of additional coverage can be justified on the basis of traffic volumes, safety and the provision of ubiquitous coverage.

Future demand on newly constructed roads

More problematic is the case of the new road connecting Canberra and Nowra via Nerriga, which contains significant coverage gaps particularly in the area where it crosses the Shoalhaven River (Oallen Ford locality). The issue in this instance is that the road (State Rd 92) is in the process of being constructed. It is only when it is complete that it will attract substantially increased traffic numbers. Funding criteria should reflect the future demand for coverage along this route

Small Towns/Rural Localities Relationship to other Government programs

The focus of regional highways and smaller communities would satisfy a definite and vocal demand as well as in the case of Telstra's bundled 3G service enhance the provision and take up of broadband services.

The possible provision of bundled services based on Telstras 3G mobile telephony platform to a number of the smaller communities in region raises a number of questions about the joint operation of the Broadband Connect, Mobile Connect, and Clever Networks programs. It is possible to argue that service provision in this instance could draw on the three funds simultaneously. That being the case it would be better that Mobile Connect program works closely with other Australian Government programs to holistically meet the broader telecommunication needs of particular localities. A particular example may be the use of mobile infrastructure to facilitate remote environmental sensing (wireless telemetry for water monitoring etc;). Remote sensing could provide not only additional justification for the establishment of a mobile service but also a financial contribution from interested environmental agencies.

Local Government and community capacity to contribute to Mobile Connect program

There is little capacity for Local Government and smaller rural communities to contribute to the program. There has already been significant and well-documented cost shifting towards these groups. Most local government authorities in the South East of NSW have not got any money to contribute even if they wanted too to satisfy their ratepayers.

Input from local and regional level

Local and regional stakeholders can make a significant contribution to this program by presenting both information and argument for the justification of funding of mobile telephony infrastructure in particular locations both at a local and regional level. The combination of detailed local knowledge and the possible provision of bundled services based on Telstras 3G mobile telephony platform to local communities reinforces the need for input from local and regional stakeholders.

Clever Networks Response to Questions

1. **Considering the current DAB program structure involving state, community and sectoral brokers, is the current arrangement the best model for catalysing broadband developments in regional, rural and remote Australia or how should it evolve?**

As the model is already established with many infrastructures in place, existing organisational infrastructure should be capitalised on. The role of community brokers in holistically evaluating regional telecommunications problems and solutions could be expanded to include the preparation of project linked funding submissions including the mapping of all telecommunications infrastructure.

2. **What role can/should brokers play in promoting or facilitating the effective use of broadband applications in order to enable communities and businesses to capture the transformational benefits of broadband?**

Training

The most basic application that should be funded by the program is a demand based sequential training program for first time adopters and possibly and a shorter skills enhancement program for emergent broadband applications. Lack of training opportunities in rural and remote areas is a major barrier to the further diffusion of on-line services and associated service delivery innovations. Provision of training is essential in rural and remote areas to enable them to effectively deal with the ongoing structural adjustment of local economies away from labour intensive to more technology intensive economic activity.

Brokers should ascertain exactly what the training needs are for their areas of responsibility. This should include a training needs analysis for volunteer groups, the magnitude of demand for training for those that have never used computers before and the formulation of appropriate training delivery strategies.

On-line service delivery to rural and remote areas

Many government departments both state and federal have or are in the process of developing on-line applications for rural and remote areas. Governments believe that such initiatives provide a cost-effective distribution of government policy initiatives to regional, rural and remote areas. However, because there is no co-ordination or strategic management of these various initiatives there remain significant barriers to their effective diffusion and utilisation by their target audience. This situation could be improved by:

- 1) State and Regional Broadband Aggregation brokers focusing directly on the delivery of these various initiatives especially those from smaller departmental units which directly target particular groups in rural and remote areas e.g. NSW Attorney Generals Department, Missing Persons Unit has developed an on-line application focused for young aboriginal women in rural and remote areas;

- 2) The utilisation of on-line access centres for publicity ,demonstration and the provision of assisted access to these applications.

Remote Environmental Sensing (wireless telemetry)

Wireless telecommunication infrastructure to facilitate a rapid expansion in remote environmental sensing (e.g., wireless telemetry for water monitoring etc;). Such remote sensing applications could provide additional justification for the establishment of services in a particular locality a fact that should be reflected in the formulation of funding criteria. Regional Broadband Brokers working with Catchment management Authorities could play a critical role in the development and establishment of these applications.

3. What other resources or programs should the brokers be aware of in this role?

Brokers need to be aware of programs that are already in existence teaching communities about technology and bridging the gap in the digital divide.

These include the many types of Online Access Centres such as Community Technology centres, Government Access Centres and Rural Transaction Centres, not to mention Telecentres, public libraries and Unlimited Potential Smith Family program centres – all working to increase knowledge of how the internet can assist people in providing information and assistance.

This is already a captive audience that could be utilised.

There is also a strong push in online learning and ebusiness in commercial and government sectors. However the slowness of some technologies makes it difficult still to gain cost effective usage of applications such as Voice IP and Video Conferencing over IP. The Federal Government through Networking the Nation has invested a substantial amount of money in video conferencing units through online access centres and for these to be used more effectively, cost effective IP solutions for this area would be beneficial.

4. Should the broker role include an increased focus on effective use outcomes and if so how can this best be achieved?

- Evaluation of key performance indicators based on outcomes.
- Brokers should utilise existing applications and resources (on-line access centres) already in place and partner with these organisations that have been funded by government for this purpose.

5. Should uptake and effective use of broadband by specific groups be targeted and if so which ones

Specific groups that could utilise broadband more effectively in regional, remote and rural areas with the provision of training include:

First-time adopters (how to turn the computer on)

The Federal Department of Education Science and Technology (DEST) Building Information Technology Skills for Older Workers (BITES) Program could with certain improvements be used as a basis for such a program. Basic improvements would be the development of basic training materials and the cost-effective delivery of such a program through on-line access centres and a wholesale relaxation of eligibility rules. Efficient and cost effective delivery of such a program could be achieved at a cost of \$10/hr per participant for groups of 5-10 for a course of 20 hours.

More advanced skills enhancement programs could either be delivered on-line or through on-line access centres. Costs for such a program would vary dependent on subject matter. There may also be a social equity case for the provision of concessions for certain participants (i.e. long term unemployed) and 100% subsidy for others such as active volunteers (RFS, SES etc;).

Non-Profit volunteer sector including emergency services

Provision of ICT related training to the non-profit sector in rural and remote areas should also be prioritised through the development of appropriate program guidelines. Provision of such would be significant for the following reasons. It will improve communication channels and data flows for decision making during emergencies, increase productivity and satisfaction for volunteers, reward volunteers through improvement of personal skill sets and finally act as an important vector for broadband diffusion and social capital development in rural and remote areas.

Home-based business development and support should be a prioritised target for the program as it directly relates to harnessing the economic and social benefits associated with the diffusion of BB into rural and remote areas.

Indigenous communities – who many not have access to computers let alone need broadband. Eg. NSW industrial Relations Department are using CTCs online access program to provide education via their website to indigenous communities. There is also a need to aggregate the number of smaller applications with specific Indigenous foci e.g. NSW Attorney Generals Missing Persons Initiative information campaign which directly targets young aboriginal women and girls into a one stop access point for all of the applications.

Seniors who are unable to travel and could use the web as a source of entertainment, socialisation, information and to fulfil shopping and banking needs.

6. How might the brokers play a role in facilitating supporting community wide connectivity and community wide networks?

Brokers and providers need to work with current community infrastructures to communicate with regional areas. Rather than go out and start from scratch, they can utilise networks and hubs within communities to get information about the needs and demands of community connectivity. By utilising networks for not only analysing

infrastructure but also providing the applications and understanding of the benefits of broadband, more support locally will be gained as people understand the benefits. Communication is a major factor in communities and an outside person telling them what should be done may not be accepted.

7. Should future demand aggregation activities be focussed in areas that have yet to receive terrestrial broadband services under HIBIS to support the delivery of the new Broadband Connect program?

YES

The major focus of this program should be towards those consumers still confined to terrestrial dial-up services. Though successful in rolling out ADSL and satellite services the HiBIS program has spent nearly 60% of its funding on providing ADSL to towns and villages those consumers more than 4km from the exchange have only had access to satellite services and in some cases wireless. The primary focus should be on providing enhanced terrestrial services to those consumers still confined to dial-up services who live outside ADSL serviced areas. This emphasis should negate the use of funds to enhance service to already well catered for towns and larger regional centres. Improvement of back-haul and improved provision of bandwidth to emergency services, local government, pair-gain dependent consumers and public Internet access points should be the only exceptions.

8. Are health, education, emergency services and the local government the appropriate services for Clever Networks to target?

YES-but also public internet access points such as Public Libraries on-line access centres and Rural Transaction Centres.

Need to maintain and enhance Public Internet Access Points (Online Access Centres) in smaller rural and remote areas

Public Internet Access should be cost equivalent to metropolitan areas. Because of low population densities this is difficult to achieve in rural locations. The only reason many of these Online Access centres can remain open is that they rely primarily on volunteer labour thus reducing overheads. However even with volunteer labour and local government assistance it is difficult for many of these centres to achieve long term sustainability. To adequately address the many issues associated with the digital divide the centres should be assisted as much as possible in their delivery of significant public goods the most basic way this can be done under this program is the provision of free bandwidth (2Mb/sec min). The only caveats being the lack of viable commercial competition and the size of the town where the online access centre is located (less than 3000 or less than 5000 on a socio-economic disadvantage basis). With the above mentioned caveats such bandwidth provision would have little or no impact on the competitive roll-out of services and by providing associated services(e.g. awareness raising, training, assisted access to applications etc;) would actually enhance the effectiveness of the overall program.

Education and training

In regional or rural areas, travelling to a training provider to study can be difficult because of physical distance or personal circumstance. In addition to those factors online learning can be inhibited because of limited computer access or Internet connection. E-education and E-health are vital aspects in growth for communities.

Students can feel a sense of isolation arising from a lack of interaction with other students and not having ready access to support networks, research material and real life examples

A vast array of study opportunities are provided leading to careers and employment that would have otherwise required students to travel or move away from home, or were otherwise unaffordable.

Mature-aged students and the unemployed who previously had little or no computer literacy can develop skills and confidence while using a range of computer programs and the internet.

There could also be an opportunity to work with health, education and emergency services by using video conferencing over IP, so many people can still use interaction with voice and visual. Video conferencing in regional areas if more affordable over broadband could bring a specialist into a town, a trainer to a farmer, the government into a community.

Assessing doctors and specialists in regional areas can be an arduous task with some doctors booked out in advance so you are not sick by the time you get to see them. Online access to patient records, information and specialists can be of valuable assistance in areas where it is hard to get information.

Health information including Occupational Health and Safety and Workers Compensation could also be included in this area. These days farmers who hire staff must go through specific training.

9. Should there be priorities within this group?

Emergency services that rely heavily on volunteers such as the Rural Fire Service and State Emergency Services should be given priority through the development of appropriate program guidelines. Provision of such would be significant for the following reasons. It will improve communication channels and data flows for decision making during emergencies, increase productivity and satisfaction for volunteers, reward volunteers through improvement of personal skill sets and finally act as an important vector for broadband diffusion and social capital development in rural and remote areas.

10. What other sectors, if any, should also be considered?

Ensure all online access centres and similar institutions such as Rural Transaction Centres (RTCs) and Public Libraries etc; in the state are provided with low-cost sustainable high

bandwidth (2mb/sec). Not only will this address significant digital divide (access, adoption, skill development) issues but also provide critical backup for rural and remote customers during service outages (lightning etc;).

11. Should there be a focus on particular applications/sectors which will require and drive network or industry capabilities?

The members of the CTC Association believe it is vital that program participants provide information such as intended future service, geographic reach, technical barriers, and speed as many people in regional areas are not educated on broadband enough.

Utilisation of Online Access Centres to assist clients obtain information and know how to use broadband is vital.

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On-line service delivery to rural and remote areas

Many government departments both state and federal have or are in the process of developing on-line applications for rural and remote areas. Governments believe that such initiatives provide a cost-effective distribution of government policy initiatives to regional, rural and remote areas. However, because there is no co-ordination or strategic management of these various initiatives there remain significant barriers to their effective diffusion and utilisation by their target audience.

This situation could be improved by:

- 3) CTCs and online access centres focusing directly on the delivery of these various initiatives especially those from smaller departmental units which directly target particular groups in rural and remote areas e.g. NSW Attorney Generals Department, Missing Persons Unit ; CTCs are already working with delivering online and video conferencing programs with these departments.
- 4) The utilisation of on-line access centres for publicity ,demonstration and the provision of assisted access to these applications
- 5) Brokers and HIBIS providers working with online access centre points

12. What strategies could be incorporated into the program design to ensure that investment under Clever Networks provides the greatest holistic community benefit?

We believe that the government needs to look at the whole project and the benefit to the taxpayer as the end result. Utilise infrastructure already in communities, work with state governments and local governments to use their infrastructure and help communities utilise this technology by teaching them the applications and safe usage of broadband.

Strong support and recognition of the role of the non-profit sector and of volunteerism in formation of social capital and the resultant public good generation.

13. Is there an ideal balance between infrastructure and applications streams and if so how can it be identified?

Where there is an obvious link between applications and take up of Broadband Services e.g., basic IT literacy in rural and remote areas is a significant barrier to the take up and efficient utilisation of these services.

There must be an ideal balance. Why bring broadband to communities who won't use it. Hence education and training and showing the use of different applications is very beneficial. This can be done by the government showcasing websites of interest that you have already funded eg. NetaAlert that are already out there to assist end users.

14. What is the best balance between competitively determined and strategic investment funding?

This balance must be determined by need and disadvantage including geographic and socio-economic. There are also issues concerning long-term sustainability of trying to promote competitive solutions in areas that are economically marginal or unsustainable because of geographic location. The emphasis should be on sustainable service delivery to basically uneconomic rural and remote areas.

15. Would potential proposals be improved if the guidelines permit proposals which encompass both infrastructure and applications aspects?

Yes- holistic solutions to a wide variety of needs for each locality would be preferable to single application solutions. Environmental remote sensing would be a useful application to extend the benefit of wireless infrastructure.

16. What key strategic investments in broadband infrastructure have the potential to provide the best outcomes?

Extension of backbone networks to provide competition in back-haul, lower costs and open up possibilities for greater innovation and equity in bandwidth provision. Electrification of remote sites has the potential to provide enormous improvements to telecommunications provision in a number of rural and remote areas.

17. Are there complementary sources of funding/contributions which should be considered in developing the guidelines for the Clever Networks program?

- Existing investments in networks by both State and local governments;
- Access to transmission sites;
- Volunteer labour in public on-line access centres and emergency services.

18. Should there be specified minimum broadband specifications (eg. Bandwidth, latency etc) for Clever Networks and if so what should they be and how should they be determined?

- The minimum bandwidth provided to the end user should be 2Mb/sec;
- Latency should be reduced through provision of terrestrial solutions to allow VOIP and other innovative real-time interactive applications;

19. What steps/mechanisms can or should be incorporated if any into Clever Networks to enable regional, rural and remote communities progressively to transition to high/higher bandwidth networks?

Use what is already available so you don't have to reinvent new infrastructure. GAC Centres, Rural Transaction Centres, Telecentres, Online Access Centres, Community Technology Centres are already established.

It is just a question of supplying them with cheap sustainable bandwidth on the basis that they are providing a significant public good.

There should be an emphasis on infrastructure investment that will not change over time e.g., optic fibre back-haul, transmission sites and towers. Sustainable long-term access to this infrastructure is essential. Specific access technologies can change over time e.g. CDMA however core infrastructure (back-haul, site access, tower and electricity supply) requirements remain the same.

20. New technologies are showing considerable promise in providing broadband access to users well outside the current DSL limitations. What strategies should be adopted to encourage and support deployment of these new technologies and to ensure newly emerged technologies are not precluded during the lifecycle of the program?

All access technologies require fibre back-haul and in the case of wireless towers. ADSL technologies have almost reached the limit of their economically feasible deployment there should be an emphasis on wireless solutions for remaining rural and remote areas.

Harden Shire Council in collaboration with Telstra is proposing to trial the use of ADSL extenders in every exchange in the Shire in an attempt to provide ubiquitous coverage. This trial could be an exception to the above statement.

21. What supporting information should be required in Clever Networks proposals in order for their sustainability beyond the life of the program to be evaluated effectively and what factors should be considered in determining sustainability?

- Estimates of probable productivity gains;
- Degree of public benefit generated

22. For any new infrastructure created or made available, should there be specified minimum infrastructure access arrangements for parties other than infrastructure owners, such as a wholesale rate for back-haul?

Yes

- Relaxation/modification of regulatory regimes in specified remote area situations to enable marginal costs of service provision/ connection in low-density areas to be dramatically lowered thus enabling the sustainable provision of broadband services.
- To achieve pricing parity with metropolitan areas the cost of each connection needs to be bought as close as possible to the associated cost in metropolitan areas independent of population density. To achieve this certain high costs need to be addressed including access to bandwidth and annual tower leasing and co-location costs.

- Inclusion of tower co-location costs into Universal Service Obligation regime- (discount on mandatory contributions). Reverse if perfect market conditions emerge over time in the particular service area.

Ideally it would be better if the infrastructure was publicly owned with carriers leasing it.

23. How realistic is such a requirement and how tangible are the likely benefits of the approach?

In some situations public ownership (i.e. local government ownership of transmission infrastructure) might be practical.

In really remote areas if infrastructure is not publicly owned builders should be protected so they can provide a viable service without the threat of competitors cherry picking the best customers.

24. How can an appropriate charging regime for such access be determined? Consideration must be made of location and population density of service area

25. What other program activities should be taken into consideration in determining Clever Network program eligibility and entitlement?

The Online Working Council Final Report identified the unique role that On-line Access Centres play in providing information and communications technology (ICT) access and skills to individuals and groups, as well as engaging communities and the private sector in building social and economic networks. These unique elements clearly provide many reasons for the continued support by all tiers of government.

26. Having regard to the possible diversity of the activities under Clever Networks, what strategies can/should be considered?

The use of structures already funded or available in communities to deliver education, assistance and resources on the use of broadband eg. CTCs, Telecentres needs to be addresses. Governments have invested a lot of money in establishing these networks to assist in the equitable delivery of applications.

The use of these resources the government has developed rather than reinvent the program under a different name and minister needs to be addressed. Other resources include. Eg. Netaalert, e-businessguide.gov.au

Training and education of use of broadband and the safety of broadband needs to be funded in some areas that don't have access to it or cannot afford to attend.

Local holistic broadband educational programs need to be developed and instigated over the three year strategy and include the introduction of new technologies such as Voice IP and Video Conferencing over IP.