



## Broadband and Deaf People

### Discussion Paper



## What is a Discussion Paper?

A discussion paper is a document that is sent to the Deaf community, for you to read and think about things that are in this Discussion Paper. At the end of the Discussion Paper, there is a separate page/attachment with all the questions in the document, ready for you to fill out and send to AAD. Information on how to send to AAD is on the last page of this document.

When we receive all the replies from you, we will put together all the details and it will show us what you all feel and think about the questions we are asking you. This helps us to show to the people who provide services & telecommunications and those who work in the telecommunications industry, industry regulators or Government Departments what the Deaf community feels. It is always important to be able to show what the Deaf community really feels by having some real facts. Your feedback will be very important to us!

We look forward to knowing how you all feel about the issues in this Discussion paper so that our knowledge about access and equity in the telecommunications area can be kept up to date.

The information we receive from you will be protected under the Privacy Act and cannot be used by anyone else outside AAD.

## What is DTAN?

This project builds on the work done by AAD's Telecommunications Access Subcommittee (TASC) since 1986. The project has been operating with funding from the Department of Communications, Information Technology and the Arts (DCITA) since October 2001.

### Activities of the project for 2003-2004

- National community consultation with the Deaf Community
- Publish 2 articles/research reports aimed at Government, industry and regulators
- Disseminate 3 discussion papers aimed at the Deaf Community
- AAD representation at various telecommunications committees and forums
- Collaborate with other peak disability groups to increase telecommunications access
- Lobby for equitable access to telecommunications products and services for the Deaf community

This project is exciting for AAD as more time and energy can be devoted to ensuring we are able to disseminate information and lobby stakeholders for increased access to telecommunications.

## Why is this paper about Broadband?

Australia at the year 2000 reported that we were the country with the fastest growing number of people (43% of population) connected to the Internet, at 37.2% growth rate. However, in the same report, it shows that people in the over 55 year old group are less likely to have Internet access at home than those in the 24 – 54 years old group. Also there is a difference in how many of those are connected to the Internet in cities than those who live in the 'bush'. (Source: Australian Bureau of Statistics 8147.0 Feb 2001)

Some time in the future we are going to be able to use video communication, eg video over Internet protocol equipment, which means you will be able to use the Internet to communicate in Auslan. AAD is interested to know how many Deaf people have Internet access and whether you use broadband or dial-up services for your Internet connection. We want to know if you are likely to use video communication when it becomes available. The information that we receive from you will help us to lobby for increased and cheaper access so that when video over Internet protocol equipment is readily available Deaf people will be better able to afford it.

After we receive responses from our Deaf members to the questionnaire, it is intended to collate all the data and make it available on our website. Information gleaned from the responses will help us identify level of services available to Deaf people and can help AAD lobby effectively for improved services or work with the telecommunications industry for suitable solutions to any issues that may arise from this paper.

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This discussion paper looks at different issues that are relevant to current broadband issues:

- Broadband – what it is and how it works
- What broadband can be used for
- Broadband service affordability
- Accessible information about broadband

Before we go into the discussions, we would like you to tell us a little bit about yourself. This information will help us to see the different issues, in order of male or female, age group and which State or Territory. We do not need you to give us your name or address.

Please look at the Questionnaire and complete the information about yourself.

## 1. Broadband – what it is and how it works

Broadband is a type of telecommunications connection. You can use it instead of the normal telephone dial up service. When people talk about ADSL and cable, they are talking about broadband.

Broadband operates much faster than the standard dial-up Internet connection and is used for checking emails, looking up websites, downloading information and many other functions. Broadband also allows you to use the telephone or fax while you are on the Internet at the same time. You cannot do that with standard dial-up connections. With dial-up you can only use the telephone or the Internet, not both at the same time.

With the right equipment and broadband connection, it is now possible to communicate with other Deaf people using Video over Internet Protocol (VoIP). Some services in the United States now provide video relay interpreting using broadband connections. Unfortunately in Australia, we do not have adequate infrastructure or guaranteed delivery system regulations to enable the recommended transmission speeds yet.

Broadband is not yet available all over Australia. We are interested to know if any Deaf people live in areas where broadband is not available. Please let us know if you are unable to access broadband still.

At the moment AAD is trying to find out how many Deaf people use the Internet at home and also whether you are using dial-up Internet or have changed over to broadband. Correct information from your feedback will help us lobby the right people on broadband issues.

### Questions

*Please look at the Questionnaire and complete the information.*

- 1.1 Do you have a computer at home?
- 1.2 If you do not have a computer at home, can you tell us why you do not have one?
- 1.3 Which type of Internet connection do you have?
- 1.4 If you do not have broadband, are you interested to get it in the future?
- 1.5 Does your area have broadband?
- 1.6 Do you find using broadband is better than dial-up Internet?

## 2. What Broadband can be used for

At the moment, broadband users are able to use their computers and the standard applications that you have when you are logged onto the Internet using dial-up services. The biggest difference that Deaf broadband users have compared with dial-up services is the faster upload and download speeds, therefore they are able to view Deaf Internet TV, read information by viewing videos on some Deaf websites, use videotelephony equipment and communicate in sign language with ease.

Other things that broadband users are able to use with faster upload and download speeds:

- Multi-media services
- Information sourcing (on demand) delivered in sign language
- Visual communication (videotelephony)
- Video on demand
- Home banking and shopping
- Interactive games
- Education (database sourcing/online)
- Carer support (medical)
- Internet telephony
- and so on

### The Future?

The most significant breakthrough for Deaf people using broadband technology is that it is quicker and faster to read information available in sign language on websites and can also access videotelephony. For Deaf people, videotelephony has the potential to allow Deaf people who use sign language to communicate in their preferred language, for example a Deaf person can use a special video camera using broadband to communicate with another Deaf person using the same equipment. In addition, video interpreting over Internet protocol is growing in the USA and some other countries.

The benefits of videotelephony are many. They include:

- Visual communication in Auslan face to face on screen
- Faster and more natural communication than by TTY
- Has the ability to provide video relay interpreting
- Can save on travel and work time costs
- Improved work / educational opportunities and performance

When video over the Internet (VoIP) communication equipment becomes easier to use and is widely available, you will be able to use it to talk with other people in Auslan. It is also possible that a video relay service option could be included in the current National Relay Service. This would be especially useful for people living in regional and remote areas to access interpreter services through a video relay service, for example medical interpreting.

If you want to communicate in Auslan over the Internet, or you want to access a video relay service, then you will need to use broadband. Dial up phone connections are not fast enough for video communication.

Did you know that video relay service is available in several countries now? A picture of a video relay service is shown below:



Picture source: Sorenson VRS, USA

More information about Video Relay Services/Interpreting is available on the Internet. Listed below are some website addresses for you to visit for further information.

<http://www.aceinfo.net.au/Resources/Research/vri.html>

<http://www.s-vision.com>

<http://www.csdinterpretingonline.com>

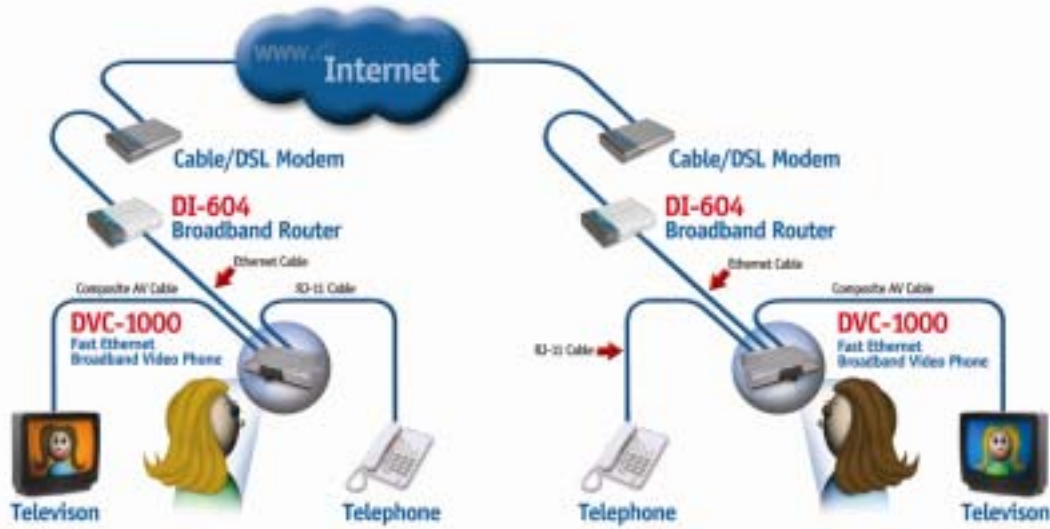
Recently, in America and the United Kingdom people have started using a special device called a D-Link Broadband Videophone that can turn any TV into a broadband videophone. It does not require a computer but is connected into your TV set and it delivers up to 30 frames per second for smooth video. It is also compatible with some flashing lamp systems.

## Broadband Videophone DVC-1000

*The Future is Now...*

*Easily turn your TV into a  
Broadband Videophone*





*Seeing is believing for Grandma*



*Peek-a-Boo.....I See You*

Picture source: <http://www.dlink.com/products/?pid=8>

This is not available in Australia yet and we are going to ask you some questions about this product in the questionnaire. Your comments will greatly help us to advocate for a similar product in Australia in the future.

### Deaf Internet TV

There are a growing number of Deaf Internet TV programs available on the Internet that you can watch on your computer. Shown is a picture of what it looks like on the computer screen.



Source: [www.zoom.coip.no](http://www.zoom.coip.no)

Listed below are some website addresses for these programs. Some of them use their native Sign Language, for example in the picture shown above, information is presented in Norwegian Sign Language.

Norway: <http://www.zoom.coip.no>

Switzerland: [www.focus-5.tv](http://www.focus-5.tv)

USA: <http://www.csd.tv>

Viewing these Deaf Internet TV programs is best and quicker when using broadband. If you use dial-up Internet, downloading these TV shows will take a very long time. There are no Deaf Internet TV programs available in Australia and we are interested to hear from you about your thoughts on this.

## Questions

*Please look at the Questionnaire and complete the information.*

- 2.1. If you already have broadband, what do you use it for?
- 2.2. If Video over Internet Protocol equipment was available in Australia, would you have it yourself?
- 2.3. What do you think of the D-Link Broadband Videophone?

2.4. If video relay interpreting was introduced in Australia, would you use it more than TTY National Relay?

2.5. Have you seen the Deaf Internet TV websites? Tell us what you think of them.

2.6. Do you think Australia should have a similar Deaf Internet TV service?

2.7. What other things do you think you might use broadband for?

### **3. Broadband Service Affordability**

There are lots of things you can use broadband for, but these things will only be useful if Deaf people can access broadband. Broadband is becoming cheaper. However if we are able to use videocommunication equipment in the future, we would need the higher guaranteed bandwidth (upload/download speeds) and larger download amounts, and these are currently expensive.

It is well known that many Deaf people are low income earners. This is because of the inadequate standard of educational opportunities and poor employment options and choices due to social attitudes towards Deaf (and disabled) people.

The minimum speed needed for Deaf people to communicate in sign language using video phones or video conferencing is 128kbps (but optimum quality is gained when uninterrupted access is at 384 kbps);

As a guide to pricing, as at 1 September 2004, Telstra ADSL broadband fast enough for video communication cost between \$79.95 and \$89.95 per month, much more expensive than the cheapest ADSL Broadband package available.

As well as a monthly broadband plan, in order to use video communication over the Internet, Deaf people would need to purchase suitable equipment (for example, a computer and a printer plus a video communication device), which is often expensive.

Do you think that AAD should look into doing more lobbying of the government and the Industry to make sure that videocommunication equipment is made available to Deaf people as part of our essential telecommunication equipment? At the moment, the infrastructure is badly in need of updating and the government is looking into which models to choose from for the new infrastructure. We want them to consider videoconferencing as part of the essential new infrastructure so we can use the telephone service in our own language. We need to know how you feel about accessibility of broadband in general.

#### **Questions**

*Please look at the Questionnaire and complete the information.*

3.1 If you already use broadband, do you think it is good value for what you pay?

- 3.2 If you do not already use broadband, can you afford to get it?
- 3.3 Would you buy equipment so that you can use video communication over the Internet?
- 3.4 Would you pay more for a faster broadband plan if you had reliable video communication equipment available at home/office?
- 3.5 Do you think broadband video conferencing equipment should be made available in Australia as part of acceptable telephone service for the Deaf?

#### **4. Accessibility of information about broadband**

Not everybody knows about broadband. Some people find it hard to understand what it means and why it might be useful for them. Many people also find it hard to work out which plan is best for them. Some people have also reported difficulties with getting their broadband connection working.

You can find information about broadband on the Telstra and Optus websites ([www.telstra.com.au](http://www.telstra.com.au) or [www.optusnet.com.au](http://www.optusnet.com.au)) or by visiting Telstra or Optus shops. There are also several other Broadband suppliers, for example, Primus, Ihug, Dodo, etc. It is always good to compare a few different services before buying.

We want to hear from you about your experiences on getting broadband if you have one yourself, or if you have had difficulty in accessing information on broadband services.

#### **Questions**

*Please look at the questionnaire and complete the following information:*

- 4.1 Before you read this paper, did you know anything about broadband?
- 4.2 If yes, do you think the information you already knew was enough information?
- 4.3 If you already knew about broadband, how did you find out about it?
- 4.4 If you already have broadband, was it easy to get it? If it was not easy can you tell us why?
- 4.5 Was it easy to set it up and get it working? If it was not easy, can you tell us why?
- 4.6 Have you seen the information about broadband on the Telstra and Optus websites?
- 4.7 If Yes, was the information easy for you to understand?
- 4.8 If the information was not easy for you to understand, what did you find hard?

## Comments and feedback

AAD looks forward to your comments on this paper. As you can see it addresses many issues. We may have missed some, so please tell us your ideas, concerns and thoughts.

**The deadline for feedback is Friday 29 October 2004.**

If you wish to provide feedback or ask questions, you can do one or all of the following:-

1. Fill out the questionnaire form and fax to:

Andrew Wiltshire  
Community Liaison and Projects Officer  
Fax: 02 9871 8400

2. Fill out the questionnaire form and post to (FREE POSTAGE):

Andrew Wiltshire  
Community Liaison and Projects Officer  
Australian Association of the Deaf Inc  
Reply Paid 1083  
STAFFORD  
QLD 4053

3. Electronically complete the form and email to:

Andrew Wiltshire  
Email: [andrew.wiltshire@aad.org.au](mailto:andrew.wiltshire@aad.org.au)

4. Visit AAD's website, go into DTAN Discussion page and type your comments on [www.aad.org.au](http://www.aad.org.au)

Your feedback and comments are very important for us because we need to know what the Deaf community feels so that we can represent you fairly when we lobby for increased services or goods.

After receiving feedback from the community, we will share your comments with the government, telecommunications industry, mobile phone providers, community services and the other members of the Deaf community as well as on our website.

Andrew Wiltshire  
Community Liaison and Projects Officer

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