

Bob Greeney, Director Technology, represented the ABA at the 35th General Assembly and associated meetings of the Asia-Pacific Broadcasting Union, hosted by the Radio & Television Commission of the People's Republic of China (RTPRC) in Shanghai from 28 October to 6 November 1998.

Broadcasting on the Internet and the Asia-Pacific Broadcasting Union

The ABU meetings focused on the effect of the Internet on broadcasting, copyright, trade rights in programming and developments in digital broadcasting. The meetings also considered program rights and whether the Internet will become the *Third Medium*. David Wood, Head of New Technology for the European Broadcasting Union discussed 'broadcasting' radio on the Internet in his paper, summarised below.

Streaming radio is radio program material that is delivered to a computer and played back as soon as the multimedia material arrives at the computer or Internet terminal. As little as three years ago, this was not considered a threat to traditional broadcasting because of the relatively poor quality of the audio. Although the quality of streaming audio has improved, Internet radio is still not as good quality as traditional radio and can at best be considered listenable rather than good.

More importantly, more than forty million people throughout the world now have RealAudio, an Internet radio software program available free from the web, and can listen to Internet radio.

While some think Internet radio is a threat to broadcasters, others consider it as more of a gimmick. Mr Wood noted that only about one hundred listeners can gain simultaneous access to a broadcaster's web site, whereas a free-to-air radio broadcaster may have hundreds of thousands of listeners.

Bandwidth limitations restrict the potential of broadcasting television over the Internet. High quality video will have to wait for higher capacity connections to the home and will need to be capable of delivering roughly ten times the capacity currently available

for delivery of good quality video. Ultimately, for digital television, broadcasting will need more than one thousand times the capacity of existing Internet data rates. Developments in digital compression rates and in the quality of receivers and computers will realise the improvements needed for real-time delivery of video material.

Broadcasters are also interested in the use of a broadcasting channel to achieve much higher data rates than can be achieved by current Internet delivery technologies.

Already some service providers deliver Internet services in the spare capacity of the analog television system. But, in a digital world, a television channel might be used to deliver up to twenty million bits of data per second, approximately three hundred and fifty times the current data rates achieved by telephone connections to the home. This increase in data rate plus the adoption of 'push technology' will significantly improve the capability of the Internet to deliver television pictures. Push technology relies on the service provider sending program content to each viewer as it becomes available. The material is stored or cached on the hard disk at the user terminal or computer and accessed later, thereby dramatically reducing the time required to access the material. Push technology works best for users who have a permanent high data rate connection to the service provider and the data can be downloaded at any time while the connection is otherwise idle. It works poorly over slower data rate dial-up connections.

The questions for broadcasters are, how should they embrace the Internet? and, will the Internet become the third medium, along with television and radio?

ABU's Planning & Strategy Group

The ABU's Planning & Strategy Group has been considering world trade in audio-visual services. There is concern as to whether trade agreements could conflict with some countries' domestic legislation relating to the preservation of cultural and national identity through broadcasting.

The General Assembly of the ABU is to commission the ABA to carry out a detailed study of how the interests of ABU members might be affected by negotiations on world-wide trade in audio-visual services. The ABA is to report to the 1999 General Assembly.

The ABU is also studying how it might assist its members in the transition from analog to digital broadcasting. All of Europe has adopted a European digital television standard; New Zealand and Australia are the first countries outside Europe to choose the European Digital Video Broadcasting (Terrestrial) standards (DVB-T). Singapore and China are assessing DVB-T and the US 8-VSB digital television systems and Singapore is expected to announce the results before the end of December 1998. China is also developing an HDTV system of its own. Japan has adopted its own system, Integrated Services Digital Broadcasting-Terrestrial (ISDB-T). Korea, Taiwan and Argentina have announced their adoption of the US 8-VSB system.

Members and affiliates are working on solutions to the issues surrounding the Year 2000 issue (known as Y2K).

Other discussion topics included copyright, program exchange and sports broadcasting in the region.

The next General Assembly and associated meetings will be hosted by the ABC, in Sydney in October 1999. □