

The \$35 million Television Black Spots Program aims to assist between 200 and 250 communities fix analog television 'black spot' areas. The program has two components: new services and replacement of obsolete equipment at existing self help retransmission sites.

The Department of Communications Information Technology and the Arts manages the Television Black Spots – Alternative Technical Solutions (ATS) Program and the Television Black Spots Program. The ATS Program will assist those communities eligible under the Television Black Spots Program but for whom analog retransmission solutions were not practical.

## Field surveys & black spots

As part of its work in the Television Black Spots Program, the ABA recently conducted analog and digital television field strength measurements in Bacchus Marsh, Victoria and participated with others in taking measurements in and around the Healesville area of Victoria.

One of the possible alternative technical solutions considered in the Television Black Spots – Alternative Technical Solutions program, is the establishment of digital television retransmission facilities. The field strength measurement surveys are used to test whether existing digital television services can be received in areas like Bacchus Marsh, or whether an additional digital television retransmission

facility is required to adequately cover the area.

### Bacchus Marsh

Bacchus Marsh is an analog television black spot in the Melbourne television licence area. Unfortunately, insufficient spectrum is available for an analog retransmission solution. In September 2002, ABA engineering staff conducted field strength measurements to measure the Melbourne digital services and determine if a digital television repeater was required. The measurements confirmed that while parts of Bacchus Marsh had poor analog television reception, there was adequate reception of

Melbourne digital television services.

A demonstration of the benefits of digital television, at a public meeting in the Bacchus Marsh Council offices in November 2002, created a positive attitude towards digital television in the community.

### Healesville

Healesville, population 5400, is approximately 60 km east of Melbourne in the Shire of Yarra Ranges. The shire

*Continued page 17*



The ABA's Ian Anderson measuring the field strength of the received television signal, and assessing the picture quality of the television program on the monitor.

The ABA field survey vehicle showing its pneumatic mast which elevates the receiver antenna 10 m high (an International Telecommunication Union standard height for field strength measurements). At this height the antenna avoids signal reflections from the ground, and so gives more accurate measurements.




would need to replace or be squeezed in alongside existing analog radio services, though interestingly, work is being undertaken on a variant of DRM: useable digital and analog radio signals share the same channel. Such a system would facilitate conversion of all analog services to digital.

DRM was developed for long-distance terrestrial broadcasting, the very wide-coverage niche currently occupied by HF and MF-AM radio. DRM could allow international services such as Radio Australia to go digital without the cost of high power satellites, or it could be used to replace wide-coverage AM services such as ABC regional radio.

In terms of regulatory responsibility, the MF spectrum used by AM radio is ABA turf while HF spectrum used by, say, Radio Australia, is administered by the ACA. As DRM is a narrowband system providing one service per channel, the ABA would be able to licence new DRM services under current law.

### **Working for success**

The ABA and ACA stand ready to facilitate trials of any digital radio technology. The ABA recently made VHF channel 9A available in Sydney for consumer-focussed trials of Eureka DAB,

coordinated by Commercial Radio Australia on behalf of a consortium of broadcasters. The trial has been delayed by a number of factors, including management of potential interference issues to adjacent television transmissions. The ABA is currently in contact with Commercial Radio Australia about the likely commencement date of the trials and any preliminary tests and will make spectrum available as required. 

**The full text of this address, including slides, is on the ABA web site:**  
[www.aba.gov.au/abanews/speeches/index.htm](http://www.aba.gov.au/abanews/speeches/index.htm)

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## **Field surveys & black spots**

*Continued from page 13*

council has applied for funding under the Television Black Spots Program. Spectrum is scarce, but planning work indicated that analog channels are available, although there was subsequent concern about the possibility of interference to viewers using the Selby analog television translators.

In January 2003, Broadcast Australia and GTV9 Melbourne conducted field strength measurements at Healesville, Selby, Marysville, Warburton and Northern Kalorama to confirm channel availability and coverage of the proposed Healesville retransmissions. Representatives from Network TEN, Broadcast Australia, the Department of Communications, Information Technology and the Arts, and ABA engineering staff were present during this survey.

As a result of this survey work, the ABA is confident that the Healesville analog television retransmission services can be established with minimal disruption to existing viewers. It is possible there will be interference to reception of the Selby translator in a relatively small area outside the intended coverage of this translator. However, the survey results indicate that viewers in this area would have alternative signal sources and few if any would be watching the Selby services. Nevertheless, careful management of the start-up process by the Shire of Yarra Ranges will be required should the shire accept funding under the program.



### **The Television Black Spot Program:**

The ABA's involvement, providing its planning expertise, is critical to the delivery of the Television Black Spot Program. At the end of February 2003, the program had replaced obsolete analog television equipment at 181 retransmission sites (at a cost more than \$4.5 million), and 535 new services in 175 black spot areas (at a cost of nearly \$13 million). A further 79 communities have been offered funding under the new services component of the program and are submitting fully costed proposals to establish television services at new retransmission sites.

### **For more information**

To contact the ABA: Freecall 1800 810 241  
To contact the Department of Communications, Information Technology and the Arts, Freecall 1800 680 841 or go to the web site: [www.dcita.gov.au/tvfund](http://www.dcita.gov.au/tvfund)