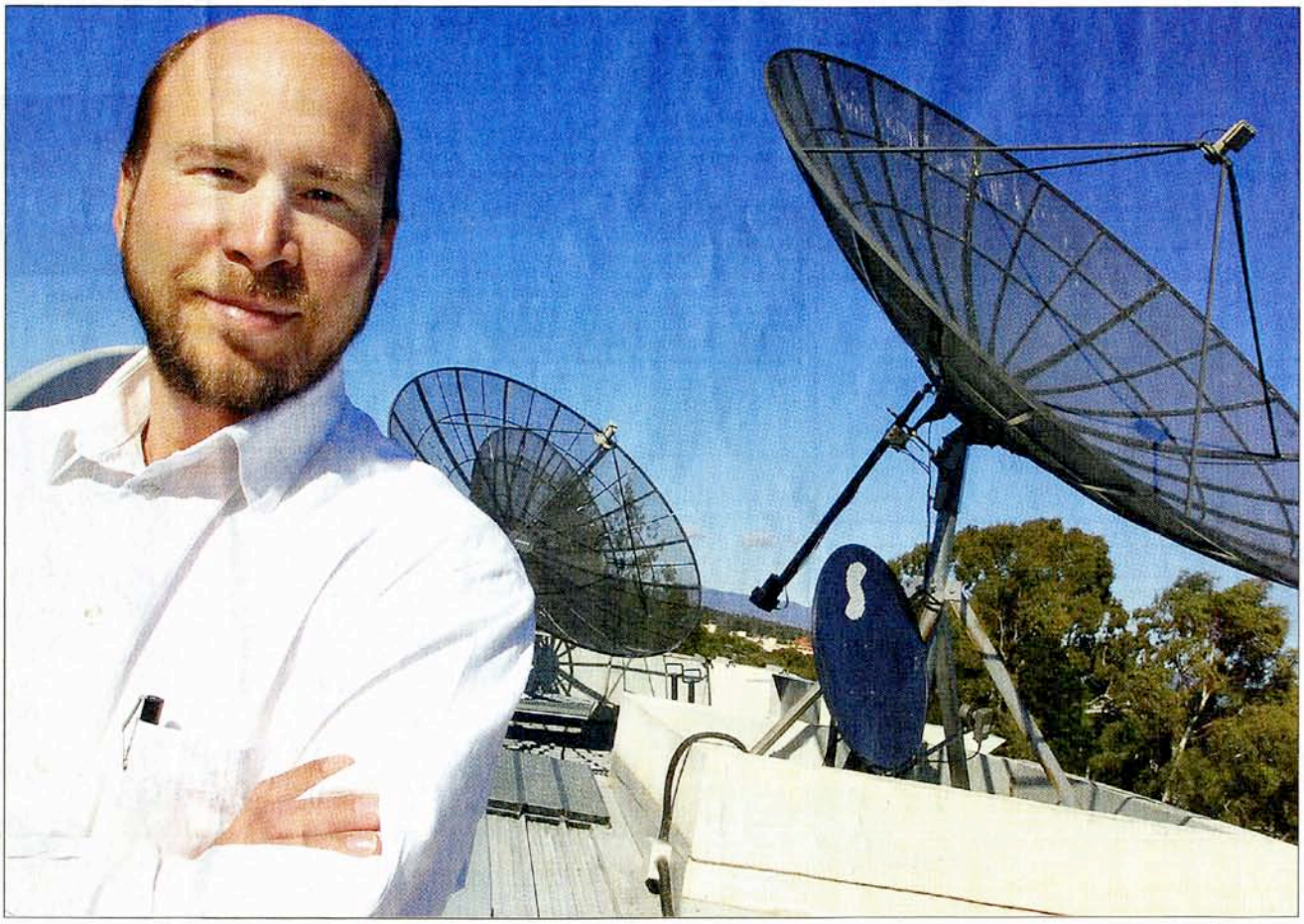

**SENDING SIGNALS:** The University of Canberra's George Bray says his project can spread TV over the web into regional areas. Picture: MARTIN JONES

# Switching the channel to Net TV

By Simon Grose

University campuses are winding down for the summer break, but at the University of Canberra George Bray is expecting three very busy weeks ahead.

The service delivery manager for UC's Division of Communication and Education, Bray is planning to lodge a bid for $3.3 million from the Commonwealth's Clever Networks fund by the December 18 closing date.

But he is missing an important ingredient – one or more bid partners willing to stump up a matching contribution to meet one of the key criteria for the program designed to boost broadband services in regional Australia.

Bray's UC team has been delivering 25 television channels online via the AARNet network to Australian universities, research institutions and schools, and to educational institutions worldwide via global educational networks.

"Now that we have achieved wide area distribution and can demonstrate that technology working, we want to do it at lower bandwidth to rural and regional users," Bray said.

If he mounts a successful bid in the next three weeks, that service plus five bespoke channels carrying content generated by research and educational institutions will become available to internet and 3G users in regional Australia.

"The outcome would be 30 television channels being distributed across Australia using IP TV in five different resolutions.

"The project is to expand upon the work we've done here, turning around digital television and building a large transcoding array so that the live channels go out in smaller formats.

"We're not saying this will be giving people eight megabit MP2 channels out in Woop Woop, but we'll be able to deliver the same content in 256K and 512K."

The six potential partners who are considering the proposal can expect a call from Bray this week.

"We are confident we will find some interested parties to put something together."

**TV SHOW:** A screenshot of BBC World running in the larger window at 8Mbps and a smaller version of this running below 400Kbps, both at 25 frames per second.

He expects partners to be looking for a commercial return from the venture but sees no future in a model based on charging by download volume for the compressed signals the service will offer.

"We need to get away from carriers trying to charge by the bit, it just doesn't scale for television," he said.

"We want the carrier to view these television services as free on-Net services or maybe they would see it as a subscription service."

One model is the free download service for large files and gaming offered by many ISPs.

"Our aim is to set up a peering architecture between AARNet and connected carriers and ISPs with an agreement that allows the free flow of educational services to their networks.

"That offers them the ability to provide those services on a subscription basis, for free, or however they want to do it."

UC established the service now provided via AARNet with the support of the Apple University Development Fund and the Department of Education, Science and Training. A $250,000 investment purchased eight satellite dishes and other equipment which allows them to provide free-to-air content on the high-bandwidth network.

The service is designed to support educational courses in languages, communication and other areas. If the funding bid is successful, the project will need to establish a legal framework to allow it to provide its service to a wider audience on a commercial basis.

"We can't answer the copyright problem without some expensive people looking at it and considering the architecture we are putting forward," Bray said.

"But our take on it is that now is the right time to do it and we are simply extending the footprint of existing free-to-air television suppliers."

Discussions have also begun with the ACT Education Department about delivering the existing service to all schools in the ACT.

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