CAUDIT

Council of the Australian University Directors of Information Technology

Regional Telecommunications Inquiry (Submissions)
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Dear Mr Estern

The Council of the Australian University Directors of Information Technology (CAUDIT) appreciates this opportunity to respond to the call for written submissions by the Regional Telecommunications Inquiry.

CAUDIT is a national body comprising the Directors of Information Technology of the Australian universities together with associate membership by the IT Directors of the universities of New Zealand, Papua New Guinea and Fiji.

CAUDIT's mission is to promote and advance the use and support of information technology in teaching and learning, research and administration in the universities through the competent management of IT services and the education of their clients. In this context, information technology includes both computing (in all its flavours) and communications, particularly as these relate to teaching and learning.

CAUDIT believes that Australia must plan now for the bandwidth that the current and emerging online Internet enabled applications will require. Inadequate bandwidth will impact on student participation in higher education and the productivity of academic staff in both research and teaching. Universities are leading the way in using Internet technologies to build virtual communities with a focus on consolidating people intellectually rather than physically.

The timing of the Regional Telecommunications Inquiry dovetails well with the decision by the Minister for Education, Science and Training to establish an expert committee to report back on the short and longer term needs by Australian universities for bandwidth to undertake high end research.

The above initiative by The Hon Brendan Nelson MP and Senator The Hon Richard Alston recognises the importance of bandwidth in the operation of modern universities and in particular the need for bandwidth to support eLearning via online courses, to support researchers undertaking complex collaborative research and to deliver to students

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administrative and support services. However the focus of this initiative is the provision of bandwidth between university campuses and the wider national and global Internet (see http://www.dest.gov.au/highered/programmes/BAC_intro.htm).

This submission focuses on the Inquiry's terms of reference relating to the delivery of Internet services to students living in regional, rural and remote Australia. CAUDIT does not regard itself as the appropriate body to comment on broader telecommunications issues that impact regional and rural communities.

Responses to the specific questions raised on Internet access (TOR 3) follow:

- How important is access to the Internet to you now and into the future?

Distance education students enrolled in Australian universities will require at least ADSL type "always on" connections to participate fully in the virtual learning communities with symmetric connectivity becoming increasingly important in the future.

The importance of online access in the student learning experience is supported by the deployment by most Australian universities of online learning environments and learning management systems (e.g. learning management systems such as Blackboard and WebCT).

These systems have facilitated communication with students, increased student independence, improved student – lecturer communication, improved access to learning materials and assisted in supporting new approaches to learning and teaching such as project-based learning and team-taught courses. A recent survey at a metropolitan university indicates that over 95% of students are using such a system regularly with off-campus use being the dominant form of access.

Video-over-IP technology is increasing in popularity between the metropolitan universities because it is very simple to use and support. This technology is likely to play a major role in lecturer - student and student - student interaction in the future.

However even desktop video-conferencing will require a minimum bandwidth IN BOTH DIRECTIONS of 256 kbps to be useful as a production teaching and learning technology. Asymmetric broadband services, such as ADSL and 2-way satellite are not suited to this.

- What concerns do you have about Internet access in your areas? What do you think about available data speeds, drop-outs or similar problems, and prices?

Internet access from a regional perspective is not promising due to the state of the tele-communications infrastructure, costs and a lack of competition. CAUDIT's concern is that the target of delivering 9.6kbps to 20kbps Internet access to all Australians is already well below that required to support the level of email communication and web access needed to participate in online education today. However it is drastically short of the bandwidth needed to support the emerging multimedia based desktop student – lecturer and student – student interaction.

- Are there any impediments to you or people you know 'getting on' line or accessing higher speed Internet services?

The major impediment for access to higher speed services in regional areas is lack of reach of suitable infrastructure and the cost for a connection. The federal and state governments need to play a more active role in the facilitation of bandwidth aggregation in rural and

remote areas and in the deployment of both fixed and wireless solutions. CAUDIT members are well placed to assist as regional university campuses are located in areas of population density and university IT departments have the necessary technical skills to facilitate bandwidth aggregation and the deployment of new technologies.

- Do you have a view on whether higher speed Internet services are reasonably priced and/or reasonably accessible?

Most universities with rural health schools are faced with major problems in providing adequate bandwidth to regionally located staff and health science students on work experience at the rural health clinics. This indicates that students would live in rural areas face even greater problems in obtaining high-speed Internet access to higher education.

Yours faithfully

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