



Office of the Vice Chancellor

Friday, 25 February, 2011

Standing Committee on Infrastructure and Communications

By email ic.reps@aph.gov.au

Submission to the New Enquiry into the National Broadband Network

Thank you for the opportunity to make a submission to the Australian Government's role in the National Broadband Network. This submission is made on behalf of Southern Cross University. The University commends the Australian Government for their commitment to the delivery of high speed broadband to all homes and businesses across regional Australia.

This submission outlines the significance and potential application of the National Broadband Network (NBN) across the University's foot print of regional New South Wales and south east (SE) Queensland. It refers to a range of key opportunities and challenges that have been identified through a snapshot of regional needs and priorities for NBN that has been undertaken by Southern Cross University in close consultation with a cross section of regional stakeholders.

These potential applications based on regional needs identify the associated development opportunities for regional Australia. This submission outlines the key themes that have emerged and are considered critical to realising the social, economic and environmental benefits of the NBN.

- **Regionalism: building resilient, decentralised and connected regional communities.**

Southern Cross University maintains a strong connection with the needs of our regional communities through its Regional Futures Institute (RFI). With a focus on Policy and Planning, the RFI provides pragmatic leading edge research to help develop and sustain small to medium enterprises (SMEs) that continue to flourish across our growing eastern coastal regional corridor. The NBN is seen as a key enabler to this region and forms a core theme that will connect, drive and provide equal opportunities in ways that have not been previously possible. With many of our remote communities yet to embrace any broadband (including ADSL) while our local town enterprises are more often reliant on establishing their own network solutions, the NBN presents an essential leveller and enabler for sustainability to grow our digital communities. Southern Cross University established the GoBroadband alliance (www.gobroadband.org.au) to facilitate collaboration from local councils, Regional Development Australia (RDA), education and health service providers and the many local SMEs. The first research driven initiative from the alliance is our eDemo Drop In Centre. This industry sponsored facility provides a physical location for demonstration, workshops and seminars of the capabilities of high speed broadband

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together with key staff that can provide impartial advice to the community. The first centre is being established at Coffs Harbour, one of the trial sites for the NBN, with others planned across regional northern NSW and SE Queensland. The introduction of the NBN has provided excellent new opportunities to connect key regional industries and help the essential decentralisation of the Australian population as outlined in the attached submission document originally supplied to the Hon Stephen Conroy, the Minister for Broadband, Communications and the Digital Economy. Our research and education provision into Policy and Planning for regional Australia will be enhanced through the introduction of the NBN as a focus and an essential catalyst for driving resilient connected communities.

- **Health: increasing the quality and accessibility of health provision to regional and remote communities.**

At Southern Cross University we recognise that one of the great benefactors of the NBN will be the enhanced health service provision for regional Australia. The regional health sector's ability to deliver high quality, affordable health services to regional Australia is currently inhibited by a range of factors currently affecting health delivery across the country. These include the rise in chronic disease, an ageing population, lack of access to specialist services and skilled workforce shortages. The delivery of health services to regional, and particularly remote, communities within the Eastern Regional Corridor (ERC) is further compromised by the distance from the main capital cities which impacts on a patient's ability to access specialists and the high levels of social disadvantage within communities throughout the region. The high speed broadband has the potential to contribute to improvements in the delivery of and access to healthcare to regional communities and to build on Southern Cross University's expertise and reputation in this field. Southern Cross University is recognised as providing world class research in Nursing (ERA, Excellence in Research Australia ranking) and has a well established research centre in Aged Care (ASLARC). The opportunity to further develop our telehealth research for home patient monitoring, funded by the Department of Health and Ageing, is just one example where high speed broadband and the NBN will be welcome. Similar issues, i.e. lack of easy access to specialists and support groups, are faced by regional patients of all age groups living with a range of chronic conditions including Parkinsons disease, diabetes, dementia and obesity. Research underway with our Cognitive Science Research Cluster will enable the wider use of IPTV 3D feedback systems for rehabilitation which is only possible with today's technology at established university and research centre sites. The introduction of the NBN provides greater opportunity for essential collaborative research across our ICT, social science, business, health and wellbeing disciplines.

- **Aboriginal Communities: focusing the benefits of the NBN to close the gap with regional and remote Aboriginal communities.**

The Many Rivers region of NSW, of which the Southern Cross University is a part, has the third largest Aboriginal population in Australia and is home to 39,360 Aboriginal people. As stated in the 2006 Census, the Aboriginal unemployment rate is 14% compared to the national regional average of 5.6%. Within the Eastern Regional Corridor, Aboriginal

communities are frequently found in remote socially disadvantaged areas where access to transport and public services, including health services, is limited. The high speed broadband, together with the use of ICT in general, has the potential to overcome geographic isolation in addition to providing access to ICT-based business and employment opportunities. The needs of this community are particularly complex within remote communities like Bowraville where a lack of access to transport, medical and support services combine with high levels of entrenched social exclusion (i.e. both place-based and multi-generational disadvantage). Broadband technologies have the potential to assist in overcoming isolation, improving access to health and related services particularly through the establishment of digital health and wellbeing hubs and facilitating the development of a range of culturally appropriate health and wellbeing services. The potential for the NBN is already being researched through our eHub projects and is providing new collaborations across our Gnibi School of Indigenous Australian Peoples, the Regional Futures Institute and the School of Health and Human Sciences to include the Centre for Children and Young People and the Northern Rivers University Department of Rural Health. Working with local organisations to include the Saltwater Freshwater Arts Alliance Aboriginal Corporation, the Indigenous Coordination Centre (Coffs Harbour) and Keep Australia Working (DEEWR) has exciting possibilities once the NBN is rolled out across the community.

- **Education: increasing the quality and accessibility of education provision to regional and remote communities.**

Southern Cross University has six Australian campuses plus overseas based students through our strong international links. Southern Cross University currently has over 16,000 students, with around 3,000 enrolled as external distance learning students. All of the units taught at the University have an online presence with extensive use of video conferencing, web-conferencing, video, audio and other online tools to facilitate learning. High speed broadband would enable Southern Cross University to provide students with opportunities to engage in world class communication and media rich student-centred learning environments. Limitations of the current available bandwidth are restricting teaching innovations and students' access to the types of technologies that are available overseas. In particular, improved bandwidth would enable improved collaborative learning opportunities for all students and provide opportunities for links with industry and other universities to create engaging learning environments. Southern Cross University's Converged Delivery Project is currently designing and developing an innovative range of learning and delivery designs that respond to the technical opportunities available in the 21st century. The University is acknowledging that students need be able to access flexible, relevant and engaging study options to meet their work and family responsibilities. The aim is to develop a new generation of flexible delivery. Many of the innovations being trialled would benefit significantly from greater bandwidth so that all students can effectively access and contribute to the learning activities. For example, the use of virtual environments allows study content to move away from static text and one-way media downloads to collaborative, media-rich and immersive learning options. By enabling students to engage with professionals in industry, authentic and inter-active learning environments are being created to allow students to practice workplace skills. These activities will encourage

students to be 'work-ready'. Virtual legal moot courts, online scenario-based learning for health professionals and virtual hotels where tourism students can practice frontline management skills and interview skills are some new developments. Other opportunities include: students access to high resolution images and video facilitating new learning experiences in many university subject areas, such as nursing, environmental science, visual arts and music; effective collaboration with other students in Australia and overseas via web and video conferencing, exchanging media-files and content to enrich their learning experience; and improved communications with researchers in other Universities, in Australia and overseas, facilitating more collaborative research projects. Improved access to higher bandwidth would enable Southern Cross University to demonstrate how regional Australia can provide engaging learning experiences for all students, regardless of how, when and where they study.

The regional footprint of Southern Cross University extends from Coffs Harbour in the south, to Lismore in the Northern Rivers and Gold Coast in the North. The University considers its role to be a catalyst for regional innovation and to support the realisation of the potential application of the NBN rollout within this region.

Southern Cross University would welcome the opportunity to discuss the contents of this submission with members of the Standing Committee. Professor Peter Croll, Southern Cross University's Professor of ICT, has been instrumental in promoting the use of the NBN across our footprint. He may be contacted directly on _____ or email _____

Please feel free to contact me directly to arrange for further comment as required.

Yours sincerely,

Peter Lee

cc Prof Peter Croll, Professor of ICT, Southern Cross University

Attachments: *"The benefits of early adoption for the National Broadband Network spanning Australia's Eastern Regional Corridor"* – original NBN Submission supplied to the Hon Stephen Conroy, the Minister for Broadband, Communications and the Digital Economy and NBN Co.