TROPICAL INNOVATION PROJECTS – ICT Game Changers

Title:	**TROPICAL INNOVATION PROJECTS** **Living in the Tropics; Business in the Tropics; Energy and Water Management in the Urban Tropics – ICT Game Changers**
Project Description:	Here we are proposing a set of independent, lightweight ICT projects that 'connect the dots' between many entities that are already innovating around tropical knowledge. A common thread is the use of digital technology, including, but not limited to the NBN. We are proposing to 'do' not 'plan', building services and insights that can be used as both demonstrators and initiators of new approaches to business and living in tropical Australia. Tangible ICT products and services will be developed on fast broadband platforms to both engage and 'power up': business, tourism, as well as sustainable living in the Tropics. These products will be mentored into the region by the "Broadband for the Tropics" (BftT) committee, who will monitor their progress and adapt plans to changing circumstances. At the end of the project period we anticipate that industry funding will sustain and grow the program. The skills, maturity and competitiveness of the regions ICT industry will also be enhanced.

Objective:	Our overall aim is ambitious but essential to the continuing development of the region. We intend to foster long-term cultural change in tropical Australia related to the adoption of technology to enhance business and liveability in the Tropics. This goal is seen as essential if tropical Australia is to best capture a leading place in the forthcoming Asia century and develop a vibrant ICT industry to provide essential support to the natural resource industries that characterise the region. Most of Asia is located in the tropical zone and continues to grow faster than western countries, providing many opportunities for growth and supply of innovative products and services relevant to the tropics.
	Three sub-projects related to themes in business, urban environments and living in tropical Australia have been selected as elements that are considered essential to the long-term development of the region. While substantial benefits could flow from other activities (e.g. agriculture) these are being pursued by other means and they would require a substantially larger investment to yield definable returns.
	Each program of activity will produce tangible products and services that have been previously scoped and practical processes of outreach and measurement will be engage. The wide reach of the BftT committee will be important in this activity and also underpin its success.
	Appended to this proforma are short individual project outlines as well as a proposed governance framework.
Target Outcomes	Three sub-projects are the principle outcomes of this project. These three activities talk to three themes:
	1. Living in the Tropics, 2. Business in the Tropics, 3. Energy and Water Management in the Urban Tropics.
	Each of these will address common challenges associated with tropical Australia and seek to develop new place-based insights and tangible engagement, business uptake, primary data acquisition and changed behaviour/processes related to each of them.
	All the projects will be developing tools (e.g. mobile Apps), functional web sites, systems of data acquisition /synthesis, sensor networks and new business processes to target each of our themes.
	As well as the technical development, the organisation networks and connections of the partners will be engaged to promulgate and evangelise the project outputs and build community engagement and adoption of new approaches.

Output(s):	Specific project details are appended to this proforma.
	Each of the allocation areas will have individual teams operating under common supervision and project management methodologies.
	A project board, the PMG, directed by the BftT will oversee both technical development and development of community/sectoral engagement groups that will finalise requirements and service outputs.
	Established adaptive project management principles will be used concurrently to develop tools with direct client input. This approach is not only faster and more responsive but also optimises on solutions of direct importance and functionality.
	The soft infrastructure developed will be managed by the BftT with the goal of securing private investment to maintain the services into the future.
Proponent: (details as appropriate)	**Proponent: "**Broadband for the Tropics" Committee
	Project Sponsor: "Broadband for the Tropics" Committee
	Project Manager: TBA. Possibilities include Townsville City Council (or other regional councils as appropriate). A governance structure will be put in place using experience gained in many other local government, university, business collaborations that both ensure outcomes and foster engagement and partnerships.
	Project partners:
	Regional Councils: Townsville City Council, Cairns Regional Council and Mackay Regional Council
	Queensland State Government.
	Local ICT industry forums: MITN (Mackay), Digital Cairns, TICTBN (Townsville)
	Research and Industry partners: James Cook University, Ergon Energy, AURIN, QCIF, ScienceMob Inc., Anittel, Chambers of Commerce, Business Enterprise Centres, Construction Industry, Townsville & Mackay Medicare Locals, IBM and Taggle Inc.
Cost of project:	$4,000,000 – for all three key sub-projects. Management costs and infrastructure costs are common and can be shared between projects in this suite.
Government contribution:	$2,500,000 in direct federal funding is sought here.

Other Contributions:	$1,500,000 in direct and in-kind contributions from the project partners. These projects are built on significant investments from entities such as JCU (Tropical Data Hub), Australian Urban Research Infrastructure Network (AURIN), Queensland Cyberinfrastucture Foundation (QCIF), Australian National Data Service, IBM (Smart Cities), CSIRO and others involved in ICT research in tropical Australia.
Private investment:	While timing has prevented the cash contribution of private firms, the project has had considerable private engagement. When established the intention is to continue the activities with investment from private organisations. Across the projects we have already attracted >$500,000 private investment (such as the Finlay Homes Innovation house and ScienceMob Inc.) that these project build on. The BftT committee is a volunteer effort that entrains >$100,000 p.a. in-kind support from community and business leaders across northern Queensland.
Consultation:	The BftT committee has been established for over two years. It is a unique, broad-based group of representatives from across all sectors of the northern Queensland economy, aimed at increasing digital literacy by supporting initiatives that develop the regions' participation in the Digital Economy. Through its' efforts the BftT has effectively engaged business, all levels of government, community organisations and academia in a bottom up, grass roots campaign to develop a 'regional' digital economy. It is the broad but deep engagement from experienced personal that has fostered the initiation of these projects.
Investment ready:	The project is based on long standing activity undertaken by BftT and the partners described herein. The majority of the sub-activities have already been investigated and /or have been the subject of previous funding applications. Detailed project plans will therefore be straightforward to develop. In some cases there are existing project plans. Accordingly, these projects can be activated very quickly and skilled technical and project management staff are available at short notice. Our experience is that the slowest step will be project contracting, but can be operational within 1 month of confirmation.
Job Numbers:	If funded in full this project will employ c.a. 20 staff for 12 months. Past this point a sustainability model will be developed that we anticipate would employ >6-8 staff in operational roles funded by industry partners. Staff will be employed across Mackay, Townsville and Cairns.

Additional Indicators of success:	Two principle indicators of success will be used beyond metrics associated with 'simple' delivery of the project. First we will use an agency such as NICTA (National ICT Australia) to independently assess the technical quality of the products and provide long term guidance for their development. Secondly we will assess the value of the program to the northern ICT industry (as assessed by participants in the engagement groups). We will also track linkages to other projects and flow-on projects, in particular we will foster start-ups initiated to exploit the commercial opportunities developed.
Linkages to Northern Queensland Strategy	The activities encompassed by these three projects will align with regional digital economy and economic development plans of the partner local government authorities.
Related Strategies:	The concept of binding digital strategies across the regions in northern Australia has been reflected in the developing digital economy strategies of Mackay, Townsville and Cairns. Development of ICT and NBN powered services was identified as one of the economic 'turbochargers' that will underpin the Townsville Futures Plan. These projects are the direct result of the initiative of the "BroadBand for the Tropics" Committee, a broadly based regional organisation.
Regional significance:	Without an investment of this type there will be a large gap in the industry and innovation base in tropical Australia. ICT and knowledge industries need to be a significant component of future northern Queensland economic growth. This is a necessary skill base required to capitalise on the natural resources base of the tropical Australian economy in the forthcoming Asian century. In addition, this project will be an important catalyst to extend the economic base of the region from natural resources and tourism to incorporate human resources and creativity.