

Economics Legislation Committee
ANSWERS TO QUESTIONS ON NOTICE
Industry, Innovation, Science, Research and Tertiary Education Portfolio
Additional Estimates Hearing 2012-13
13 February 2013

AGENCY/DEPARTMENT: Commonwealth Scientific and Industrial Research Organisation (CSIRO)

TOPIC: Tasmanian ICT centre

REFERENCE: Written Question – Senator Bushby

QUESTION No: AI-107

Please provide a breakdown of the projects/companies that the \$50 million package to help Tasmania to “build the skills and tools needed to benefit from the digital age” announced by Senator Kim Carr in April 2011 has been spent on or allocated to.

Please outline whether these projects/companies are in Tasmania or are Tasmanian.

Is/was there any formal agreement in place to ensure the money was spent in Tasmania? If not, why not?

ANSWER

The \$50 million package announced in April 2011 has been spent on or has been allocated to projects to develop infrastructure, build skills and create new business opportunities within Tasmania.

The emphasis of the work in Tasmania has been to use the existing extensive data systems in Tasmania to conduct analysis to support decision-making in new and more efficient ways. Target activities include improving energy use, monitoring fish stocks, protecting the oceans, developing food production capacity and managing water resources. The work is in close collaboration with University of Tasmania (UTAS) in order to develop critical mass in Tasmania. Transfer of the technology to local industry is facilitated by a Research Investment Advisory Committee, consisting of representatives of the local ICT industry.

The majority of the projects funded and described below are being carried out in Tasmania, and to date, more than 90% of expended funds have been spent in Tasmania. The exceptions are expert consultants from the CSIRO who work to develop and transfer expertise to Tasmanian researchers. There is no formal agreement in place to ensure the money is spent in Tasmania, because the objective to spend this money in Tasmania was clear and has been adhered to through the targeted Tasmanian projects. There is no provision to grant funds to companies. Funds have been set aside for related PhD and postgraduate scholarships with the UTAS, for a relevant collaborative research engagement with the University of New South Wales (UNSW) targeting Tasmanian-based UNSW students, and one top-up scholarship with the University of South Australia is underway with the student engaging directly with the Tasmanian ICT Centre (ICTC) lab. The CSIRO will continue to collaborate with other research organisations, government agencies and companies to implement projects that have beneficial impact for industry and the community.

The projects being undertaken under this package are:

The Sensing Tasmania (SenseT) program combines historical and spatial data from Tasmanian government agencies, utilities and research bodies with real-time sensing data in a new state-wide sensor network, making this information available to the community. The work is being undertaken in Tasmania with UTAS the primary partner. IBM has also agreed to become a formal partner in the SenseT program (IBM's Australian head office is in NSW). The other industry participants in the SenseT program are all Tasmanian based primary producers that are collaborating on practical projects such as aquaculture, viticulture and dairy beef production.

Integrated Water Resource Management is addressing the development of sensor networks and information systems for monitoring and predicting water levels as a basis for optimizing use by a wide range of different users in Tasmania, such as farmers, tourism operators and the hydroelectric energy industry.

Our Resilient Coastal Australia is developing coastal sensor networks and technologies for monitoring and predicting oceanographic phenomena, for use in studies of climate adaptation, biodiversity, fisheries management, marine toxins and algal blooms effecting aquaculture and recreational fishing.

Interactive Social-Environmental Prescriptive Analytics Services Computing is developing technologies for analysing social media content in support of Tasmanian government and commercial decision-making. Applications include emergency and disaster detection and monitoring, trend analysis for government planning and commercial marketing, and text virality/trend analysis. This work also includes the informal transfer of technology from similar research within the ICTC dealing with Federal government data and with associated skills development in Tasmania.

Sensing Middleware Architecture is a technology development project designing interfaces in the sensor network systems to increase the amount of raw data and services that can be integrated in analysis.

Cloud Computing Infrastructure Maintenance provides storage and application hosting for some sensor networks.

There are also a number of smaller scale projects being undertaken with the funding announced in April 2011 in the areas of obesity monitoring and prevention, energy system modelling and energy demand management, prescriptive analytics, and the automation of scientific discovery in large and diverse data and sensor systems. Whilst these projects are being undertaken by the CSIRO's Tasmanian-based researchers, the project outputs are likely to have benefits beyond the Tasmanian coastline.