

# Canberra was a tough call, but cooperative

It's a tough call running a government conference in Canberra in the middle of winter to focus on the spatial information industry which, despite its best efforts, continues to suffer from lack of high-level political as well as general public recognition.

And it's even tougher when the conference follows on the heels a national Budget that many spatial industry people saw as failing to specifically fund or openly recognise critical spatial projects - such as a national spatial data infrastructure and acceleration of the program to build a national positioning network. (This perception may well prove to be unjustified as the Government's \$32 billion infrastructure program rolls out over the next several years with its focus on roads, rail, ports and environmental projects - all developments with a big spatial work content.

As one leading industry figure told LANDMARK: "We may not have gained the recognition, but we certainly got the money. In the present environment with all the financial constraints facing the Government, that's not a bad result."

Despite these perceived and practical headwinds, a majority of attendees at the inaugural spatial@government conference held in Canberra during June, voted it a major success, with preliminary dis-

cussions already underway for a repeat next year. The conference attracted an over-full house of 348 delegates and registrations had to be closed off the week before it opened.

A key message to emerge was the significant business leverage that can be achieved when you use the location components that sit in most government information and datasets.

The conference also helped boost the newly evident collegiate spirit between the spatial industry's private, academic and government organisations and opened the door to increased internationalisation of the Australian industry.

China's Ambassador to Australia, Mr Zhang Junsai, set the international cooperation theme running by calling for increased cooperation between China and Australia on spatial technologies.

The global financial crisis and the accelerating importance of green technologies in the world economy had placed greater importance on science and technology, he said.

"Our two countries should seize this historic opportunity by working more closely on science and technology," he added.

"Australia has great strengths and a solid foundation in research and development. China enjoys favourable conditions



and a big market for commercialisation. This complementarity promises a broad prospect for our cooperation in science and technology. We should also explore ways to conduct joint ventures and joint research with third countries.

"Science and technology have no national boundaries. Major challenges such as population growth, climate change, shortage of natural resources, and natural disasters are confronting human society.

"Spatial information and other technologies will play an increasingly important role in the survival and development of mankind.

"China stands ready to work with Australia to develop these technologies, strengthen our cooperation in science and



**ODDSPOT**  
Economist Allan Smart, principal author of the groundbreaking ACIL Tasman study of the impact of the spatial information industry on the Australian economy, got his own personal lesson on the value of spatial technology. While he was attending the conference dinner, a thief broke into his car and stole his GPS unit.

Left: VSC independent chair Oline Hedberg with fellow council member and SIBA vice chairman Glenn Cockerton were among the delegates at the conference.

Above: ANZLIC chairman Warwick Watkins

contribute to the well being of our peoples and the whole of mankind."

New Zealand's, CEO of Land Information, Colin MacDonald, quickly followed up the theme by calling for better links between the Australian and NZ spatial communities.

"It doesn't benefit any of us to see developments being reinvented on either side of the Tasman," he said.

New Zealand was interested in co-operating with Australia on spatial research and innovation and also looking at the possibility of partnering with Australia's CRCSI rebid program, he added. (This partnership was announced several weeks later.)

Dr Neil Williams, CEO of Geoscience Australia said that location was an enabler of government business and a common element in the increasing number of significant national and global issues we

faced today. These included climate change, water scarcity, national security and terrorism concerns and a whole raft of social issues such as health, unemployment, social disadvantage, education and provision of services to indigenous communities.

"Location has become an increasingly important component of many aspects of our daily lives that would never have been imagined even twenty years ago," he said.

"Governments are increasingly recognising the link between these major issues and location.

Today, we can relatively easily exploit the location component that resides in most of the information governments use to support policy development and service delivery requirements.

"But are we effectively exploiting the connection provided by location that is

resident in most of our key national issues at a level beyond individual agencies?

"Are we benefiting from the common link provided by location?"

"We have made great progress in this area, but more needs to be done."

**Trust a Scotsman to continue to seek answers to tough issues.** Colin MacDonald, CEO of Land Information for the NZ Government, told the conference that the spatial information industry still faced an identity problem.

What was needed, he suggested, was an accurate and readily understandable description of spatial information and services and their importance to society. He described it as an 'elevator brief'— something you could use to convince your captive audience when you are travelling from the ground floor to level 18. Most delegates thought it was a neat way of putting a new focus on a continuing industry problem.

**THE TOP OF THE HILL HEARS THE MESSAGE**

The spatial information industry 'message' and the importance of the industry to the national economy seems to be gaining momentum in Canberra.

Resources and Energy and Tourism Minister Martin Ferguson (pictured below) told the Spatial@Government conference in Canberra that many of his colleagues in Federal Cabinet were discovering the importance of spatial information and its associated technologies.

Besides its positive impact in the resources sector, particularly in open cut mines, and in tourism (where it is becoming an essential service for activities like remote four-wheel tourism), Mr Ferguson said that Government agencies with social responsibilities were increasingly turning to location-based approaches to better focus program delivery.

"For example, predictive modeling can be used to assess health requirements by area or region, thereby helping to plan the long-term deployment of health infrastructure to maximise its utility for regional communities," he said.

"In the time I have been the Minister responsible for Geoscience Australia, I have learnt a lot about the important contribution spatial technology makes to our lives and the opportunities it presents for the future.

"It is a fascinating area of technology that is moving ahead in leaps and bounds and one in which Australia is a recognised world leader.

"As Minister for Resources and Energy, I have seen first hand the efficiencies gained in mine sites from high-precision navigation capabilities.

"Australia's early adoption of global navigation satellite systems has helped make us one of the most efficient resource producers in the world in many ways, for example by increasing the accuracy of seismic and drilling surveys.

"Spatial data and GPS have allowed the mechanisation of many mine activities, including the transport of ore and therefore productivity has improved, along with mine safety.

"Spatial technologies also enable the use of selective mining technology which can position a mechanised shovel in exactly the right place to maximise ore extraction.

"A recent Allen Consulting study noted that selective mining is being used by about 15 per cent of open cut mines in Australia.

"There are tremendous productivity gains available using this approach and more than half Australia's mines are potential candidates for the technology." Geospatial technology would soon be regarded as an essential capability in any advanced economy, he added.



Dr Williams said that some important questions that needed to be considered were:

- How could successful examples of spatial enablement be applied more broadly to build a robust location-based framework?
- How do we ensure that the framework remains robust and long term?
- What are the roadblocks to developing a framework and how do we get around them?
- How do we ensure ownership of the framework by all stakeholders?

"These questions are well worth considering," he added, "because the benefits of the framework are great.

"They include improved evidence-based policy, streamlined policy evaluation and monitoring, more focussed, coordinated and improved service delivery, more efficient internal business processes and reduced costs through shared capability."

ANZLIC chairman Warwick Watkins was among the minority of industry leaders who were upbeat about the government's recent Budget decisions.

"Because spatial has become so ubiquitous you do not have to have the term explicitly stated for there to be major relevance to the industry or the subject matter," he said.

Among recent Budget decisions he described as "very positive as many have a strong link to spatial", were:

- Government funding of \$80m for infrastructure and research into terrestrial ecosystems, groundwater and built environments;



- A \$40m space research program and creation of a space policy unit;
- \$52m for the Collaborative Research Networks program to help smaller and regional universities collaborate with other research institutions;
- A doubling of the level of collaboration between Australian businesses and universities;
- A Commonwealth Commercialisation Institute with \$196.1m to develop a 'radical' new approach to commercialising the best Australian research;
- A desire to see more funding from overseas research organisations spent onshore, and
- A goal to see a 25% increase in the number of businesses engaging in innovation over the next decade.

"These are major announcements and very significant building blocks for the spatial industry," Watkins said.

He added that major areas of change in spatial information would continue to result from technology and data convergence.

Yvonne Thompson, of Victoria's Emergency Services Telecommunications Authority, is not a Scot, but she is certainly a stirrer in the cause for greater access to government spatial data – especially for our emergency services. "I don't accept that," she responded loudly when she questioned one government speaker about the availability of a new government dataset listing schools and childcare centres throughout Australia. She was told there might be a problem about releasing the data because some of the business addresses of the operators could be considered as private information.

Many delegates agreed with Yvonne and asked: Are privacy restrictions being pushed too hard?

These included enhanced data mining techniques to derive increased value from existing and new datasets and expansion of the concept of location intelligence.

All of this was being driven by the need to meet the needs of society and to gain the knowledge and understanding to develop the tools and capacity to address challenges such as climate change and the fundamentals of how our earth functions and the interrelationships between this and our society.

"There is an emerging era of making the coordinates that are the corner stone of spatial information intelligent and dynamic rather than a static reference point," he added.

"This will build the fifth dimension of spatial information where, instead of us looking at the one, two and three dimensional models that GIS has become famous for and the fourth with time, we become part of the data stream and work within the datasets as an intertwined and inter-related set of relationships.

"In some respects, physically and mentally acting and making decisions within a dynamic framework of inter-connected thought processes and tools not unlike (the way) our brain and body currently navigates our path through the landscape we live in. We need an increased period of partnerships and collaboration to bring this to reality."

Watkins added that key areas of focus for ANZLIC included:

- Spatial Information as an infrastructure in its own right and to support other infrastructure – importantly also as part of the underpinning of the various stages of planning, building and monitoring built traditional infrastructure such as roads, railways and ports.
- Skills and knowledge development as this will be the food that fuels our future economic growth and social wellbeing.

Seventeen indigenous delegates attended the conference – seven were sponsored by ANZLIC and ten others by various organisations including the Office of Spatial Data Management (OSDM).

Fittingly, several conference sessions focused on how spatial technologies can create a better understanding of indigenous mobility and enable improved government service delivery to outback communities.

- Spatial Data infrastructures through the Australian Spatial Marketplace;
- The National Elevation Data Framework (NEDF) and the continued work on data interoperability.
- ANZLIC's current work on establishing the framework and model for addressing the rights, restrictions and obligations around the land parcel.

"We have the chance to build on our physical and knowledge infrastructure and to leverage off the NCRIS AuScope project to achieve integrated research and an operational GNSS CORs network – a true partnership with private and public sector bodies and combining research and operational needs," Watkins added.

"We also need to leverage off the AuScope Information grid, the new thrust by ANZLIC to revamp the ASDI in collaboration with NZ and the core work undertaken in our cooperative research centres and our universities with a structural SDI wrapper which creates the framework, linkages, rules and guidelines within which a dynamic SDI can be developed.

"We are not starting from scratch and have to avoid the black box syndrome with its centralized hierarchical approach.

"This is a core area for ANZLIC together with the inter-related metadata work to promote the understanding and use of our spatial metadata tool and the guidelines."



Right: SIBA's David Hocking and conference convenor Ben Searle found plenty to discuss about conference proceedings

Above: Geoscience Australia CEO Dr Neil Williams.