

**NATIONAL INNOVATION SYSTEM REVIEW****SUBMISSION BY**

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**DECLARATION OF INTEREST**

The Australian Spatial Consortium is made up of the six lead organisations in the spatial information sciences in Australia; ANZLIC – The Spatial Information Council, the Australian Spatial Information Business Association (ASIBA), the Spatial Sciences Institute, The Cooperative Research Centre for Spatial Information, PSMA Australia Limited and 43 Pty Ltd.

The Australian Spatial Consortium tackles issues in the national interest on behalf of its members where those interests can (best and only) be progressed through partnerships that reach across the sectors and existing institutional frameworks. The members of the Consortium believe that the National Innovation System is one of those interests.

**SUMMARY**

The Australian Spatial Consortium is a new lead body that spans the government, private, research and education sectors across a whole industry – spatial information<sup>1</sup>. It has the ability to play a leading role in increasing the reach of Australia's innovation systems and would like formal guidance on how to do so from DIISR. It strongly supports the CRC Program. Its members would like to support moves to introduce creative commons for information management. The Consortium feels that innovation in Australia would be given a substantial boost with the establishment of a national information portal, together with a supporting structure and resourcing to better assist with the management of public sector information. The Consortium proposes the creation of a National Elevation Data Framework as a critical project for the innovation agenda.

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<sup>1</sup> Spatial information includes satellite images, global positioning systems, geographic information systems and visualization systems. It underpins much of the daily lives of Australians; real estate, weather forecasts, fire fighting, transport, aviation navigation, defence, border security and surveillance to name just a few. It contributes between \$6 and \$12 billion dollars to GDP annually.



## THE ISSUES

### 1. The culture of innovation in Australia

The Australian Spatial Consortium brings together the peak bodies from government, the private sector, the profession and the research and education sectors in the spatial information sciences. It wishes to play a critical role in increasing the reach of innovation to its member organisations and to the individuals in those organisations and in doing so to help progressively improve the culture of innovation in Australia. It will become a voice for articulating the fundamental and applied research needs in spatial information. It will play a lead role in shaping the agenda in this industry for the next round of the CRC program. It will seek ways to ensure that there is a long term home for research in the spatial sciences beyond the natural life of the CRC for Spatial Information and its successors.

The consortium recognises the real challenges that exist in marrying the disparate objectives for innovation that often exist in the government sector, the private sector and the university sector and will actively work to bring these objectives together where-ever it is in the best interests of the nation to do so. The Consortium would like to play its part in the national innovation system as a model for cross sector collaboration in the new order of innovation in Australia. It seeks guidance from the stewards of the national innovation system as to how it can play this role most effectively.

### 2. Information flows, information markets and the role of public sector information

The spatial information community knows that government held information, and in particular spatial information, will play an absolutely critical role in increasing the innovative capacity of this nation. So much government information at present is difficult or impossible to access, either by government itself or by third party users. The members of the Australian Spatial Consortium are strongly supportive of the development of a creative commons approach to the provisioning of information. They would like to see a national information portal (or portal of portals) established to improve discoverability, access and the flow of information. The members recognise that users often improve the information they get and two way flows, together with a single data model approach (collect once and make available for all), is the most effective means for managing information.

The national information portal, and all of the support mechanisms it requires, may require new management structures to permit the better management of information. A structure that accommodates the federated model of information management currently operating across jurisdictions in Australia will be needed. Such an approach would accelerate transformation of spatial information value chains, harmonising the creation of value by our government institutions and private sector corporations, and increasing the competitive advantage of Australian industries in national and international markets.



### **3. Ownership of (partially and wholly) publically funded intellectual property**

Australian institutions who are recipients of government funds that are used to generate new intellectual property are required to devote considerable resources to the protection and exploitation of that IP. In many instances this effort is poorly directed, resulting in excessive costs, delays in use of the IP and missed opportunities. Consideration should be given to putting in place a 'national public benefit test' which requires the stewards of the IP to determine whether there is likely to be greater net benefit to the nation in making the IP readily available, on the one hand, or securing it up for proprietary exploitation on the other. This issue is particularly relevant for Boards of CRC's.

### **4. The CRC Program**

The Australian Spatial Consortium is a strong supporter of the CRC Program. It has seen the Cooperative Research Centre for Spatial Information make a significant contribution to the viability and effectiveness of the spatial information industry (government and private sector) in Australia over the past four years and would like to see it continue for another 7 year term. The Consortium will have a strong role to play in shaping its agenda. The Consortium members also derive considerable benefits from other CRC's as well.

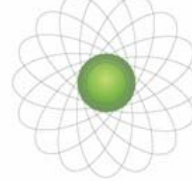
The Australian Spatial Consortium would like to consider a long term, strategic and formal role in guiding and nurturing the agenda for CRC's where their activities involve spatial information science. It would like to work with the CRC program secretariat within DIISR to further develop that role.

### **5. Education**

The education system is struggling to provision the volume of skilled resources required for the spatial information industry. The Australian Spatial Consortium will seek ways to strengthen the support provided to educational institutions from the key stakeholders in government and the private sector. It will become more active in helping define curricula. It will look to ways to increase the critical mass of teaching and research concentrations and to improve the viability of spatial information science in education.

### **6. Level of investment in R&D**

The average investment in R&D (as a proportion of total turnover) of companies in the spatial information industry is eight percent. Nineteen percent of companies do not invest in R&D at all. Are these numbers good for Australia? Should we be doing better. Australia needs to find a mechanism to better advise peak bodies as to how to guide industries in relation to investments in R&D.



## 7. Government support programs for innovation and R&D

Sixty-four percent of companies in the spatial information industry feel that the time and effort required to find out about government support programs for R&D is an impediment to innovation in their company. These impediments need to be investigated and mechanisms put in place to improve this situation.

## 8. National Elevation Data Framework

The Consortium would like to suggest a specific project that it feels will make a substantial contribution to innovation in Australia; that is the creation of national elevation model for Australia. At present Australia only has low resolution data that means we are unable to effectively map the likely location and effects of tsunamis and floods in many places around Australia. We are poorly prepared for the increasing consequences of global climate change. The NEDF would be the single most effective means for us to improve our water data accounts. It would permit us to create detailed three dimensional models of the surface of Australia and of our marine floor. In creating the NEDF there would be tremendous scope for the government sector and the private sector to be brought together for research and operational collaboration. It would create many spin-off benefits as we increasingly move to a 3D world. In 2007 COAG recognised, in-principle, the value of the NEDF. The proposal now needs to be progressed as a national priority.

## ABOUT THE AUSTRALIAN SPATIAL CONSORTIUM

In March 2007, a group of thirty-five leaders from Australia's spatial information community agreed that Australia needed to form a new peak body designed to address those issues in the national interest that can best and only be tackled through partnerships across the sectors. A Steering Committee was formed in July 2007 and announced by the federal government in August 2007. It is made up of the peak bodies from all sectors of Australia's spatial information industry. These are:

- The Australian Spatial Information Business Association (ASIBA) (representing over 400 companies)
- ANZLIC – the Spatial Information Council (representing all Australian governments at Commonwealth, State and Territory levels and the New Zealand government)
- PSMA Australia Ltd (a company wholly owned by all of the Commonwealth, State and Territory Governments of Australia for the purpose of provisioning government held data for use by third parties)
- Cooperative Research Centre for Spatial Information (representing 70 core partners: eight government agencies, six universities and 56 companies)
- 43 Pty Ltd (wholly owned by the CRCSI, and representing over 50 local and overseas companies who are members of the CRCSI)
- Spatial Sciences Institute of Australia (the peak professional body representing over 4,000 members)



The ASC came into being as a direct result of the highly successful networking activities of the Cooperative Research Centre for Spatial Information. This is strong recognition of the power of the collaboration established across the spatial information industry by the CRC approach to collaboration.

**Warwick Watkins**  
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