

A Collaborative Approach to Building National SDI in Federated State Systems: Case Study of Australia

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SUMMARY

Spatial information is now recognised by governments as essential in supporting the economic, social and environmental interests of a nation. The demand for high-quality spatially related information that is complete, up-to-date, interoperable, and readily available is increasing with impetus for managing widespread, long- and short-term disaster events, domestic security, environmental degradation and the need for improved community preparedness. There are many and varied organisations and stakeholders that use, provide and distribute spatial data.

National SDI is being progressed throughout the world with the majority of countries reporting SDI activity. However, a nation's need for SDI is not well understood and further what constitutes National SDI and how to build one is the source of much debate. This research reveals organisation-based collaboration and effective coordination of spatial information and activities is required across and within jurisdictions to progress National SDI in a federated system. The role of the State has never been so important to achieving this national imperative.

Whilst much literature exists on SDI initiatives, advances in components of SDI, data sharing and how to structure and manage GIS-based projects, little contribution has been made to the nature of the interactions between the various organisations and stakeholders. Results from a comprehensive investigation of SDI at the State and National level in Australia will illustrate these issues.

This paper highlights new research by the Centre for Spatial Data Infrastructures and Land Administration at the University of Melbourne and the development of the National SDI Collaboration Model to facilitate National SDI development, particularly in federated countries and with relevance to all nations. Strategies were developed as part of the Model for improving collaboration and coordination in countries negotiating federal structures, independent states, private industry and the needs of the community.