

*Abundant and useful spatial information within reach of all*

# ***Tasmania's Spatial Data Infrastructure***

*~ a new framework for the use of spatially  
referenced data in Tasmania*

*1 August 2011*

# 1 Background

The Tasmanian Spatial Information Council (TASSIC) is the key forum for increased collaboration between public, private and community sectors in the collection, maintenance and use of spatial information in Tasmania. Council members are nominated by key spatial organisations to represent government, academia, the spatial information industry and private sector interests. The Council reports to Tasmania's Minister for Primary Industries and Water.

A Spatial Data Infrastructure (SDI) can be defined as 'the environment or framework from which resources can be provided in order to spatially enable society. An SDI comprises the people, policies and technologies necessary to enable the use of spatially referenced data through all levels of government, the private sector, non-profit organisations and academia.'<sup>\*</sup>

TASSIC's role in relation to the development of Tasmania's SDI is one of advocacy, monitoring and enablement. Specifically, the Council seeks to maximise the benefits of Tasmania's SDI and:

- ◆ monitor constantly changing spatial industry requirements
- ◆ maintain the vision to ensure the relevance and capability of the SDI to meet those requirements
- ◆ establish and maintain a current knowledge of best practice, nationally and internationally
- ◆ lobby to remove legislative and policy barriers
- ◆ lobby to implement enabling legislation and policy
- ◆ promote Tasmania's SDI and spatial industry in general.

The development of a more effective SDI is a priority area for TASSIC. The objectives of this activity are:

- ◆ to provide clear, agreed and understood goals and priorities for Tasmania
- ◆ to provide a yardstick against which initiatives can be measured.

TASSIC has developed a framework of guiding principles to support the evolution of the SDI.

## 2 Development of the framework

This framework has been developed by TASSIC through workshops and discussions focusing on the following activities and resources:

- ◆ review of past influences in the establishment of SDIs from personal, local and global perspectives
- ◆ identification of the broad range of trends affecting the current and future management of spatial information and the relevant infrastructure
- ◆ acknowledgement of industry and community responses to those trends
- ◆ evaluation and discussion of recommended components of the Australian Spatial Data Infrastructure (ASDI) model<sup>\*</sup>
- ◆ review of the principles and findings of the European INSPIRE Directive ([inspire.jrc.ec.europa.eu/](http://inspire.jrc.ec.europa.eu/))
- ◆ description of an ideal future scenario for Tasmania's SDI.

The components of an ideal SDI for Tasmania are represented by a series of guiding principles. While physical infrastructure will evolve at an ever-increasing rate, these guiding principles will provide a stable and clear reference point against which relevant initiatives can be assessed. This is not to say that the principles are static. On the contrary, they should continually evolve to address developing requirements and contemporary practices.

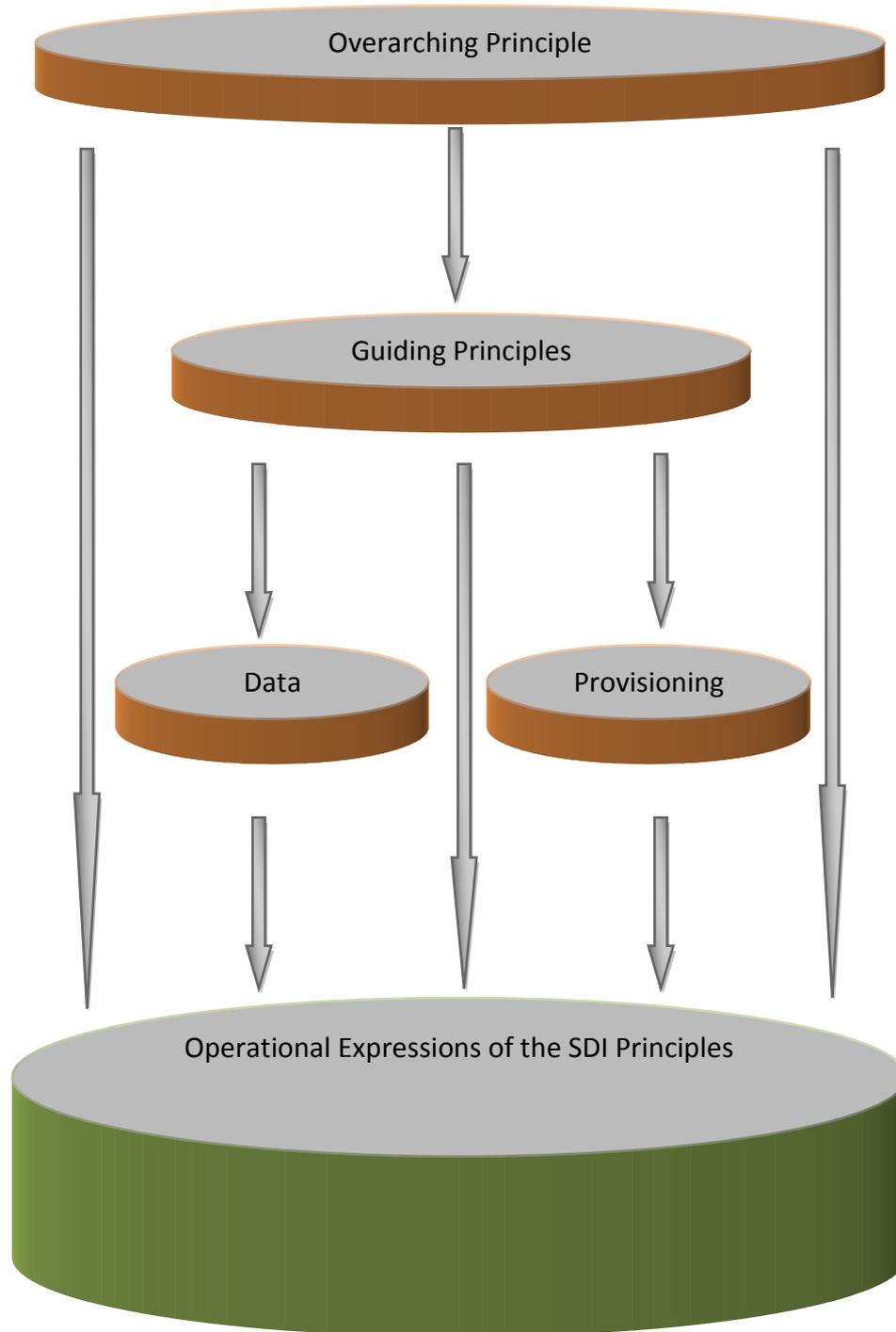
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<sup>\*</sup> *Spatially Enabling Australia Recommendations v2.1, January 2008, ICSM ASDI Consultancy, prepared by Geomatic Technologies*

# 3 Principles – Tasmania’s Spatial Data Infrastructure

Overarching principle	
<p><b>Tasmania’s SDI should facilitate access to, and application of, spatial information to underpin Tasmania’s economic, environmental and social prosperity.</b></p>	
Guiding principles	
<ul style="list-style-type: none"> <li>◆ Public investment should have maximum outreach and benefit.</li> <li>◆ Public investment should avoid duplication of effort.</li> <li>◆ To be effective, the SDI should be user-driven and responsive to changing user requirements.</li> <li>◆ Tasmania’s SDI should allow users to make an informed assessment of the fitness for purpose of spatial data or services.</li> <li>◆ Tasmania’s SDI may develop into a federation of efficient infrastructures rather than one central facility.</li> </ul>	
Spatial data	Provisioning infrastructure
<ol style="list-style-type: none"> <li>1. Fundamental and authoritative spatial data should be maintained by Government for the benefit of the entire community.</li> <li>2. Clear and concise custodianship responsibilities should be allocated for fundamental and authoritative spatial datasets.</li> <li>3. Tasmania’s SDI should support and facilitate adoption of national and international data and metadata standards.</li> <li>4. The SDI should support and facilitate interoperability of spatial datasets and services.</li> <li>5. The SDI should facilitate proactive publishing of spatial data available for general access.</li> <li>6. The SDI should facilitate the exchange of available Tasmanian spatial data.</li> <li>7. Access to spatial data should not be compromised by commercial arrangements.</li> <li>8. All spatial data should be supported by catalogue services that ensure data is discoverable and provide information about the quality and source of the data.</li> <li>9. The SDI should support a wide range of data themes to maximise the outreach to new industries.</li> </ol>	<ol style="list-style-type: none"> <li>1. Access to spatial data and services should be managed under a common licensing structure that is consistent with national and international initiatives.</li> <li>2. Access services should be provided by both public and private organisations.</li> <li>3. Access methodology and general availability should not be barriers to the pervasive use of spatial data.</li> <li>4. The SDI should encourage access to both spatial data and associated value-added services to maximise the value derived from spatial data.</li> <li>5. Access services should conform to contemporary standards such as the Open Geospatial Consortium (OGC) standards and specifications.</li> <li>6. The SDI should include and support development of data and service directory and discovery services.</li> <li>7. The SDI should support and facilitate value adding opportunities.</li> </ol>

## 4 Conceptual diagram



Tasmania's SDI establishes a set of principles under which initiatives can be designed or assessed.

Principles are framed as:

- Overarching
- Guiding
- Data
- Provisioning

These principles find expression in operational decisions about spatial data collection, management, discoverability, exchange, analysis and application.

This environment is responsive and dynamic, reflecting current best practice.

The principles established by the Tasmanian SDI are durable but can be expected to evolve through time.