



*Information Queensland
Technology Alignment Review
Volume 1 – Executive Summary*



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NOTE: The Queensland Government was restructured following the February 2004 state elections, with the names and organizational affiliation of many departments being changed. It is to be determined whether or not this report will continue to reflect the previous structure.

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1. Overview

The Queensland Spatial Information Infrastructure Strategy (QSIIS) engaged the consultants to review the current state of implementation of information systems dealing with geographic and other spatially related services across the QSIIS community. Whilst the scope encompassed participating QSIIS Agencies, a whole-of-government information service model was adopted, restricted to neither just QSIIS nor just spatial data and information.

These findings were then reconciled against an interoperability architecture based on principles of distributed, custodial management and non-proprietary open standards.

This technical alignment identifies particular elements of the interoperability architecture that can be targeted for early implementation as distinct components as the core of an open standards-based Information Queensland platform. The Internet and the World Wide Web are assumed to be basic vehicles for delivering spatial services to Queensland government and citizens.

Sufficient technology exists to begin building Information Queensland today. The framework for developing institutional arrangements is well developed. The process for reviewing and establishing business cases is already established.

Core services for Information Queensland can be implemented in short order. These include, but are not limited to:

- Registries containing descriptions of services and data (and later for components)
- Repositories for spatial data, catalogues (metadata), mapping symbols and so on
- Tools for discovering (spatial) services, data and other assets
- Tools for authoring, publishing and maintaining service descriptions, metadata, map symbol and other assets
- A gazetteer, based on current authoritative state names list, which would in turn allow for:
 - o Looking up locations by name rather than by coordinates (geocoding)
 - o Easily portraying location and feature names on maps and other presentations
 - o Parsing documents to determine their geographic relevance
- Accessing and incorporating data (usually in existing tables and reports) that includes some sort of location but is not in itself spatial data (geolinking)

- Map and charting displays
- Tools for managing the style of presentation of the above displays
- Data extraction (i.e. an arbitrary 'cookie cutter')
- Conversion between various data formats.

These priority targets are either already in the process of being implemented, can be readily adapted from existing systems and applications, are known to be ready for implementation with off-the-shelf products (commercial or other), or are crucial to supporting further development of Information Queensland.

The target services are a subset of, but entirely consistent with, the more complete definition of the interoperability architecture. Additional components can be developed subsequently based on experience gained during rollout of the core service components. All components and their relevance in the interoperability architecture are discussed in detail in the body of the report.

2. Background

The objectives for the technical review are to:

- Assess the current architectures of the nominated candidate systems and applications that provide **spatially-oriented information services** for the Government of Queensland, and compare these to a **shared services model** for **interoperability** and **integrated services** delivery to meet business needs for the State Government;
- Develop an **interoperability architecture** based on open standards, and develop a strategy to migrate to such a model.

The architecture makes no assumptions about vendors and institutions other than their support and acceptance of open, non-proprietary standards. It provides an explanatory framework within which a distributed service managed by authoritative custodians can be implemented to support an expanding set of spatial services for the whole of the Queensland government, commercial re-sellers and citizens.

The result will allow for a detailed project plan, including resources, to be developed for QSIIC approval.

Implementation will deliver services targeted through the associated business review, to be completed according to the **Access Queensland Business Process Review** process. The BPR will be undertaken as a subsequent step by a different project team.

Both the outcomes from this Technical Alignment Review and the BPR process will provide significant input into forming the newly announced **Information Queensland** initiative and taking it forward.

Information Queensland is in support of other current government initiatives such as Access Queensland/ Smart Service Queensland, the Services Integration Infrastructure (SI), and Aligning Services and Priorities (ASAP) to achieve improved service delivery and increased operational efficiencies. This initiative will build on existing government service delivery infrastructure to achieve efficiencies and to maximise the benefits of the latest enabling technology. With a whole-of-government focus, the project will achieve cross agency efficiencies with better information sharing between agencies to deliver core business and services to clients.

3. History

The current work is to be aware of the **history** and current initiatives in spatial information servicing in Queensland, without dwelling on these. Instead its focus is to identify means for moving forwards.

There are strong arguments that a(nother) **full business requirements study** should be conducted and a formal business analysis and comparative study of options concluded, before developing the interoperability architecture. However, findings from many such studies conducted over the last five years have not been realized before technology advances or departmental/government restructuring have moved the goal posts. Volume 4, Appendix 1, the *QSIIS DataHub project Plan* summarizes many of these. What have not changed are the requirements of the end users and the overall business cases to meet these requirements.

Unsatisfied remains the need for a “laxative” to get data moving to the services that create the products that meet the requirements of the end users.

3.1. Current Status and Trends

Technologies such as the Internet have **advanced rapidly** and the benefits of its ubiquity are being realized at home, in business, and within community groups. One goal is to **extend the benefits of developments** within government, and between the Government and its clientele.

Government has been proactive in implementing **changes in the mechanics** of customer servicing from the ‘shop counter’ to the Internet. However, these efforts preserve the compartmentalization of Departmental structures and fail to meet the demand products created by **inter-agency services**.

In those instances where inter-agency cooperation yields services and products (for example, in local government, planning and environmental matters), each of the respective agencies **gather fresh copies of data** from all and sundry, then re-process, these, manage their storage, and integrate the data to provide the information products to their constituents. This situation is repeated time and again, with considerable cost and angst across the public and private sectors.

