

# The Case For National Coordination in Spatial information BoF

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## DESCRIPTION

There are multiple groups who collect and produce spatial data assets (e.g. the Bureau of Meteorology, ABARES, Geoscience Australia) and there are a number of groups who access and retain standardised copies of data for particular analytical tools or services (e.g. the curated spatial data collections available through ALA, AURIN, BCCVL and ecocloud). Currently, each of these groups maintain and manage these collections independently.

With the growth of freely available aggregated data services such as ALA, TERN, AURIN, BoM, GA etc, there is a requirement for an ever increasing volume of spatial data at higher temporal and spatial resolution. The ALA, for example, provides a single location to discover biologically related environmental data, but the current layers are a small subset of available bio-environmental data.

As a result of this, there are a number of key issues that emerge for data providers, data aggregators and producers of data products[1]:

- Discovering the availability of relevant spatial data;
- Maintaining an up to date suite of layers and deprecating old versions on their system;
- Mixed and restrictive licensing terms;
- Inconsistent or absent metadata;
- Lack of interoperability of the spatial data across different tools and services;
- A lack of richness in the methods implemented from standards for engaging with the spatial data;
- Significant storage and computing (HPC) needs in ingesting/processing spatial data;
- Duplication of effort, computation and storage to maintain local versions of the reference spatial data.

A national coordination in the development of services that promote best practices in the development and publication of spatial information, single point of truth to access spatial information as a service can address many of these challenges.

Establishing a nationally coordinated spatial data service provides a range of benefits such as [1],

- provide a trusted, 'one-stop-shop' for commonly used Australian spatial data, increasing the FAIRness of these datasets;
- enable access to higher spatial and temporal resolution data and provide richer methods of interacting with spatial variables;
- availability of a more comprehensive range of spatial reference data;
- providing a consistent and standardised method of access to these spatial data;
- enable the utilisation of spatial data in a broader range of research and management activities by reducing the

barriers for the use of spatial data;

- ability to share resources and common infrastructure setup across different organisations;
- ability to standardised metadata to describe and propagate along with the data
- more coordination between different organisations and government agencies to publishing spatial information.

This BoF will discuss the idea of establishing a nationally coordinated spatial data service within the Australian research infrastructure landscape. During this session we will seek to discuss this proposition, and undertaking a community consultation to:

- test the assumption that a national spatial data service is needed;
- assess the feasibility of establishing such a capability within the current eInfrastructure landscape;
- identify major use cases for the service.

The session will consist of,

- Brief presentation
- Facilitated and open discussions

Proposed duration for the BoF session: **40 minutes**

## REFERENCES

1. K. Dharmawardena, "The Case For a National Spatial Layers Service", <https://docs.google.com/document/d/1JxpAYxlL6p-5P6XAe4XHPFKJAYEs-u1sc5gvYmxOCTA/edit?usp=sharing>, Jan. 2019.