

BUSINESS AREA: ENTERPRISE SPATIAL SERVICES



Case Study

Enterprise Spatial Data Platform Transformation

Enterprise Spatial Platforms transition from on-premise to AWS Cloud.

The Challenge

The Victorian Government Department of Energy, Environment and Climate Action (DEECA) has successfully transitioned its Enterprise Spatial Platforms and Services from an on-premise data centre to the AWS Cloud, establishing new spatial capabilities. This transformation involved a comprehensive redesign and re-build of core services for both internal and external users. The program has delivered cost-effective, reliable, scalable, and recoverable platforms, ensuring easy access to critical spatial data, supporting informed decisions about Victoria's natural and built environment. At the heart of this transformation is the Enterprise Spatial Data Platform, comprising the Vector, Raster, and Metadata platforms.

Spatial Vision's role in this large project was to assess, design and deliver spatial metadata cataloguing via the open source GeoNetwork platform, known within the DEECA platform as Metashare.

Metadata is crucial to spatial data infrastructure because it provides essential information about the data's origin, quality, format, and usage, ensuring that users can effectively discover, understand and utilise spatial datasets.

"I want to thank you all for making our vision for an Enterprise Spatial Data Platform a reality and for the quality of outcome that has been recognised as the winner of this year's Geospatial Victoria Technical Excellence Award."

Anthony Draga, Manager Enterprise Spatial Services
DEECA

Organisation

Victorian Government Department of Energy, Environment and Climate Action (DEECA)

Customer Profile

DEECA are focused on creating a liveable, inclusive and sustainable Victoria with thriving natural environments - where the community is at the centre of everything they do.

<https://www.deeca.vic.gov.au/>

Location

Victoria

Sector

Government

Solution

As part of the larger Enterprise Spatial Platform, Spatial Vision was able to test and develop the metadata platform Metashare in collaboration with DEECA and CSIRO. The finished platform is a modern metadata portal that will be used by Victorian government data custodians and business stakeholders for years to come.



“Each of you have made a significant contribution to its success and have been duly recognised for your hard work and dedication to the task. I cannot thank you all enough for your effort, flexibility and collaboration throughout”

**Anthony Draga, Manager Enterprise Spatial Services
DEECA**

Our Approach

Spatial Vision was initially approached to assess the viability of GeoNetwork as the metadata component of the larger Enterprise Spatial platform. The main driver was retirement of the old on-premise system (developed by Spatial Vision many years ago) in favour of a more scalable, modern, cloud-based metadata platform. There was also a need to consolidate multiple existing sources of metadata – notably, metadata for Raster and Vector datasets were held in different locations, and there was a desire to bring these two portals together. Once viability had been determined and GeoNetwork selected as the platform of choice, Spatial Vision was contracted for the implementation and build of custom reports, as well as other custom business features for Metashare.

GeoNetwork is an open-source catalogue application designed for managing and sharing spatially referenced resources. It provides a platform for efficiently publishing, discovering, and accessing geospatial metadata and datasets, enabling organisations to improve data transparency, accessibility, and collaboration within spatial data infrastructures. Importantly GeoNetwork has robust support for international metadata standards – in this case ISO 19915-3 2018 Geographic Information – Metadata.

Spatial Vision was just one partner in the consortia chosen to work through the broader solution; 1Spatial Australia, Spatial Partners, Jirotech, CSIRO, Geocat BV, Datacom, and AWS all collaborated to complete the project.

The first component of the Metashare implementation was a proof-of-concept to assess GeoNetwork’s suitability for the new metadata platform. Once suitability was determined, Spatial Vision performed stakeholder consultation with key Victorian Government business units and data custodians to determine requirements for the metadata system, and this consultation led to the platform design.

Business level customisations for reporting, aided by CSIRO staff who were also core contributors to the GeoNetwork open-source project, were built on to the proof-of-concept system and eventually deployed into the DEECA digital infrastructure. A key requirement was to migrate DEECA’s existing metadata from two separate

systems into the new, standards-based repository. This required a detailed mapping process from old to new formats and extensive testing to ensure the data was migrated correctly.

We also supported implementation partners to integrate with the metadata system via its web services interface, allowing other enterprise spatial platform components, such as DataShare, to access up to date information about spatial data.

The Outcome

Spatial Vision was able to test and develop the metadata platform Metashare in collaboration with DEECA and CSIRO. The finished platform is a modern metadata portal that will be used by Victorian government data custodians and business stakeholders for years to come.

- A resilient, modern cloud-based metadata platform customised for the Victorian government
- Stakeholder driven business decisions and customisations
- A centralised, accessible metadata portal for Victorian spatial datasets

If you want to transform your legacy systems, we can assist with stakeholder engagement, consultation, design and delivery to ensure your organisational needs are met.

If you’d like to know more, [please get in touch.](#)