

A South African Platform for Data Systems: the World Data Centre for Biodiversity and Human Health as a case study

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SAEON and the CSIR initiated a project in 2005 to create an extended spatial data infrastructure, named CoSAMP. This platform was subsequently extended, commencing in 2008, to align it with a multi-year platform development plan. This plan took cognisance of a comprehensive user requirements survey conducted in 2008.

By mid-2009, the initial extensions, allowing the platform to accommodate a variety of widely used meta-data standards, was completed and put into production. At the same time, it was realised that several other initiatives would require the same infrastructure, albeit with extensions and refinements unique to each. As a result of this, SAEON and its partners have collaborated to develop a multi-stakeholder platform that provides a meta-data driven data sourcing and archiving function.

The shared platform infrastructure is open source, and has medium-term funding from a variety of stakeholders and sources. The platform is a freely available national resource and serves the scientific community, nationally and internationally, while pooling scarce resources and avoiding duplication.

The World Data Centre for Biodiversity and Human Health in Africa commenced as an implementation project in early 2010 utilising the same platform, and requiring specific extensions agreed between the main stakeholders. The prototype implementation of the WDCBHH will extend the mapping capabilities of the platform, add facilities for visualization of structured data, and extend the bounds of the meta-data repository to cover the whole of Africa for aspects such as Human Health and Biodiversity.

The paper explains the platform architecture, functions, and capabilities, discusses the WDCBHH prototype implementation, and highlights the benefits of a shared platform approach. It summarizes the management and mandate overlap questions that arise in a shared platform environment, and how the platform aims to add value to data sources by ensuring that new additions to the portfolio, such as the WDCBHH, serve a well-defined niche.