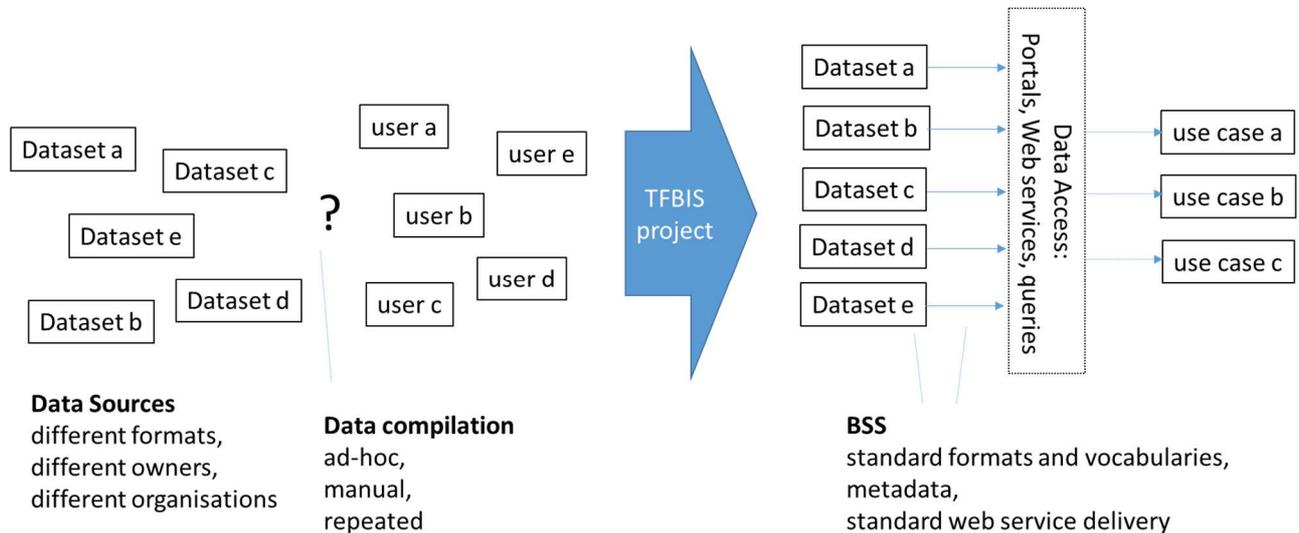


New Zealand Biodata Services Stack (BSS)



Vision and Goal

New Zealand's biodata is easily and seamlessly exchangeable, combinable and federated from multiple data providers to multiple data users through a national "Biology Data Infrastructure" (BDI). This will make the management of New Zealand's ecosystem and biosecurity risks more effective and comprehensive.

To support that vision, by 2016, New Zealand has developed and proofed (through a working demonstration) a "Biodata Services Stack" (BSS). This stack includes:

- National standards, guidelines and procedures that ensure (key elements of) (freshwater and terrestrial) biodata (related to species occupancy/occurrence) can be archived and published consistently in any organisation across New Zealand;
- National systems to support consistent archiving and publishing of biodata across New Zealand;
- Standards-based web-services to enable biodata federation.

Organisations across New Zealand which are collecting biodata have agreed to implement and adhere to the Biodata Services Stack.

The Biodata Services Stack will be consistent with and support international data (exchange) standards, in particular ISO, OGC, and GBIF standards.

We envisage that the BSS will be implemented as a set of national standards, guidelines and systems and continuously supported and maintained by relevant agencies including central and local government.

Development of the BSS

The BSS will be developed through work streams implemented by dedicated project teams and overseen by a project director, and a steering committee.

The work will be carried out through four interdependent work streams.

- In a terrestrial biodata case-study we will identify and specify the work necessary to establish the national federated data network for supporting national harvesting and aggregation of Tier 1 terrestrial biodata.
- In a freshwater biodata case-study we will focus on identifying and specifying the work necessary to establish a New Zealand freshwater biodata network.
- In a third work stream (people, systems, processes) we will specify and develop the necessary underpinning infrastructure. This stream will include elements addressing individual and institutional issues and constraints, together with the necessary technical systems, processes and standards. Developing the case-studies will inform this work stream.
- The final and fourth work stream seeks to implement the infrastructure of the BSS, as specified in the previous work stream, across diverse agencies and information systems as a demonstration system.

Project Timelines

