Integrated Biological Systems (IBS)

Governance provisions

Context and scope of the Project

The Project has arisen from the process to identify Australia's strategic infrastructure priorities conducted by the NCRIS Committee in 2005 and 2006. That process recognised, amongst other things, that key areas for investment included:

- databasing and linkage of existing animal, plant, invertebrate and microbial collections, along with provision of associated informatics capabilities;
- provision for Australia's participation in other international programmes such as GBIF (Global Biodiversity Information Facility) and CBOL (Consortium for the Barcode of Life) be evaluated as part of the proposal development.

The work of identifying specific priorities for further investment, and a strategy for implementing them, was carried forward in the NCRIS Investment Plan for an *Integrated Biological Systems* capability (IBS). *The Atlas of Living Australia* is one of the interrelated components of the IBS capability.

The interrelated components of the IBS capability are:

a) The Australian Phenomics Network (APN) – Lead Agency: The Australian National University

The Australian Phenomics Network will provide a world-class network of mouse production, cryopreservation, phenotyping, documentation, distribution and databasing facilities that will remove current barriers, such as cost and accessibility, to making sophisticated mouse models of human and animal disease available for medical and other research groups in Australia.

b) The Australian Plant Phenomics Facility (APPF) – Lead Agency: The University of Adelaide

The Australian Plant Phenomics Facility will be established as a two node facility distributed between The University of Adelaide (UA) and CSIRO Plant Industry/The Australian National University (ANU). The objective is for the two nodes to provide

state-of-the-art capabilities for plant phenotyping (offering controlled environments, field-based plant growth monitoring, and high throughput robotics, automated imaging and computing technologies), integrated with the ongoing adaptation and application of emerging phenomics measurement technologies.

Coordination

The Atlas will be integrally linked with key international initiatives such as *Global Biodiversity Information Facility* (GBIF). One of the roles of the Atlas will be to pay the subscription to GBIF on behalf of the Australian Government. Membership of GBIF allows Australian representatives to serve on GBIF committees and therefore contribute to and obtain access to international activities in the Biological Information field. The Atlas will also incorporate the Australian portal to GBIF, the *Australian Biodiversity Information Facility* (ABIF). Another important international initiative which the Atlas will have strong links with is the Encyclopaedia of Life (EOL). The EOL is a collaborative scientific effort led by the Field Museum of Natural History, Harvard University, Marine Biological Laboratory, Missouri Botanical Garden, Smithsonian Institution, and Biodiversity Heritage Library. The ultimate aim of the EOL is to provide an online database for all 1.8 million species now known to live on Earth – linking to initiatives such as the Atlas.

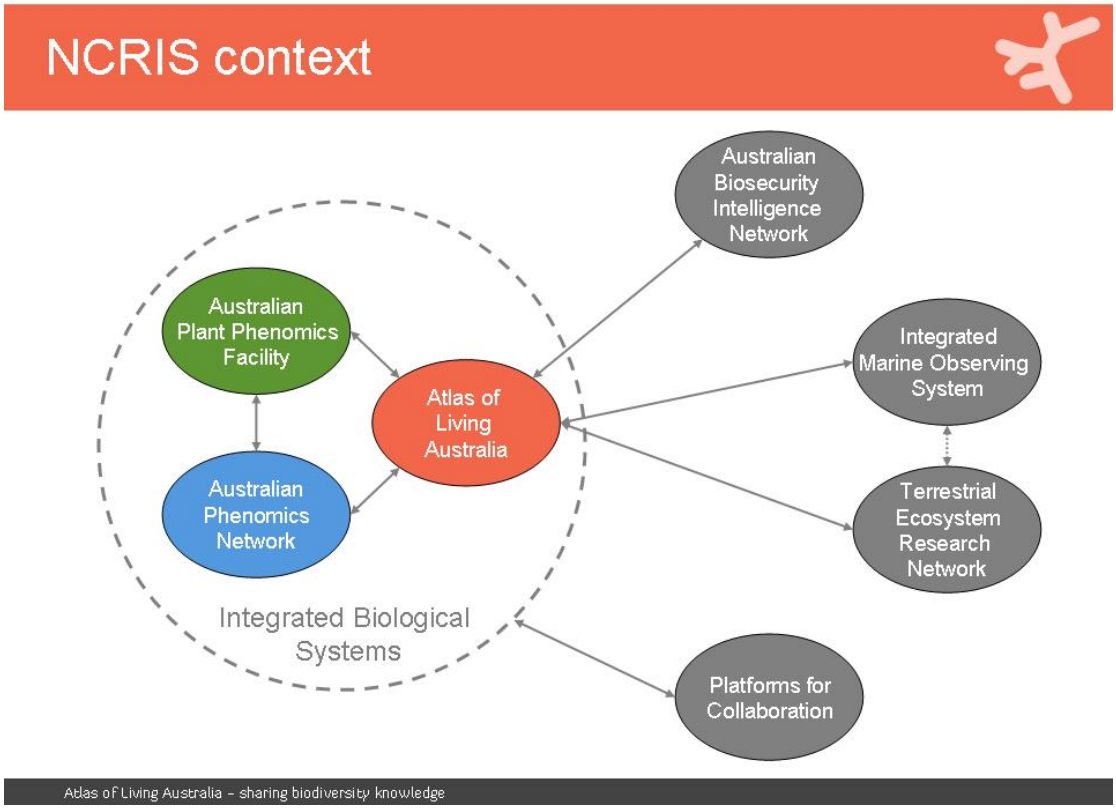
The development of *The Atlas of Living Australia* will support and be coordinated with the individual capacity areas in the NCRIS Capability – *Integrated Biological Systems*, these being:

- *The Australian Phenomics Network* (APN);
- *The National Plant Phenomics Facility* (NPPF).

The coordination of activities of the three individual capacities within *Integrated Biological Systems* will be undertaken by the Integrated Biological Systems Steering Committee. When convened, the Committee will operate independently. It will be responsible to and report primarily to its constituents, although the terms of reference will provide for it to provide advice to DEST and the NCRIS Committee. The primary role of the IBSSC will be to provide advice to its constituents regarding strategic planning for IBS research infrastructure, coordination and collaboration across the three IBS NCRIS projects, and development of joint activities of IBS facilities.

The governance and management structures of the three NCRIS IBS projects will be independent of the IBSSC. Each project will report directly to DEST in relation to their funding agreements. However, the funding agreements will require the three projects to provide certain information to the IBSSC and to consider advice from the IBSSC.

CSIRO, with the assistance of the ALA Management Committee, will coordinate with agencies implementing Capability 5.16 (*Platforms for Collaboration)* infrastructure as part of NCRIS, to determine the optimum way for *The Atlas of Living Australia* to access the necessary IT infrastructure (including servers, storage space). These negotiations will also need to consider lease arrangements or participation in a national 'science commons infrastructure'.



ALA Relationship with NCRIS capabilities