Biodiversity Information Architecture

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Outline:

• Problem statements
• Workshop outcomes
• Key components
• Recommendations
The main purpose is to provide biodiversity information management to support:

- Research
- Decision-making practices
- Science-based policy advice
- Monitoring and determine trends
Participants:

Atlas of Living Australia
GBIF
BHL
INBio
Rio de Janeiro Botanical Gardens
CONABIO
LNCC
UNDP
Open University
Costa Rica
African Conservation Centre
National Museum of Kenya
Problem Statements:

• Difficulty in leveraging information into an actionable decision making application;

• SANBI’s dissemination tools lack a consistent interface (loss of ‘brand value’);

• Re-implementation of the same functionality (confuse stakeholders);

• Disaggregated and disparate systems;

• Lack of integration amongst the technology platforms and requires a broad skills base which is unsustainable;
Problem Statements continued...

• Challenge is to combine the existing information environment with new and evolving technology;
• The resource considerations for this task are enormous (need innovative methods of management);
• Skills within biodiversity information management are not readily available (combination of computer science and natural science).
Information Architecture Workshop:

- Draw on international experience in designing EIA;
- Recognise the success of other initiatives, investigate the best model to integrate all SANBI information resources;
- Thoroughly evaluate SANBI’s current architecture and gather suggestions and recommendations to adapt;
- Develop a blueprint to designing a system that is easy to maintain and cost-effective;
- Deliver scientifically credible information to support biodiversity conservation and development;
- Develop a biodiversity informatics architecture that could be adopted by other countries, specifically in Africa.
Graphic representation of the process

1. **Scope of work** (Develop a National Strategy)
2. **Role of SANBI** (to address: IP, standards and communication)
3. **Engaging with community (BIMF)**

   - Define data authority
   - Institutional agreements
   - Design

   - Implement
   - Review
Key components:

- Establish a taxonomic backbone (taxonomic concepts) for the country;
- Adhere to a durable classification system;
- Develop a time stamped archiving process;
- Implement a framework of fundamental geodatasets;
- Develop standards and policies to be legislated at national level;
- Leveraging current activities from stakeholders to address common goals;
Key components continued…

• SANBI should reassess its scope and determine the roles and contributions of partners organisations;
• Ensure global compatibility (GBIF, BHL, EOL, iBOL);
• Fitness for use (flag areas that need improvement);
• Managing different categories of data (relevé data, images, multi-media).
Recommendations:

• Have partners onboard from the beginning and ensure there is good communication throughout the process;
• Avoid duplication;
• Use an incremental architecture;
• Use open source software and collaborate on software development;
• Programme is sustainable;
• Inclusive governance.
Thank you

Questions?