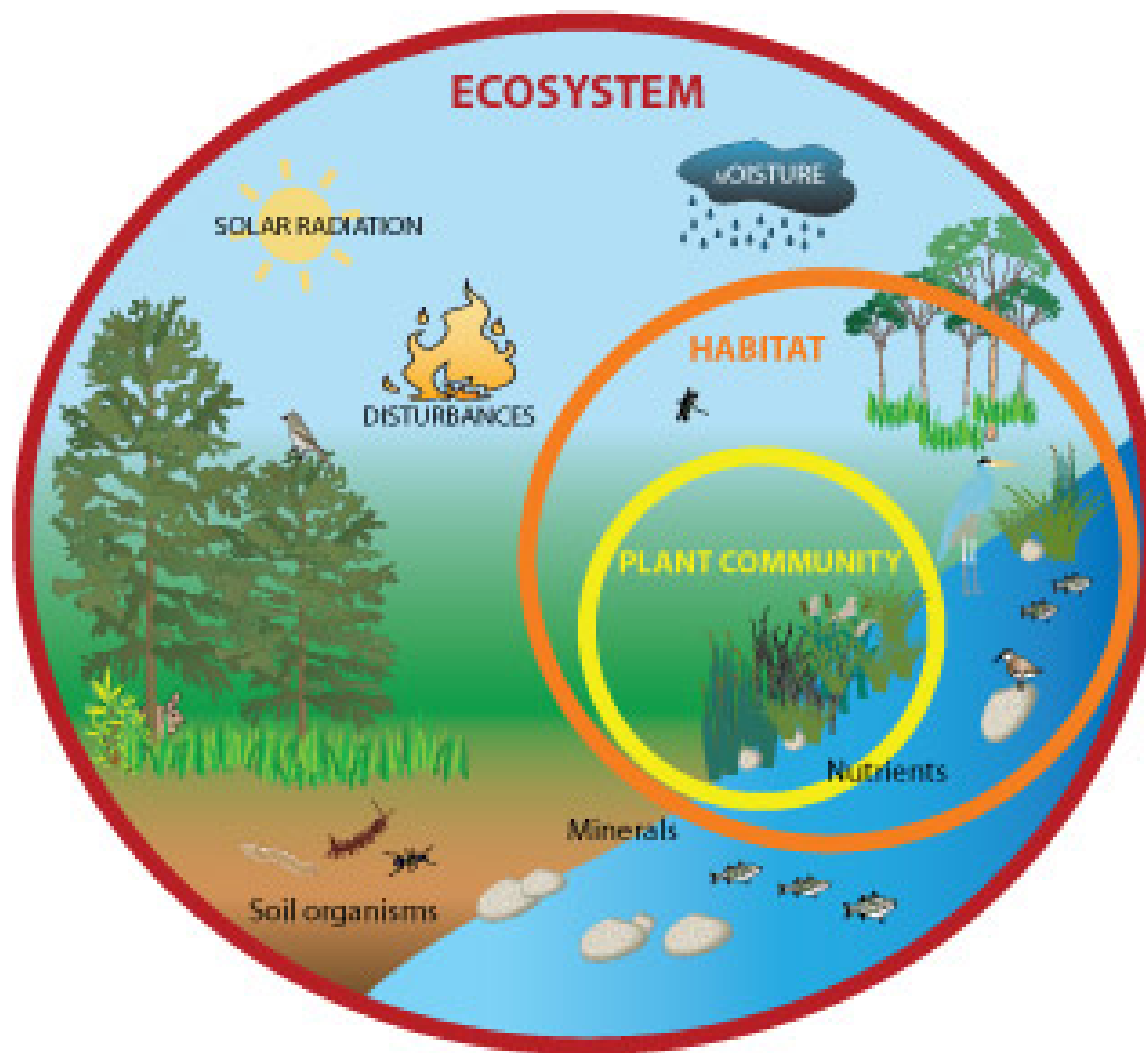


PARSE.Insight symposium:
“Carrying the Flame Forward”
Audit and Certification:
Towards an Ecology of Repositories

Paris, 25 June 2010
Simon Lambert, STFC (UK)

An ecology?



Background

- OAIS fundamental
- Why is audit and certification needed?

History

- Section of OAIS on roadmap for development of related standards includes an item for accreditation of archives
- TRAC (Trustworthy Repositories Audit & Certification: Criteria and Checklist)
 - RLG and NARA led this work as agreed by OAIS group
 - Based on OAIS Reference Model and Report on Trusted Digital Repositories: Attributes and Responsibilities (RLG-OCLC, 2002)
 - Publicly available

CCSDS Working Group

- Charter of WG agreed at meeting Jan 2007
- Goal: Obtain ISO approval of a standard that establishes the criteria that a repository/archive must meet to be designated an ISO Trusted Digital Repository
 - on which a full audit and certification of digital repositories can be based
- Following route of OAIS
 - CCSDS is the “working arm” of TC20/SC13 of ISO
- Based on TRAC document

Current status

- Two standards documents prepared
 - Metrics for Audit and Certification of Digital Repositories
 - Requirements for Bodies Providing Audit and Certification of Digital Repositories
 - Both now submitted to CCSDS/ISO
- Completely public process

The metrics document

Section A: Organisational Infrastructure

Section B: Digital Object Management

Section C: Infrastructure and Security Risk
Management

Metrics and their structure:

- Statement of requirement
- Supporting text
- Examples of Ways the Repository can Demonstrate it is Meeting this Requirement
- Discussion

The metrics document

3.2.1.2 The repository shall have the appropriate number of staff to support all functions and services.

Supporting Text

This is necessary in order to ensure repository staffing levels are adequate for preserving the digital content and providing a secure, quality repository.

Examples of Ways the Repository Can Demonstrate It Is Meeting This Requirement

Organizational charts; definitions of roles and responsibilities; comparison of staffing levels to industry benchmarks and standards.

Discussion

The repository should determine the appropriate number and level of staff that corresponds to requirements and commitments. The repository should also demonstrate how it evaluates staff effectiveness and suitability to support its functions and services.

“Requirements for bodies ...”

- Relation to analagous standards
 - ISO 17021 “Conformity assessment — Requirements for bodies providing audit and certification of management systems”
 - Elaborates on this standard in the context of Trustworthy Digital Repositories
- Structure
 - Follows ISO 17021

“Requirements for bodies ...”

7.2 PERSONNEL INVOLVED IN THE CERTIFICATION ACTIVITIES

The requirements from ISO/IEC 17021:2006, Clause 7.2 apply. In addition, the following TDR audit and certification specific requirements and guidance apply.

7.2.1 COMPETENCE OF CERTIFICATION BODY PERSONNEL

The following training requirements apply to all members of the audit team, with the exception of d), which can be shared among members of the audit team. The certification body shall have criteria for the training of audit team members that ensures

- a) knowledge of CCSDS 652.0-M-1/ISO 16363[1] and other relevant normative documents;
- b) understanding of digital preservation;
- c) understanding of risk assessment and risk management of digitally encoded information;
- d) technical knowledge of the digital preservation aspects which apply to the activity to be audited;
- e) general knowledge of regulatory requirements relevant to TDRs;
- f) knowledge of management systems;
- g) understanding of the principles of auditing based on ISO 19011;

The wider context

- There are other standards/approaches
 - For example “Data Seal of Approval”
- We can envisage a marketplace for audit/certification services, appropriate to the needs of individual repositories
- Perhaps a Gold/Silver/Bronze level of certification

Next steps

- Awaiting feedback from CCSDS/ISO
- Set up of Primary TDR Accreditation Board
- Test audits