

# Digital Assessments, Audits and Certifications and Our Community

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# Topics

Reviewing digital repository assessment and audit using the cycle of community good practice development and evolution:

- Need for self-assessment, audit, and certification
- Community standards and guidelines
- Tools and techniques
- Using lessons learned

# Cycle of good practice for communities

1. *Identify*: define and specify a challenge or an unmet need
2. *Specify*: develop standards and guidelines
3. *Implement*: build tools and techniques to apply standards
4. *Improve*: evolve using experience and changing needs

# 1. Identify

## 1996 PDI Report

Seminal community document:

Called out the need for audit and certification, defined the issues, suggested actions

### **Preserving Digital Information**

**Report of the Task Force on Archiving of Digital Information**

**commissioned**

**by**

**The Commission on Preservation and Access**

**and**

**The Research Libraries Group**

May 1, 1996

## 2. Specify

### **TDR 2002**

Implications for our community  
for doing audits and assessment

Starting point for TRAC

**Trusted Digital Repositories:  
Attributes and Responsibilities**

An RLG-OCLC Report

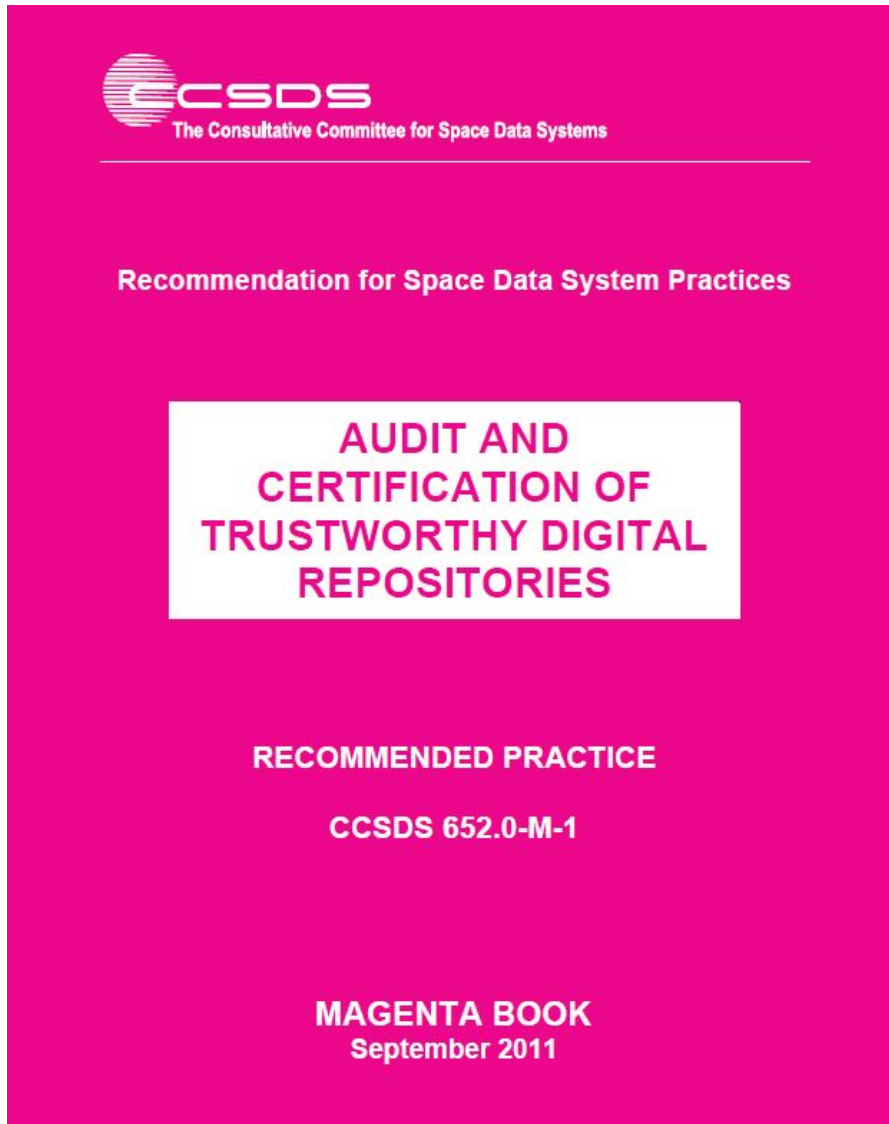
RLG  
Mountain View, CA  
May 2002

## 2. Specify: examples

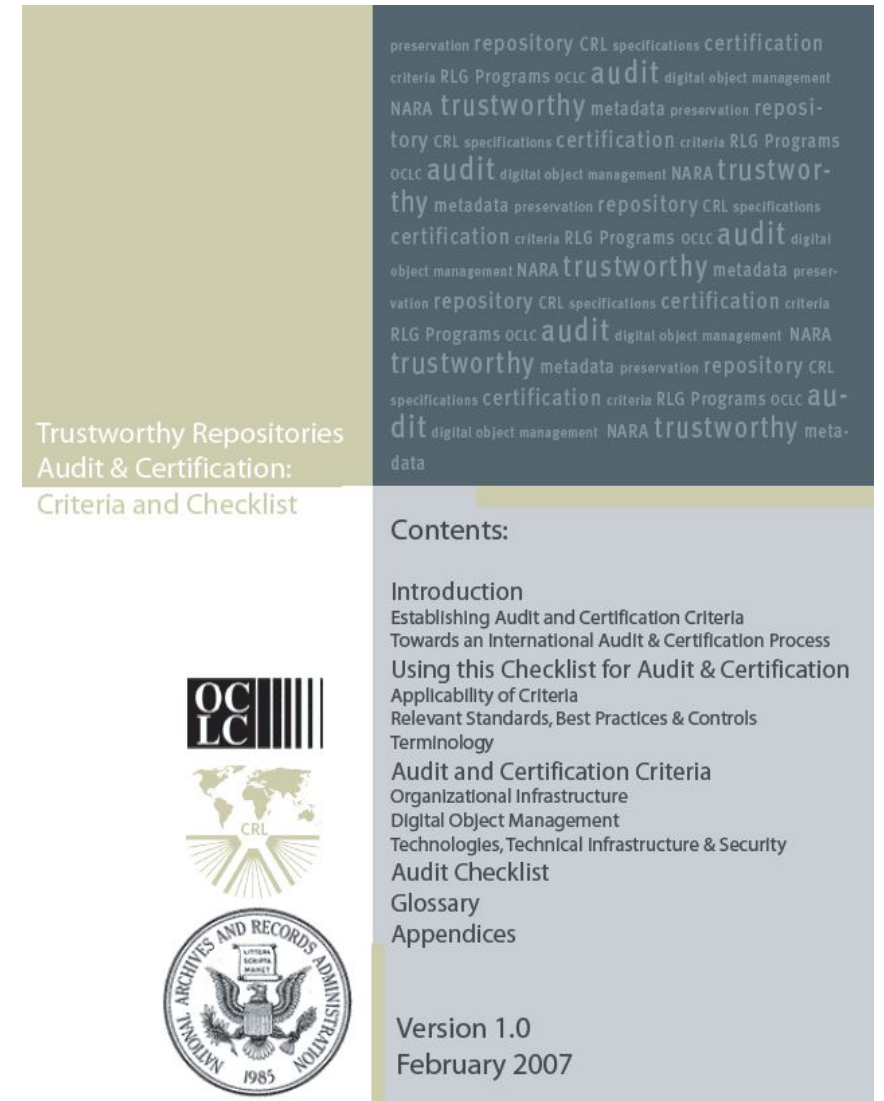


- TRAC Checklist, 2007 – ISO 16363: 2012, pending revision
- nestor Catalogue of Criteria for Trusted Digital Repository, 2004
- Ten Principles (for digital repositories), 2007
- Data Seal of Approval, 2008

# Audit and Certification of Trustworthy Digital Repositories

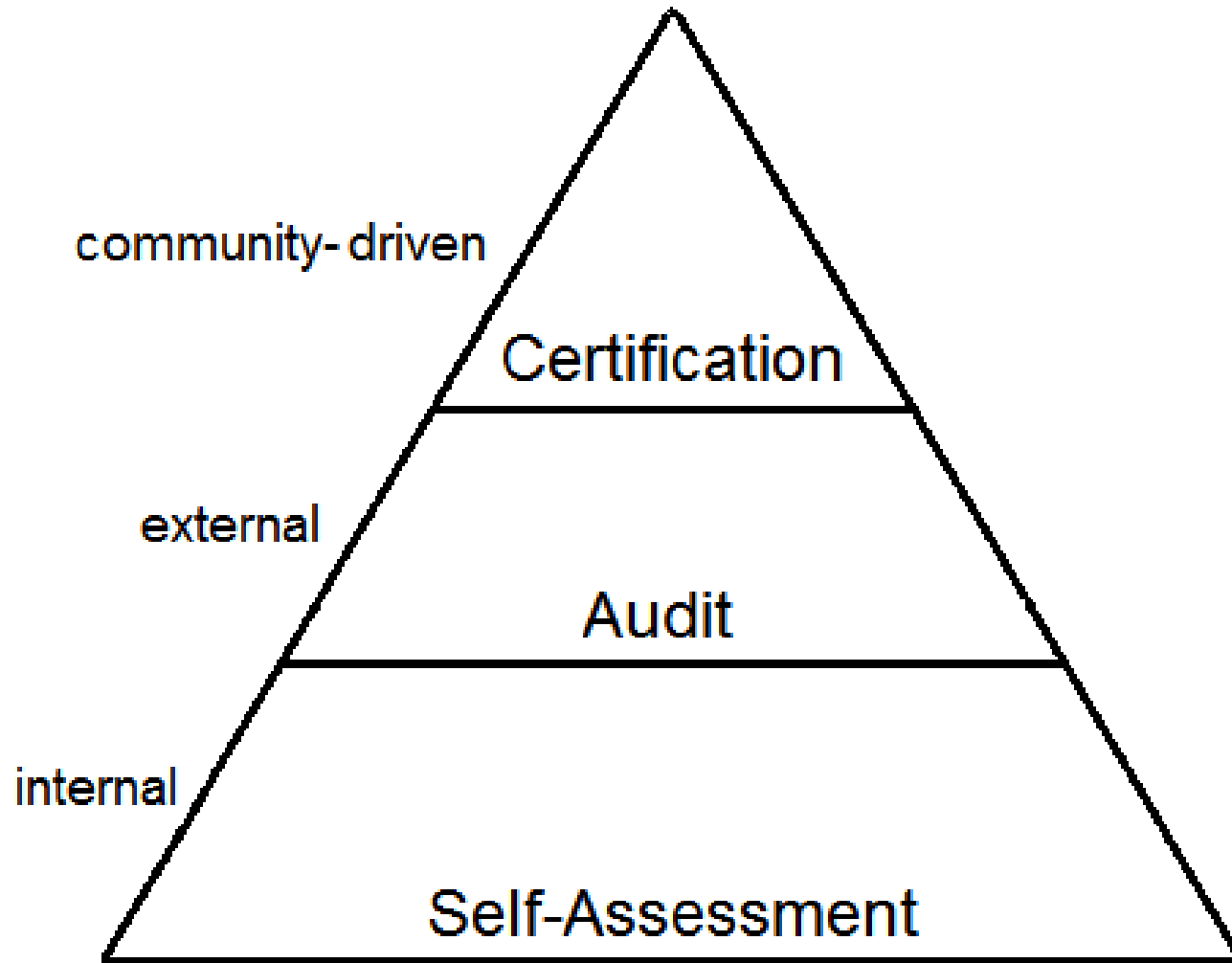


ISO 16363: 2012  
2021 pending  
based on TRAC



# 3. Implement

In Practice...





# Early assessment tools and approaches

- DINI (Germany) – archive certifications
  - A certification example for TRAC in place by early 2000s
- DRAMBORA (DCC, DPE) – risk management tool for collections
  - A means for managing evidence launched around 2005
- Test audits using TRAC since 2006
  - Process and documentation example that informed ISO 16363
- DPM Self-assessment Tool version 1
  - Capture documentation for incremental improvement (c 2010)

# Ten Principles

1. Commits to continuing maintenance of digital objects for identified community/communities.
2. Demonstrates organizational fitness (including financial, staffing structure, and processes) to fulfil its commitment.
3. Acquires and maintains requisite contractual and legal rights and fulfils responsibilities.
4. Has an effective and efficient policy framework.
5. Acquires and ingests digital objects based upon stated criteria that correspond to its commitments and capabilities.
6. Maintains/ensures the integrity, authenticity and usability of digital objects it holds over time.
7. Creates and maintains requisite metadata about actions taken on digital objects during preservation as well as the relevant production, access support, and usage process contexts before preservation.
8. Fulfils requisite dissemination requirements.
9. Has a strategic program for preservation planning and action.
10. Has technical infrastructure adequate to continuing maintenance and security of its digital objects.<sup>6</sup>

# PLATTER

## Planning Tool for Trusted Electronic Repositories 2008

Business Plan

Staffing Plan

Data Plan

Acquisition Plan

Access Plan

Preservation Plan

Technical System plan

Succession Plan

Disaster Plan

<i>Strategic Objective Plan</i>	<i>Responsibilities</i>	<i>Corresponding Core Principle(s)</i>
Business Plan	Financial planning, monitoring, and reporting	2
Staffing Plan	Acquisition and maintenance of relevant skillset for managing repository	2
Data Plan	Specification of data and metadata objects, formats, and structures for ingest, storage, and dissemination, together with the relevant transformations and mappings.	5,6,7,8
Acquisition Plan	Management of the relationship with depositors and other data providers. Appraisal policy.	3,5
Access Plan	Management of relationship with end users. Access Policy.	1,8
Preservation Plan	Ensure that access and usability of material in repository is not adversely affected by technological change and obsolescence	9
Technical System Plan	Specifies goals for hardware, software and networking	10
Succession Plan	Manage obligation to ensure preservation of material beyond the lifetime of the repository	1
Disaster Plan	Respond to rapid changes to the repository environment	1,6

# DPM Self-assessment & Audit Tool

Ongoing self-assessment and audit

- Version 1.0 at ICPSR – TRAC
- Version 2.0 at MIT Libraries – ISO 16363

## Status Summary

Section	Total Requirements *	Average Compliance Rating
<b>3. Organizational Infrastructure</b>	25	0.4000
<b>4. Digital Object Management</b>	60	0.0000
<b>5. Infrastructure and Security Risk Management</b>	24	0.0000

\* The total number of requirements include sub-requirements and sub-sub-requirements for which TRAC provides a basis for a compliance rating.

## Requirement Status

### 3.1 Governance and Organizational Viability

	Compliance Rating	Status
3.1.1 Mission statement	4	Accepted
3.1.2 Preservation Strategic Plan	3	Ready for review
3.1.2.1 Succession, contingency, and/or escrow plans	2	In progress
3.1.2.2 Organizational environment	1	Not started
3.1.3 Collection Policy	0	Not started

# DPM Self-assessment Tools: Roles

The list below consists of the stakeholder groups that have a role to play in TRAC compliance. TRAC roles and responsibilities are enumerated.

- [Senior Management](#)
- [Coordination Group](#)
- [Operations Group](#)
- [Information Technology](#)
- [Administration: Finance or HR](#)
- [Acquisitions](#)
- [Preservation](#)
- [Dissemination](#)
- [Rights Management](#)
- [External Advisory Group](#)

TRAC Home Responsibilities Login

Home

## Senior Management

This page consists of a RACI chart to assist in assigning and tracking the TRAC for an outline of roles included in the following RACI chart. For additional information, see the [Roles](#) page.

**Responsible**

- [3.1.2 Preservation Strategic Plan](#)
- [3.1.3 Collection Policy](#)

**Accountable**

- [3.1.1 Mission Statement](#)
- [3.2.1 Identified Required Competencies and Appointed Staff](#)

**Support**

**Consulted**

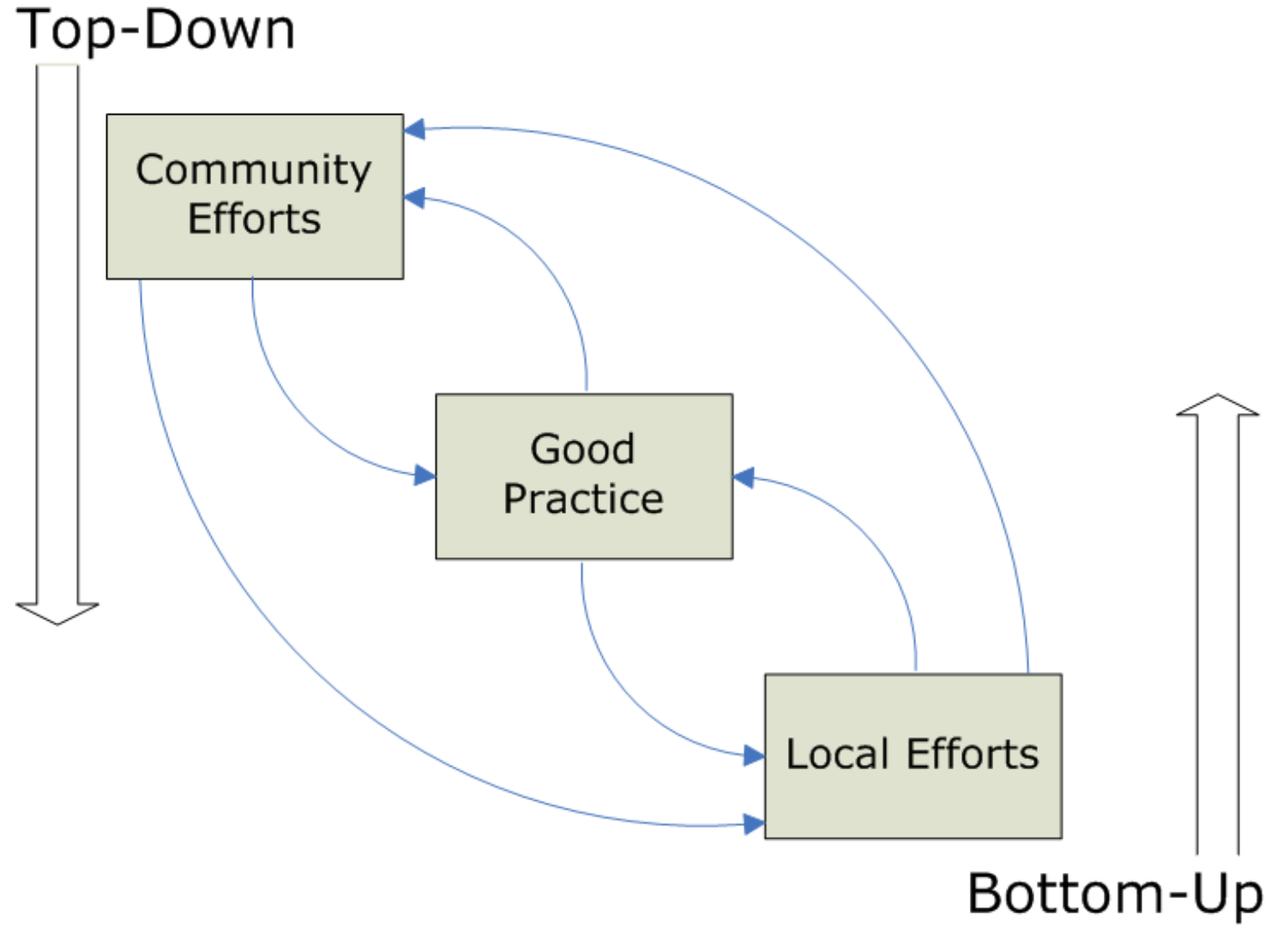
**Informed**

# Outcomes of self-assessment and audit

Completing a self-assessment or audit may lead a repository to:

- Formalize policies
- Define roles and responsibilities
- Consider succession planning
- Designate funding
- Rationalize metadata
- Address preservation rights
- Prioritize technical developments

# 4. Improve



# Evolving good practice using lessons learned

## Community developments from lessons learned:

- **NDSA Levels of Digital Preservation v. 1 2011; v. 2 2020**
  - 2011: help repositories get started
  - 2020: informed by using 2011; added assessment tool
- **Outer OAIS - Inner OAIS (OO-IO) Model, 2016**
  - Addresses audit for repositories and providers (Zierau and McGovern)
- **Core Trust Seal, 2017**
  - World Data Systems (WDS) + Data Seal of Approval (DSA)
  - related: FAIR Principles (Findable, Accessible, Interoperable, Reusable), 2016
- **DPC Rapid Assessment Model (RAM) v. 1 2019; v. 2 2021**
  - Making it easier for repositories to do a gap analysis



# Objectives

With our ongoing assessment and audit developments we are trying to:

- Improve our ability to define, build, demonstrate and measure (compliance, users) trust in our repositories
- Incorporate standards-based practice into day-to-day
- Highlight benefits and value of self-assessment & audit
- Make demonstrating good practice ongoing, efficient, productive – and enjoyable?

# Next improvements?

My wish list:

Add tools to make self-assessment and audits easier:

- create, capture, update documentation for audit and assessment
- use assessment results to prioritize development needed
- support peer review audits
- collaboratively complete self-assessments and audits with providers
- share results from assessments and audits

How do we find out who has been certified?

Who should be audited or certified?

Who should do audits and certification?

Thank you!

Questions?