

# Topic 9 - Assessing Sustainability

# Overview

- Introduction to ISO 16363
- Challenges to long-term sustainability
- Assessing sustainability

# Digital Preservation Foundation

The 3-legged stool

- Technology
- Organization
- Resources

# Organizational Infrastructure

*Policies, procedures, practices, people  
required to build and run a program*

# Resources framework

*Requisite startup, ongoing, and contingency funding to enable and sustain the digital preservation program.*

# Technological Infrastructure

*Requisite equipment, software, hardware,  
a secure environment, and skills.  
Anticipates and responds wisely to  
changing technology.*

# ISO 16363

Speaker notes

*No notes on this slide.*

# ISO 16363

*“Space data and information transfer systems – Audit and certification of trustworthy digital repositories”*

- 90 pages of standards-speak
- 110 metrics
- 4 levels of inconsistent hierarchical nesting

ISO 16363:2012 (CCSDS 652.0-R-1)

Lovely, ey? ;)



# What for?

- How do we know if we're doing it right?
- How does a user know if we're doing it right?

# It does make sense.

*ISO 16363 provides criteria with which to evaluate the three essential components of a digital preservation environment*

- Organizational Infrastructure
- Digital Object Management
- Technical Infrastructure & Security

# Organizational Infrastructure

1. Governance & organizational viability
2. Staffing & structure
3. Procedural & policy accountability
4. Financial Sustainability
5. Contracts, license & liabilities

# Organizational Infrastructure

1. Are we supposed to be doing this?  
Governance & organizational viability
2. Do we have the people to do this?  
Staffing & structure
3. Are we sure we know how to do this?  
Procedural & policy accountability
4. Can we afford to do this?  
Financial Sustainability
5. Do we have the rights to do this?  
Contracts, license & liabilities

# Digital Object Management

1. Ingest: Acquisition
2. Ingest: AIP creation
3. Preservation Planning
4. AIP preservation
5. Information access & management

# Digital Object Management

## 1. Do we have everything?

Ingest: Acquisition

## 2. Is this going to be preservable?

Ingest: AIP creation

## 3. How are we going to do this?

Preservation Planning

## 4. Are we keeping an eye on everything?

AIP preservation

## 5. Can people find and use this stuff?

Information access & management

# Technical Infrastructure

1. Technical infrastructure risk management
2. Security risk management

# Technical Infrastructure

## 1. Is our infrastructure working properly for the task?

Technical infrastructure risk management

## 2. Can we deal with an emergency?

Security risk management



# Assessing sustainability

# Certification? Me? Naaah.

- But isn't this about certification?
- What if we don't want/need that?
- And is there even a certification process?
- Why should I care?

# Self-Assessment

- Identification of strengths and gaps
- Risk assessment & prioritization
- Road mapping

# Self or 3rd Party?

*“You are doing a great job on a, b, c, but we recommend making improvements on x, y, z. Here is a roadmap.”*

- Self assessment is okay
- But working with 3rd party has advantages

# Level of compliance

## 0. **Non-compliant or not started:**

The repository has not yet addressed the requirement.

## 1. **Slightly compliant:**

The repository has something in place, but is less than halfway compliant towards addressing the requirement.

## 2. **Half compliant:**

The repository has partially addressed the requirement and has significant work remaining to fully address the requirement.

## 3. **Mostly compliant:**

The repository can demonstrate that it has mostly addressed the requirement and is working on full compliance.

## 4. **Fully compliant:**

The repository can demonstrate that it has comprehensively addressed the requirement.

A train-the-trainer once asked us when preparing lectures for the BenG Winterschool:

*Why would anyone want to do what you're doing? It sounds like it's only problems and troubles!*

It's not. But it's a neverending challenge - and that's the fun (at least for me).

# Challenges

to long term sustainability:

- Time
- Know-How
- Money
- Team splits up
- Tech failure
- Obsolescence
- Complacency
- Management
- ...

# Cost of Inaction Calculator

URL: <https://coi.weareavp.com/>

# Links

- Nancy McGovern, Anne Kenney, “[Digital Preservation Management: Implementing Short-Term Strategies for Long-term Problems](#)”
- [Cost of Inaction Calculator \(AVP\)](#)