

# FDsys: Preparation and Internal Audit for ISO 16363 Certification

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## Introduction



INSTITUTE of  
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- Jessica Tieman, M.S. Library & Information Science
- National Digital Stewardship Residency  
Created by the Library of Congress in partnership with the Institute of Museum and Library Services (IMLS)
- Mission: “to build a dedicated community of professionals who will advance our nation's capabilities in managing, preserving, and making accessible the digital record of human achievement. This will enable current and future generations to fully realize the potential of digital resources now and for years to come.”

## ISO 16363: Audit and Certification of Trustworthy Digital Repository

- GPO is currently preparing for an external audit of FDsys against the ISO 16363 criteria
- Standard which defines recommended practices for assessing the trustworthiness of digital repositories
- Comprised of 109 criteria covering organizational infrastructure, digital object management, and infrastructure and security risk management

## ISO 16363 Audit Criteria Examples

### Organizational Infrastructure

*3.1.1 The repository shall have a mission statement that reflects a commitment to the preservation of, long term retention of, management of, and access to digital information.*

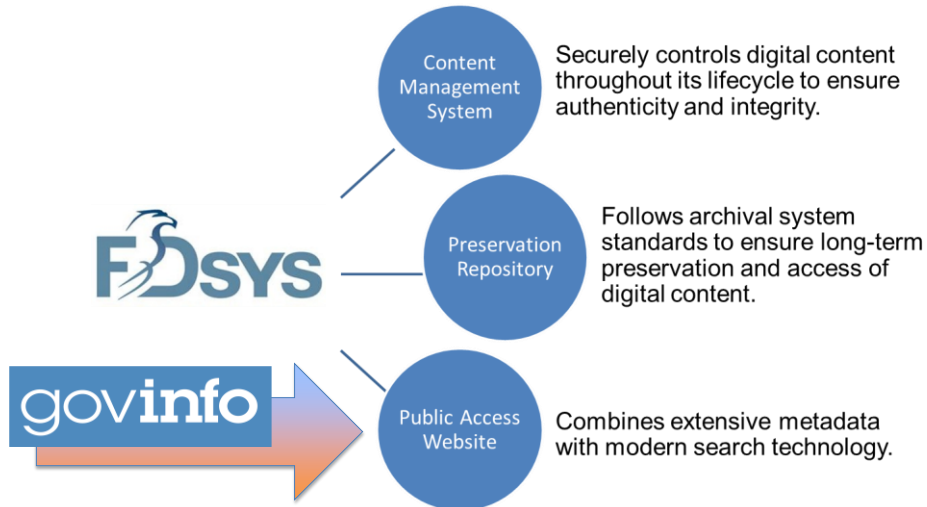
### Digital Object Management

*4.1.5 The repository shall have an ingest process which verifies each Submission Information Package for completeness and correctness.*

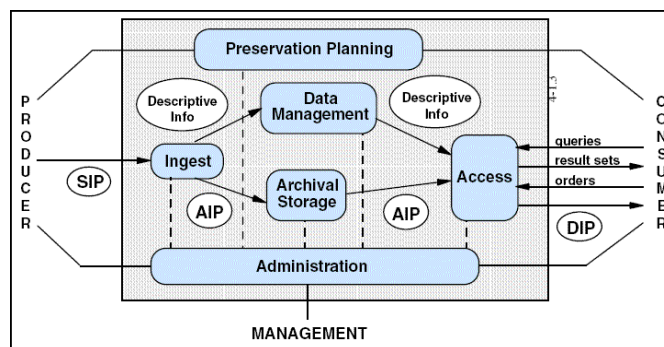
### Infrastructure and Security Management

*5.2.4 The repository shall have suitable written disaster preparedness and recovery plan(s), including at least one off-site backup of all preserved information together with an offsite copy of the recovery plan(s).*

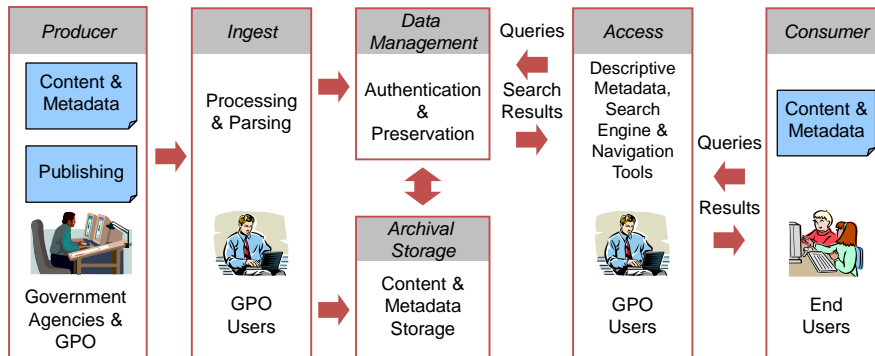
# FDsys Overview



# Reference Model for an Open Archival Information System (OAIS) (ISO 14721)



## FDsys/govinfo OAIS Implementation



## Why certify digital repositories?

“For assuring the longevity of information, perhaps the most important role in the operation of a digital archive is managing the identity, integrity and quality of the archives itself as a trusted source of the cultural record. Users of archived information in electronic form and of archival services relating to that information need to have assurance that a digital archives is what it says it is and that the information stored there is safe for the long term.”

– John Garrett and Donald Waters, *Preserving Digital Information: Report of the Task Force on Archiving of Digital Information, Commission on Preservation and Access and RLG, 1996*

# ISO 16363 Auditor's Priorities

## Auditing body Philosophy:

*Trustworthy Digital Repositories are ecosystems of people, technology, resources, policies, business planning, and the user community*

## Goals of the audit process:

*Ensure the repository focuses on preservation (as much as access)*

*Ensure the repository's organizational practices conform to standards and digital preservation terminology*

*Ensure the repository has explicitly defined its user community and stakeholders and understands their needs*

*Ensure the repository has viable business practices, operations, and funding well into the future*

# ISO 16363 Standard Status

1985: *Report from the Committee on Records of Government*

2002: *Digital Repositories: Attributes & Responsibilities* (Research Libraries Group & OCLC)  
Recommendation: Develop a process for the certification of digital repositories

2005: Trustworthy Repositories Audit and Certification (TRAC) Criteria and Checklist (Lead by RLG-NARA Task Force)

2006: Center for Research Libraries (CRL) begins TRAC assessments

2007: TRAC presented to Consultative Committee for Space Data Systems (CCSDS) by several RLG-NARA working group members

2012: ISO 16363 Standard for Trustworthy Certification

2014: ISO 16919 for Audit requirements

2015: ISO-PTAB (Primary Trustworthy Digital Repository Authorization Body) hosts High Level Training Courses (GPO takes course)

Jan 20, 2016: ANAB (ANSI-ASQ National Accreditation Board) Announces Certification Process for Auditing Bodies

Reference: Marks, Steve, Bruce I. Ambacher, Christopher J. Prom, and Michael Shallcross. *Becoming a Trusted Digital Repository*. Society of American Archivists, 2015. Print

## Internal Audit Project Summary

- Gap analysis
- Outreach with OAIS-Compliant Digital Repositories
- Creation of necessary documentation
- Internal audit

## Project Successes

- OAIS Compliance
- Engaged User Community
- Digital Object and Data Management
- Succession and Contingency Planning
- Infrastructure Risk Management
- Content Integrity and Authenticity
- Technical Documentation

# Project Challenges

- Organizational Governance
- Designated Community
- Technical Dependencies
- New Vision (National Plan, FIPNet, govinfo)

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## Advancing Institutional Progress through Digital Repository Assessment

March 16, 2016 by [Mike Ashenfelder](#)

*The following is a guest post by [Jessica Tieman](#).*

Three quarters of the way into my twelve-month National Digital Stewardship Residency at the U.S. Government Publishing Office, I reflect on the success and challenges of my project. I also recognize how the outcome of my work will impact the future of the GPO, its business units, the communities within the Federal Government and the general public that are all invested in the success of GPO's audit and certification of govinfo (formerly FDsys) repository.

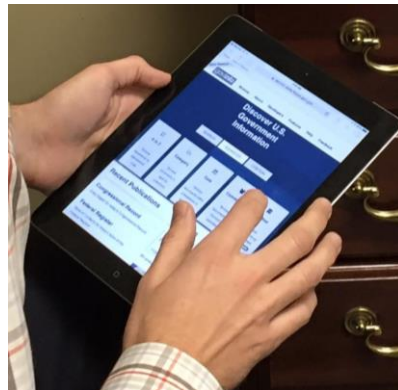
In this post, I'll give a brief update on my assigned role at GPO: to prepare govinfo for ISO 16363 Trustworthy Digital Repository Audit and Certification. I'll also explain how preparing for the audit has served as a way for GPO to advance its strategic plan to transition from a print-centric model to a content-centric digital agency.



U.S. Government Publishing Office Director Davita Vance Cooks reveals the new [www.govinfo.gov](#) during the site launch event on February 3rd. Photo: U.S. Government Publishing Office

# Outcomes

- Centralized Documentation
- Policy and Guideline Development
- Organizational Transparency
- External Certification



## Thank You