**Government Publishing Office**

**NDSR Project Title**
Preparation for Audit and Certification of GPO’s FDsys as a Trustworthy Digital Repository

**Project Summary**
The Government Publishing Office (GPO) seeks to certify GPO’s Federal Digital System (FDsys) as a Trustworthy Digital Repository. The project will include a review of GPO’s artifacts against the TDR checklist (ISO 16363); outreach to digital repositories and certifying organizations to gather feedback, lessons learned, and best practices related to the certification process; updates to GPO’s artifacts; and a report of findings from an internal audit conducted by the Resident. The report will be an input to a subsequent external audit conducted by an accredited organization (ISO 16919).

**Specific Goals / Objectives**
- Participate on the FDsys Program team that manages, develops, and supports the content management system, preservation repository, and public access website components of FDsys.
- Become familiar with the TRAC and TDR checklists.
- Interface with repositories and certifying organizations to gather feedback, best practices, and lessons learned about the certification process.
- Lead initiatives to create, implement, or update artifacts required for the external audit, and perform an internal audit against the TDR checklist.

**Timeframe & Deliverables**

**Months 1-3: Immersion and Analysis**
- Participate on the FDsys Program team.
- Review and become familiar with the TRAC and TDR checklists.
- Review GPO artifacts including technical design documents, policy statements, and operational procedures.
- Prepare a detailed gap analysis of artifacts mentioned in the TDR checklist versus existing GPO artifacts.

**Months 4-6: Outreach and Best Practices**
- Contact a minimum of four certified TRAC-compliant repositories and a minimum of one certifying organization to gather best practices and lessons learned about the audit and certification process.
- Contact a minimum of three large repositories that follow the OAIS reference model but have not pursued certification as either a TRAC-compliant or Trustworthy Digital Repository to gather their feedback about the audit and certification process.
- Deliver a document summarizing feedback, best practices, and lessons learned that can be shared with the digital stewardship community.

**Months 7-9: Implementation and Updates**
- Interface with technical and policy staff members in various GPO business units, and participate on a cross-functional project team leading initiatives to create, implement, and update required artifacts as necessary based on the gap analysis, feedback, best practices, and lessons learned.

**Months 10-12: Assessment and Audit**
- Perform an internal audit of FDsys against the TDR checklist.

**Project Deliverable**
The Resident will deliver a final audit report to the project team and GPO senior management.
Resources Required
Two Mentors (Lisa LaPlant, FDsys Program Manager and David Walls, Preservation Librarian) to provide insight about the technical and policy aspects of operating a system that manages, preserves, and provides access to electronic Federal Government Publications; 1 Resident.

GPO’s Office of Programs, Strategy, and Technology (PST) will provide a collaborative, co-located workspace for the Resident to be embedded with the software development, operational support, and PST staff members who comprise the FDsys Program team at GPO’s headquarters on North Capitol Street in Washington, DC. The Resident will also be given the option to utilize a secondary workspace within GPO’s Library Services and Content Management organization.

Access to TRAC and TDR checklists, ISO standards, FDsys technical design documents, GPO policy statements, GPO operational procedures, an instance of FDsys, TRAC-compliant repositories, large OAIS-repositories, certifying organizations, technical and policy staff members in various GPO business units, and a cross-functional project team.

Context
The mission of the U.S. Government Publishing Office (GPO) is to Keep America Informed as the official, digital, and secure source for producing, protecting, preserving, and distributing the official publications and information products of the Federal Government. Under Title 44 of the U.S. Code, GPO is responsible for producing and distributing information products for all three branches of the Federal Government, including the publications of Congress and the White House, U.S. passports for the State Department, and the publications of other Federal agencies and the courts. GPO provides permanent public access to Government information at no charge through our Federal Digital System (FDsys) and through partnerships with approximately 1,200 Federal Depository Libraries nationwide.

GPO’s vision is to continue to transform ourselves into a digital information platform and provider of secure credentials. GPO has continually transformed itself throughout its history by adapting to changing technologies to better serve the information needs of Congress, Federal agencies, and the American public. Following the enactment of the Government Printing Office Electronic Information Access Enhancement Act of 1993, GPO began providing online access to Government publications through GPO Access. In 2003, the National Archives and Records Administration formally recognized GPO as an affiliate archive responsible for ensuring permanent public access to the electronic Government publications on GPO Access, and this function continues today with FDsys.

In January 2009, FDsys was launched as a Beta in parallel with GPO Access. FDsys replaced GPO Access as GPO’s system of record in December 2010, and GPO Access was retired in March 2012. FDsys is a content management system, preservation repository, and public access website that provides free access to official Government publications and securely controls digital content throughout its lifecycle to ensure content authenticity and integrity. FDsys ensures long-term preservation of and access to digital Government content by following archival system standards. In addition, the FDsys public website combines robust search technology with extensive metadata for a high-quality user experience.

After five years of operating as a production system, stakeholders are eager for FDsys to pass an external audit using the TDR checklist resulting in certification as a Trustworthy Digital Repository. The TRAC (Trustworthy Repositories Audit and Certification) checklist assesses the reliability, commitment, and readiness of institutions to assume long-term preservation responsibilities, and a number of repositories have already been certified as TRAC-compliant. The TRAC checklist was superseded in 2012 by ISO 16363:2012, known as the TDR (Audit and Certification of Trustworthy Digital Repositories) checklist. The TDR checklist defines a recommended practice for assessing the trustworthiness of digital repositories and is comprised of 109 criteria covering Organizational Infrastructure, Digital Object Management, and Infrastructure and Security Risk Management. The TDR checklist is now used as a basis for certification as a Trustworthy Digital Repository by an accredited organization (ISO 16919:2014).
Required Knowledge and Skills of Residents

- Ability to communicate clearly and effectively both verbally and in writing.
- Ability to work independently and on cross-functional teams.
- Strong analytical, critical thinking, and organizational skills.
- Knowledge of ISO 14721 which specifies a reference model for an Open Archival Information System (OAIS).
- Knowledge of the Metadata Encoding and Transmission Standard (METS) for encoding administrative and structural metadata in XML.
- Knowledge of the Metadata Object Description Schema (MODS) for encoding bibliographic and descriptive metadata in XML.
- Knowledge of the Preservation Metadata: Implementation Strategies (PREMIS) Data Dictionary for encoding preservation metadata in XML.

Preferred Knowledge or Experience of Residents

- Knowledge of the TRAC checklist, ISO 16363 (TDR checklist), and ISO 16919.
- Knowledge of the Federal Depository Library Program.
- Knowledge of digital file formats and preservation strategies.
- Experience with project management and software development including traditional waterfall and Agile methodologies.
- Experience reviewing or authoring system design documents.
- Experience using the Documentum content management system.