Science Focus Task Force

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Objectives

- Monitor and conduct project research in the light of scientific activities
 - Literature review
 - Surveys
 - Case studies
 - Prototype system development
- In order to help answer the domain and cross-domain research questions.



Archaeological Records & Geographic Information Systems

- Interviews with archaeological research center in United States Southwest
- Literature review
- Online survey of archaeologist recordkeeping practices and GIS covering 30 countries



Cybercartographic Atlas of Antarctica

- "spatially-referenced information...in an interactive, dynamic, multimedia, multimodal, multi-sensory and multidisciplinary format"
- Records creator being investigated by InterPARES and also looking to InterPARES to help them create records capable of being preserved over the long term



Spacecraft Mission Operation Records

- Interviews of Appraisers and Preservers of Scientific data and records
- Validation of IP1 Appraisal & Preservation Models
- Walkthrough of the models using case study data and recording results
- Refinement and validation of the models



Electronic Engineering & Manufacturing

- Collaboration of U.S. government agencies
 and San Diego Supercomputer Center
- Observation of prototype archival system that must preserve and authenticate electronic engineering and manufacturing records
- Assess InterPARES1 Preservation Model



Persistent Archives Based on Data Grids

- Objective: Demonstrate that the functions of the InterPARES Preservation Model can be implemented in a Virtual Data Grid.
- NARA Persistent Archives Prototype will be used to accession into a distributed archival repository OAIS submission information packages (SIPs) containing scientific data, records and metadata.
- Demonstrate migration of scientific data and records in legacy file formats to current, standard file formats.



Survey of Encoding Formats for Scientific Data

- Documentation of file formats, MIME types and examples of fifty file formats for scientific data in the space and earth sciences.
- Readers and Viewers for all fifty file formats.
- Survey of formal languages for describing file formats.
- Conversion tools for all fifty file formats.
- Test bed for migrating scientific data from current to standard formats.
- Methodology for evaluating and selecting standard file formats.



Assessing the Authenticity of an Electronic Recordkeeping System

- A decision support tool is being developed to aid records managers, information managers and archivists assess the trustworthiness of electronic recordkeeping systems.
- The tool is interactive, knowledge based and includes information about international standards in records management and information security.

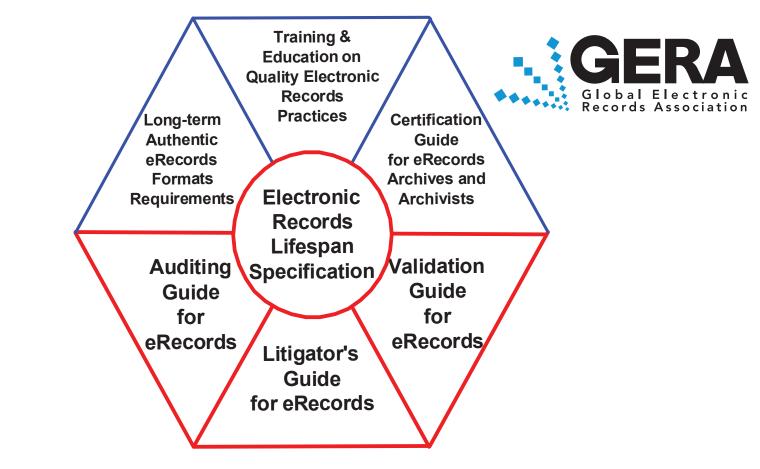


Dissemination Activities

- International Conference and Workshop
 Presentations with multiple professional disciplines
- Publications
- Collaboration and guidance of other research and development projects



Collaboration with Industry





Preliminary Findings

• Scientists are concerned about:

- Data versus records
- Who pays for preservation, storing, and access to the records of scientific activities?
- Funding agencies often require preservation, but don't offer methods or means
- Existing metadata schemes not geared towards recordkeeping or preservation

