# NARA's Electronic Records Archives Program

Presentation to the
National Digital Strategy Advisory Board
Library of Congress

June 28, 2004

Kenneth Thibodeau, Ph.D.
Director
Electronic Records Archives Program
**National Archives and Records Administration**

# NARA Mission

- "NARA ensures, for the citizen and the public servant, for the President and for the Congress and the Courts, ready access to essential evidence."
  - *essential evidence*: material generated by or received by the Federal Government, that documents
    - the rights of citizens,
    - the actions of Federal officials, and
    - the national experience.

# NARA's Electronic Records Challenge

- Preserve any type of record,
- Created using any type of application,
- On any computing platform
- From any entity in the Federal Government and any donor
- Provide discovery and delivery to anyone with an interest and legal right of access
- Now and for the life of the Republic, and
- Provide policies, strategies, guidance, and tools for federal agencies to manage electronic records in support of their lines of business

# NARA's Response to the Electronic Records Challenge:

## The Electronic Records Archives Vision

"The Electronic Records Archives will authentically preserve and provide access to any kind of electronic record, free from dependency on any specific hardware or software, enabling NARA to carry out its mission into the future."

# The ERA Program

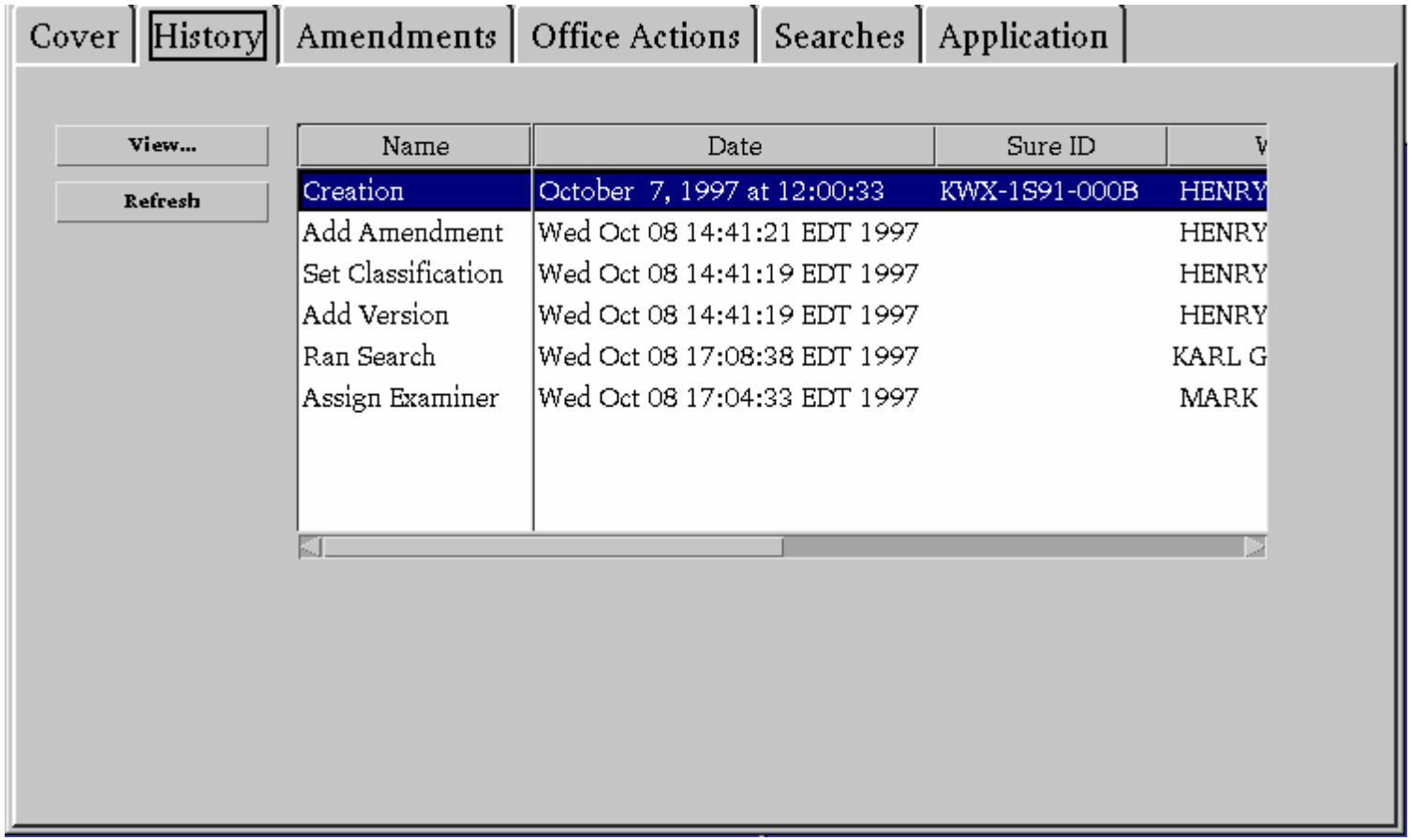
- Acquisition of the ERA system to
  - Support NARA's end-to-end process for lifecycle management of ***all federal records***
  - Preserve, and provide access to valuable ***electronic records***
- Organizational change management
  - Ensure NARA successfully implements the system to achieve its strategic goals
- Research and Exploratory Development
  - Address new challenges posed by continuing change in Information Technology and its use in government
  - Capitalize on progress in technology

# NARA's Strategy

- Attack the critical preservation problem
- Define the requirements in terms of the lifecycle management of records
- Find solutions in commercially viable, mainstream technologies being developed to support e-commerce, e-government and the next generation national information infrastructure
- Align with overall direction of IT in the U.S. Government

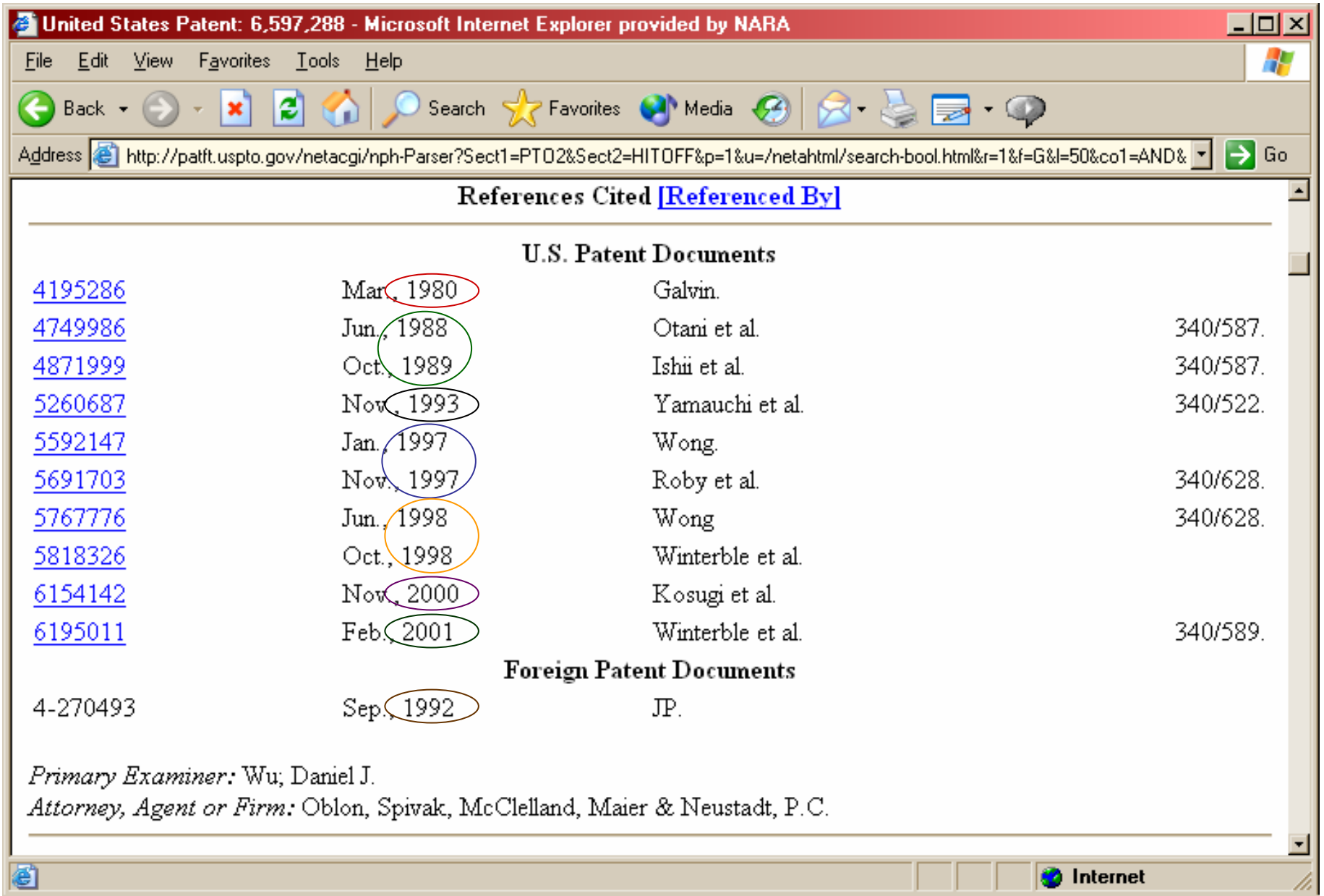
# Some Specific Aspects of Preserving **Records**

# Records are preserved as members of ordered sets




e.g. Patent Application Files

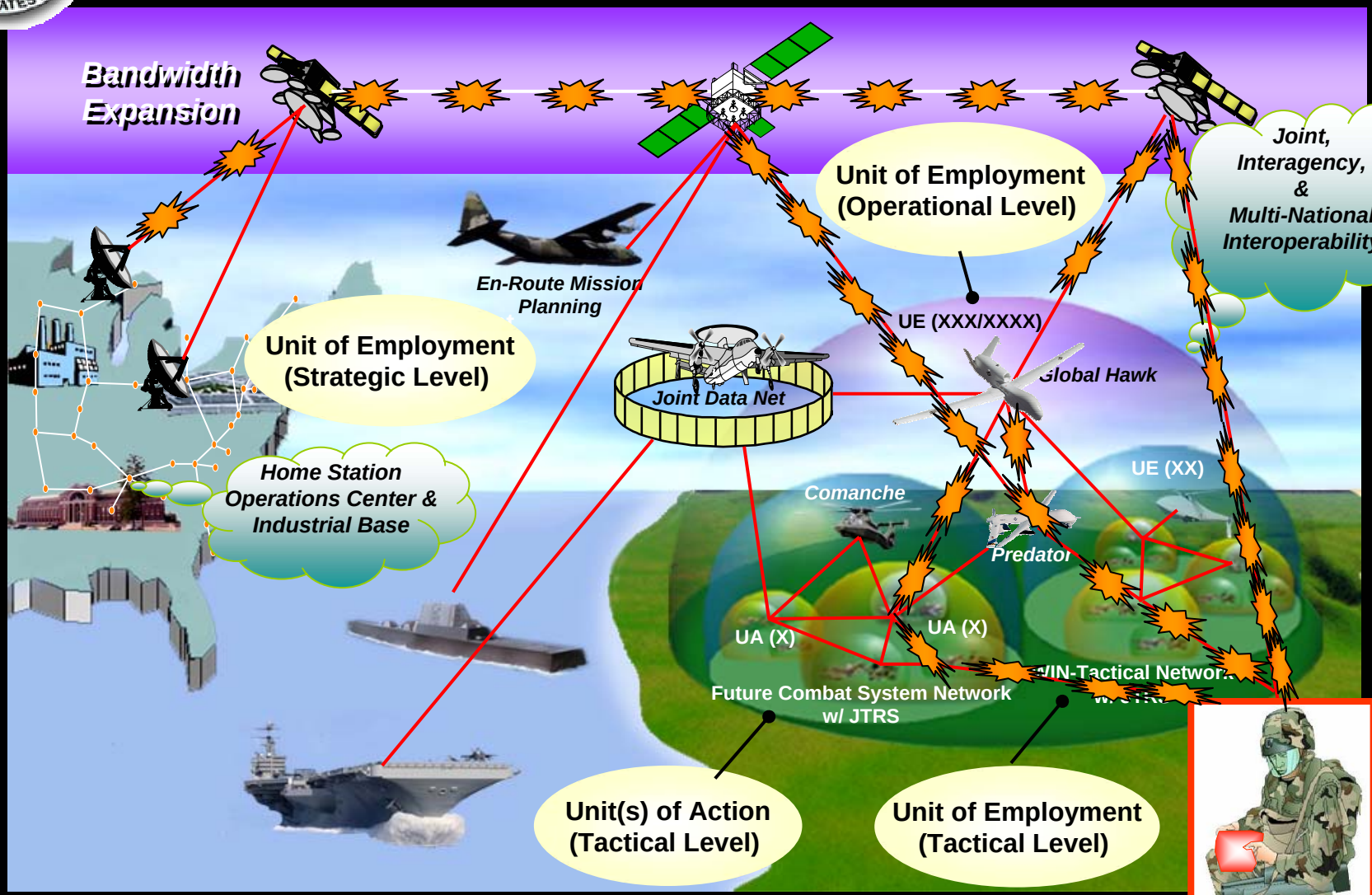
# Sets of records can span long time periods



# Examples of Electronic Records NARA preserves

- Bureau of Economic Analysis, Dept. of Commerce
  - Regional Economic Information System Time Series, 1969-89.
- Watergate Special Prosecution Force, Department of Justice
  - Abstracts of Testimony, Interviews, Diaries, 1973-77.
- Military Assistance Command Vietnam, DoD
  - Psychological Operations Information System, 1970-73
- U.S. Army and Joint Services Environmental Support Group
  - Army Nuclear Testing (1945-1962) Personnel Review
- NARA
  - Electronic Army Serial Number Merged File, ca. 1938 - 1946
- Agency For Health Care Policy And Research**,**
  - National Medical Care Expenditure Survey, 1977, 1987
- Executive Office of the President
  - Automated Records Management System (email), 1994-2000

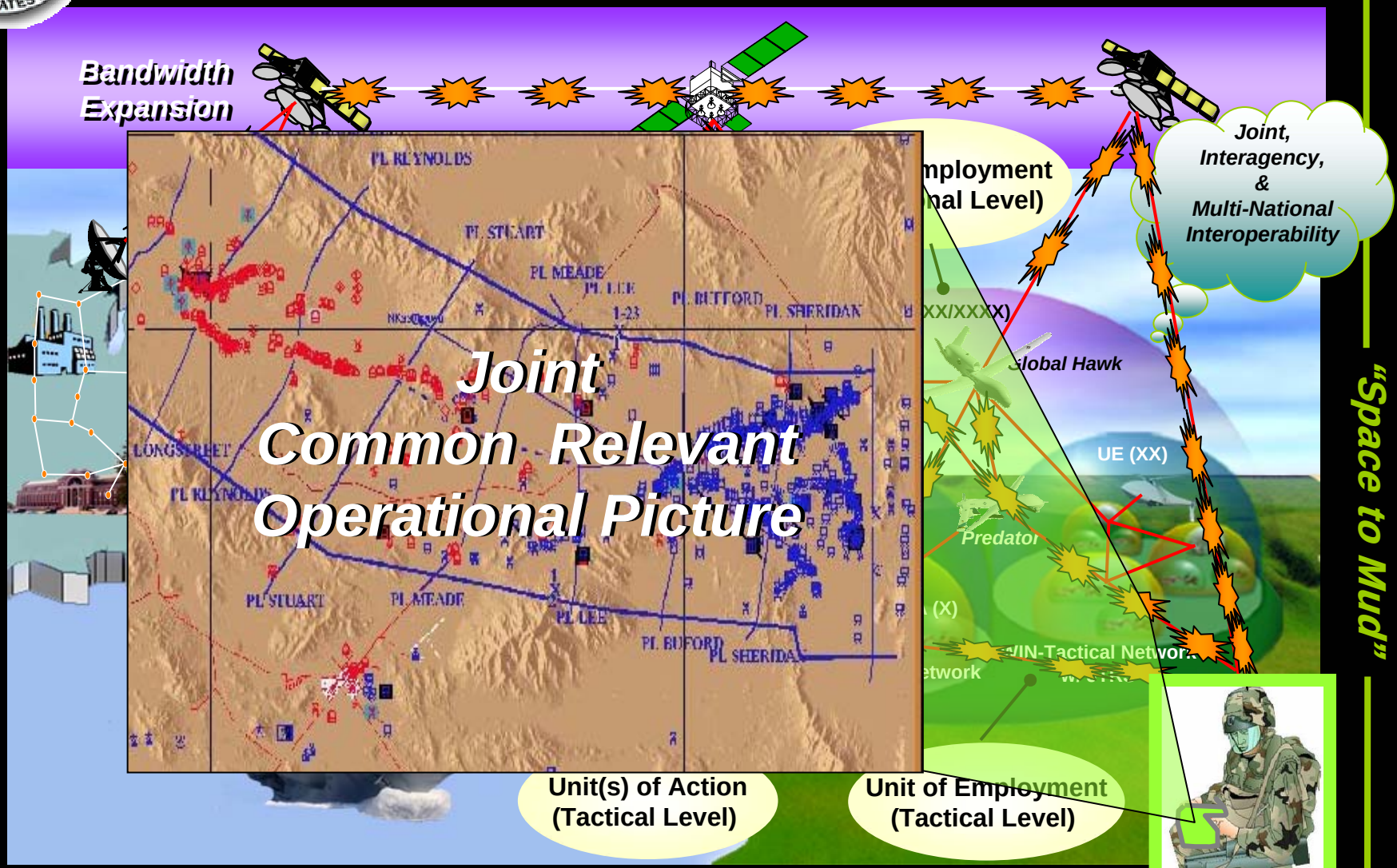
# Exploiting the Enterprise



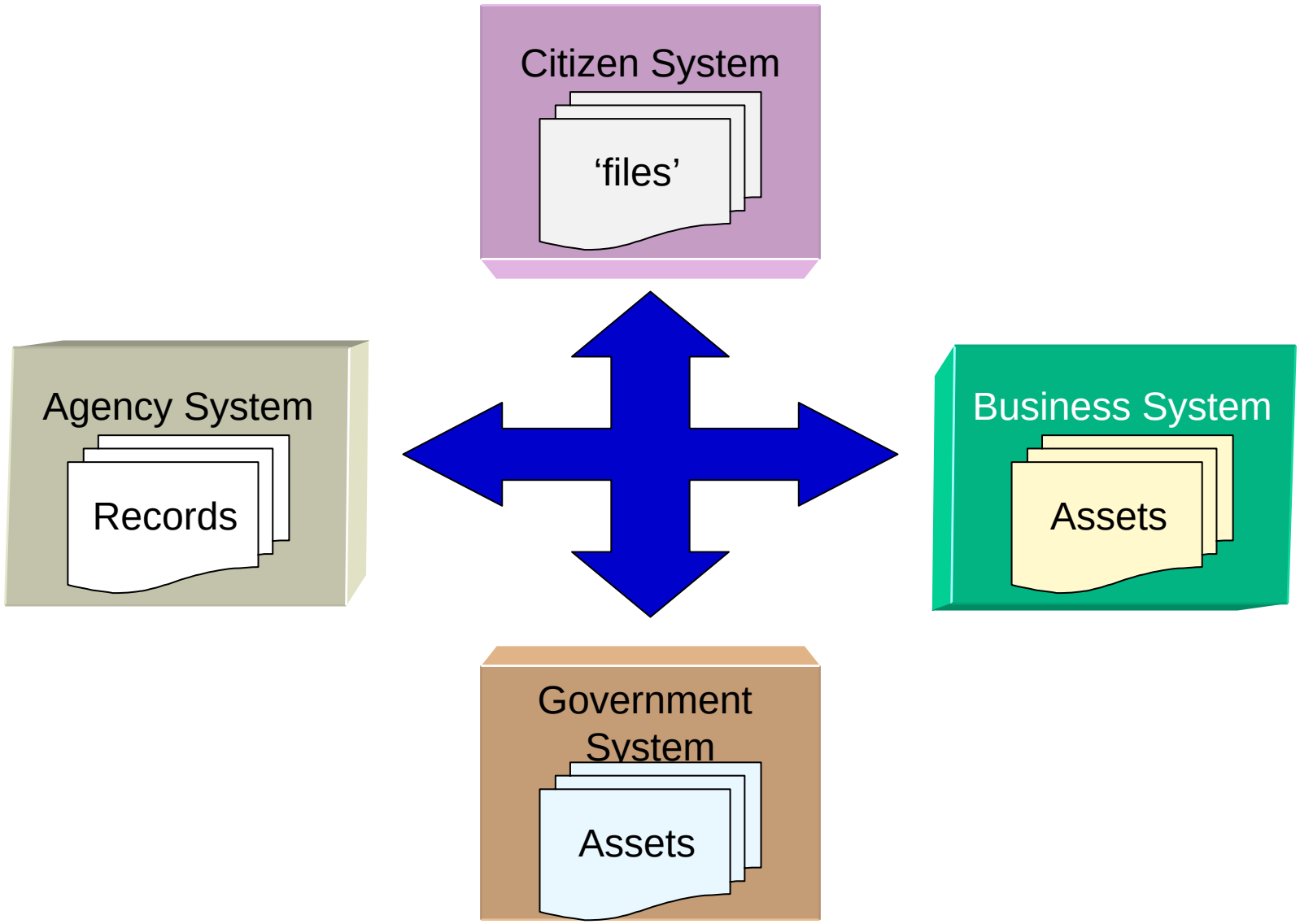

"Space to Mud"

"Factory to Foxhole"

# Exploiting the Enterprise

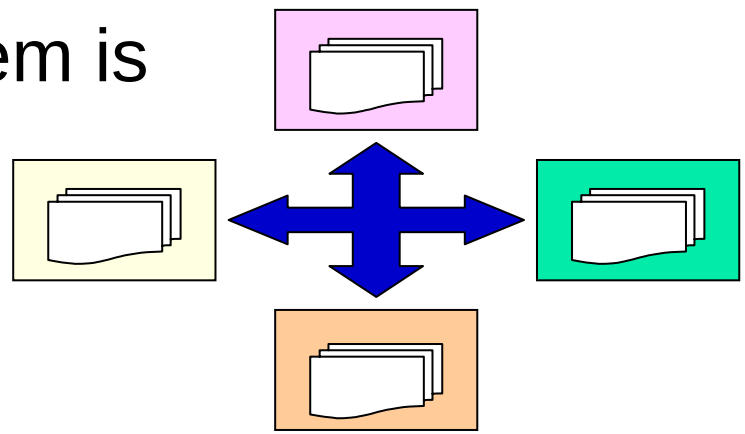


# E-transactions

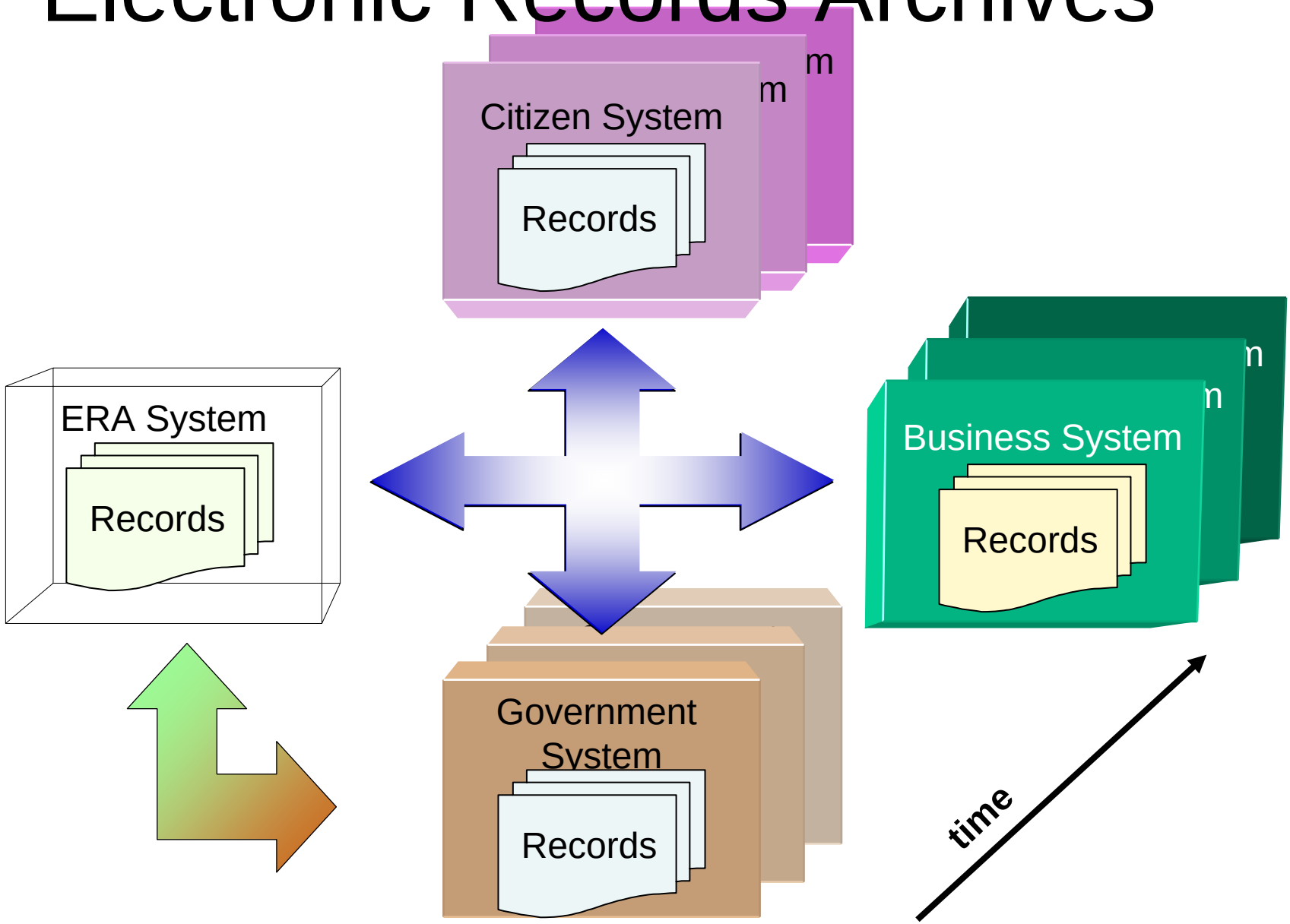


# E-transactions: basic assumptions

- ***Different*** systems interact in conducting e-transactions.
- Anything which must be true about an information asset in one system must be true about that asset in another system involved in the e-transaction.
- The only thing one system needs to know about another system is that it can use the same intermediary.

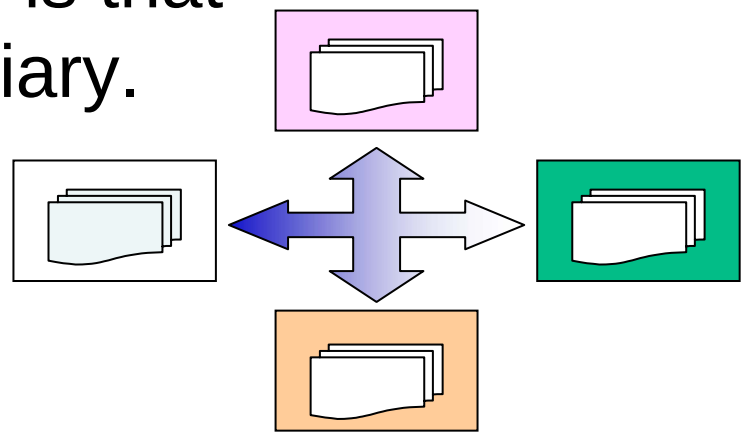


# Electronic Records Archives

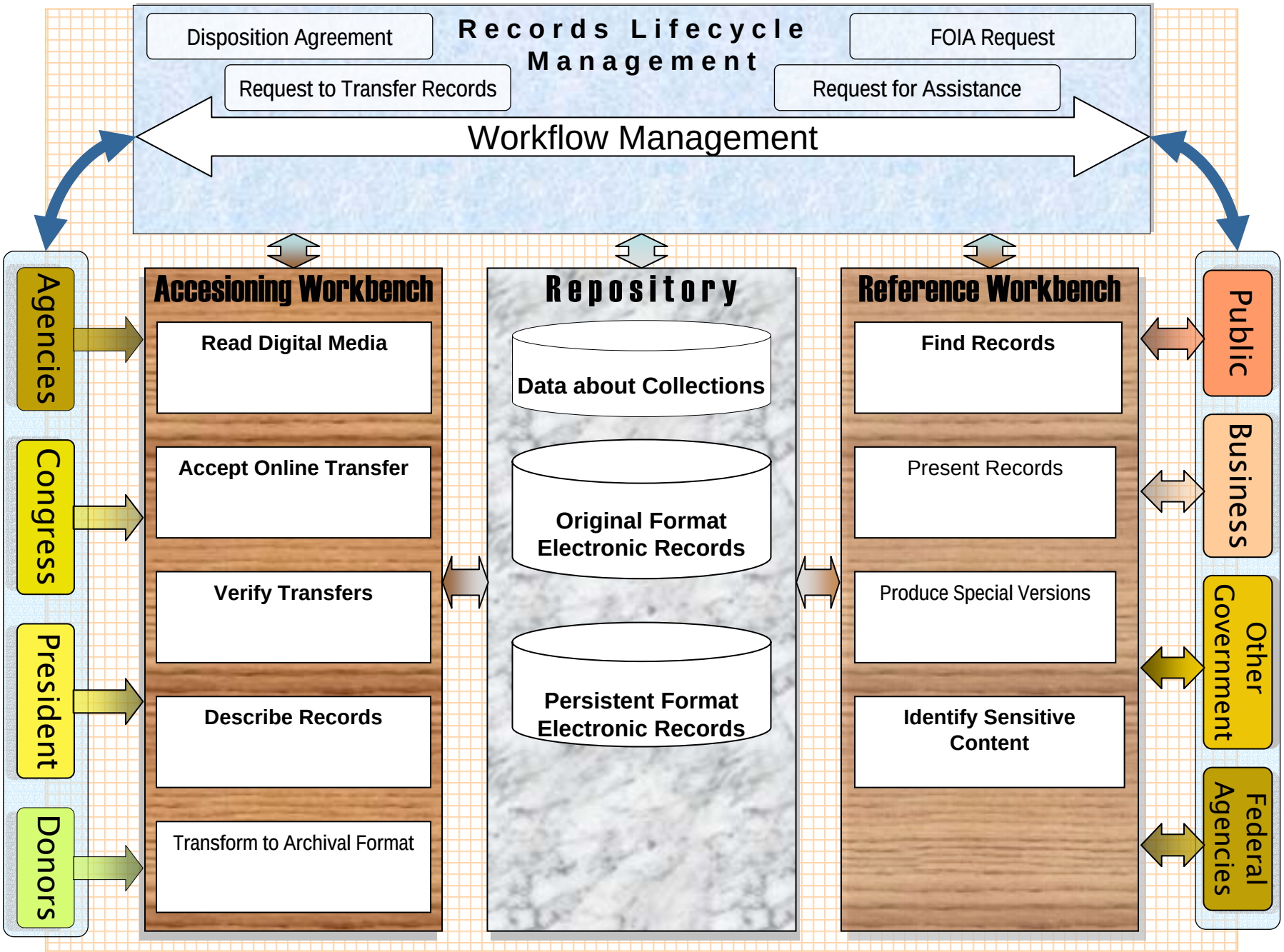


# Electronic Records Archives: basic assumptions

- The ERA system must be able to interact with ***different*** systems.
- Any record in the ERA system must be an authentic copy of that record.
- Any record delivered from ERA to another system must be an authentic copy.
- At any time, the only thing the ERA system needs to know about another is that it can use the same intermediary.
- Over time, the ERA system cannot know what mediators other systems will use.

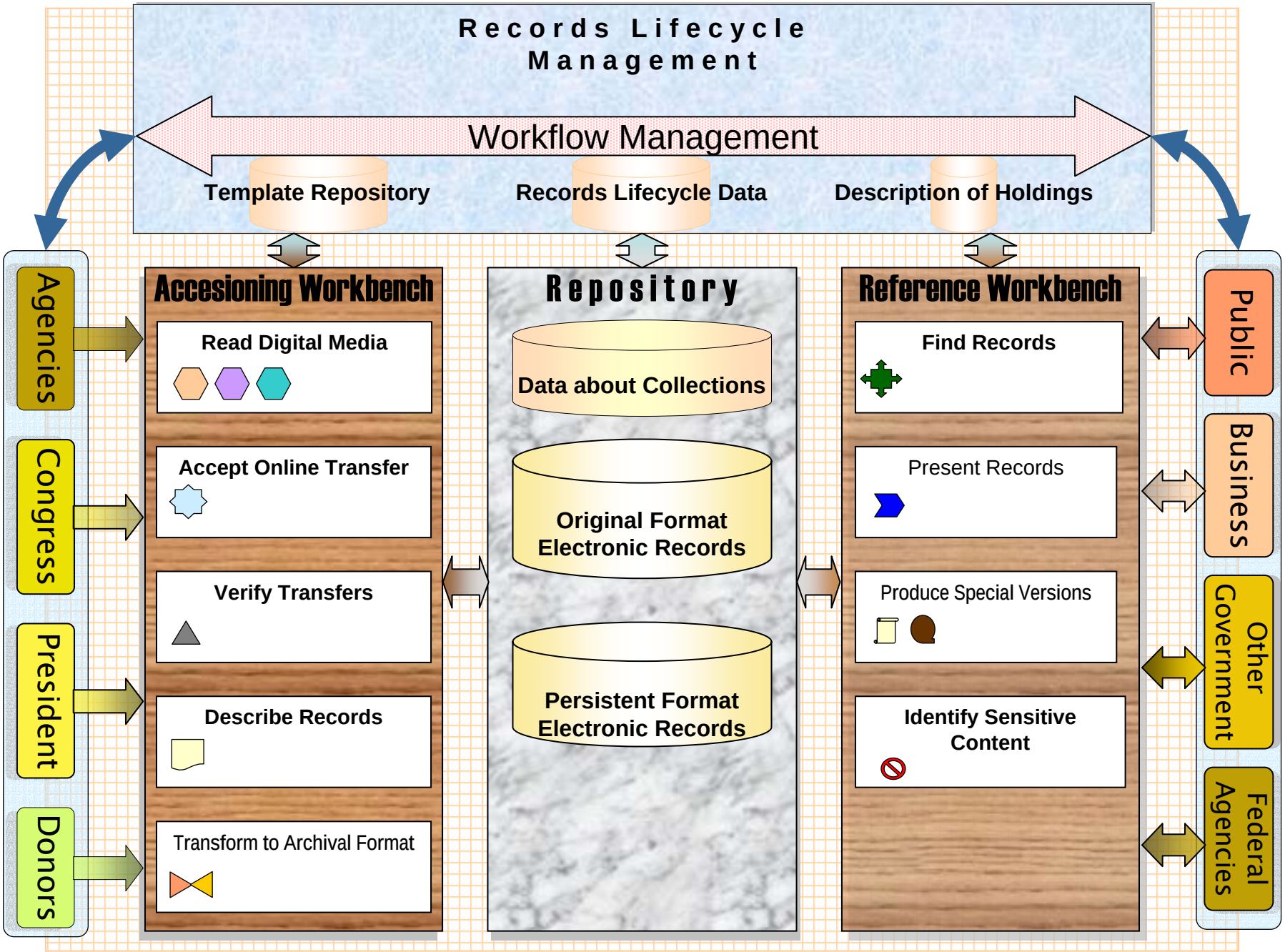


# ERA Virtual Workspaces

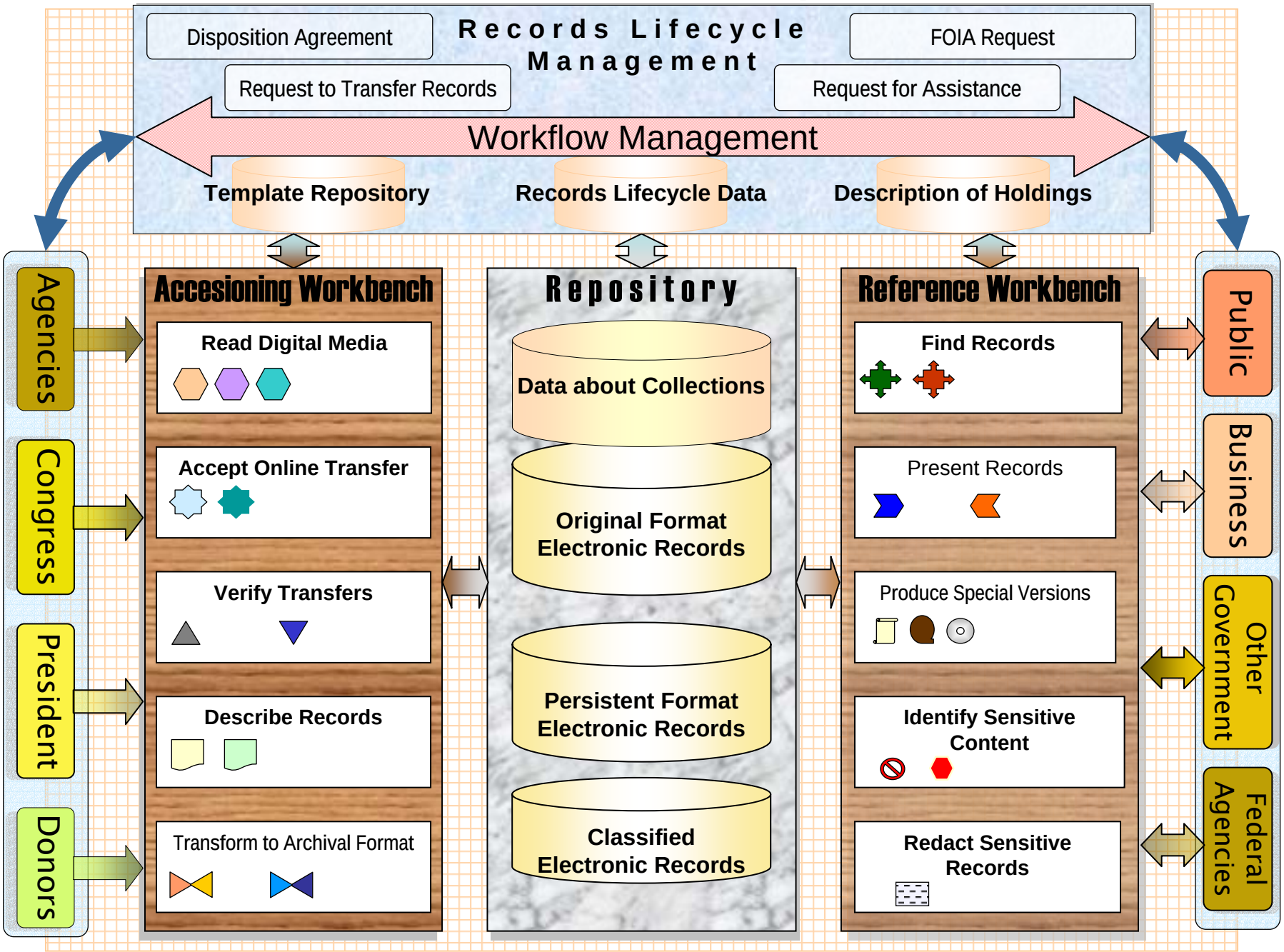


# ERA Virtual Workspaces

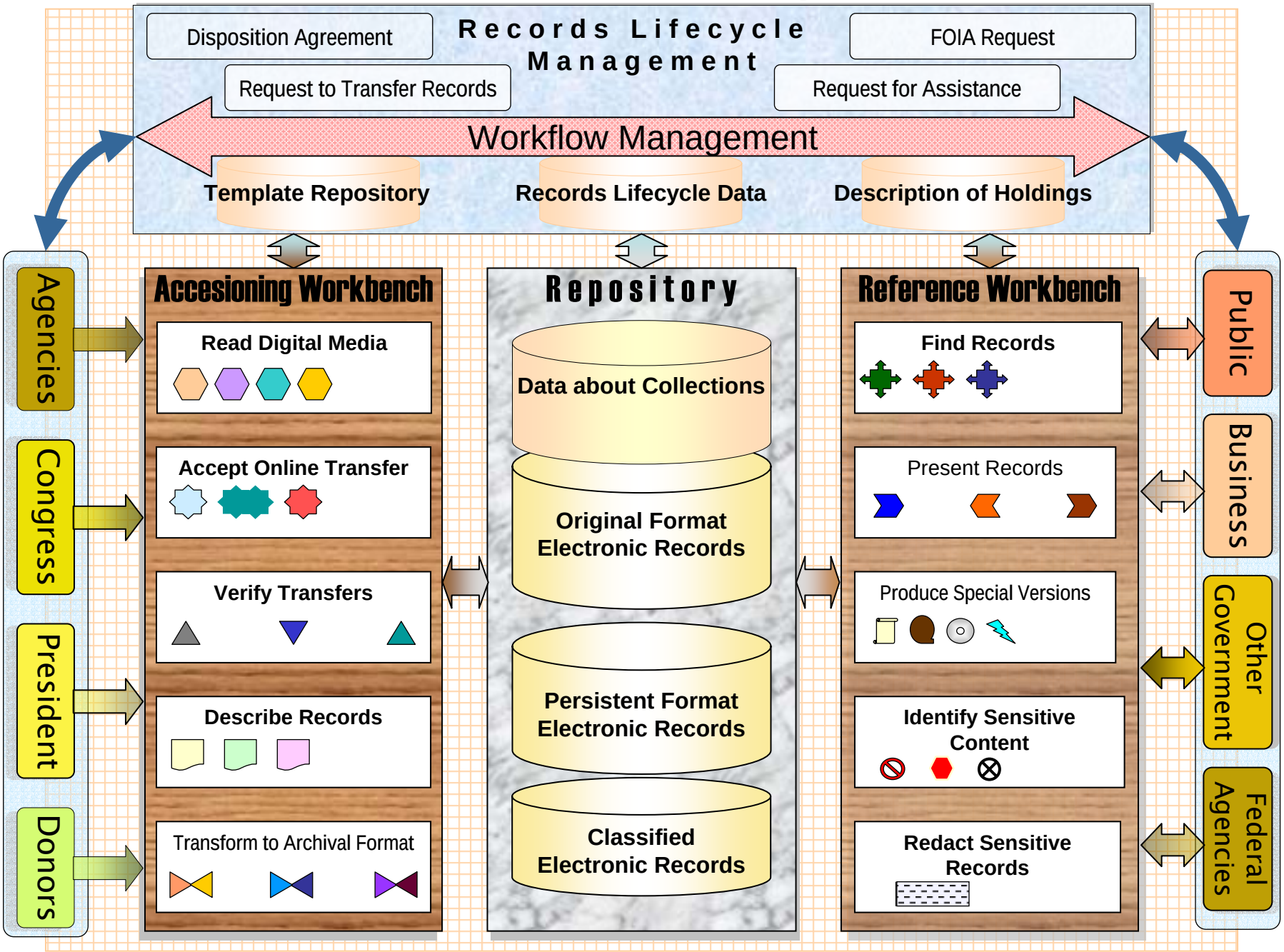
Increment 1



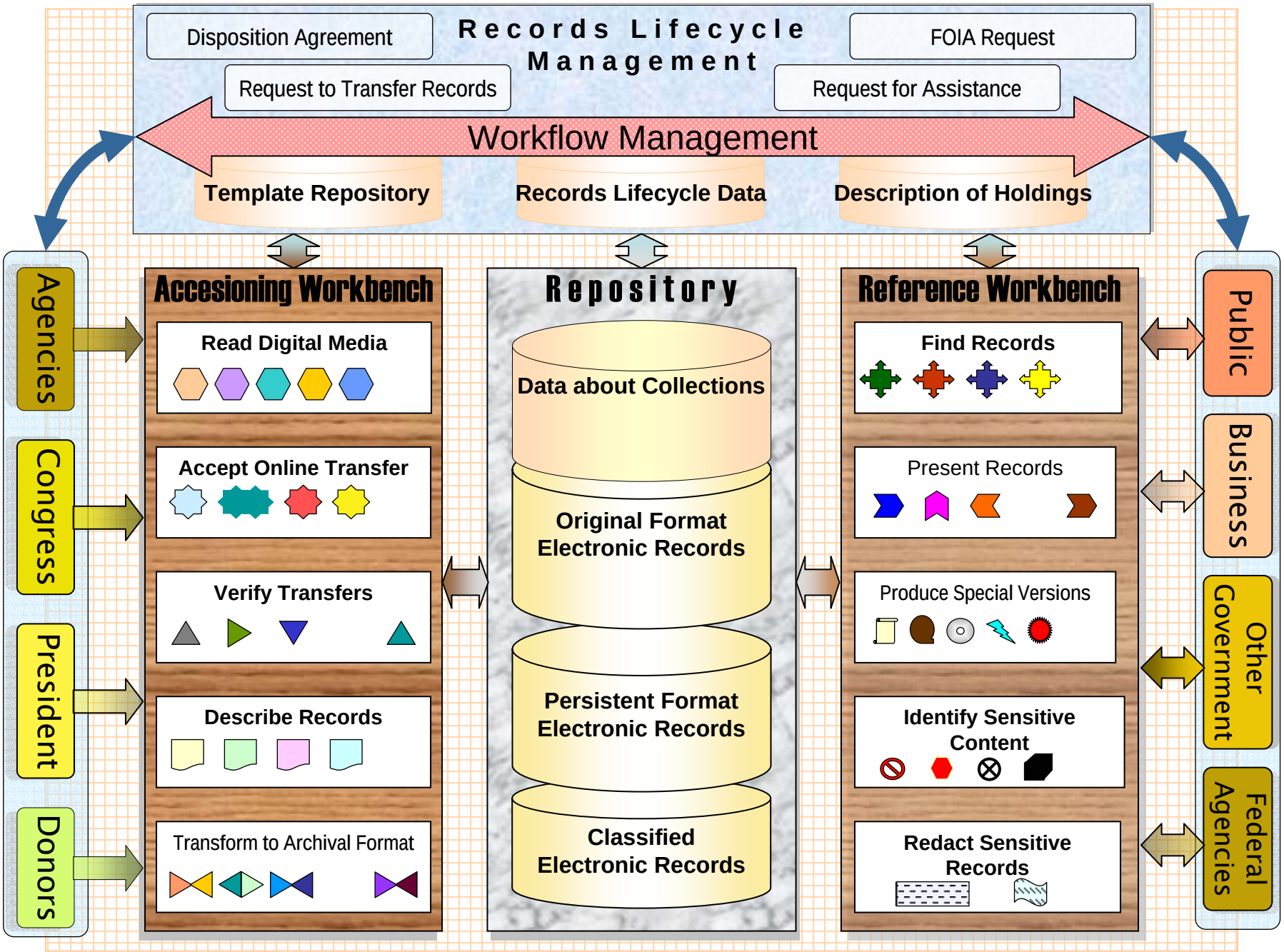
# ERA Virtual Workspaces Increment 2



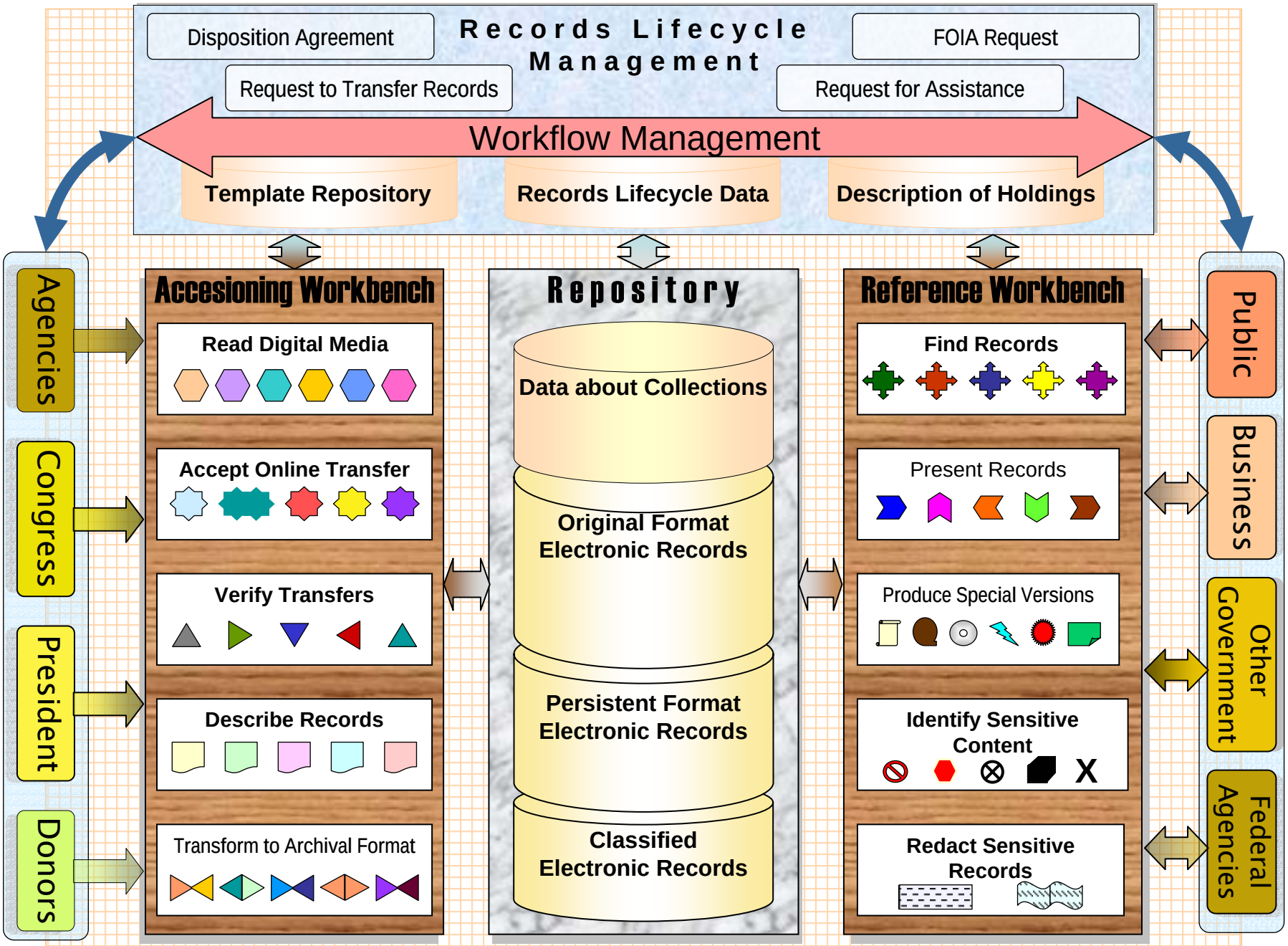
# ERA Virtual Workspaces Increment 3



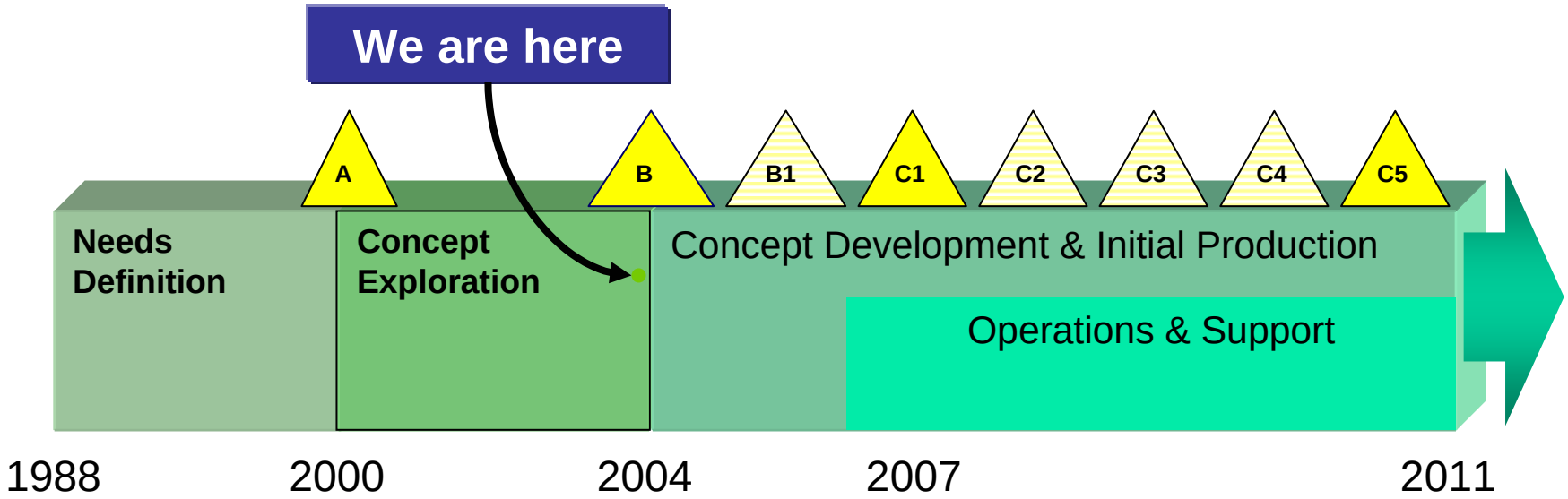
# ERA Virtual Workspaces Increment 4



# ERA Virtual Workspaces Increment 5



# ERA System Acquisition Lifecycle



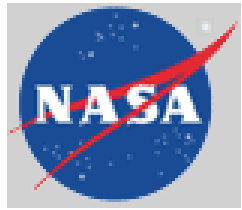

**Milestones**

- A Mission Need, Vision Statement, Analysis of Possibilities
- B Contract Award
- B1 Design Selection
- C1 – C5 Increments 1 to 5

# ERA Partnerships

National Science Foundation

Global Grid Forum

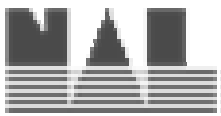


**San Diego Supercomputer Center**

**National Computational Science Alliance**

The Library of Congress

*Army Research Laboratory*




National Agricultural Library

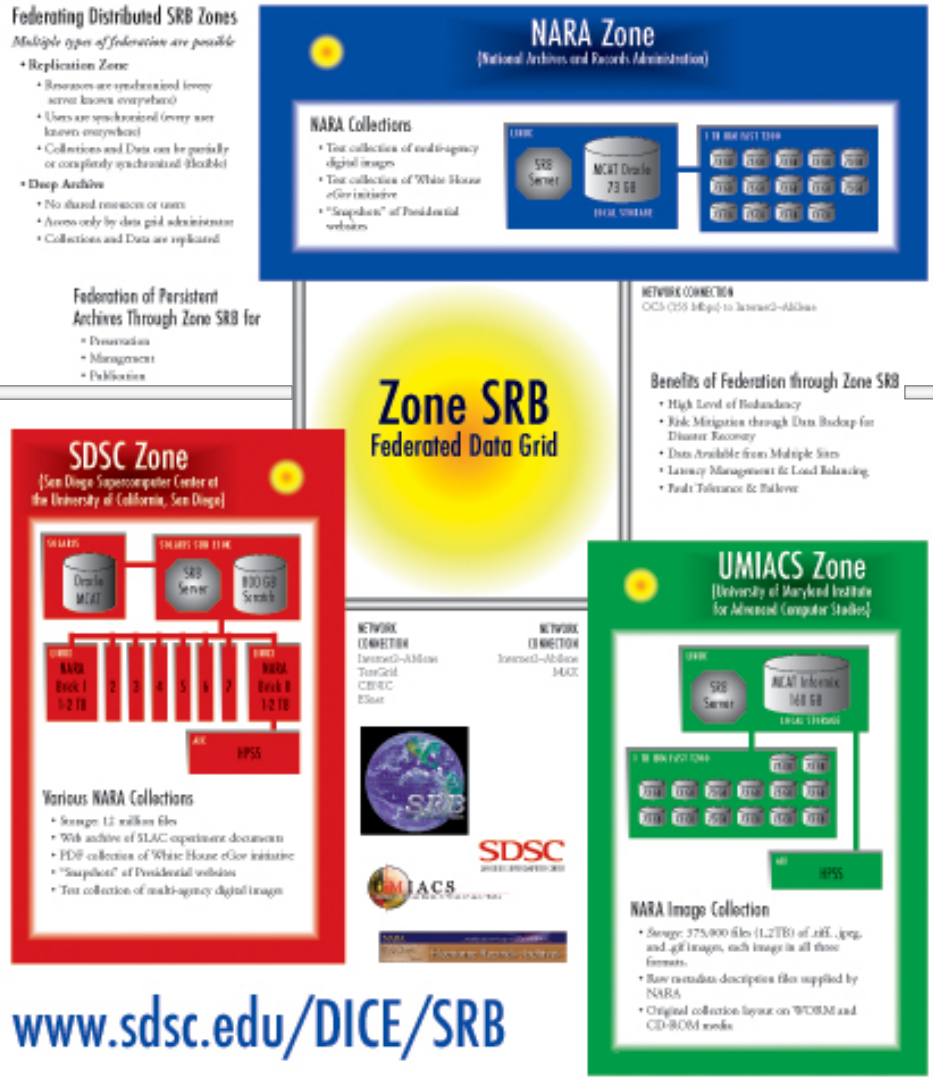
DIGITAL LIBRARY FEDERATION

**National Partnership for Advanced Computational Infrastructure**

# NARA Research Prototype Persistent Archive

*"Preservation & Performance Through Federation"*

## NARA DIGITAL COLLECTIONS and FEDERATED SITES




Stanford Linear Accelerator Center

MIT Libraries DSpace™

www.sdsc.edu/DICE/SRB

For additional information:

http://www.archives.gov/electronic_records_archives/index.html