

OAIS in the Lifecycle Management of Records



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OAIS in the Context of Records Management

- Preservation of archival electronic records
 - InterPARES Project Model: “Preserve Electronic Records
- Management of current records
 - Department of Defense standard for records management applications (DoD 5015.2-STD.)

Records

- **Instruments and by-products of practical activity**
- Not created for publication, *in general*
- Intended to communicate in specific contexts where there is an exceptionally high degree of shared information and knowledge
- In the case of transactional records, where the parties involved are well known.

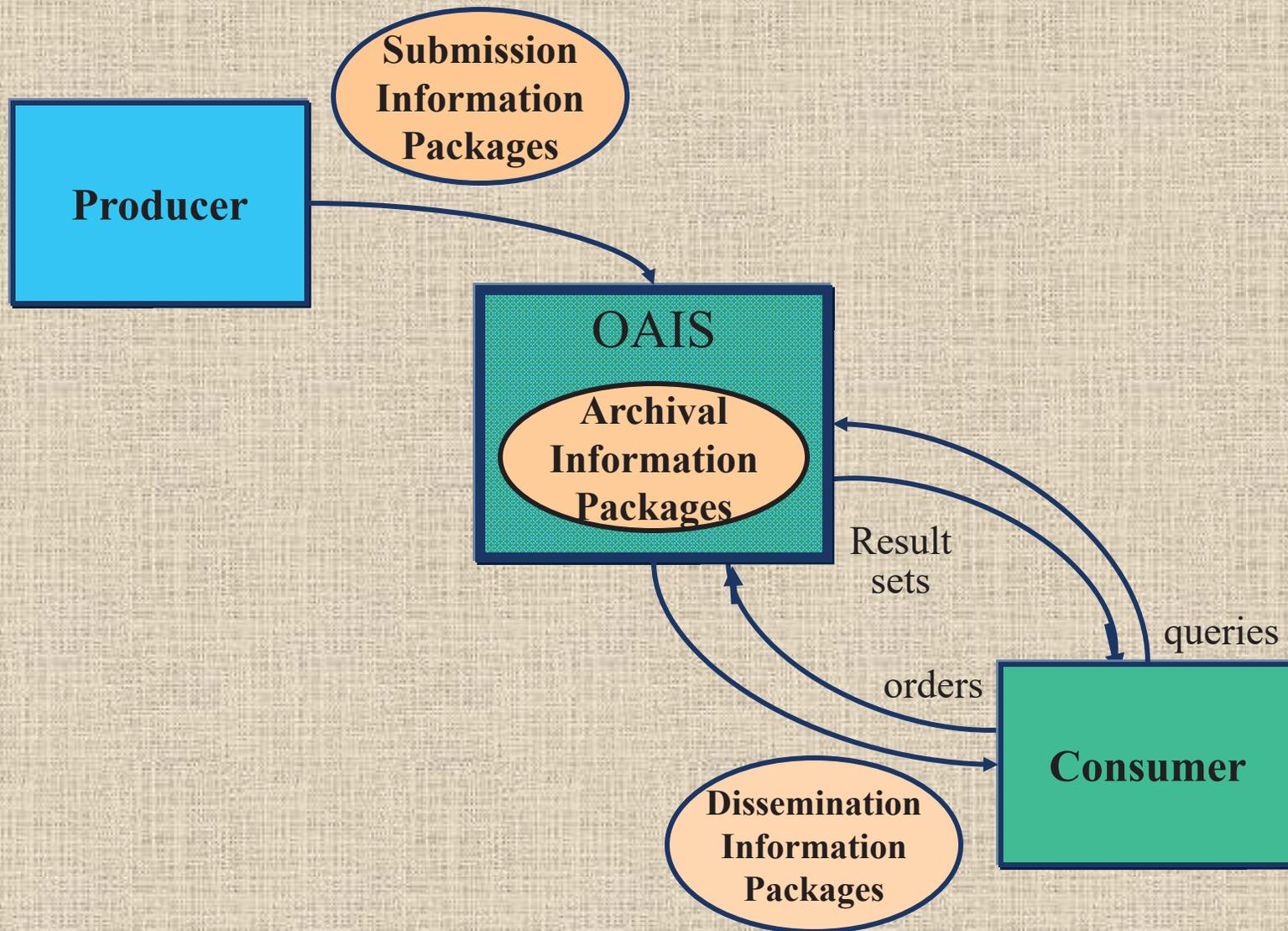
Archival Fonds

- Records exist only as members of organized collections with specific provenance
- The Archival Fonds is an *organic* collection that is accumulated in the course of activities.
 - Organic in the relationships among records in an archival fonds
 - Organic in the relationships between the fonds and the activities in which the records were created and used.

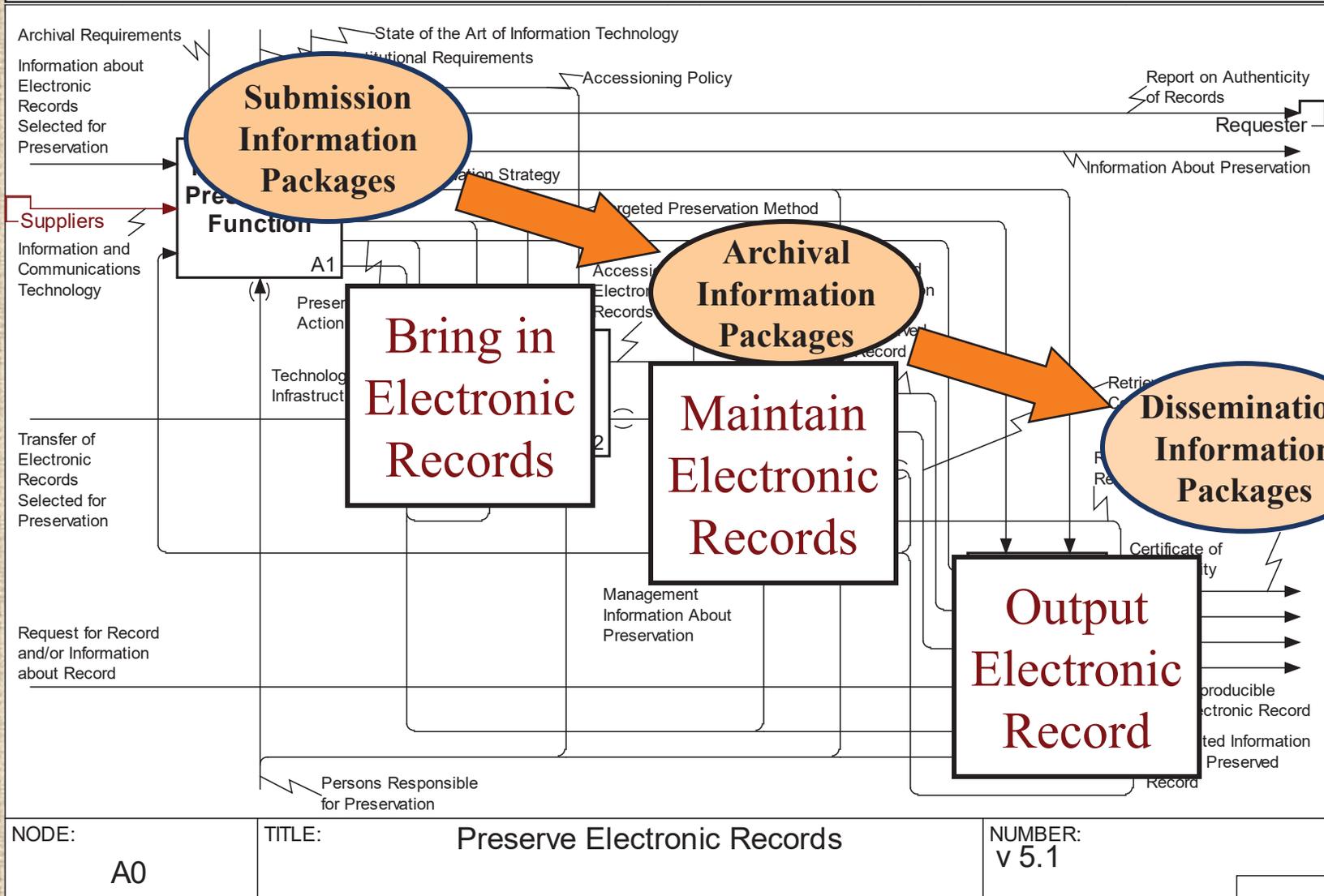
InterPARES

- International research on Permanent Authentic Records in Electronic Systems
- 7 multidisciplinary research teams
 - Asia, Australia, Canada, CENSA, Italy, Northern Europe, United States
- 4 Task Forces
 - Authenticity, Appraisal, Preservation, Strategies
- 10 National Archives
 - Canada, China, France, Hong Kong, Ireland, Italy, The Netherlands, Sweden, United Kingdom, United States
- 1998-2001 www.interpares.org

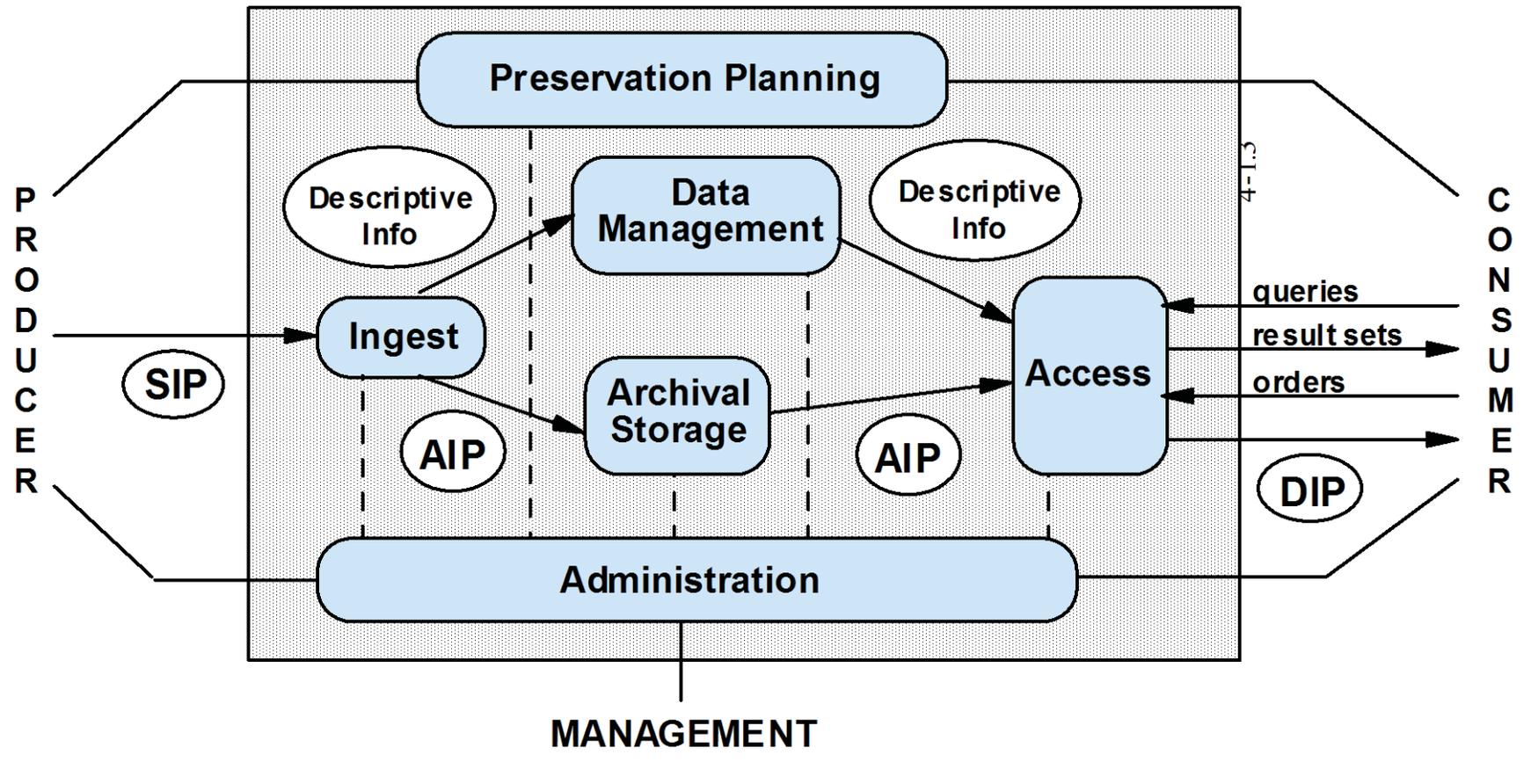
OAIS Overview



InterPARES IDEF0 Preservation Model



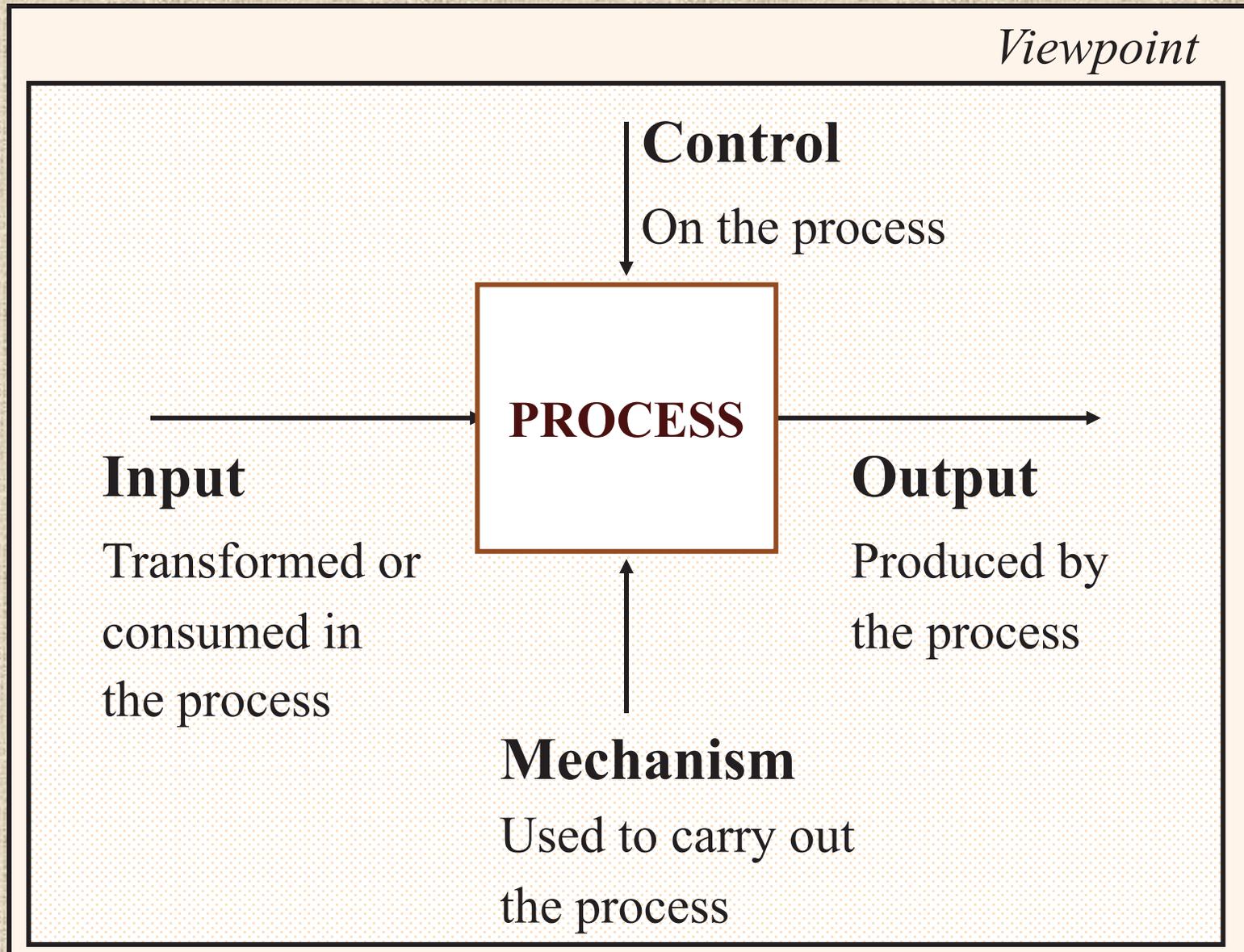
OAIS Functional Entities



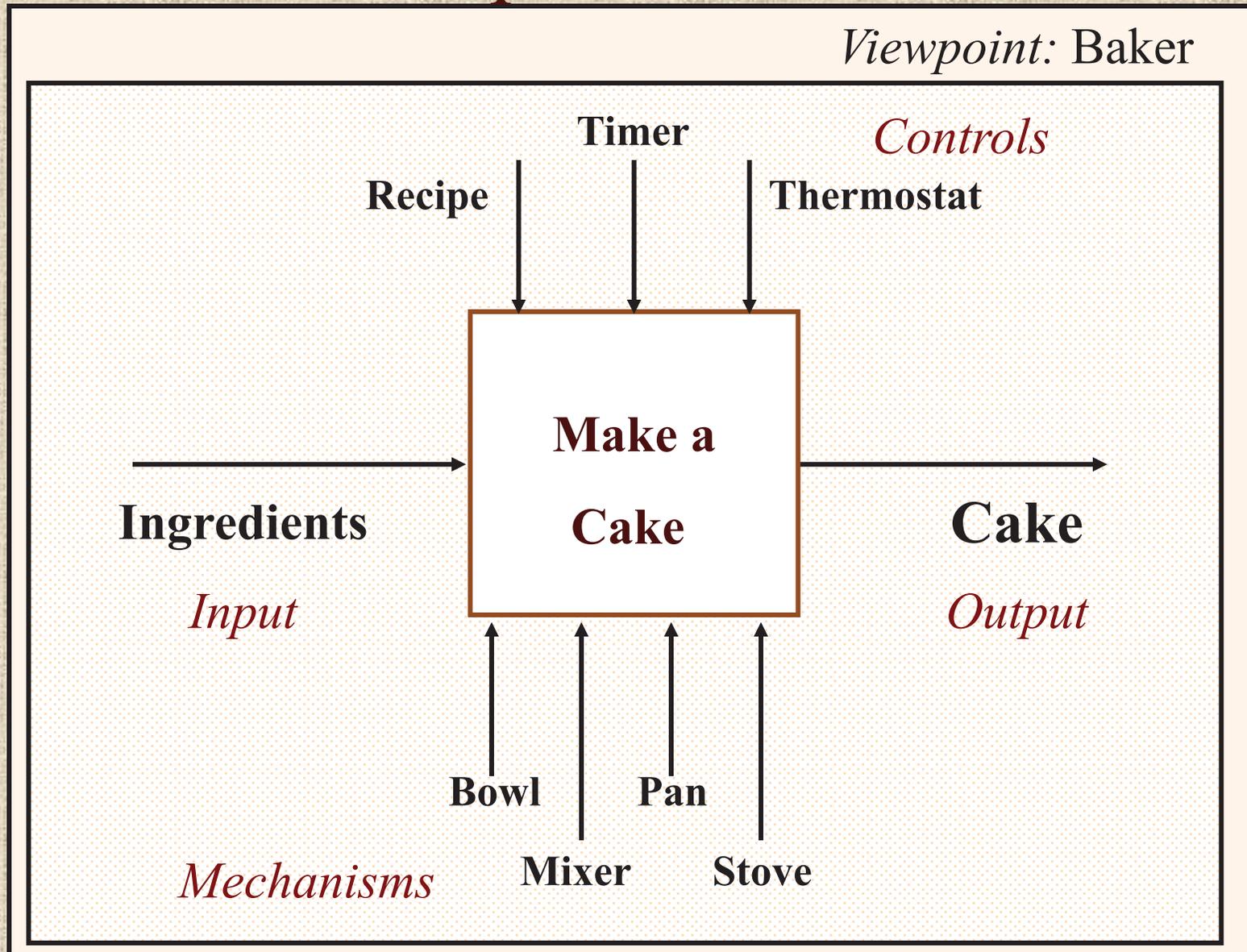
‘Preserve Electronic Records’ Model

- Extends over same range as OAIS
- A Subset of OAIS functions, excluding
 - Decisions related to what will be preserved
 - covered in the InterPARES ‘Select Electronic Records’ model
 - Decisions on customers, customer services, and access rights
- Adds specifications and processes for preserving collections of records

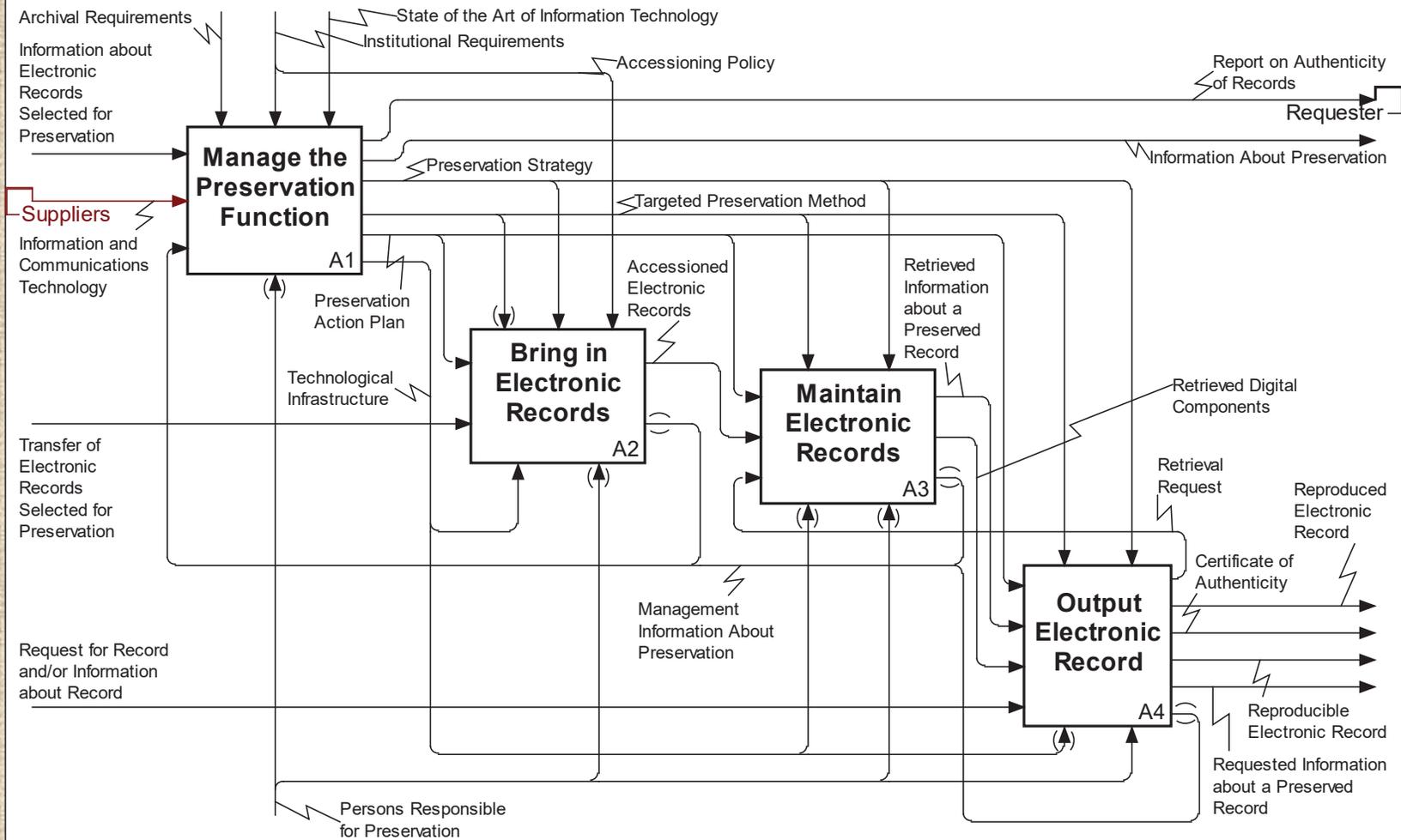
IDEF0 Notation



IDEF0 Example



InterPARES IDEF0 Preservation Model



NODE: <p style="text-align: center;">A0</p>	TITLE: <p style="text-align: center;">Preserve Electronic Records</p>	NUMBER: <p style="text-align: center;">v 5.1</p>
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Management and Execution

1. State of the Art of IT
2. Archival Requirements
3. Institutional Requirements

Information
about
Records
Selected for
Preservation

IT

1. 2. 3.

Manage
Preservation
Function

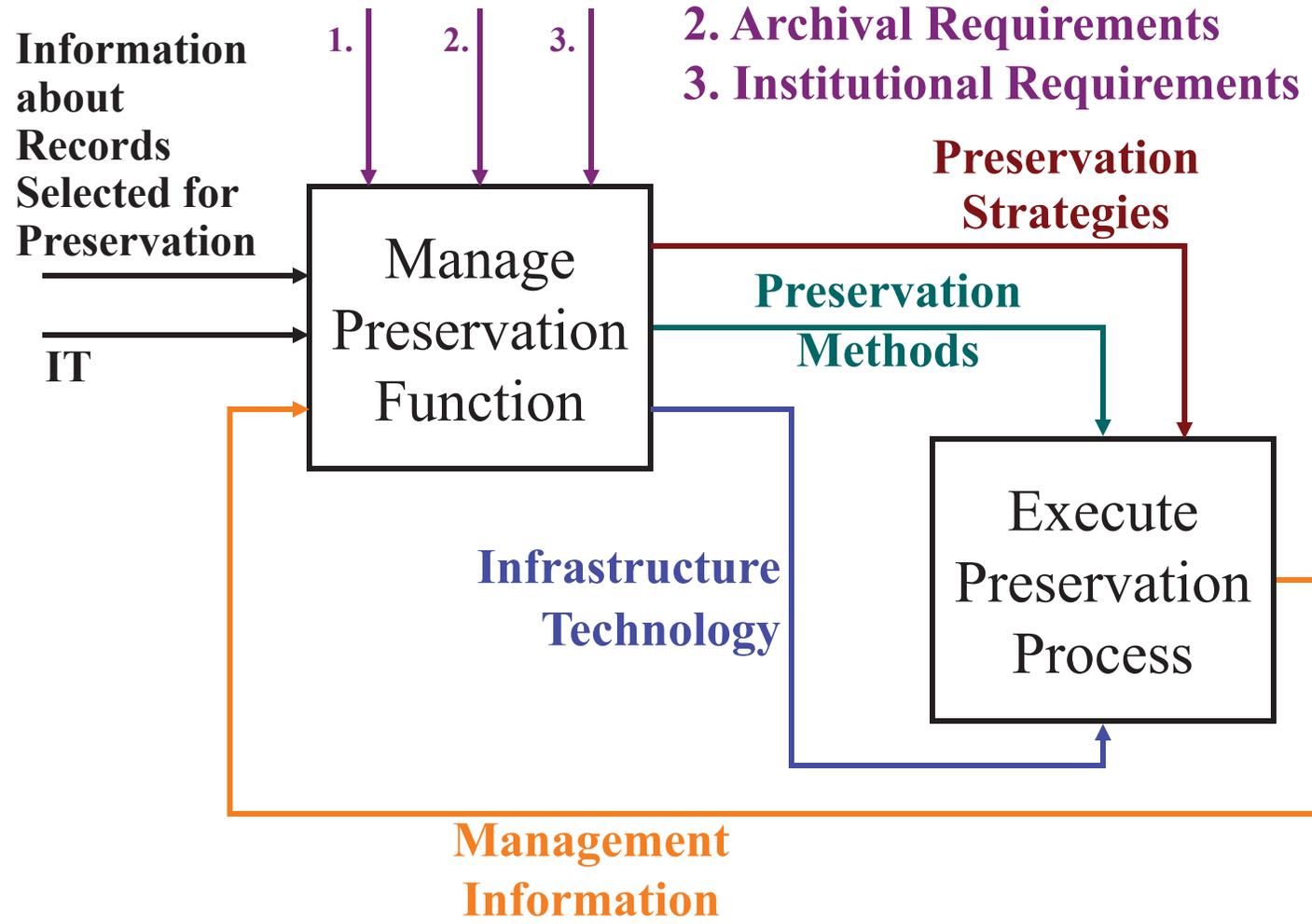
Preservation
Strategies

Preservation
Methods

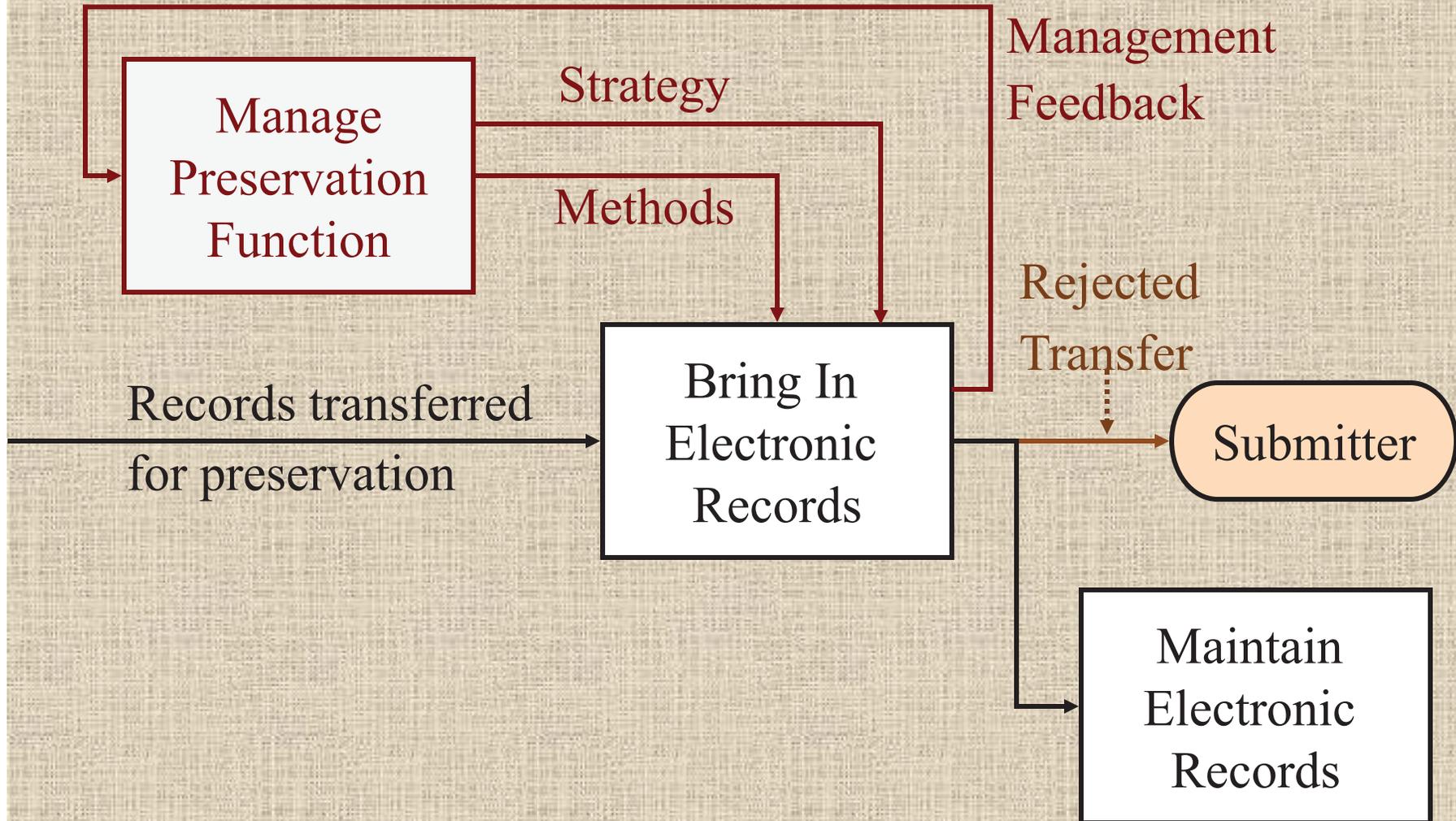
Execute
Preservation
Process

Infrastructure
Technology

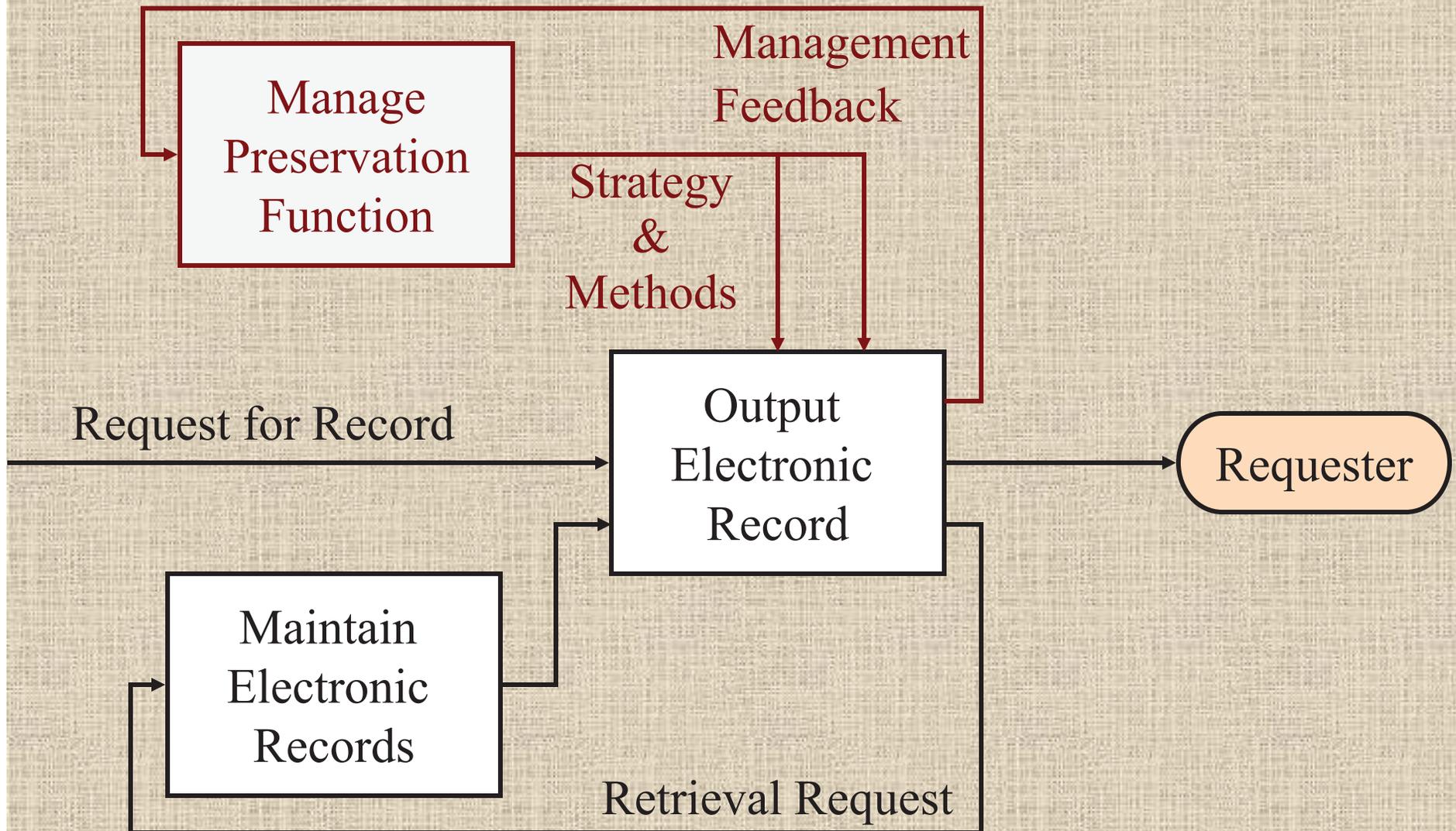
Management
Information



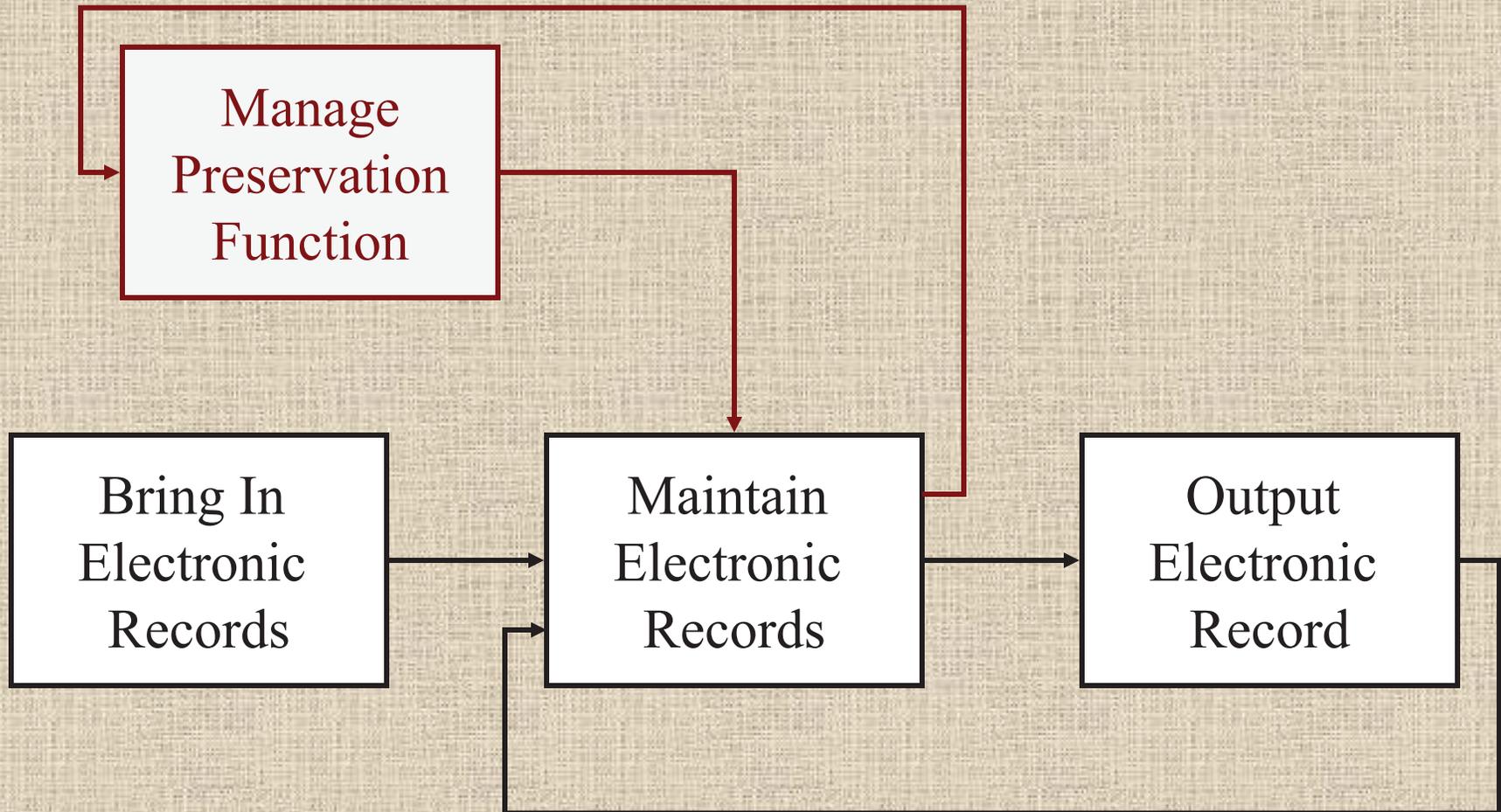
Ingest Function



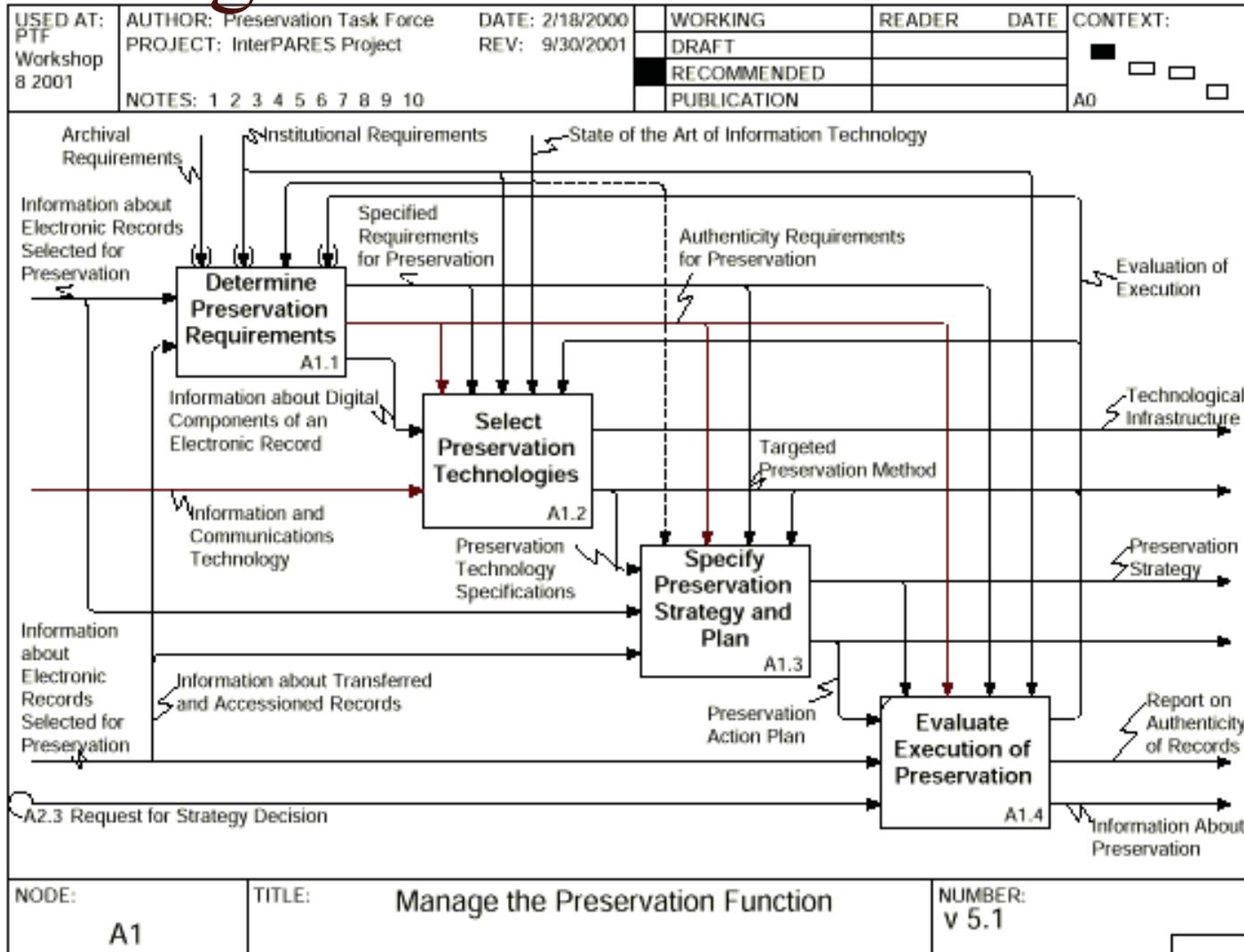
Dissemination Function



Dissemination Function

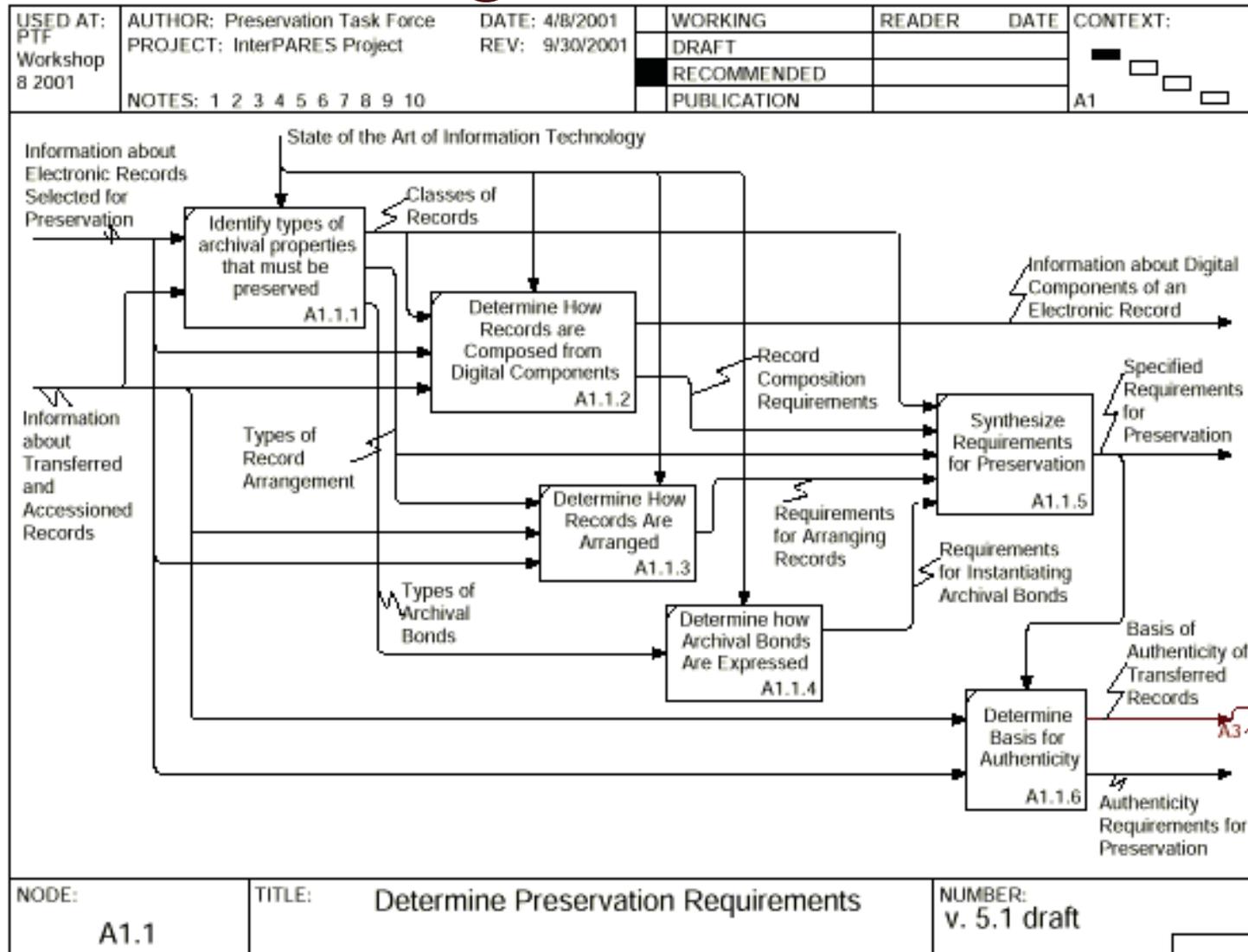


Manage the Preservation Function



NODE: A1	TITLE: Manage the Preservation Function	NUMBER: v 5.1
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Manage Preservation



Determine Preservation Requirements

- Identify archival properties that must be preserved
 - For records
 - For archival aggregations of records
 - For expression of archival bonds
- Synthesize requirements for a body of records
- Determine basis of authenticity
 - Certification by preserver
 - Verification by user

Baseline Requirements for Preserving Authentic Electronic Records

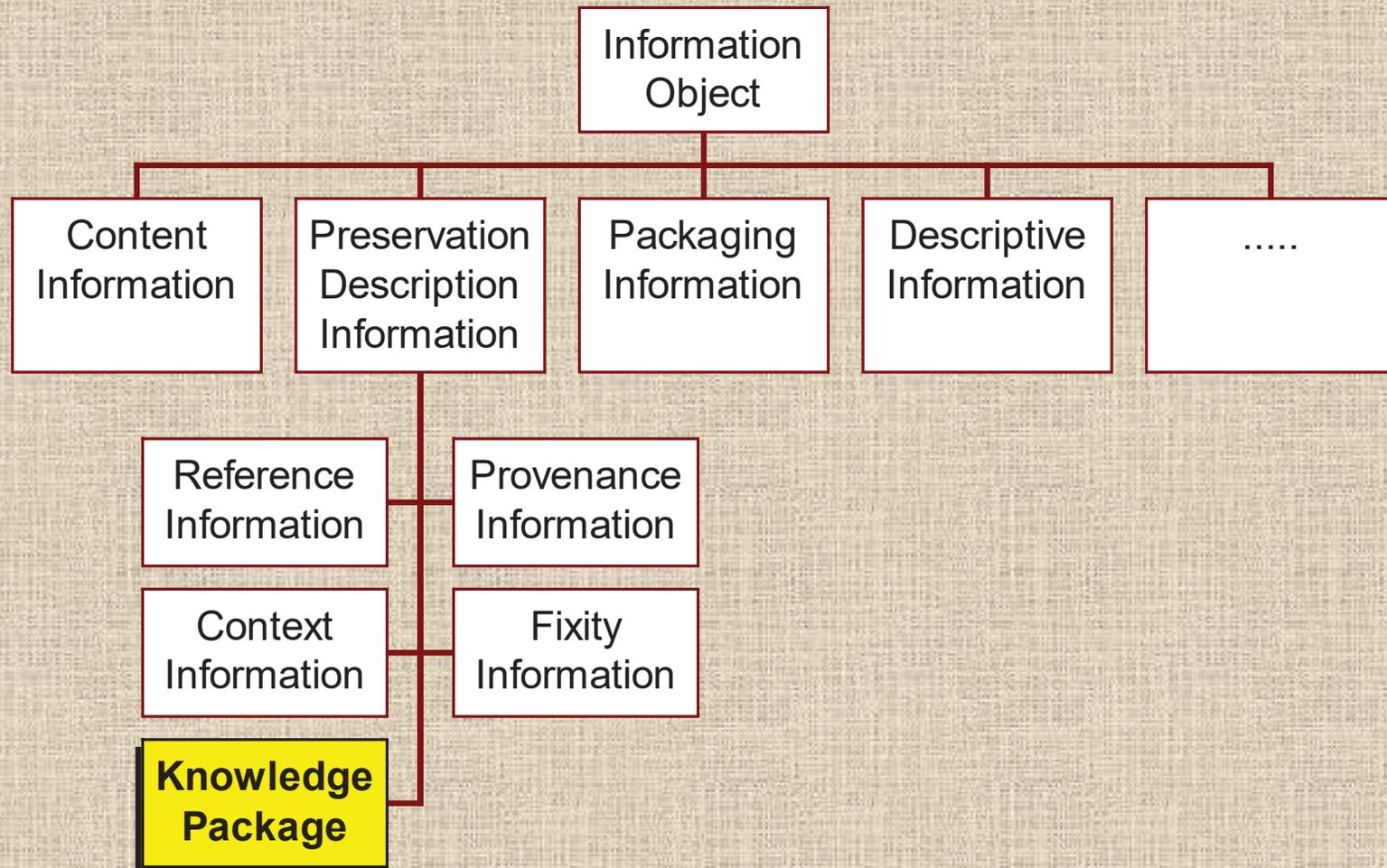
1. Controls over records transfer, maintenance, and reproduction

- 1.a Unbroken custody of the records is maintained
- 1.b Security and control procedures are implemented and monitored
- 1.c The content of the record remains unchanged after reproduction

2. Documentation of preservation & reproduction processes and their effects

3. Archival description of the fonds includes information about changes the records have undergone since they were first created.

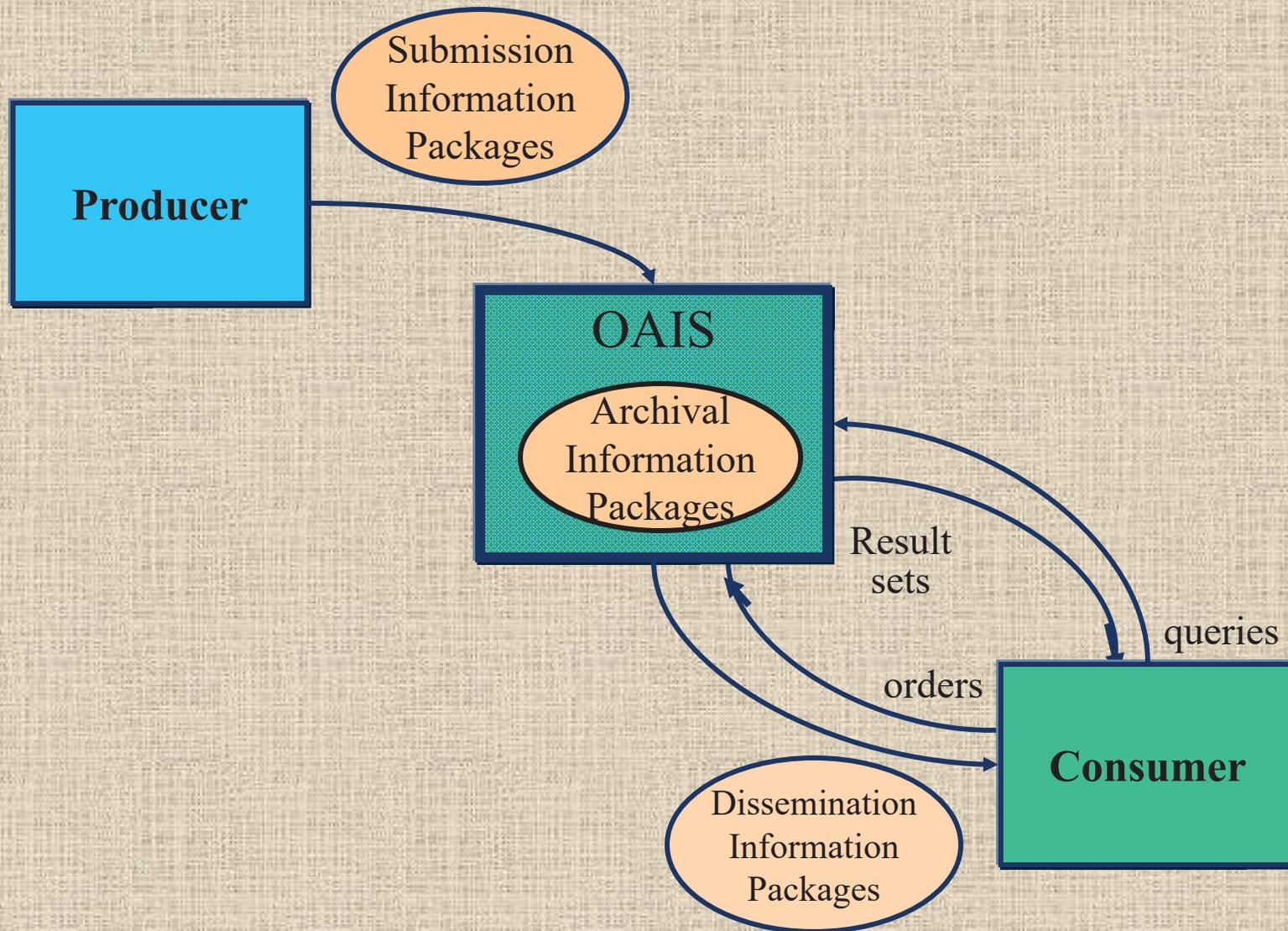
OAIS Information Object Taxonomy



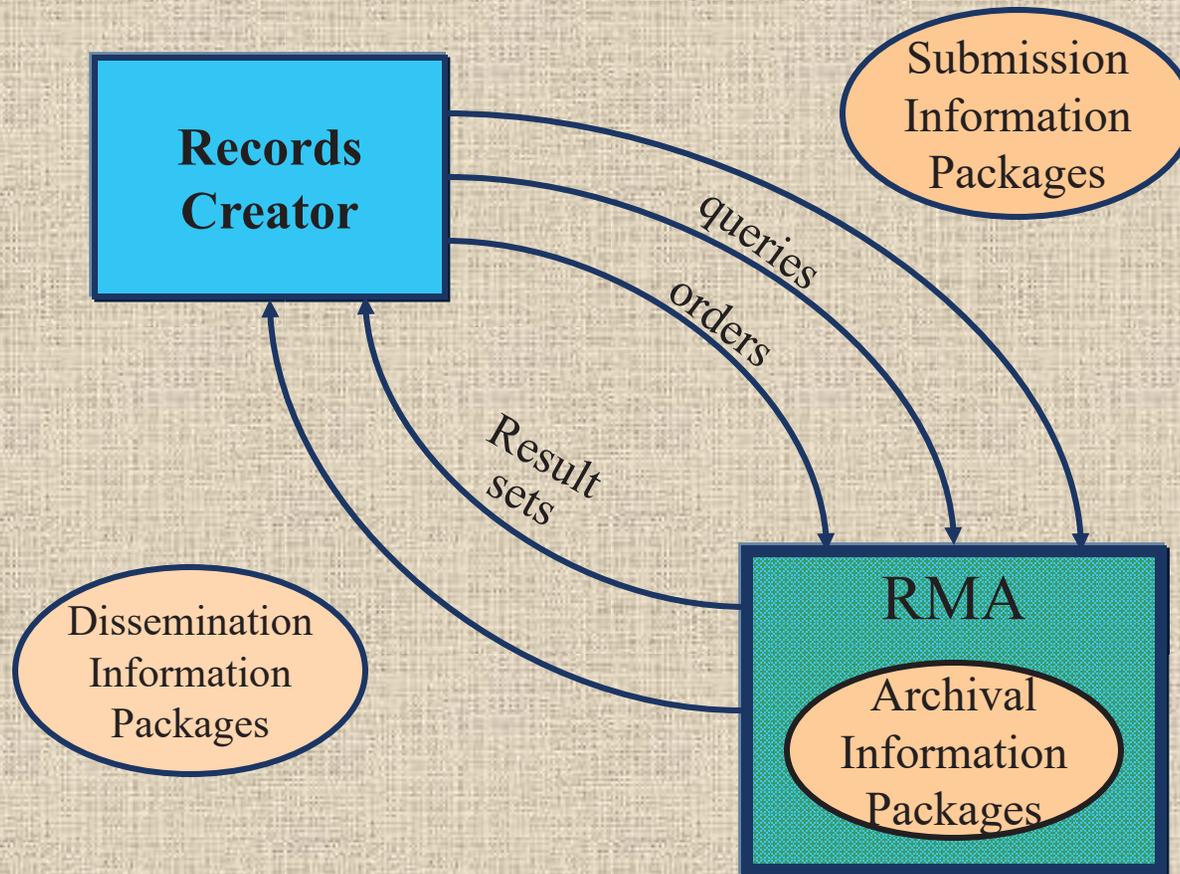
OAIS & Current Records

- “Long-term” preservation issues arise in many cases of maintaining current records
 - Patent Case Files
 - Drug Case Files
 - Medical Records
 - Real Property Records
 - Aircraft Records
 - Weapons Systems Records

OAIS Overview



OAIS v. Records Management Application



RMA = Records Management Application, DoD 5015.2-STD.

OAIS & Records Management Application

- Producer = Records Creator = Consumer
- Submission Information Packages:
 - Individual records
- Archival Information Packages:
 - Records aggregated over time
- Dissemination Information Packages:
 - individual records & aggregates (files)
- The RMA standard (DoD 5015.2) leaves preservation over time as an implementation issue

Thank You



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