TIMBUS

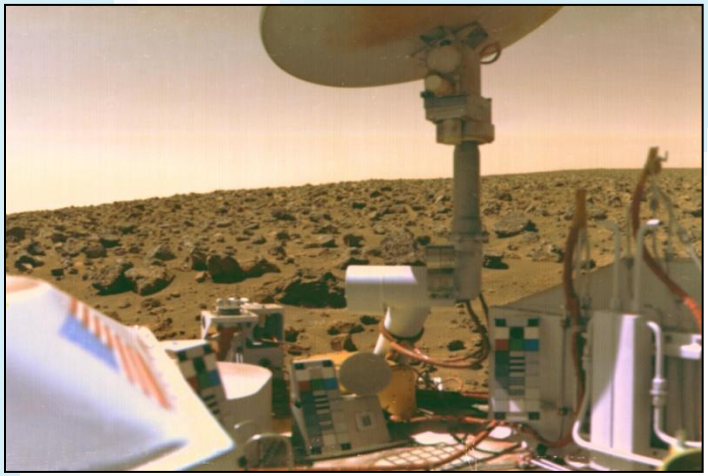
TIMELESS BUSINESS

Sponsored by the European Commission Directorate for Information Society

Open Archival Information System (OAIS) ISO 14721:2003

a reference model … to establish a **system** for archiving information, both digitalized and physical, with an **organizational scheme** composed of people who accept the **responsibility** to **preserve information** and make it available to **a designated community**.

OAIS – what you need to know



Courtesy NASA/JPL-Caltech

Consultative Committee for Space Data Systems

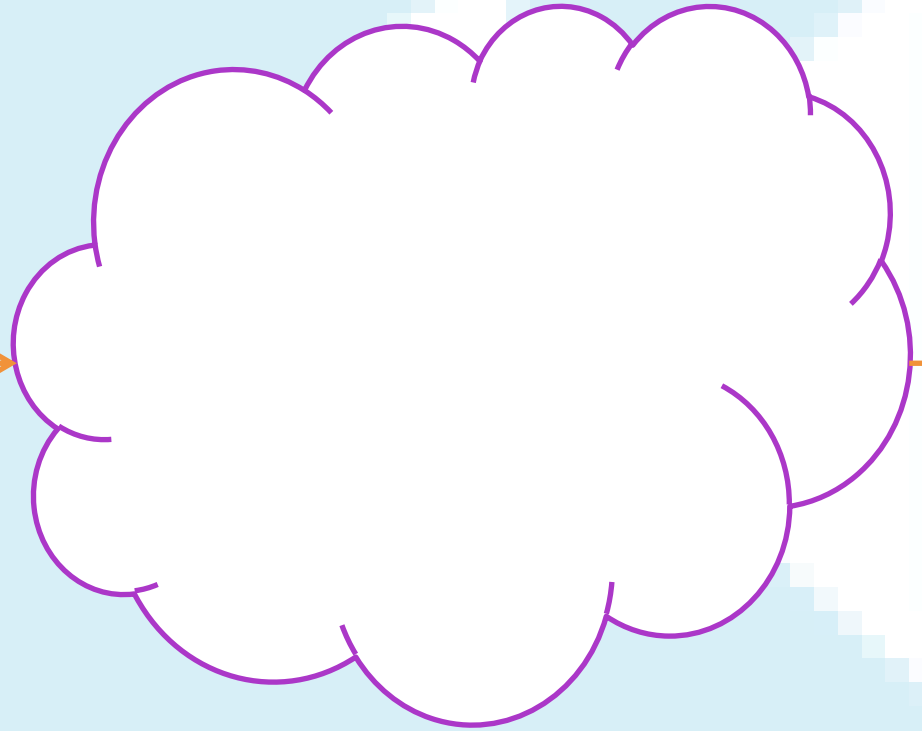
Scalability? It scales up really well ...

Foundation of many (all?) DP systems research

Core vocabulary and concepts

Ideal process: a users perspective

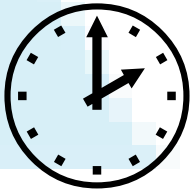
Data creator (producer)

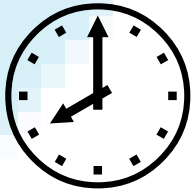


Data user (consumer)

Data user (consumer)

Data user (consumer)





Archive

Disseminate

Submit

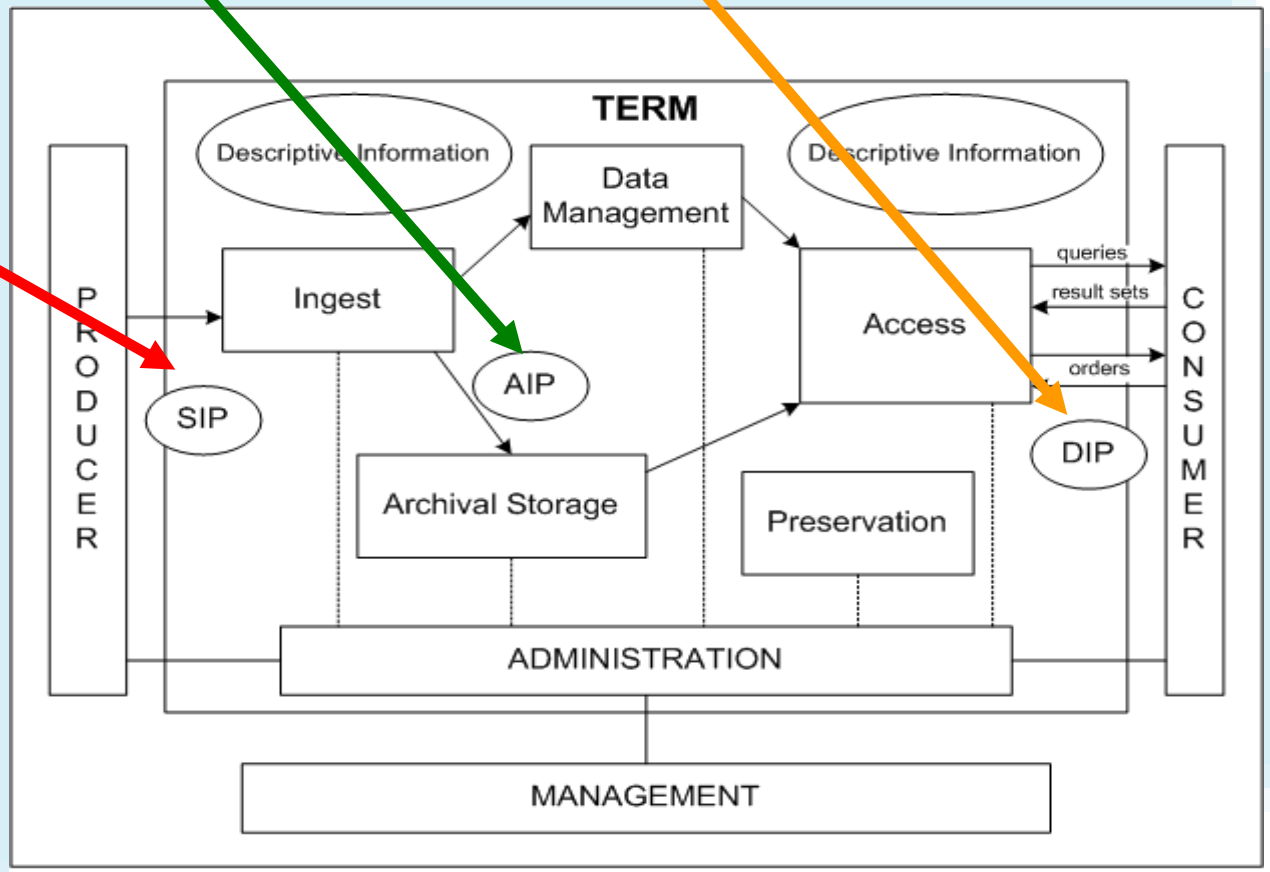


Fig. 1. Major functions of the OAIS Reference Model from Consultative Committee for Space Data Systems (CCSDS), CCSDS 650.0-W-1, Producer-Archive Interface Methodology Abstract Standard. (OAIS). White Book. Issue 1. Draft Recommendation for Space Data System Standards.

Picture from DLib

Diagramarama

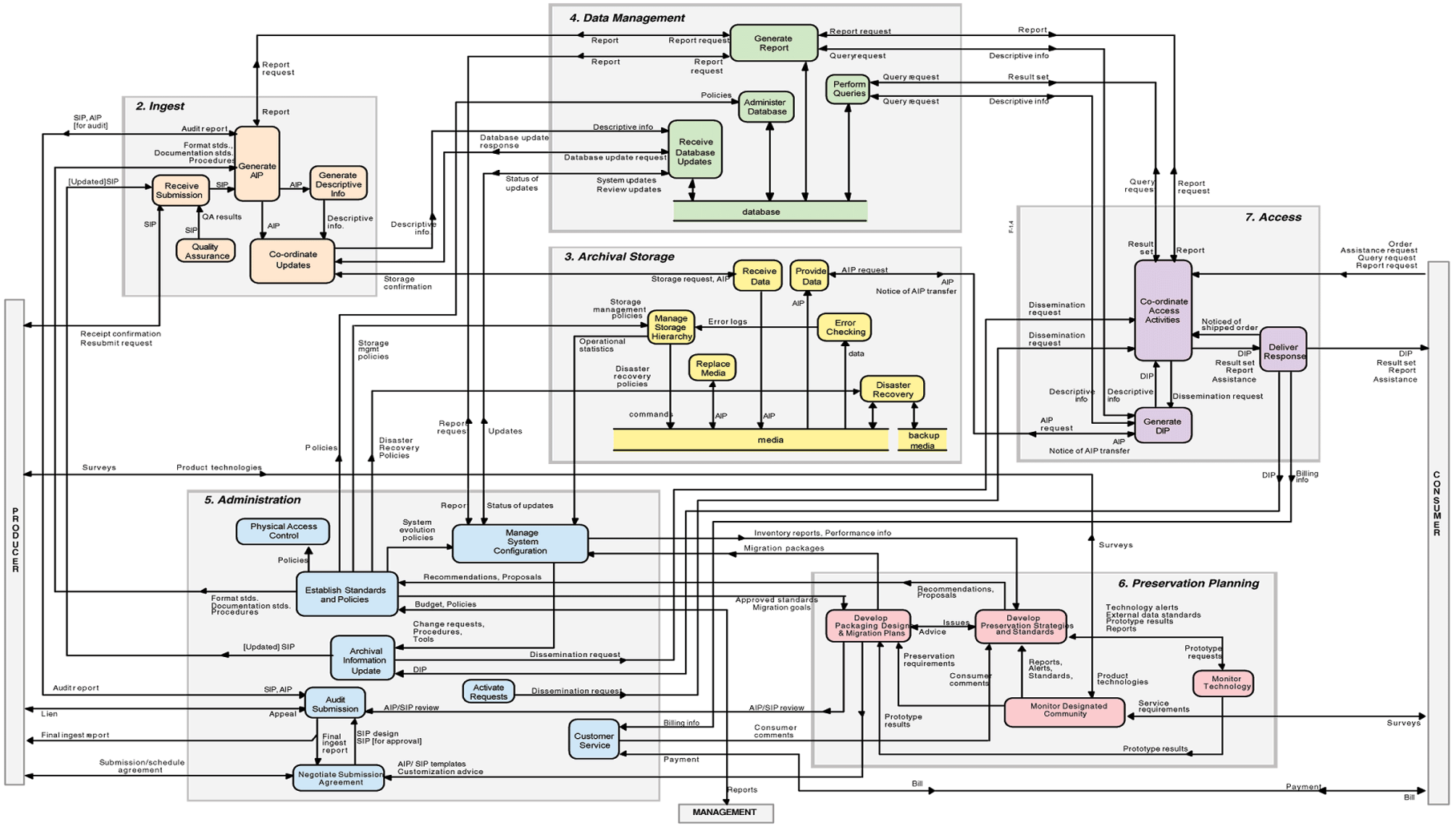


Fig. 1. Major functions of the OAIS Reference Model from Consultative Committee for Space Data Systems (CCSDS), CCSDS 650.0-W-1, Producer-Archive Interface Methodology Abstract Standard. (OAIS). White Book. Issue 1. Draft Recommendation for Space Data System Standards.

OAIS: Core Functions

Negotiate for appropriate content

Obtain sufficient control to manage content

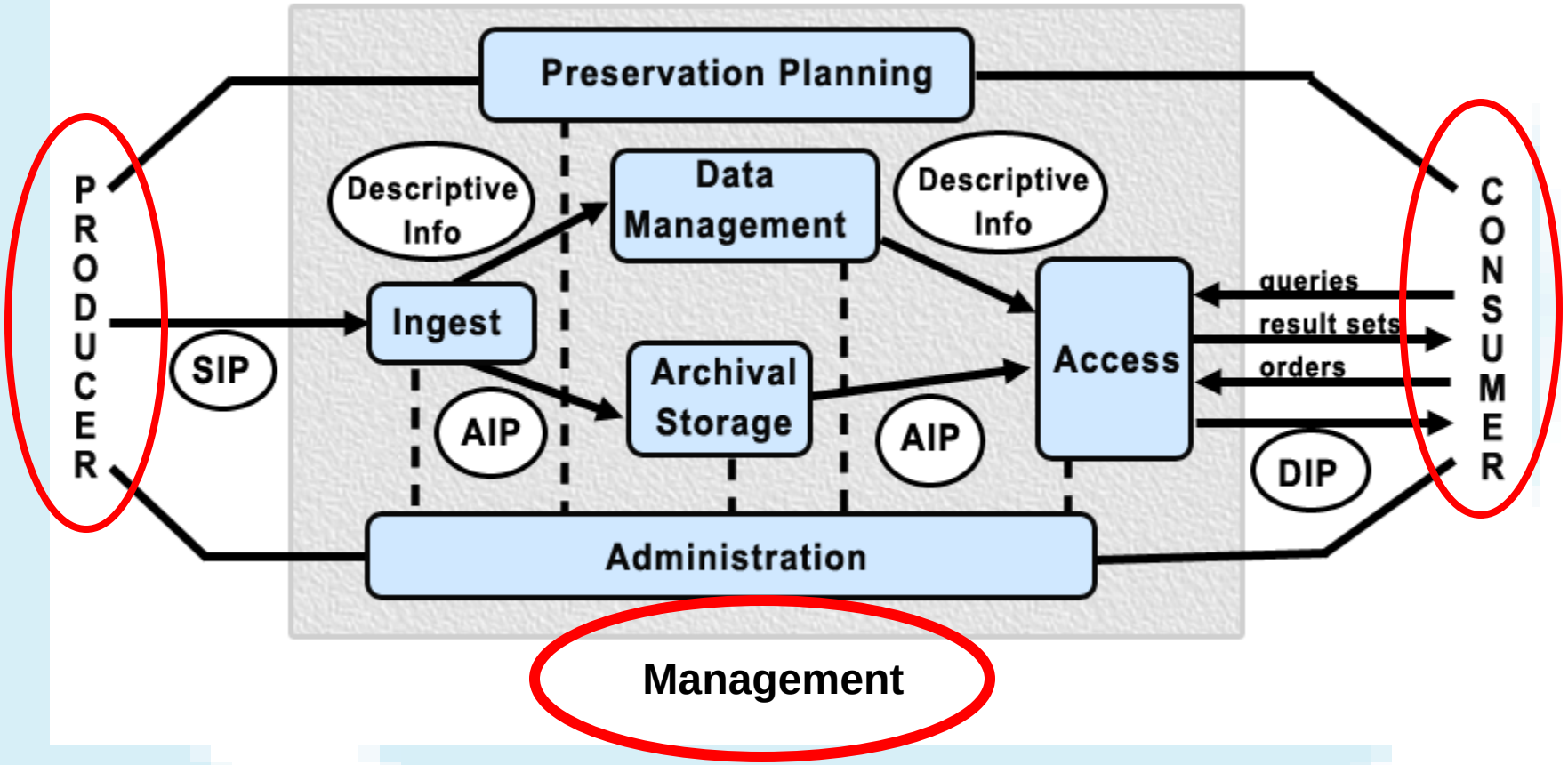
Determine the scope of the designated community

Ensure independent utility of data

Follow procedures for preservation

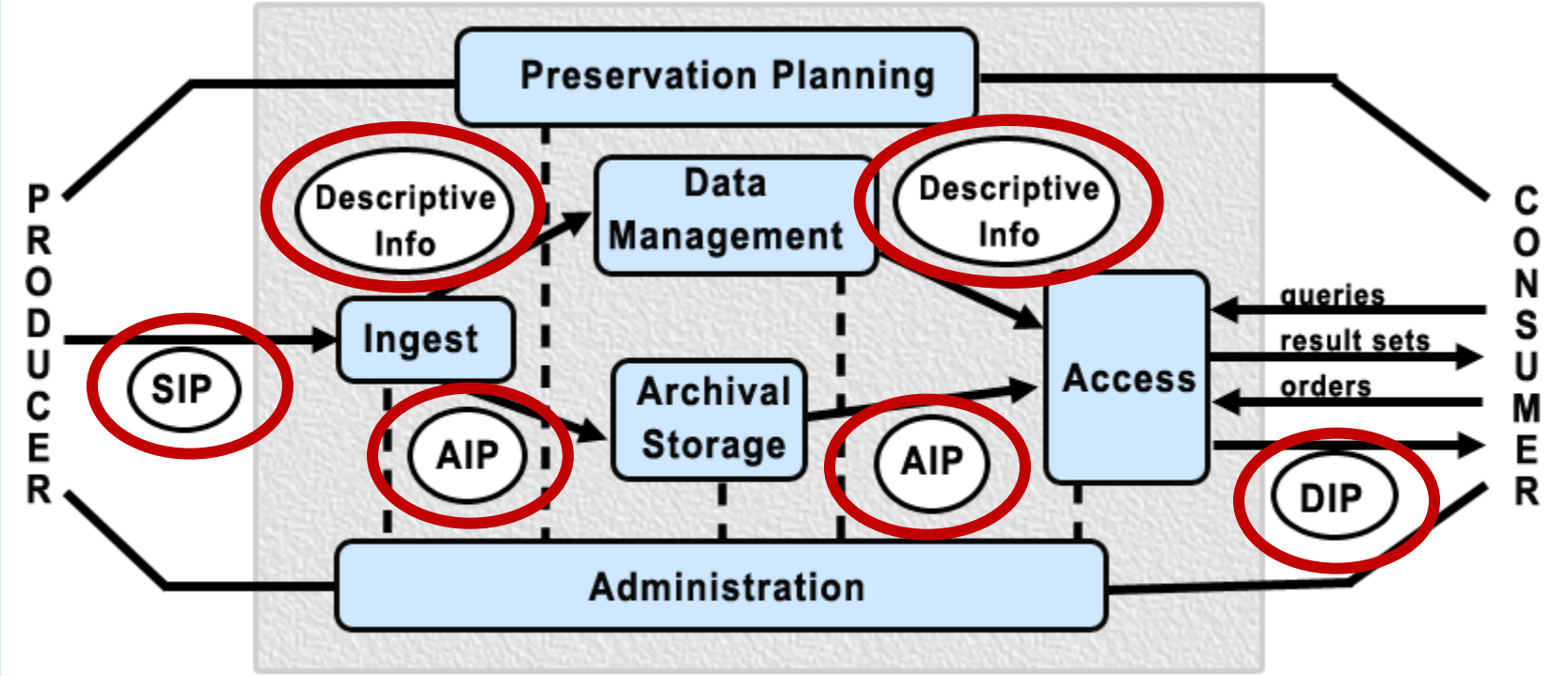
Disseminate data to a designated community

the actors



Who are your producers?
Who are your consumers?

the objects



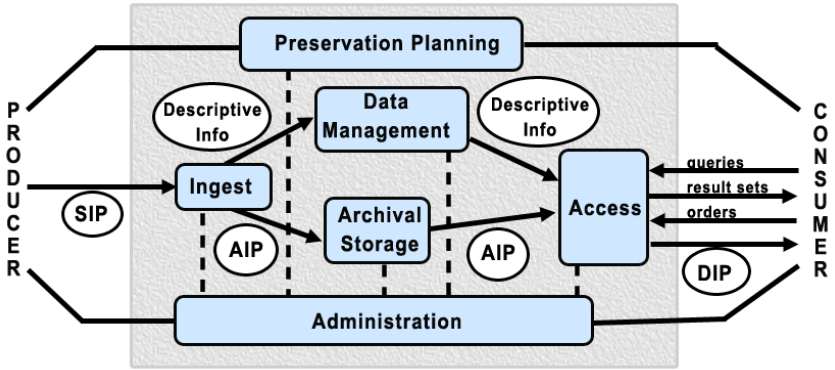
Management

What do your producers produce?
What information will help submission?
What will information will help preservation?

What do your consumers consume?
What information will help dissemination?

Diagramarama: 6 things not obvious from the diagrams...

BONUS SLIDE



1. not a production-line process …
2. SIP:AIP:DIP not necessarily 1:1:1 relationship
3. not necessarily all one agency
4. not all of this has to exist simultaneously
5. functional model *and information model*
6. Significant volume of research and development

seven functional components of OAIS

Common Services

Ingest

Archival Storage

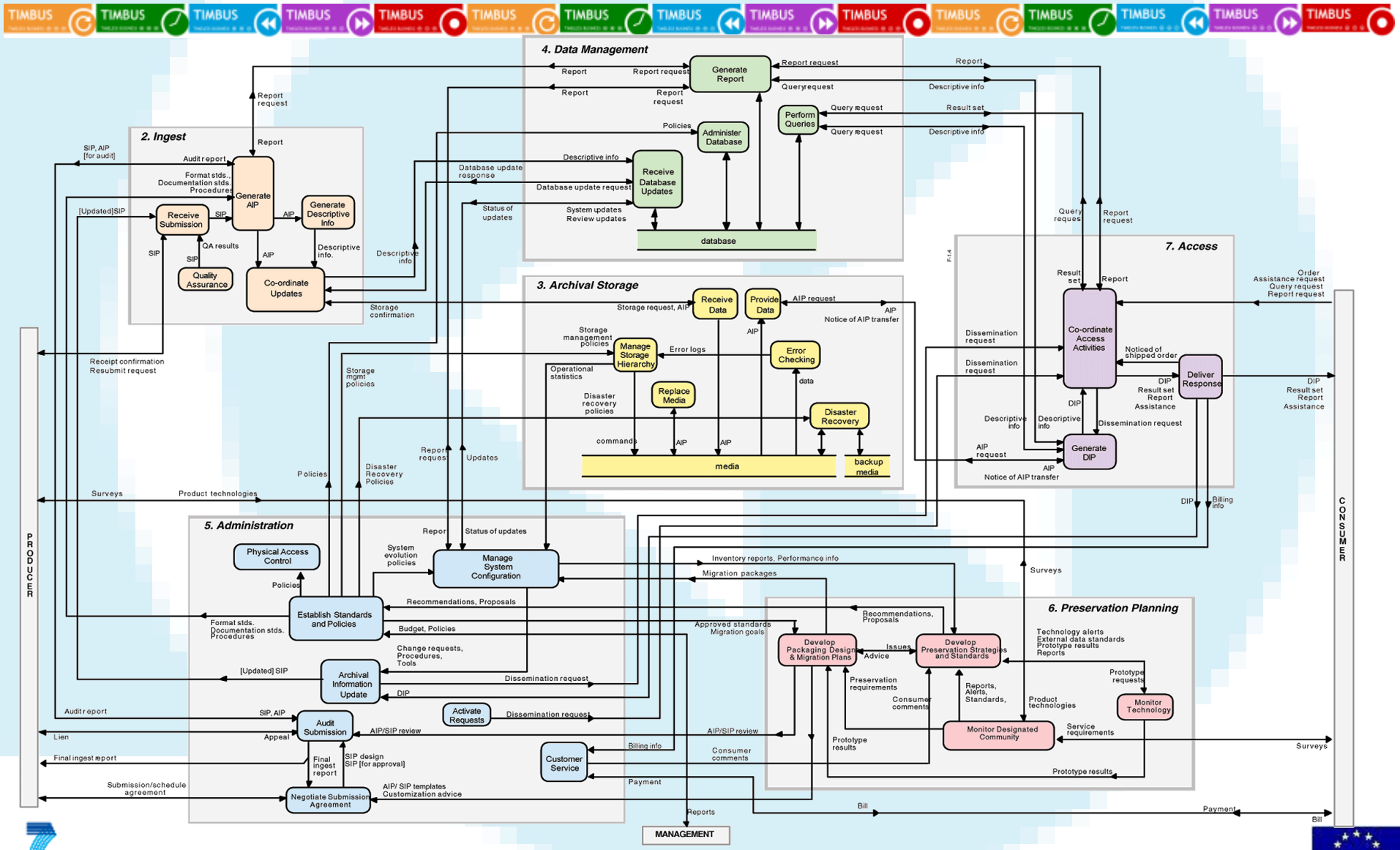
Data Management

Administration

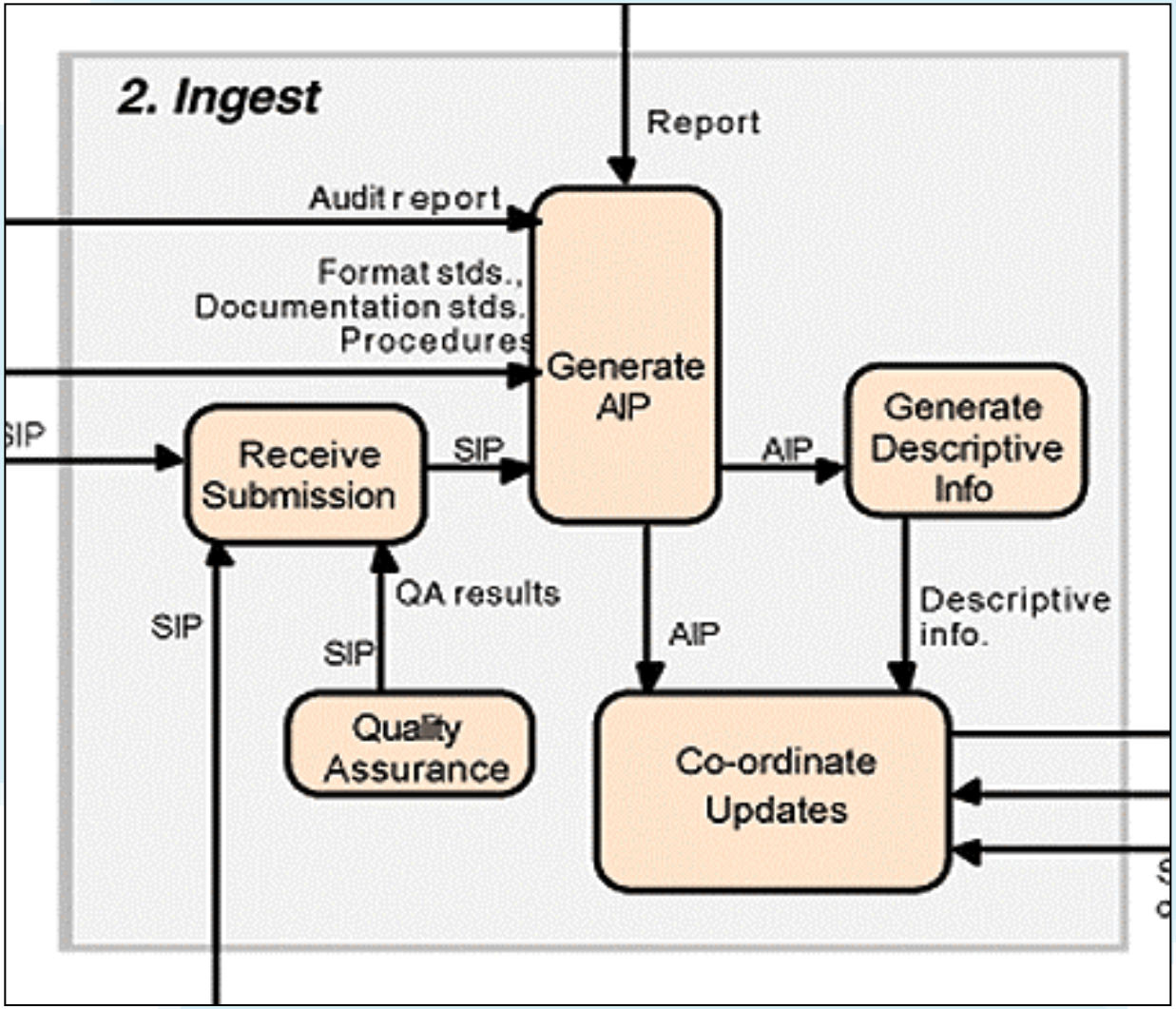
Preservation Planning

Access

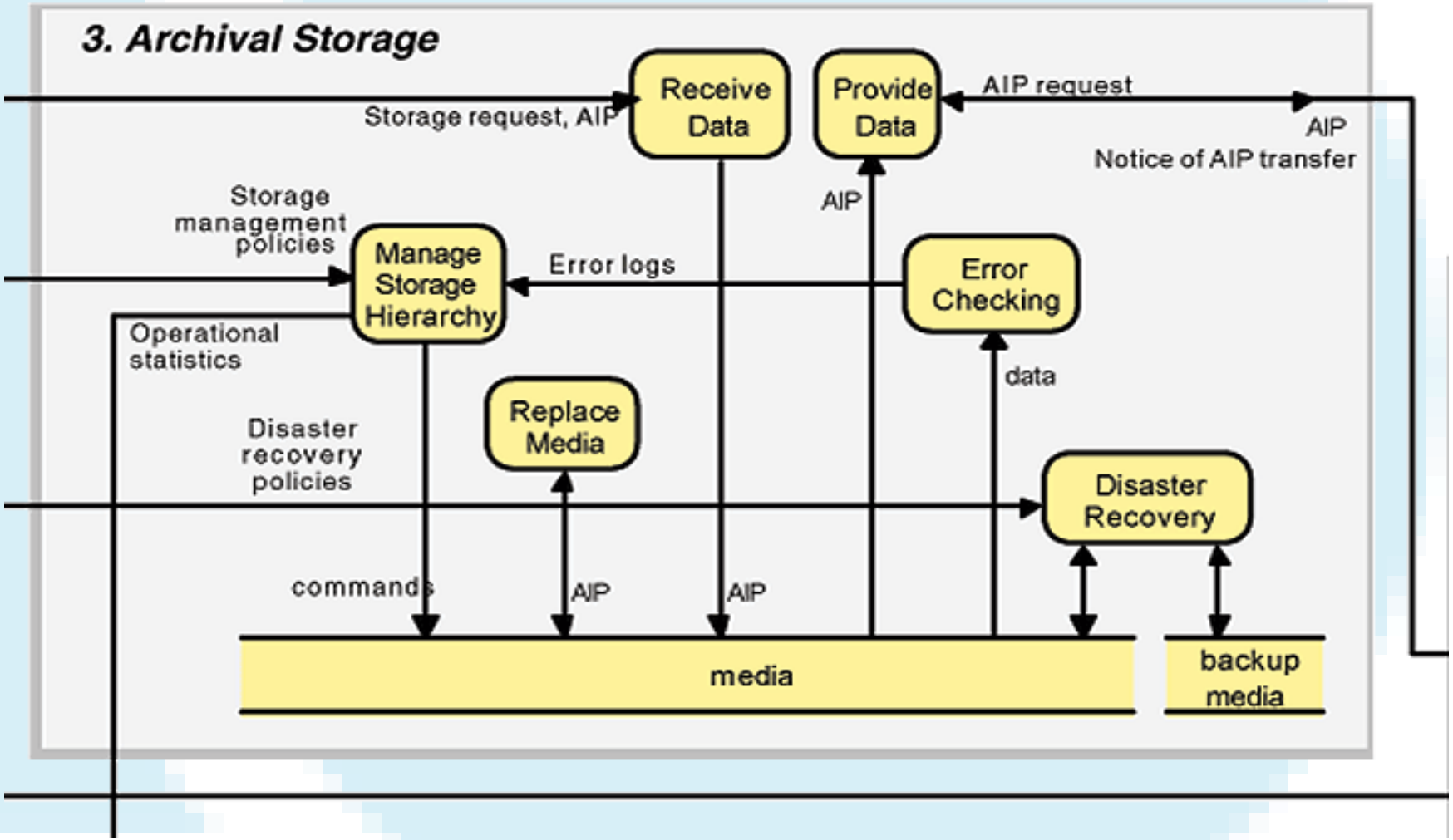
7 main components



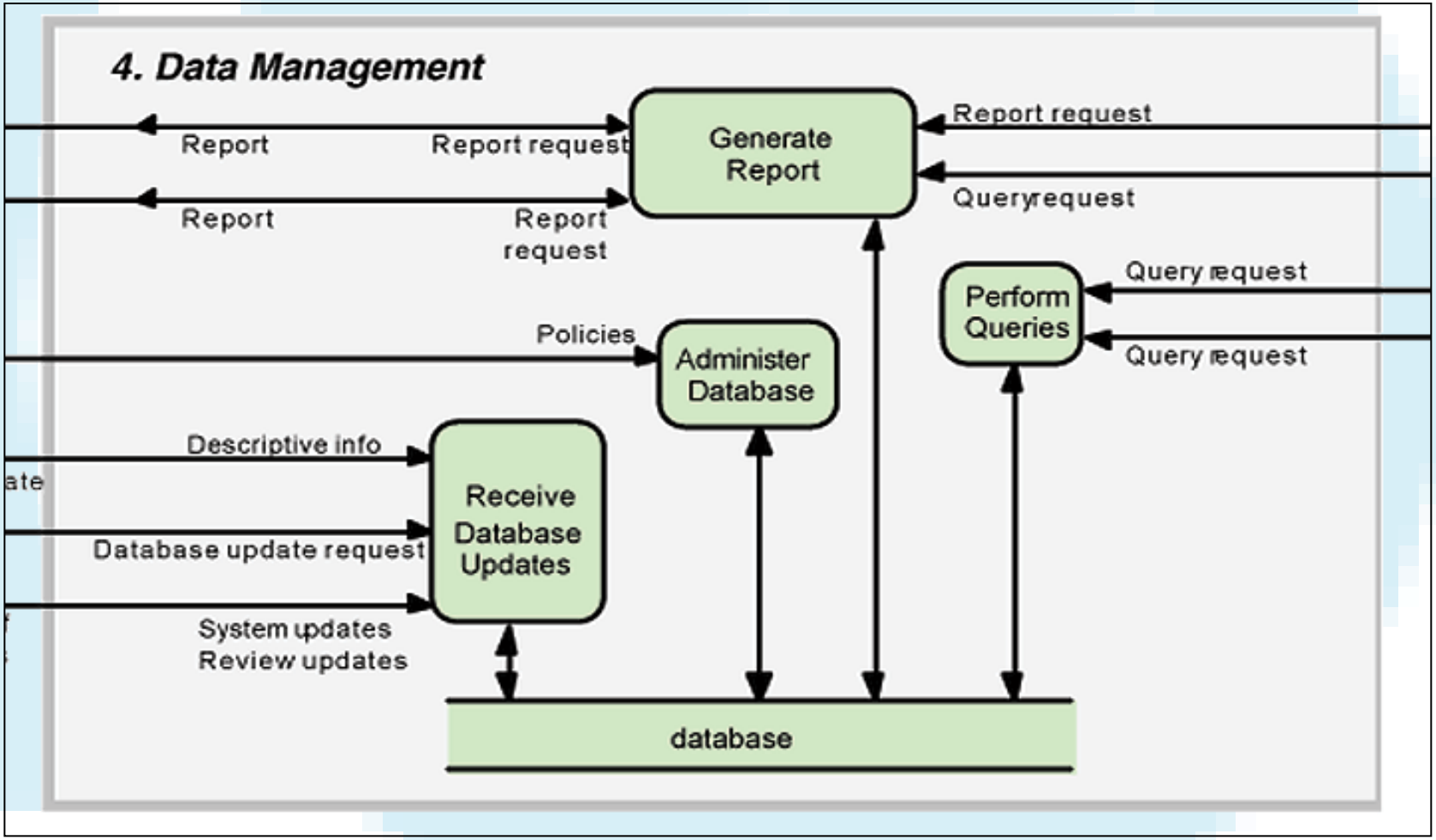
Ingest


2. Ingest
Report
Audit report
Format stds.,
Documentation stds.,
Procedures
Generate AIP
Generate Descriptive Info
SIP
Receive Submission
SIP
AIP
QA results
SIP
SIP
AIP
Descriptive info.
Quality Assurance
Co-ordinate Updates

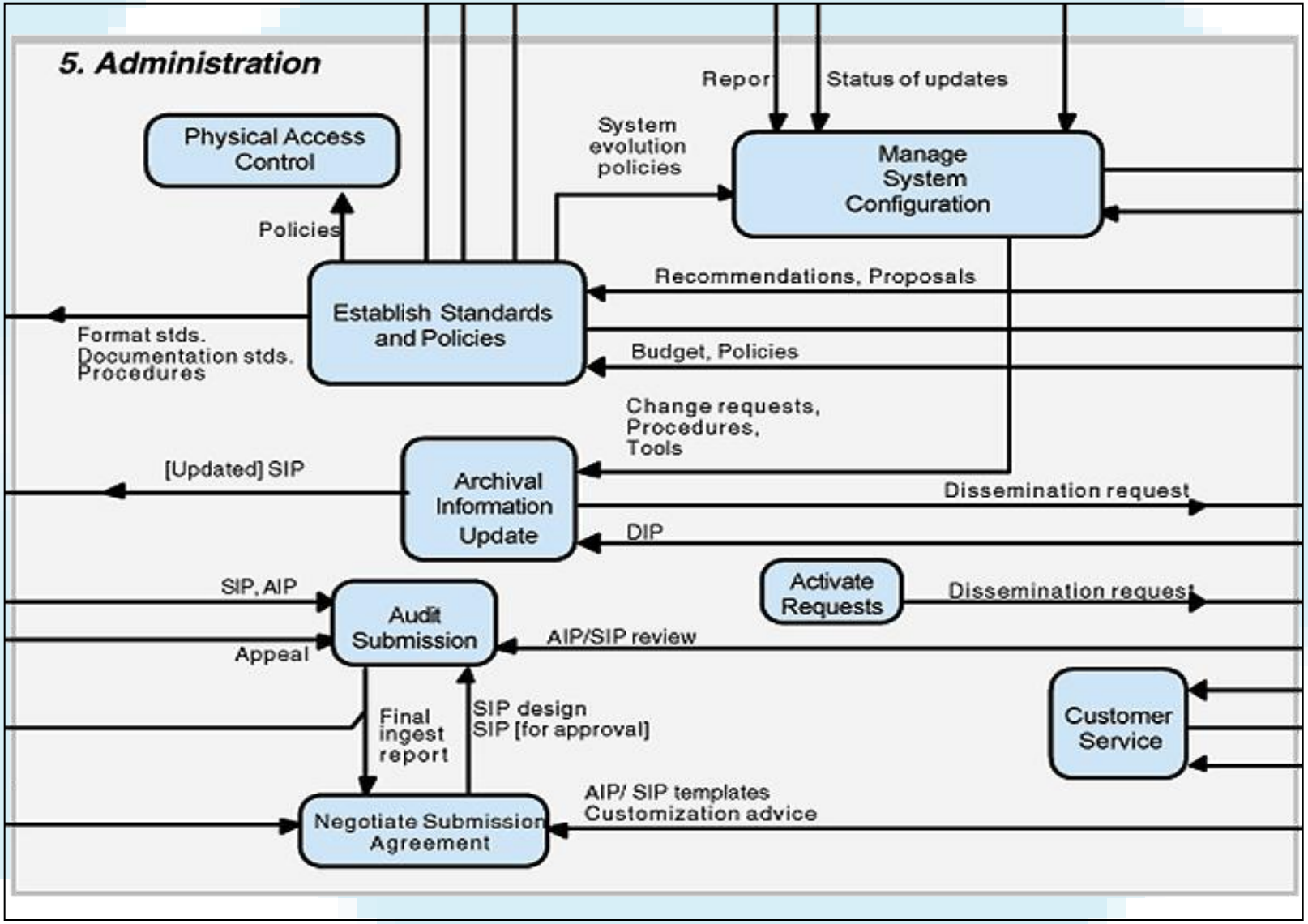
Archival Storage



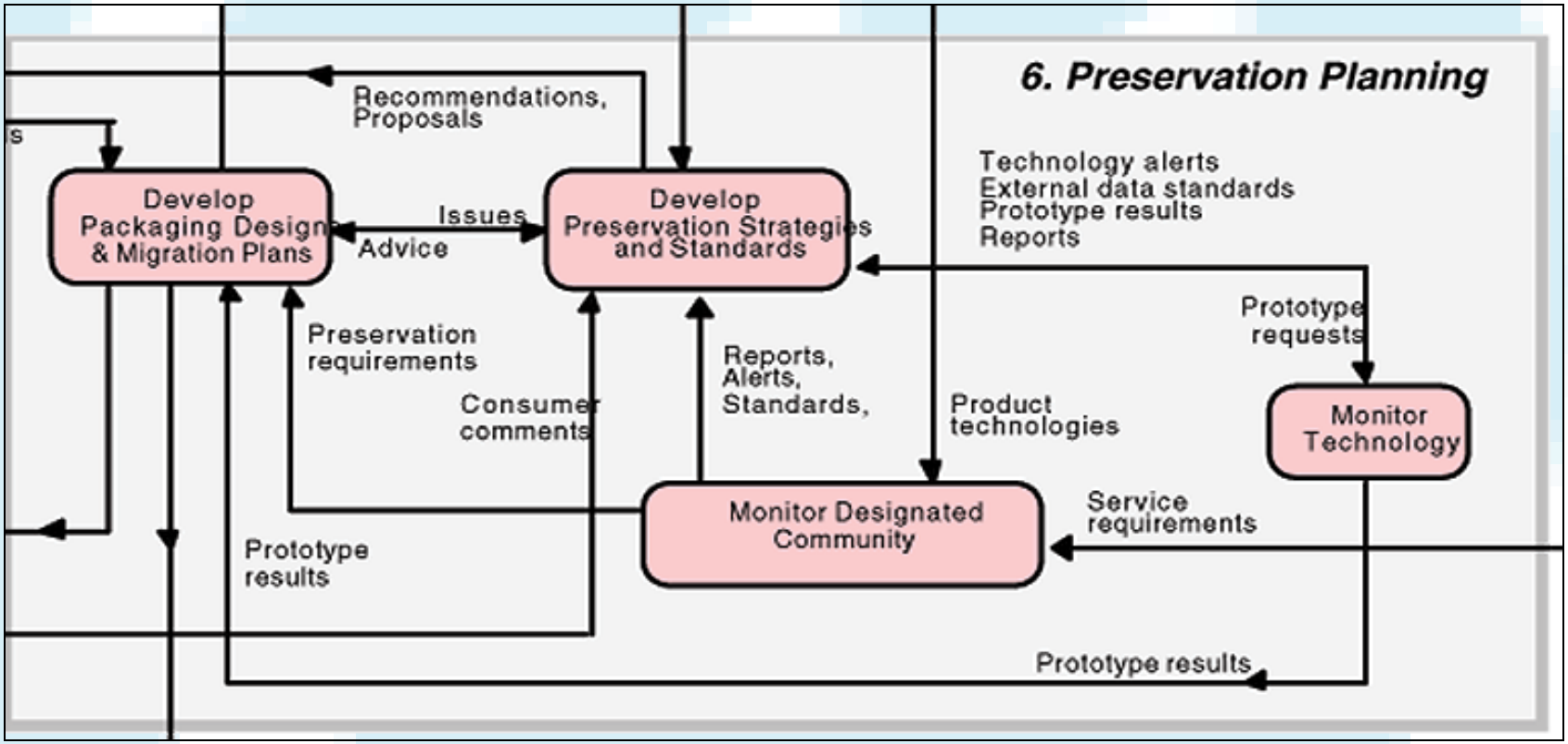
Data Management



5. Administration



6. Preservation Planning

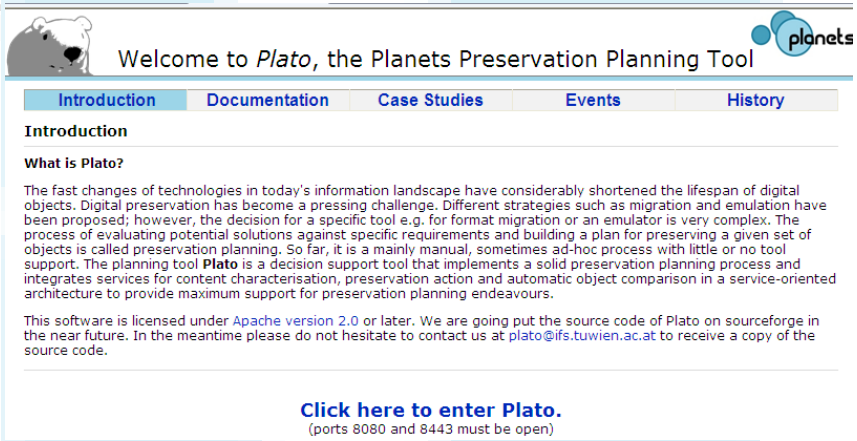


BONUS SLIDE

Preservation Planning?

PLATO preservation planning tool

http://www.ifs.tuwien.ac.at/dp/plato/i



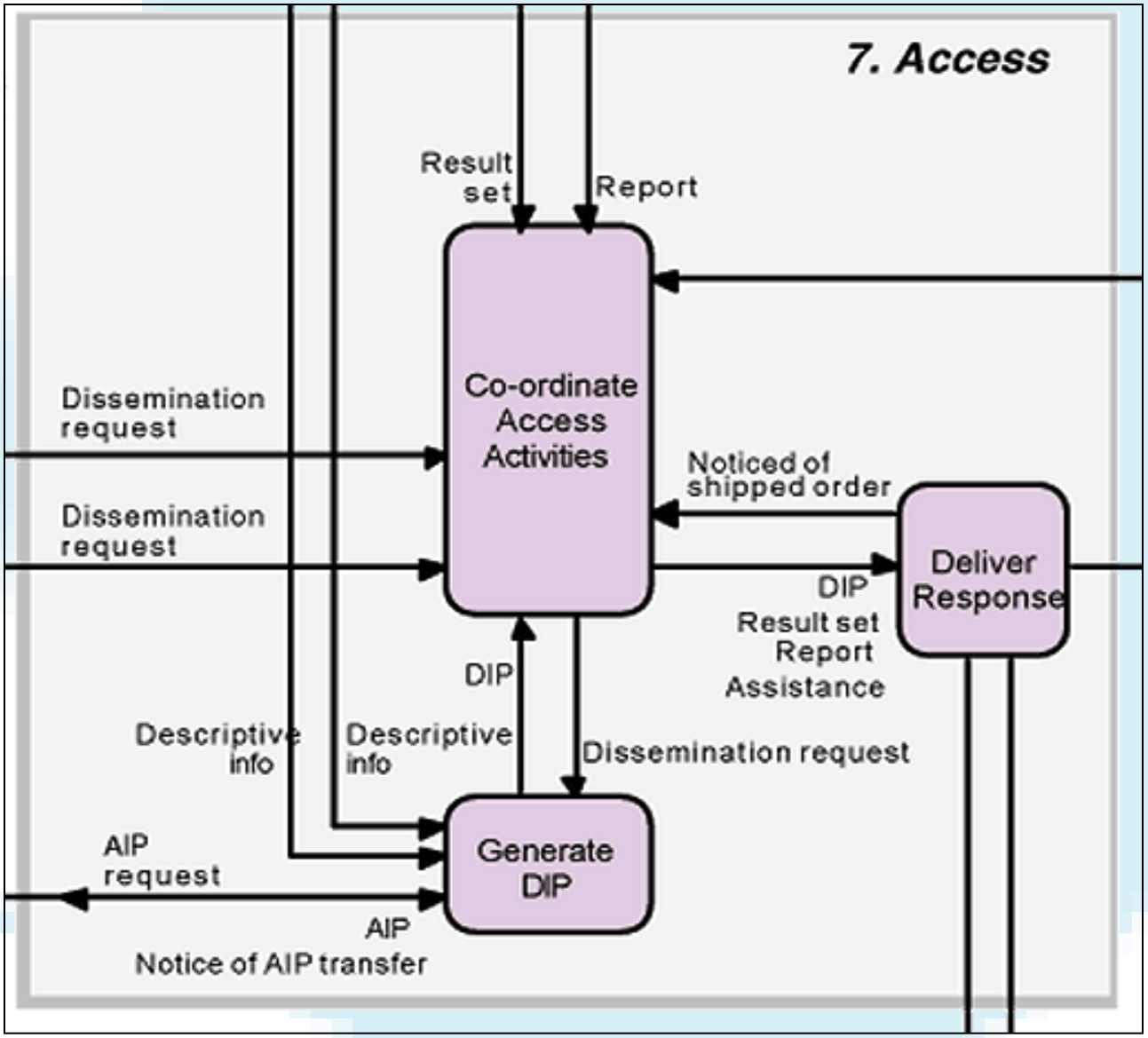
4 stage process:

- **Define requirements**
- **Evaluate actions**
- **Analyse results**
- **Build and execute plan**

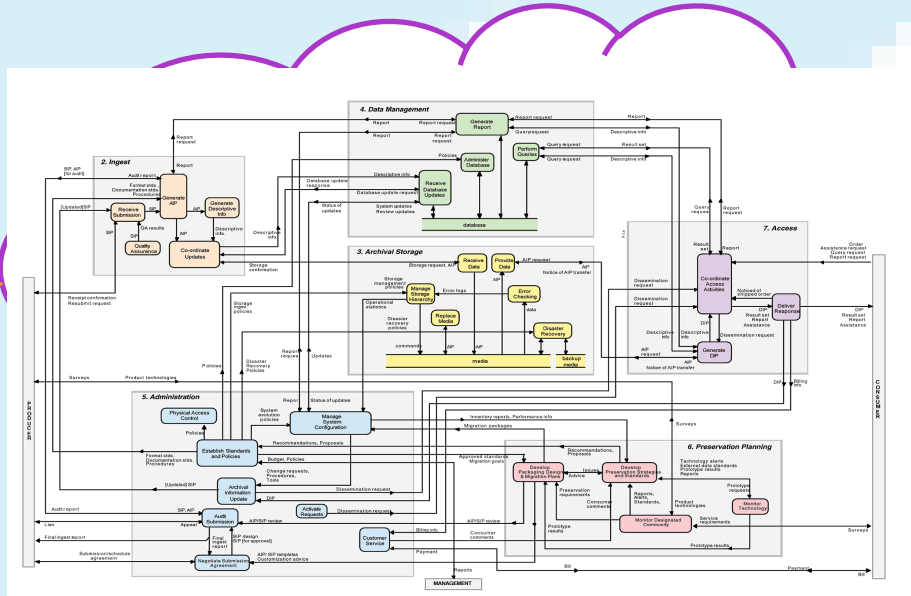
Preservation Test bed

Library of preservation plans

7. Access


7. Access
Result set
Report
Co-ordinate Access Activities
Dissemination request
Dissemination request
Noticed of shipped order
Deliver Response
DIP
Result set
Report
Assistance
DIP
Descriptive info
Descriptive info
Dissemination request
Generate DIP
AIP request
AIP
Notice of AIP transfer

Data creator
(producer)



Data user
(consumer)

Data user
(consumer)

Data user
(consumer)

"The better you are at digital preservation: the less people will notice."