The eArchiving Initiative in Europe

Janet Anderson, Highbury R&D, Ireland

KDRS conference, 7th June 2023

https://www.europeana.eu/en/item/9200369/webclient_DeliveryManager_pid_6328451_custom_att_2_simple_viewer

eArchiving Introduction

European Commission

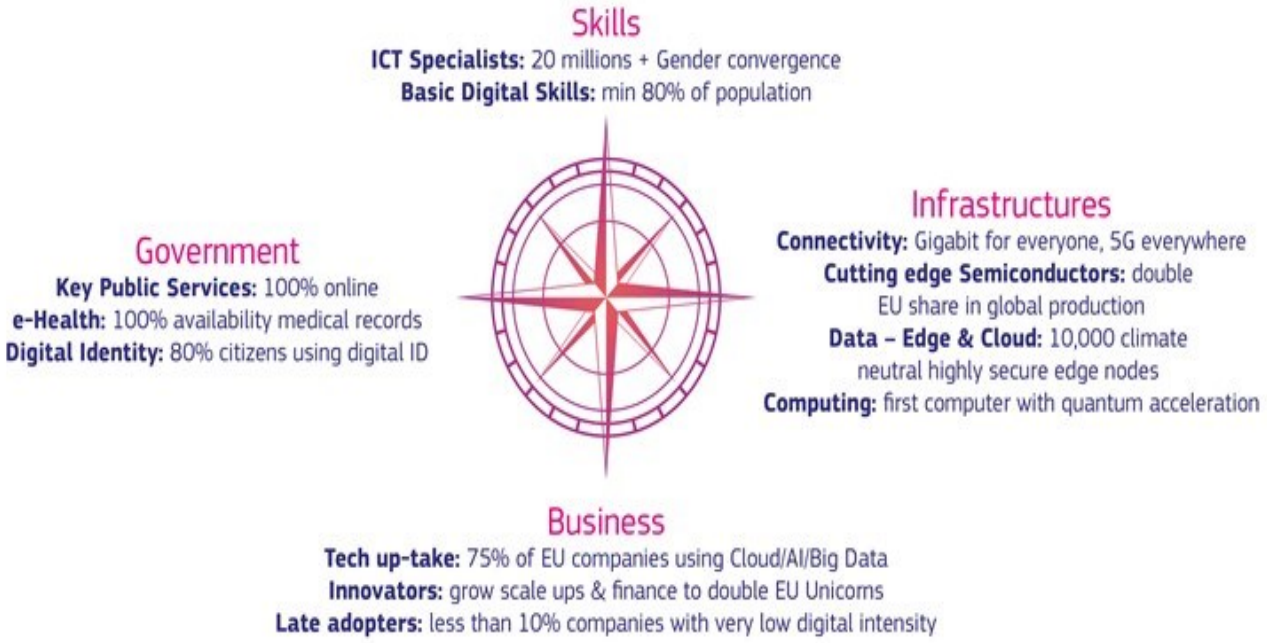
2030 DIGITAL DECADE

POLICY PROGRAMME:
A PATH TO THE DIGITAL DECADE

European Commission

#DigitalEU

The Digital Decade vision & targets (March 2021)



- Secure and performant sustainable digital infrastructures
- Skills
- Digital transformation of businesses
- Digitalisation of public services and areas of public interest

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#DigitalEU

Path to the Digital Decade (15 September 2021)

In line with the Communication, the “Path to the Digital Decade” includes:

1. **Digital targets** along four cardinal points measured at EU and national level with key performance indicators
2. **Governance** through **monitoring (DESI) and cooperation mechanism**;
3. The **monitoring of digital principles** in the inter-institutional declaration;
4. A mechanism to set-up **Multi-Country Projects** with Member States to facilitate pooling of investments

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"Mälar 22"; "A6 Segling" by Norberg, Oscar - National Maritime Museum, Sweden - Public Domain. https://www.europeana.eu/en/item/916109/smm_sm_photo_Fo133481

eArchiving in **DIGITAL**

- New **DIGITAL** Europe programme, data spaces:
  new narratives, new website, own events
- **Procurement** for 2+2 years:

  eArchiving initiative (from 2022 October)
- *Not only* for Archives: full *digital preservation*,
  data sustainability *from design*
- Compatible and **interoperable** with EU standards: eSignature, eDelivery, eID...

European Commission

eArchiving Generic Services projects 2021-23

EU Funding 75% co-financing. Min 3 entities from 3 MS.
Results: 8 eligible offers, 4 taken, 838k total, 16 institutions from 10 MS + 1 EEA

Protecting Oral Histories using Blockchain

- Austria: AIT Austrian Institute of Technology GMBH
- Ireland: Highbury Research and Development Ltd
- Netherlands: Koninklijke Nederlandse Akademie van Wetenschappen

Oneclick eArchiving

- Finland: Kaakkois-Suomen Ammattikorkeakoulu OY *and* Disec OY
- Estonia: Eesti Kunstiakadeemia
- Norway: PIQL AS

J-Ark - European Jewish Community Archive

- Spain: Pangeanic-B. I. Europa SLU
- Netherlands: Stichting Jewish Heritage Network *and* Stichting Europeana
- Portugal: KEEP Solutions LDA
- Poland: Ośrodek Brama Grodzka – Teatr NN
- Lithuania: Jewish Community of Lithuania

eArchiving of Engineering and Science Library

- Norway: PIQL AS
- Spain: Airbus Defence and Space, S.A.
- Slovakia: The Central Library of Slovak Academy of Sciences

Europa exactissime descripta [Material cartográfico] by Hondius, Henricus, 1597-1651 - 1631 Repositorio Biblioteca virtual de Andalucía, Spain - Public Domain. https://www.europeana.eu/en/item/2022707/lod_oai_bibliotecavirtualandalucia_juntadeandalucia_es_6352_ent1

eArchiving in **DIGITAL** – what the Commission aims at

"Mälar 22"; "A6 Segling" by Norberg, Oscar - National Maritime Museum, Sweden - Public Domain. https://www.europeana.eu/en/item/916109/smm_sm_photo_Fo133481

- To foster the **availability** of data for use
- Strengthen data-sharing mechanisms
- Improve technical, semantic, organizational and legal **interoperability**
- Simplify data **exchange** within private and public archives
- Complement other services of the Digital Europe Programme, providing them with means to preserve their data in a **transparent, secure, sustainable** manner for the future reuse
- Intereoperability of data will ensure reuse and **sustainability in the long term**

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eArchiving in **DIGITAL** – tasks of the contractor

"Mälar 22"; "A6 Segling" by Norberg, Oscar - National Maritime Museum, Sweden - Public Domain. https://www.europeana.eu/en/item/916109/smm_sm_photo_Fo133481

- To build on the results of the previous projects and the e-Ark specification
- Specifications maintenance and development
- Validation and conformance testing
- Training
- Outreach
- Support
- Building synergies in DIGITAL
- Onboarding
- Support of Generic Services projects

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eArchiving Overview

European Commission

E-ARK History

- 2014-2017: E-ARK project
- 2018-2021: CEF eArchiving Building Block
- **2022 – eArchiving Initiative starts**
- The E-ARK Consortium has expanded over the years to embrace partners from new sectors/domains

E-ARK Grant Agreement No 620998, https://eark-project.com/
E-ARK4ALL, Grant Agreement number: LC-00921441 CEF-TC-2018-15 eArchiving (2018-2019)
E-ARK3, Grant Agreement No. LC-01390244 CEF-TC-2019-3 E-ARK3, (2019-2021)
Current procurement: eArchiving Common Services Platform - CNECT/LUX/2021/OP/0077 no. LC-01905904

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E-ARK Consortium

5 Group Members:

- Austrian Institute of Technology (AIT), **LEAD**
- Highbury R&D, Ireland
- Gabinete Umbus, Spain
- KEEP Solutions, Portugal
- DLM Forum, Estonia

6 subcontractors:

- Association des Archivists Francophones de Belgique
- EasyLean, Estonia
- Ever Team Software, France
- IdenTrust, Belgium
- KMD, Denmark
- Prisma Cultura, Italy

E-ARK Consortium

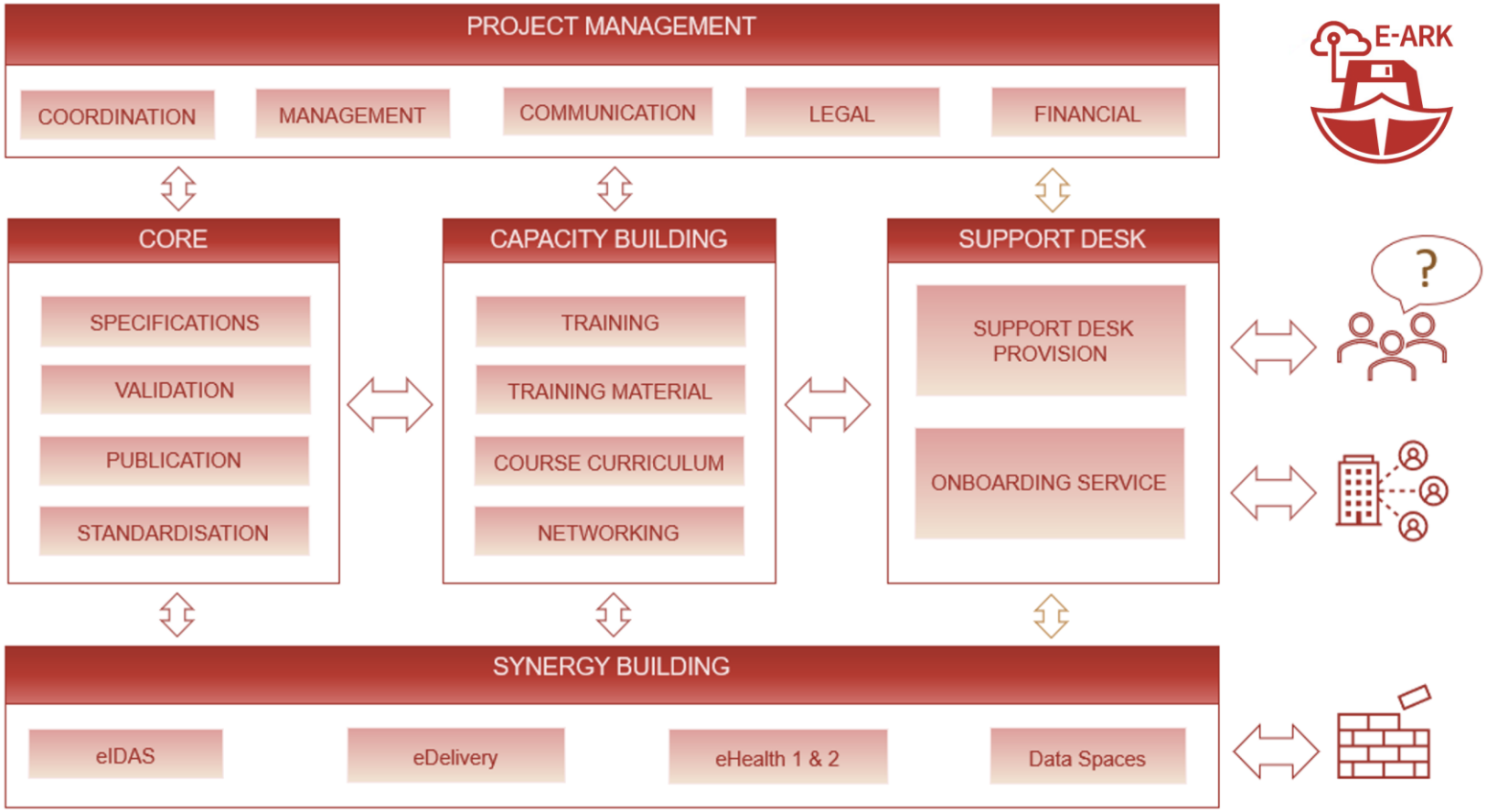
15 organisations via DLM Forum:

- Archives of the Republic of Slovenia,
- Docbyte, Belgium
- ES Solutions, Sweden
- Geoarh, Slovenia
- Instituto de Engenharia de Sistemas e Computadores – Investigação e Desenvolvimento em Lisboa, (INESC-ID), Portugal,
- National Archives of Estonia, Finland and Norway
- Stichting Open Preservation, Netherlands
- Penwern, U.K.
- Poliphon, Hungary
- Serda, France
- Swiss Federal Archives,
- Kommunalförbundet Sydarkivera, Sweden
- Kaakkois-suomen Ammattikorkeakoulu (Xamk), Finland

The eArchiving Initiative

- Start date 1st October 2022
- Two years + two possible annual extensions
- EUR 1,970,000 (two years)
- Digital Europe Programme
- DG CNECT and E-ARK Consortium
- Comprises five key Activities:
  - Project Management
  - CORE
  - Capacity Building
  - Support
  - Building Synergies

The eArchiving Initiative: the five Activities



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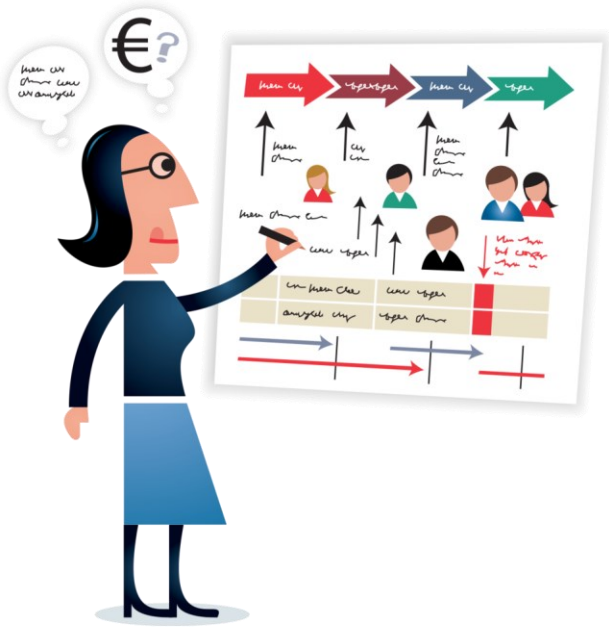
Coordination/Project Management

PM Activity Tasks

- PM.1: Coordination, project, risk and financial management (PM2)
- PM.2: Communication
- PM.3: **Website**
- PM.4: **Legal Compliance**



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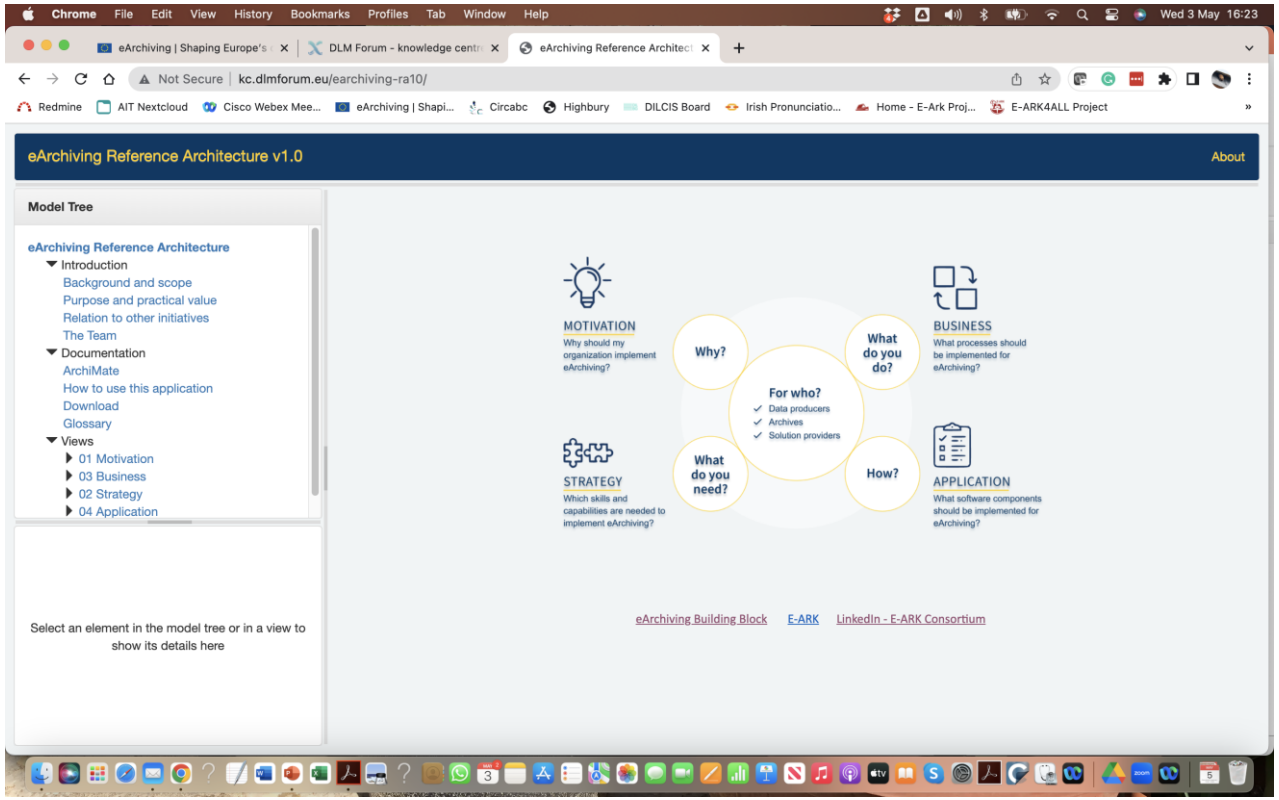
Core Activity

CORE Key tasks



Task CORE.1 **Specifications Maintenance and Knowledge Base**

- Sub-Task CORE.1.1 **Specifications**
- Sub-Task CORE.1.2 **Knowledge Base** (includes **Reference Architecture** and **Maturity Model**)
- Sub Task CORE.1.3 **Release Management**

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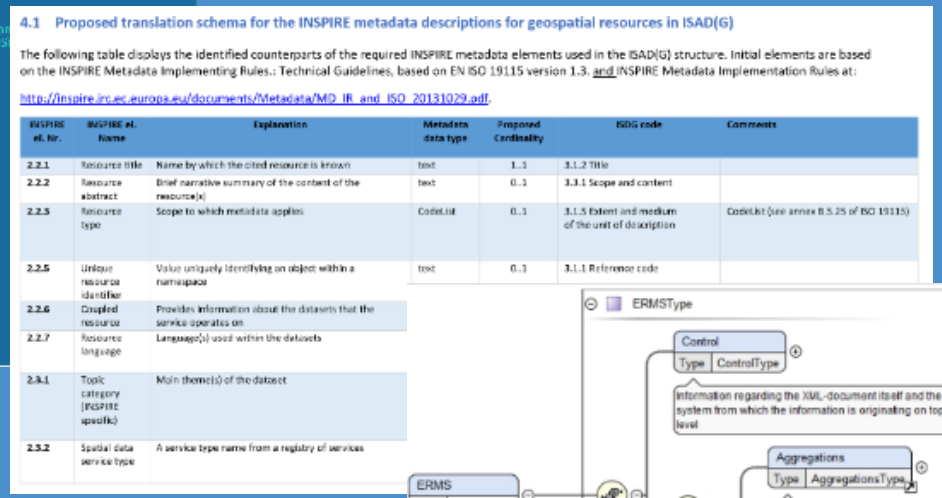
Specification documents



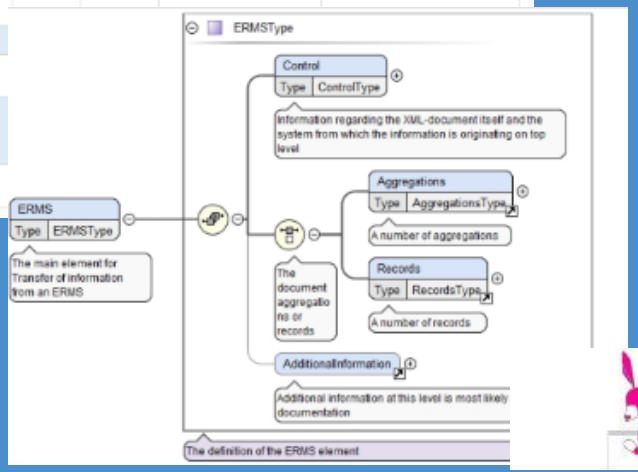
4.1 Proposed translation schema for the INSPIRE metadata descriptions for geospatial resources in ISAD(G)

The following table displays the identified counterparts of the required INSPIRE metadata elements used in the ISAD(G) structure. Initial elements are based on the INSPIRE Metadata Implementing Rules.: Technical Guidelines, based on EN ISO 19115 version 1.3. and INSPIRE Metadata Implementation Rules at:

http://inspire.jrc.ec.europa.eu/documents/Metadata/MD_IR_and_ISO_20131029.pdf.

INSPIRE el. Nr.	INSPIRE el. Name	Explanation	Metadata data type	Proposed Cardinality	ISDG code	Comments
2.2.1	Resource title	Name by which the cited resource is known	text	1..1	3.1.2 Title	
2.2.2	Resource abstract	Brief narrative summary of the content of the resource(s)	text	0..1	3.3.1 Scope and content	
2.2.3	Resource type	Scope to which metadata applies	CodeList	0..1	3.1.5 Extent and medium of the unit of description	CodeList (see annex B.5.25 of ISO 19115)
2.2.5	Unique resource identifier	Value uniquely identifying an object within a namespace	text	0..1	3.1.1 Reference code	
2.2.6	Coupled resource	Provides information about the datasets that the service operates on				
2.2.7	Resource language	Language(s) used within the dataset(s)				
2.3.1	Topic category (INSPIRE specific)	Main theme(s) of the dataset				
2.3.2	Spatial data service type	A service type name from a registry of services				

Requirements



XML-Schema/Schemas

Expression of requirements not possible to make in the XML-schema

Guideline

Example

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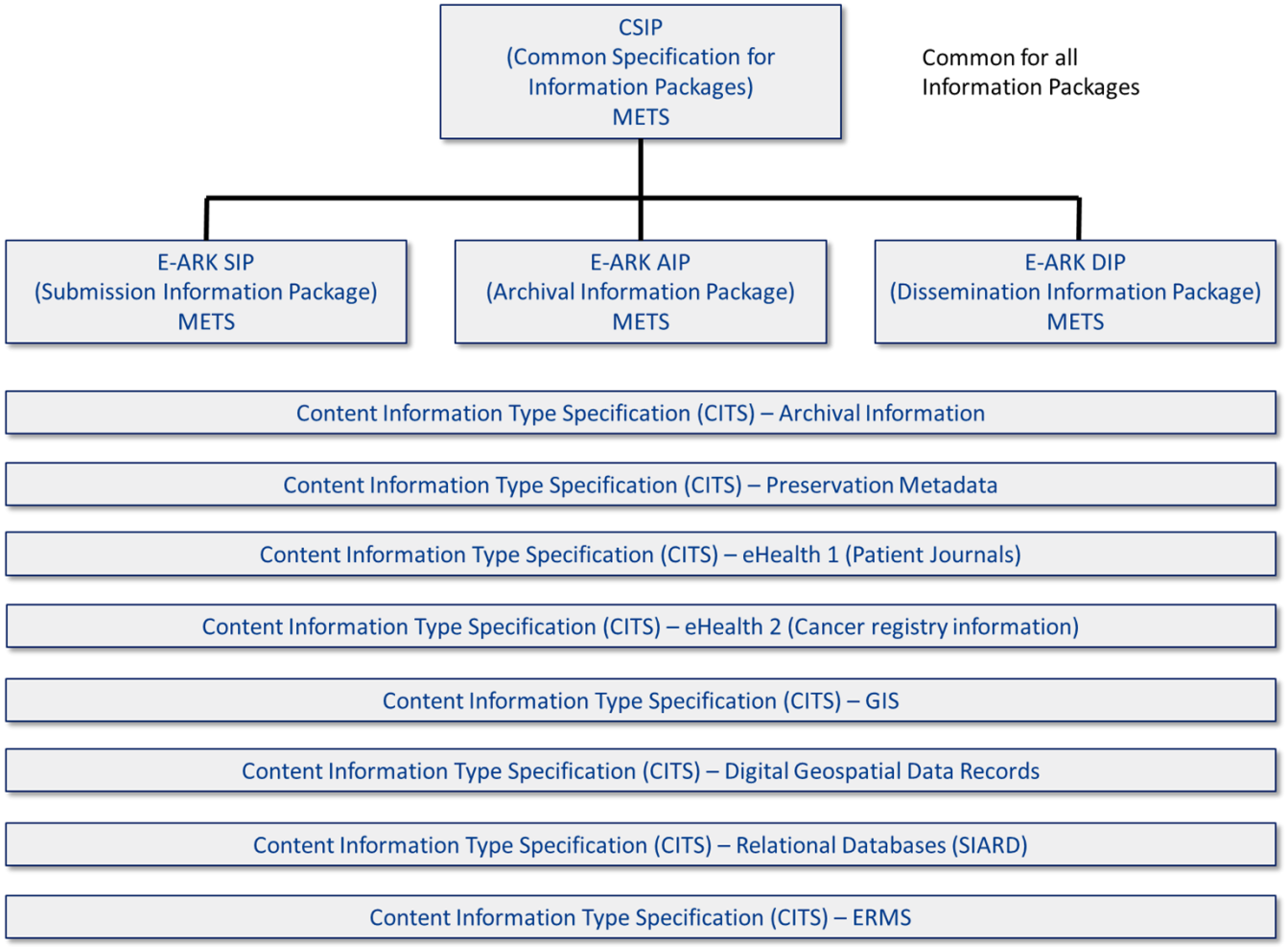
Specifications

https://github.com/DILCISBoard https://dilcis.eu/ https://dilcis.eu/reviews/current-reviews



CORE Key tasks

Task CORE.2 **Creation of new eArchiving specifications: Engineering1 3D CITS**
(cf 3D Content Information Type Specification (CITS), liaising with Digital Cultural Heritage Data Space, 4CH)

https://lotar-international.org/

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Preserving 3D Objects. 3D model of the Villa of Oplontis Martin Blazeby, POCOS_Vol_1.PDF

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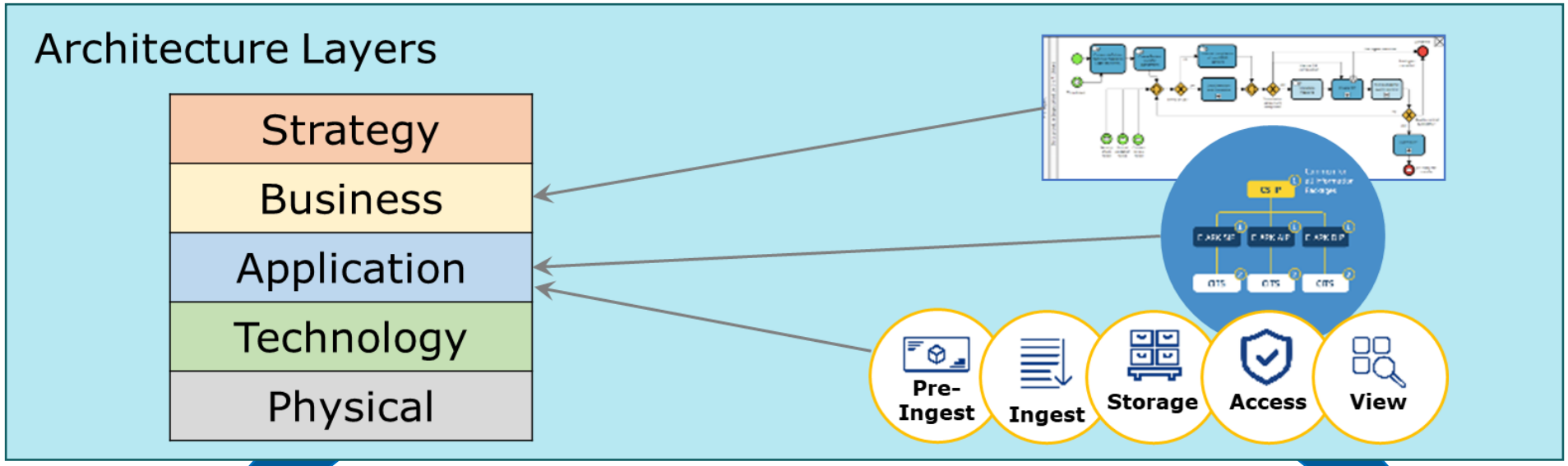
eArchiving Reference Architecture



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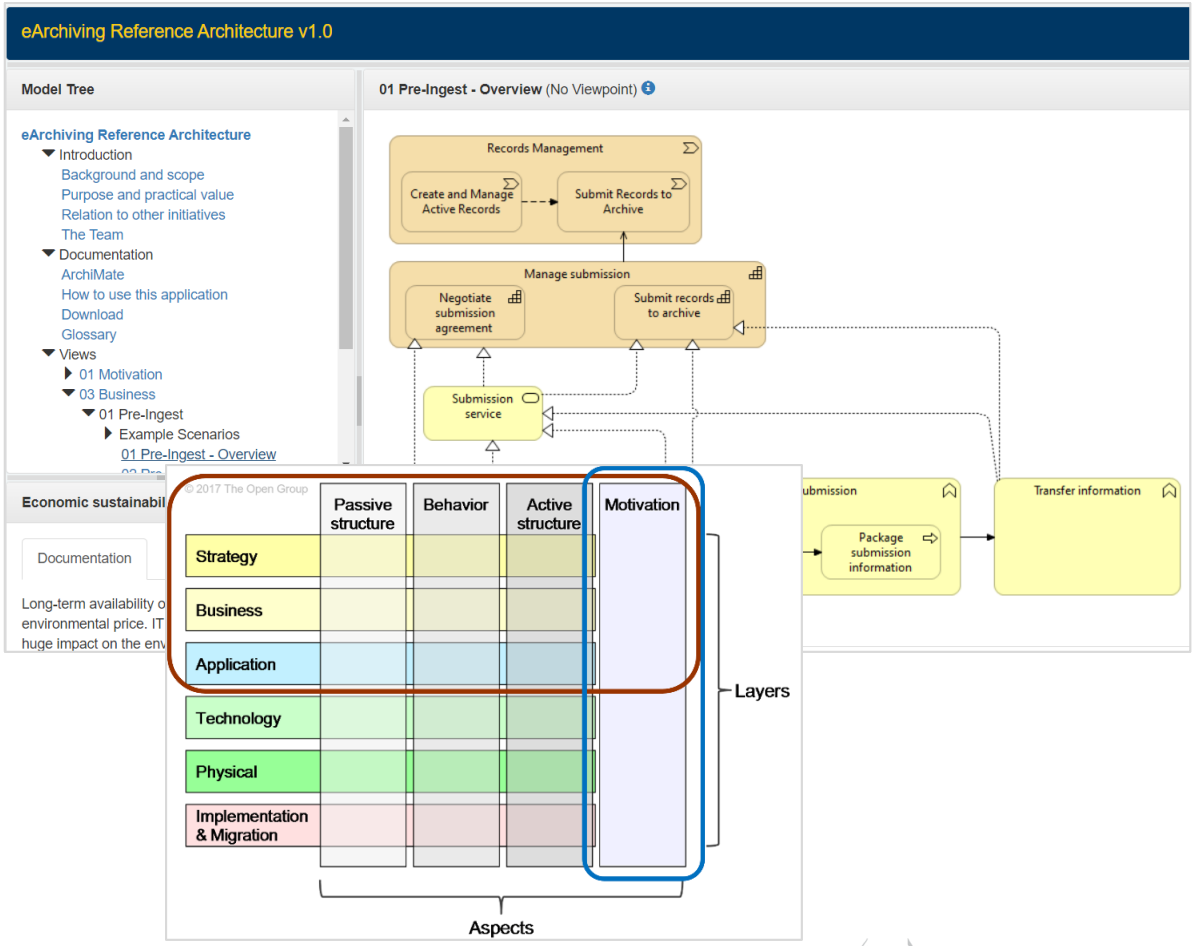
eArchiving Reference Architecture v1.0

- Version 1.0 published in 2021
- Online version available at the E-ARK Knowledge Centre
- ArchiMate model can be downloaded from the online version
- V1.0 is focusing on the motivation aspect, strategy and business layers



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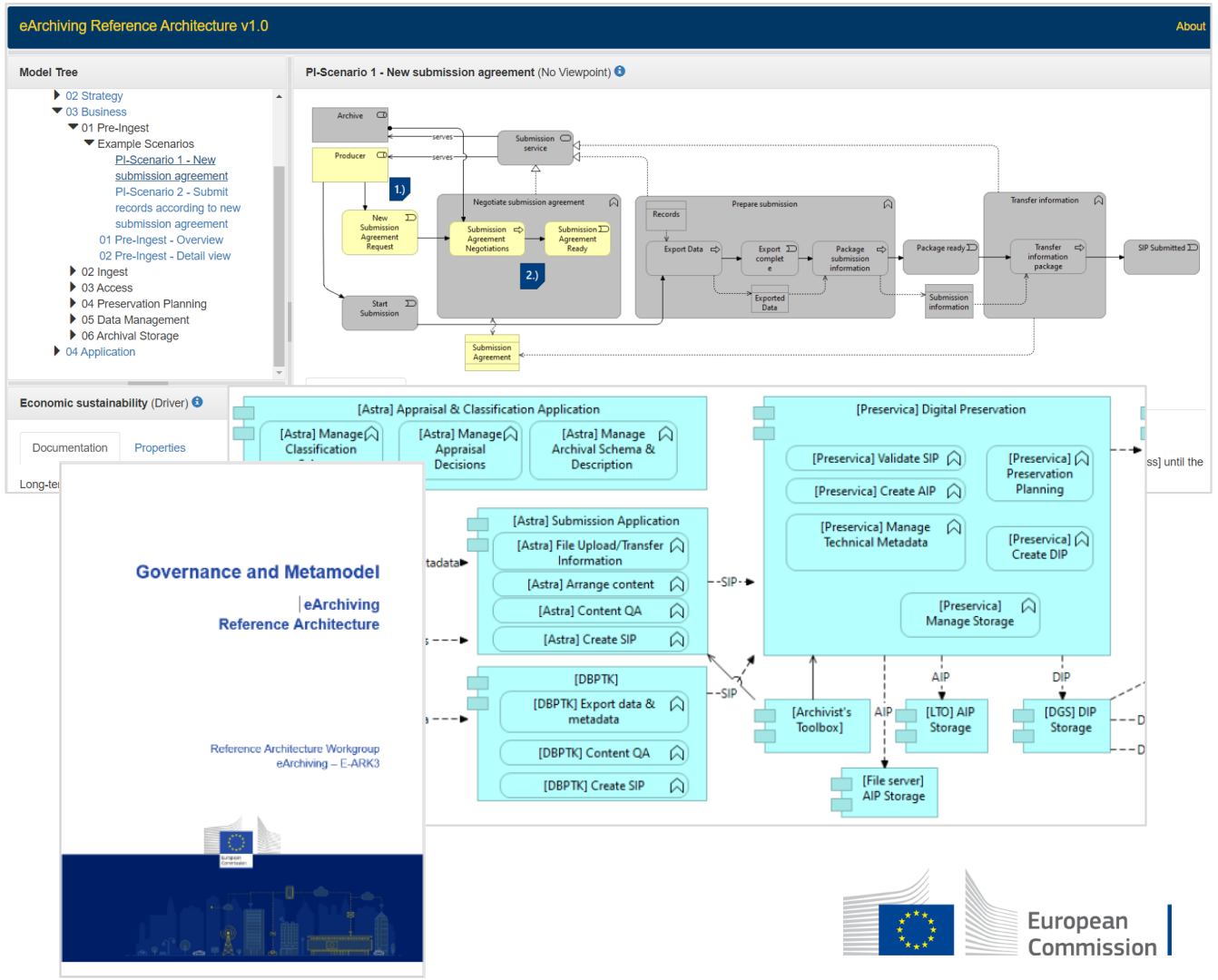
eArchiving Reference Architecture v1.0

Extended with:

- Principles document
- Business scenarios
- Real world application layer
- Introduction, documentation, and glossary sections



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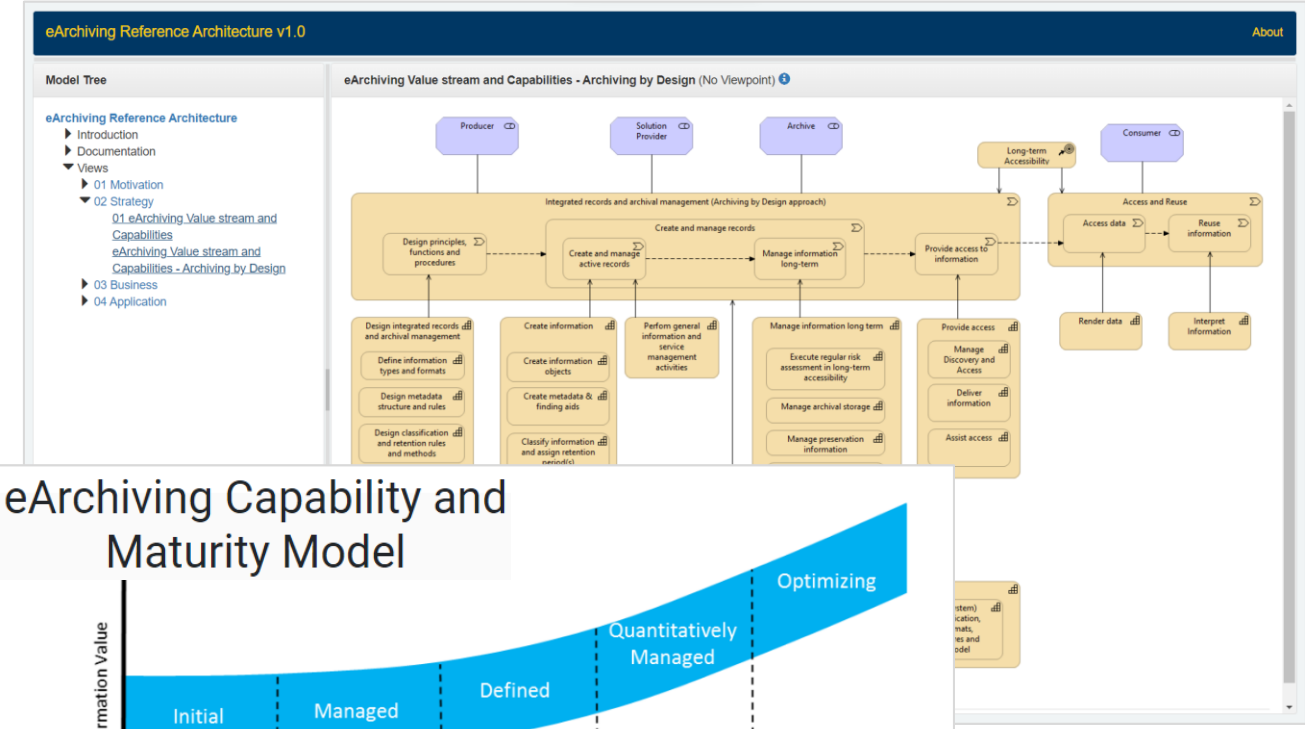
Reference Architecture – Work in progress

Parallel activities:

- Aligning with the new version of the eArchiving Maturity Model
- Aligning with the Archiving by Design approach



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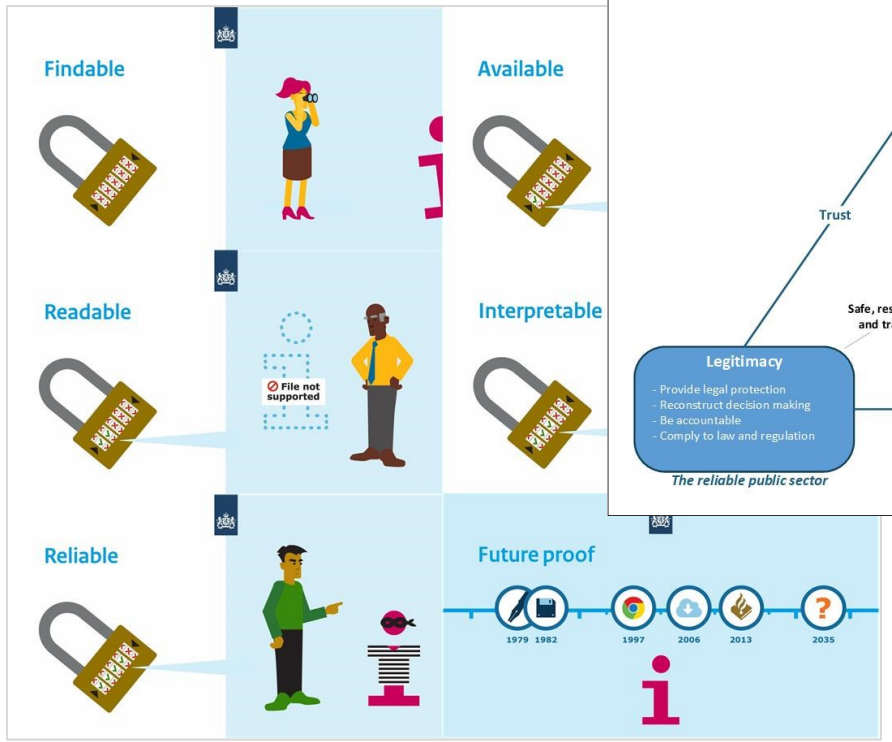
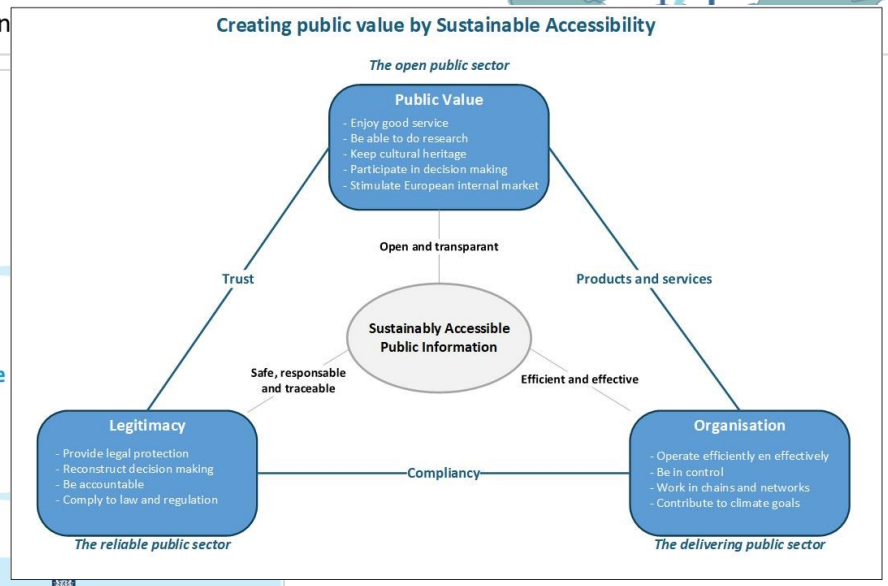
Reference Architecture – Archiving by Design

- EAG Archiving by Design working group
- DUTO model by the Dutch National Archives





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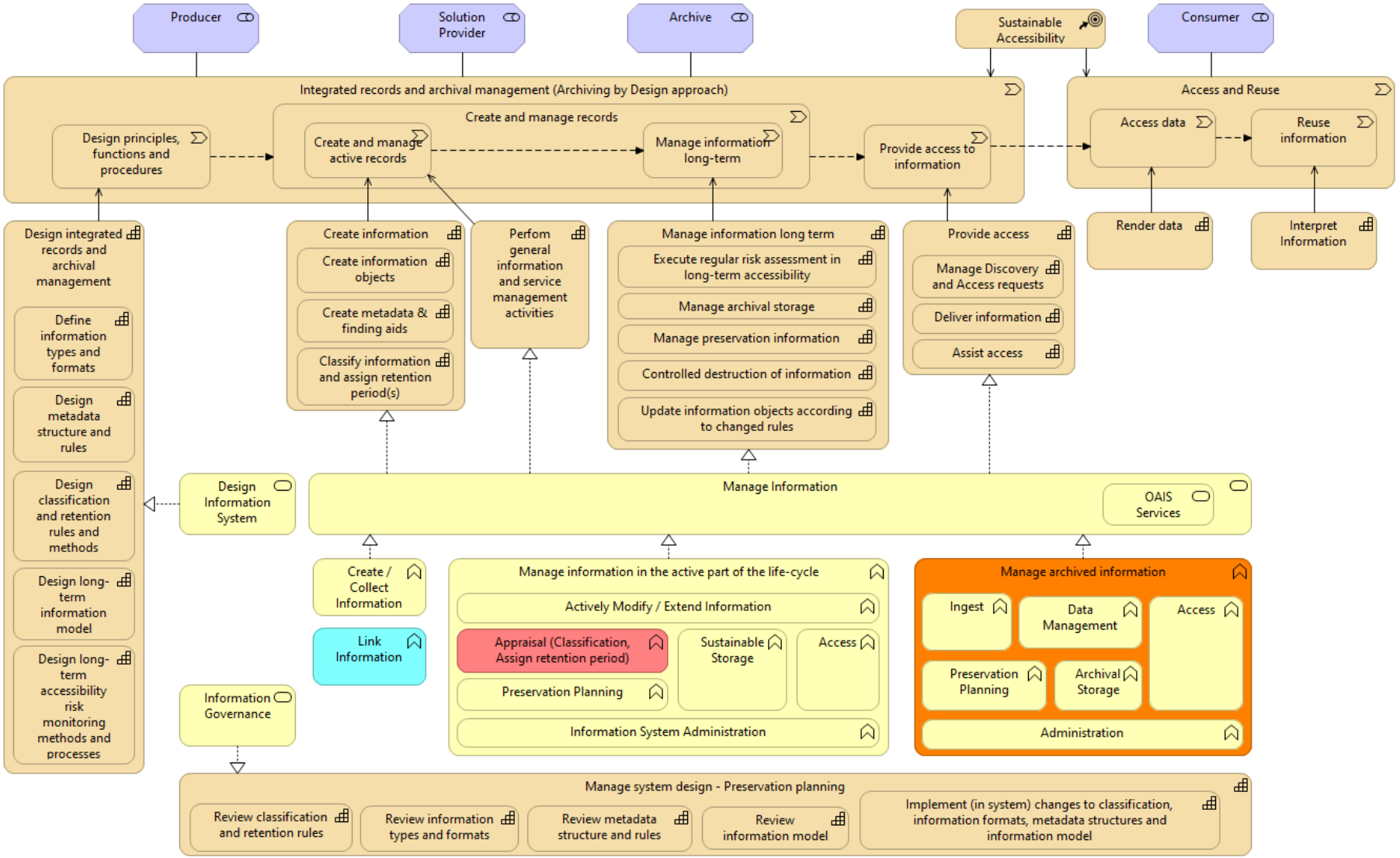
Reference Architecture – Archiving by Design



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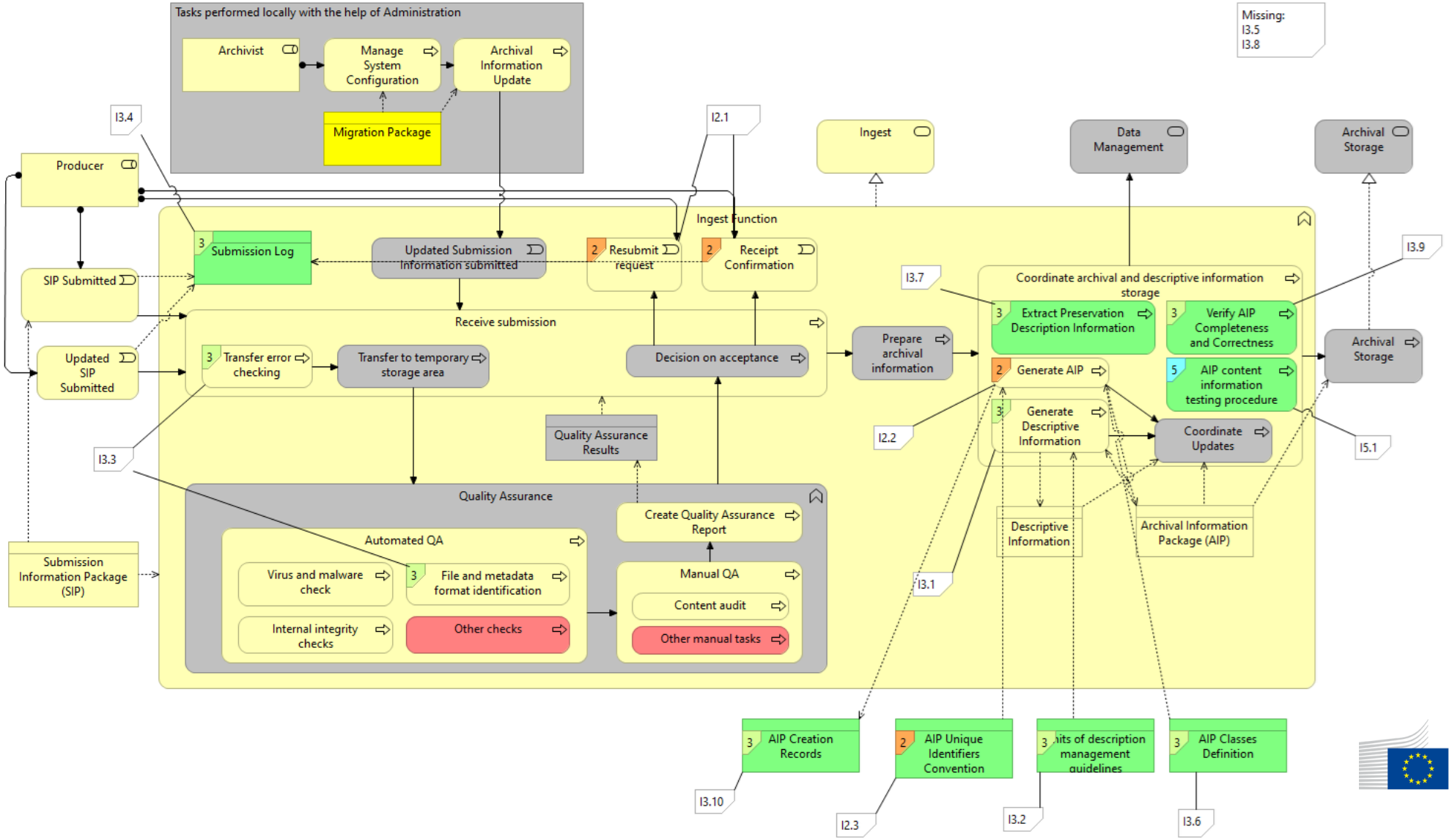
Reference Architecture – Maturity Model



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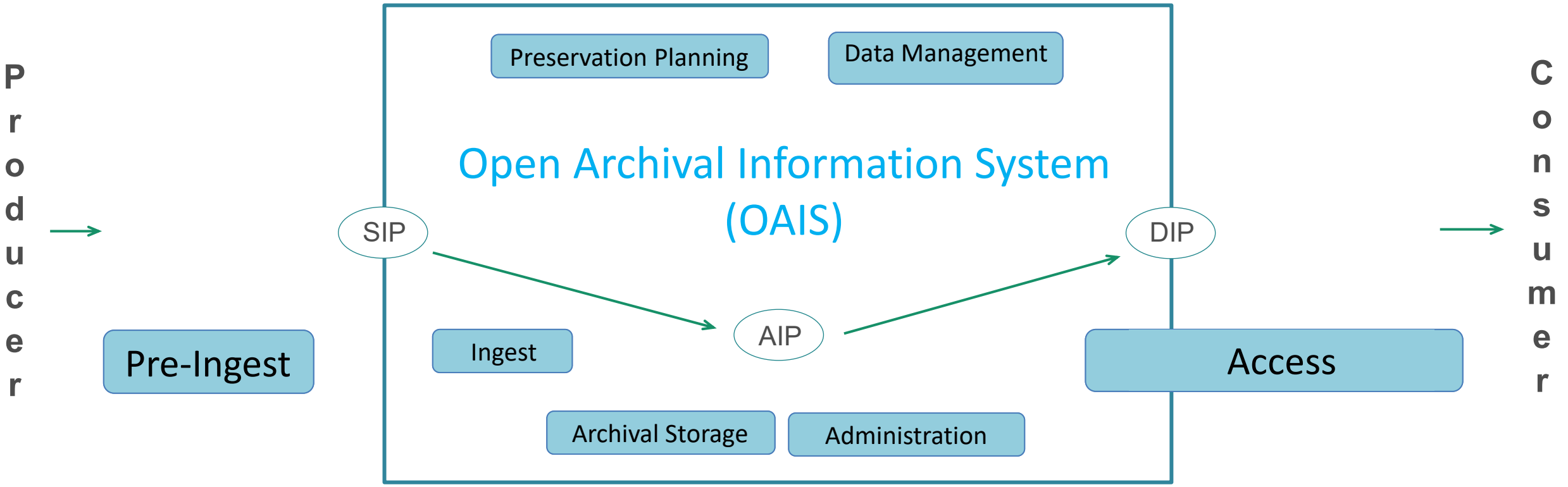
Creating E-ARK specification crosswalks



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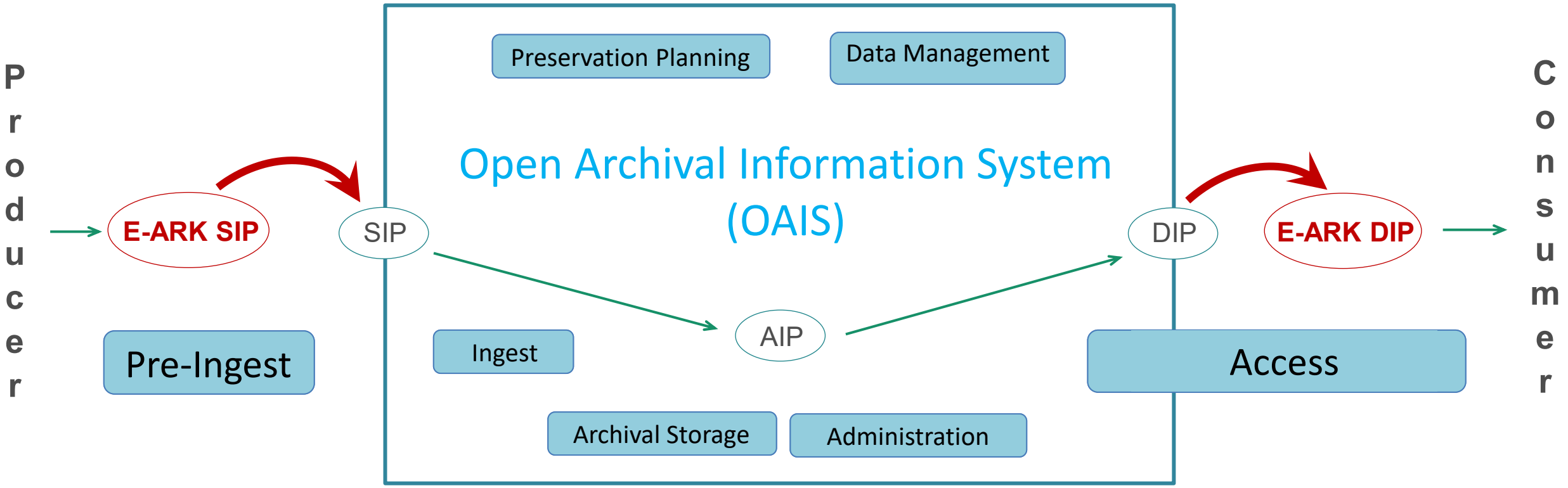
Creating E-ARK specification crosswalks



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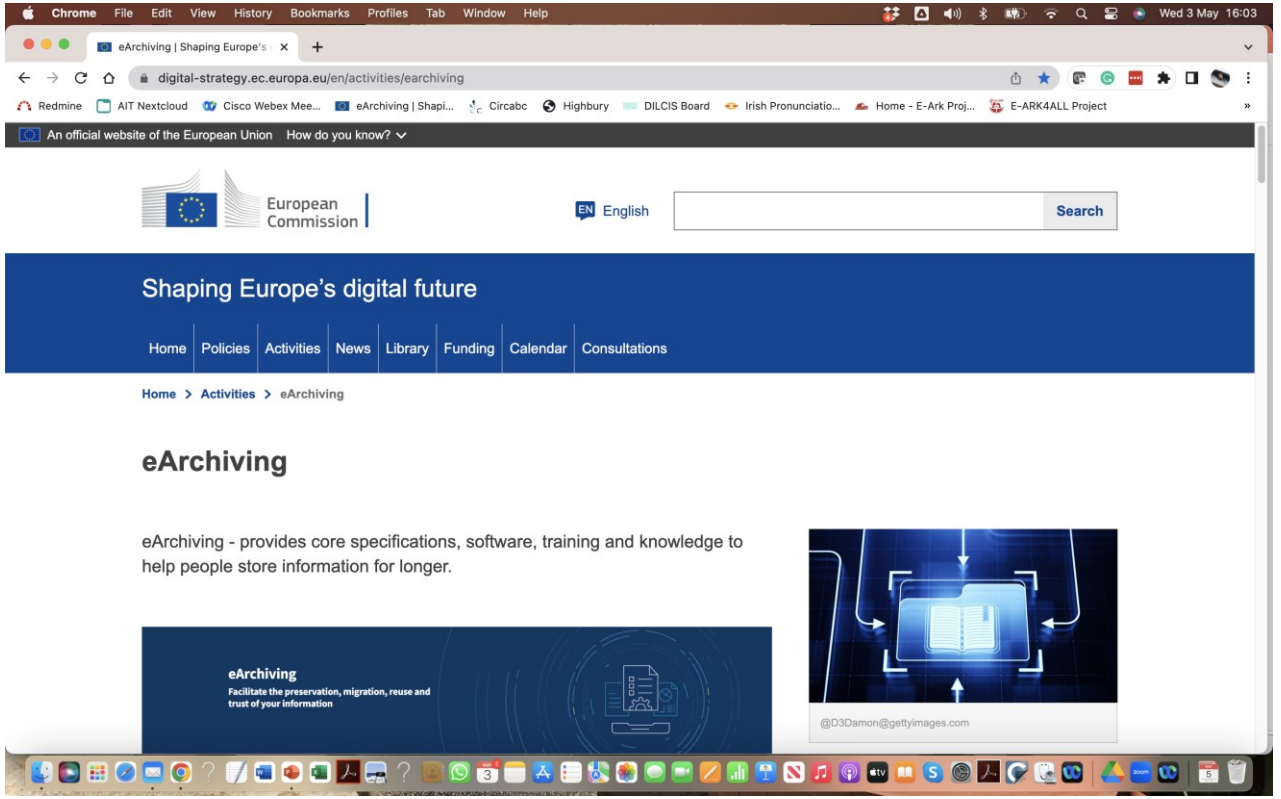
CORE Key tasks

- Task CORE.3 **Validation Testing Tools and Software libraries,** related to the eArchiving specifications
- Task CORE.4 **Online publication.** Covers all the relevant information about the specifications and the other services, on the dedicated section on the Digital strategy website via both Drupal and the CNECT-specific CMS, the “newsroom”
- Task CORE.5 **Standardisation and interoperability Engagement**



https://digital-strategy.ec.europa.eu/en/activities/earchiving

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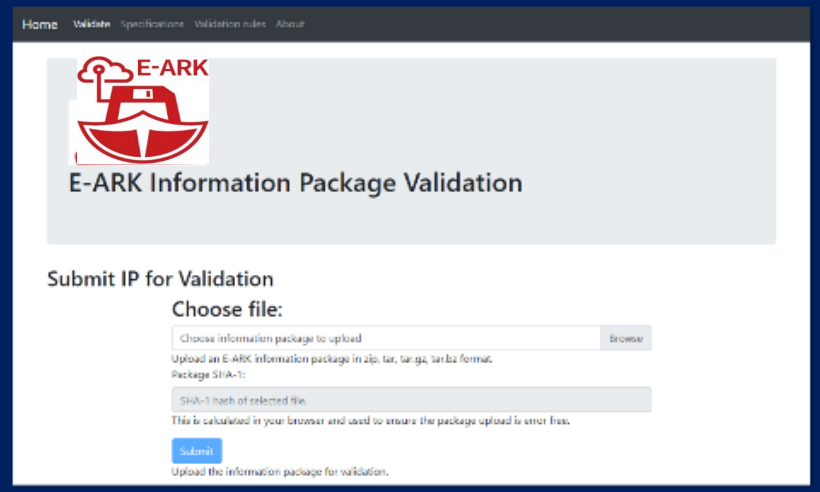
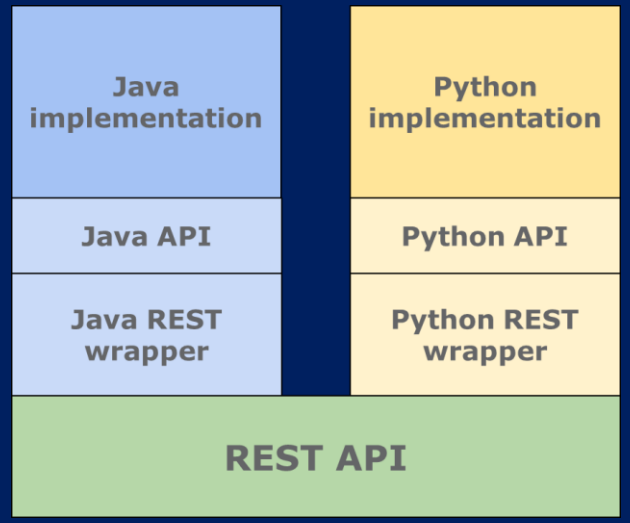
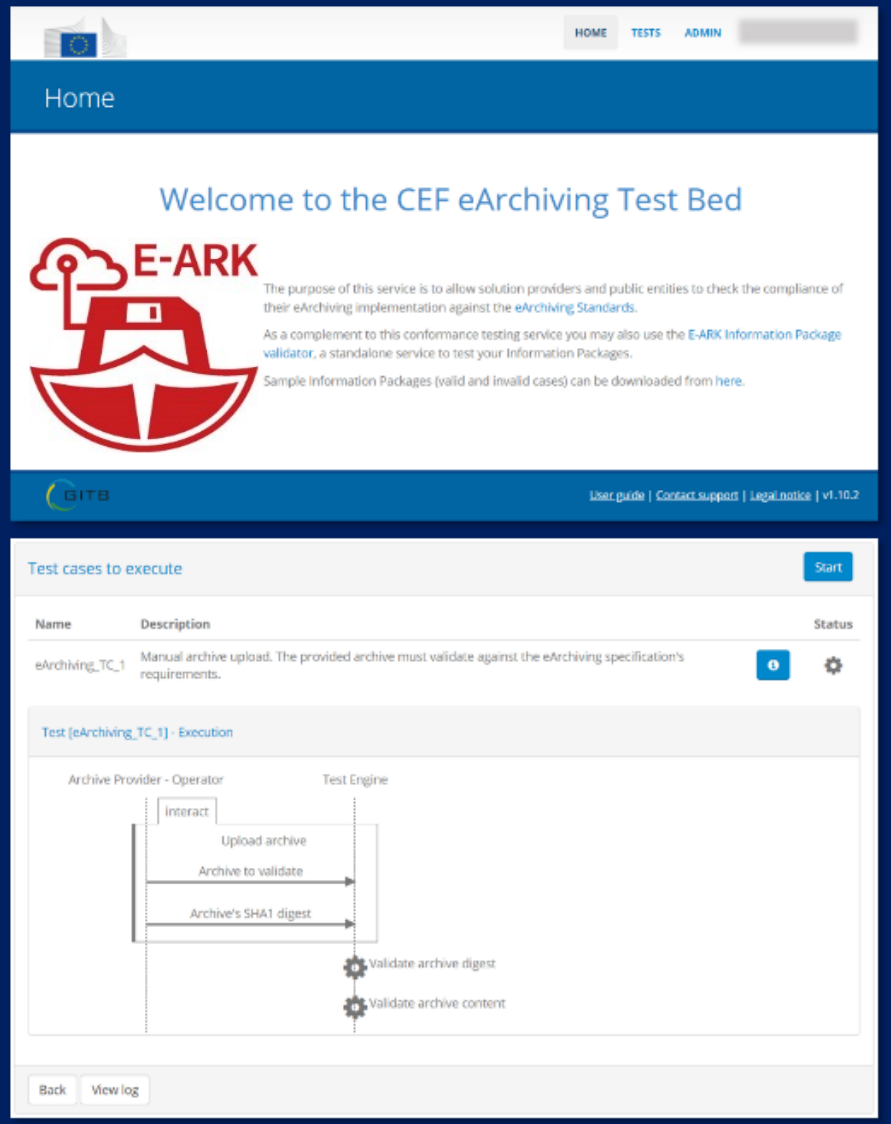
How do you know if an Information Package conforms to E-ARK specifications?





E-ARK specification validation is now available in two flavours: try it on the web or download from GitHub.

How do you know if a piece of software is conformant with the eArchiving Building Block?



Ciutat de les Arts i les Ciències, València, Valencia, Spain
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Capacity Building Activity – Training

CB Activity - Training

CB Key tasks

Task CB.1 Multilingual training

Training material will be made available in various languages to support the main areas of the eArchiving CSP. The consortium will deliver this through both digital and physical channels. Training will take the form of:

- Online webinars
- Face-to-face training workshops.

Training Webinar Series

Month	Date	Title	Speaker	Organisation
April	27	Using eArchiving standards for system-independent storage of authorisation metadata	Sven Schlarb	AIT
May	18	Understanding database preservation	Luís Faria	KEEP Solutions
June	15	Large object (LOB, BLOB) handling capabilities of SIARD with the Database Preservation Toolkit	István Alföldi	Poliphon
July	20	Creating E-ARK conformant Archivematica preservation workflows	Stephen Mackey	Penwern
		Summer break		
September	21	Using open-source tools for eArchiving	Anssi Jäaskeläinen	XAMK
October	19	Using ESSArch for eArchiving	Björn Skog/ Andreas Segerberg	ES Solutions
November	16	Using eArchiving for FAIR access to long-term geospatial records in the digital economy	Gregor Završnik	Geoarh

CB Activity - Training

CB Key tasks

Task CB.2 'Train-the-trainer'

The creation of additional specialist trainers in the fundamentals of eArchiving is critical for capacity building. The first tranche of trainees will derive primarily from the consortium membership. The task will develop a series of specialist modules on the fundamentals of eArchiving. The training will be delivered in both face-to-face contexts at industry events and online.

CB Activity - Training

CB Key tasks

Task CB.3 Standalone training material provision

The task will provide how-to guides integrated into the E-ARK reference implementation (*earkweb*), which are also available separately for download and accompanied by video resources demonstrating the basic eArchiving processes. CB.1 and CB.5 to ensure that a holistic training environment is developed.

CB Activity - Training

CB Key tasks

Task CB.4 CEF Call GS projects training services integration Task

Four Generic Services (GS) projects were awarded in 2021. TCB.4 will provide a repository for or link to the training materials developed by the Generic Services projects after their cessation. We are liaising with J-ARK; PROHUB; OneClick; eArchiving of Engineering and Science Library.

CB Activity - Training

CB Key tasks

Task CB.5 Create eArchiving course curriculum

To complement Tasks CB.1–4 which focus on industry training – the eArchiving course curriculum is aimed at the higher education community. The curriculum will be developed in a series of logical steps:

- Scoping exercise
- User needs analysis
- Development.

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https://www.europeana.eu/item/9200517/ark__12148_btv1b5973170h

Capacity Building

Capacity Building
KEY TASKS

Capacity Building Key tasks

- **Task CB.6**
  - **User Capacity Building:** Capacity building of appropriate organisations and users, promoting the need for sustainable data and digital preservation, and the use of eArchiving as a model

- **Task CB.7**
  - **Transnational Specialist Network:** Foster the creation of a trans-national network of specialists with respect to data sustainability and digital preservation by providing the opportunities to meet

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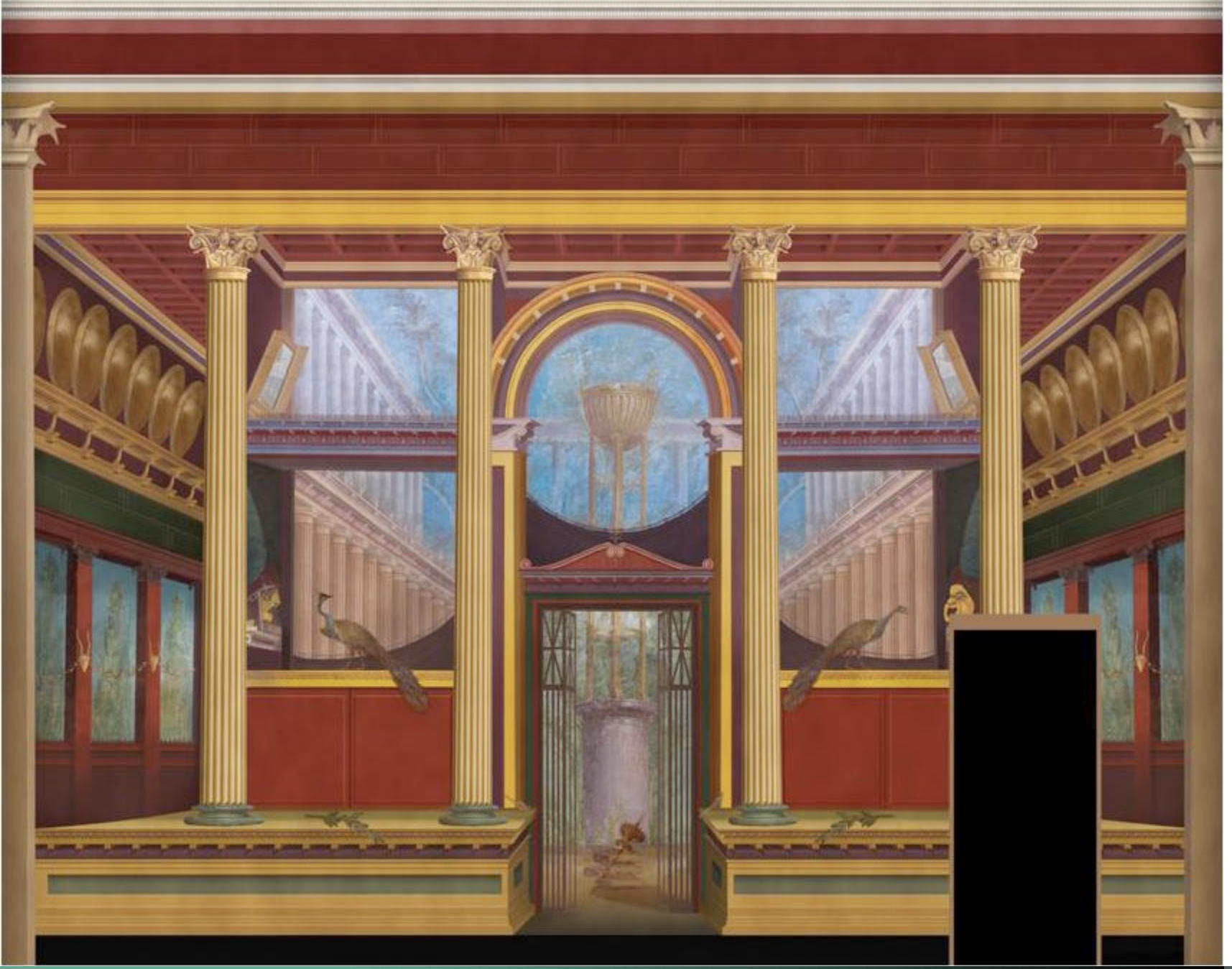

KEY TASKS

- **GENERAL**
  - Communication Plan
- **Task CB.6**
  - First public event “e Archiving 2022-2023”, 25th and 26th April 2023
  - “eArchiving open event” Salamanca, October 2023.
- **Task CB.7**
  - Geoconference
  - Curriculum, DCH, 3D CITS etc.

Digital restoration by Martin Blazeby of fresco from Room 15, Roman Villa at Oplontis.

© King’s College London 2011.

Provisional List of Events

Intended date	Place	Name	Mode
April 2023	N/A	eArchiving 2023-2024:	Virtual/Open public event
May 2023	Ljubljana	Geoconference	Face-to-Face/ Hybrid mode- Subdomain open public event
Oct 2023	Salamanca	eArchiving: digital preservation and data sustainability in Europe	Face-to-Face/ Hybrid mode Open public event
Nov 2023	N/A	Presentation of eArchiving Conformity seal	Virtual- Open public event
Feb 2024	TBC	Preservation of eHealth data	Face-to-Face/ Hybrid mode/Subdomain public event
Mar 2024	N/A	Presentation of new CITS 3D	Virtual/Open public events
Apr 2024	TBC	Cultural Heritage preservation	Face-to-Face/ Hybrid mode/Subdomain public event
Jun 2024	TBC	Database preservation	Face-to-Face/ Hybrid mode/Subdomain public event
September 2024	Open public event	Presentation of eArchiving Curriculum	Virtual

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Support Activity

support@e-ark-foundation.eu

Key Tasks

Task SUP.1 Support Desk Provision

- Set-up support desk access point
- Set-up ticketing system
- Set in place the review system

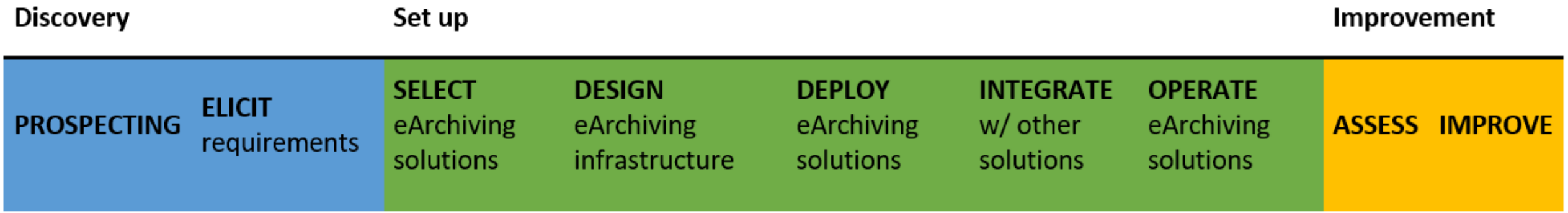
Task SUP.2 Onboarding Services

- Set-up CRM tool
- Set-up assessment, uptake and follow-up procedures
- Set-up registry of external events

@D3Damon@gettyimages.com

eArchiving services

Stakeholders Onboarding - Onboarding process



In each step we expect your feedback

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Synergy Building Activity

Synergy Building Tasks

DEP – Developing synergies with Digital Europe Programme's activities:

DEP.1
eSignature and eIDAS

DEP.2
eDelivery

DEP.3
eHealth

DEP.4
Data Spaces

https://data.europa.eu/en/datastories/european-data-portal-publishes-sixth-annual-open-data-maturity-report

eSignature and eIDAS

DEP.1

!

Revision of eIDAS Regulation and its implementing acts.

Long-term preservation of e-signed documents.

1, 2, …

Actively following up the eIDAS Regulation updating process.

eArchiving specifications: foundation for the electronic archiving trusted service.

Reforging links with eSignature Building Block.

Dedicated and strategic collaboration between the E-ARK and Service interministérial des Archives de France (SIAF), the VITAM team within SIAF, and the French National Archives to work together, specification to specification, to draw closer together these two major initiatives previously working in parallel.

European Commission

eDelivery

DEP.2

Exploring synergies with eDelivery as it would make a good use case for the joint work.

Promotion of the use cases, sharing and encouraging the use of interfaces and common components, providing training and support desk effort to foster the onboarding.

1, 2, …

Documentation of the Domibus eArchiving interface and DG TAXUD use case.

Publication and dissemination of the DG TAXUD use case on a more visible and far-reaching portal.

eHealth

DEP.3

!

Increasing awareness of the existence of eHealth specifications.

Piloting the eHealth specifications.

1, 2, …

Identification of the possible pilot partner for the specification implementation.

Identification of the key organisations, events, communication channels in the domain, which will be used for raising the awareness.

Data Spaces

DEP.4

!

Strengthening existing and develop new liaisons with non-archival domains.

Establish synergies with Common European Data Spaces (Cultural Heritage, Skills, Tourism, Media, Manufacturing, Green Deal, Mobility, Health, Finance, Energy, Agriculture, Public administrations).

1, 2, …

Using Geoconference and other eArchiving events for exploring potential synergies.

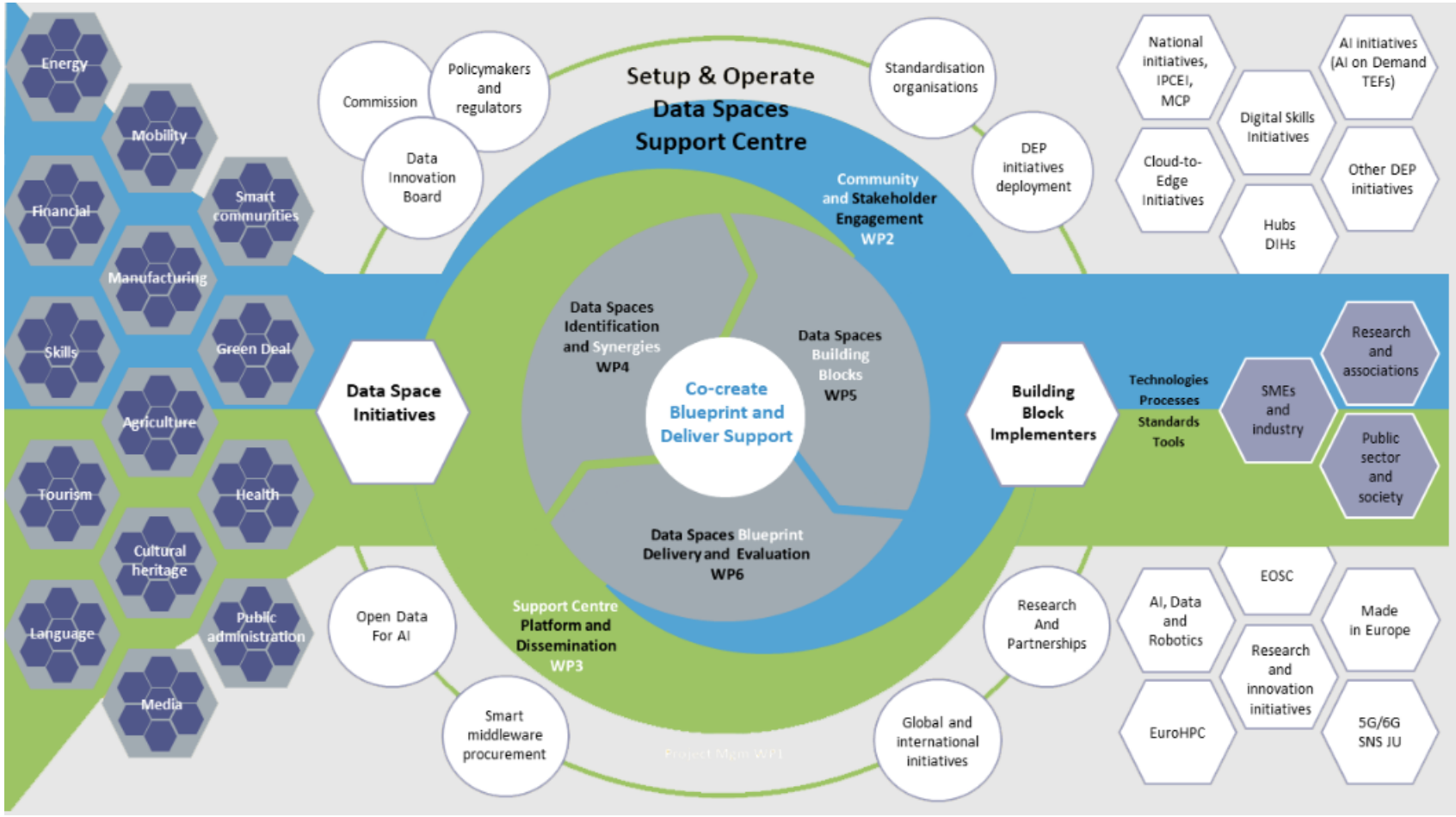
Re-use of existing BB tools in eArchiving (e.g. eTranslation).

Participating in eInvoicing Technical Advisory group.

Patient Summary (Directive 2011/24/EU) – eHealth1.

European Commission

European Commission Data Spaces
https://dssc.eu/



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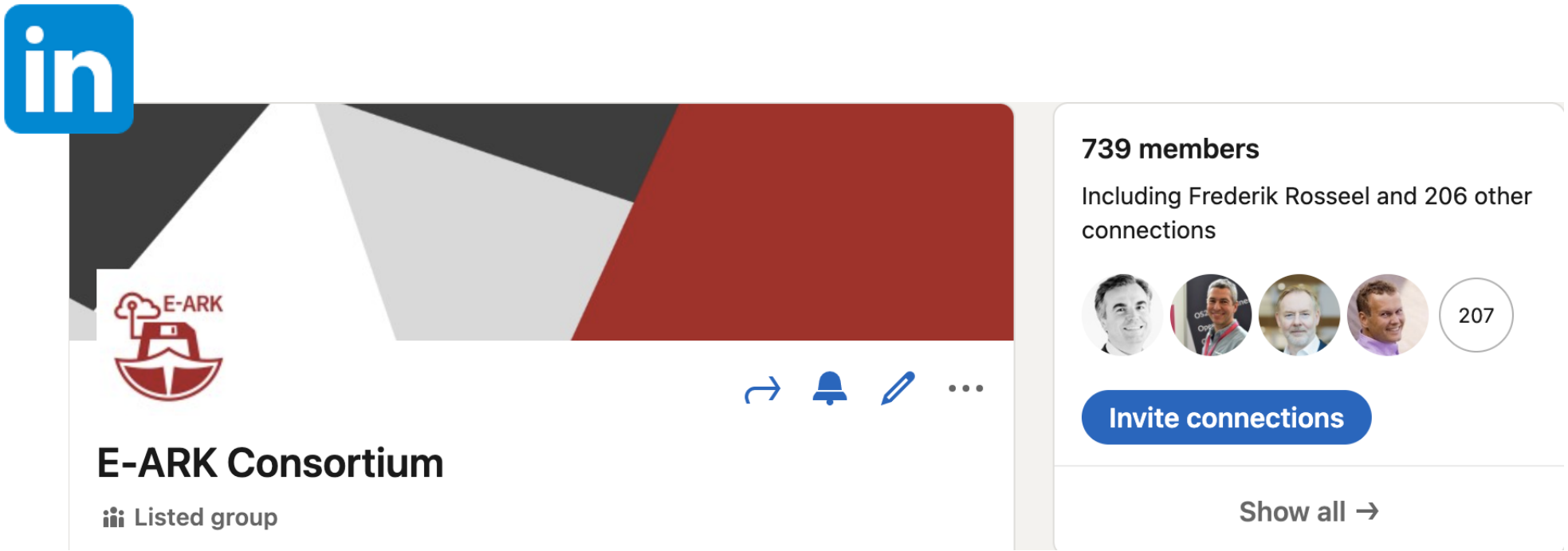
Keep in touch

Social Networks



https://www.linkedin.com/groups/8343650/

Keep in touch

Social Networks

@EU_eArchiving

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Questions?

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