From E-ARK to eArchiving
Collaboration for interoperability in digital archives

Designing the Archive
ASA/ICA/ARANZ/PARBICA Conference
Adelaide, 21 – 25 October 2019

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The issue

Sustainable digital archiving

"Doing digital archiving" requires extensive expert knowledge, specifications, software, hardware, knowledge of your external stakeholders.

Very costly when done alone...

**Why not collaborate?**
E-ARK history

EC-funded project 02.2014 – 01.2017

- Specifications for Information Packages (SIP, AIP, DIP) and content (databases, records management, loose files)
- Software to create, preserve and reuse E-ARK packages
- Seven operational pilots to validate the products
- www.eark-project.com
The Digital Single Market

Aims to ensure that citizens, businesses and public administrations can reap the benefits that digital has to offer.

Source: Tallinn Declaration
How is the Commission helping PAs and businesses build digital services which comply to EU regulations?

Standards.

The Connecting Europe Facility’s mission is to support projects to use basic components, based on standards, that will ensure systems can communicate with each other.

We call these basic digital components Building Blocks.
Explore and experiment with big data for improved performance and decision making.

Analyse, manage and share data, in real time, at the right time, throughout Europe.

Facilitate the preservation, migration, reuse and trust of your data since Dec 2018.

Harness the power of a European-wide network of blockchain services, increasing trust through data security, privacy and transparency.

Re-use data held by Public Administrations.

Promote the implementation of the European standard for electronic invoicing across borders.

Securely identify European citizens.

Exchange online data and documents reliably and securely.

Create and verify electronic signatures between businesses and EU citizens.

Offer machine translation to translate your documents and web content into any official EU language, Norwegian or Icelandic.
How is eArchiving set-up?

Policy Owner: European Commission
Stakeholder Management Office: European Commission
Service Provider: E-ARK consortium

Connecting Europe
Awareness: European Commission to recognise the importance of digital sustainability issues

Sustainability: A Building Block is not a fixed-term project but a solution provided by the European Commission for the long-term

Collaboration: easier contact with other building blocks (f.ex eDelivery, eSignatures) and sectors (f.ex. eHealth, eJustice)

What does it mean for archives?
eArchiving is not just about specs and software!!!

**Core Services**

*Facilitate cross-border/cross-sector technical interoperability among heterogeneous information systems.*

**Enabling Services**

*Enable the adoption of the core services.*

**Software**

- Sample software
- Relational Database archiving and reuse tools
- Pre-ingest and SIP creation tools
- Long-term Repository solutions
- Access and Reuse tools

**Operations Services**

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**Enhancing Services**

*Enhance customer experience.*

**Stakeholder Management Services**

- Stakeholders follow-up
- Community management services
- Awareness raising & stakeholder engagement
- Knowledge Centre
- Maturity Assessment Service
- E-ARK General Model

**Technical Specifications**

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**Standards of ESOs**

- CEN Standards
- ETSI Standards

**Audience Concerned by All Services:**

- Repositories
- Data Creators
- Solution Providers
eArchiving in 2018 - 2019

Stabilising specifications

- E-ARK specification review
  - More than 200 comments received
- Streamlining spec management workflow
  - All specifications transferred to GitHub ([https://github.com/dilcisboard](https://github.com/dilcisboard))
- Updated (v2) E-ARK Information Package specifications published in May 2019
- Maintenance of Content Information Type Specifications (CITS)
  - Geospatial data, ERMS, relational databases (SIARD 2.1, in collaboration with the Swiss Federal Archives)
Software

- E-ARK validator
  - Validation rules (incl schematron) and test corpus
  - Open-source libraries in Java and Python
  - GitHub link: https://github.com/dilcisboard

- Maintaining specification compliance in sample software
  - All E-ARK software compliant with v2 specifications
  - Functional updates throughout the portfolio, esp. in database preservation

- Providing a demonstration environment
  - E-ARK Web: online “demo digital archive” to show how E-ARK packages can be created, stored and reused (going public in early 2020)
Support and training

- Establishing the eArchiving Service Desk
  - For any queries you have about the specifications, software, CEF, Building Blocks, (or weather, meaning of life, ...)
  - [https://ec.europa.eu/cefdigital/wiki/display/CEFDIGITAL/eArchiving+Service+Desk](https://ec.europa.eu/cefdigital/wiki/display/CEFDIGITAL/eArchiving+Service+Desk)

- Preparing for the delivery of training
  - New training programmes for eArchiving specifications and software
  - Access to already available training on general digital archiving
  - Gradually rolled out in 2020
eArchiving in 2018 - 2019

Community

- **eArchiving website**
  - [https://ec.europa.eu/cefdigital/wiki/display/CEFDIGITAL/eArchiving](https://ec.europa.eu/cefdigital/wiki/display/CEFDIGITAL/eArchiving)

- **DLM Forum for archivist discussions**
  - eArchiving F2F meetings next to bi-annual DLM programme – open to everyone!
  - Next DLM Forum meeting 14-15 November 2019, Helsinki

- **Reaching out to other sectors**
  - **eHealth**: scoping possible actions
  - **Finance**: piloting eArchiving solutions on information systems at the EC Directorate for Taxation and Customs (TAXUD)
eArchiving in 2020

Business as usual

- E-ARK specifications are stable!
  - No plans for major updates within the foreseeable future
  - Consult the broader community for further ideas and potential bugs, prepare and publish minor updates when needed

- Regular software updates
- Service Desk continues to be operational
- Availability of training
- Go out and listen to archives, creators and users!
eArchiving in 2020 (and beyond)

Exploring new areas

- Content Information Type Specification and supporting software for eHealth
- Reference Enterprise Architecture for digital archiving
- eArchiving Compliance Testing regime
- Explore “eArchiving, Trust and Security” (read: digital signatures, blockchain, ...)

European Commission
What can you do?

1. Join the specifications discussion and development.
2. Start using the eArchiving specifications and open-source software.
3. Provide feedback to help us improve solving your problems.
4. Use our support services to help you get started.
5. Become a national CEF eArchiving ambassador.
6. Get involved and encourage your staff to get involved too.
Is eArchiving for me?

Yes, if you need to guarantee access to your information in the future.

What we can help you achieve

- Long term integrity and authenticity of your data
- Preserve and access data over extended periods of time
- Transfering information assets to repositories and between generations of technology
- Comply with specifications and standards (OAIS, E-ARK, METS)