



ARCHIVER – Project Update

Open Market Consultation

23rd of May 2019 – Stansted, UK

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Project Coordinator

CERN



Pre-Commercial Procurement

Focus: Archiving and Data Preservation Services using commercial cloud services

Procurement Budget: 3.4M euro

Starting Date: 1st of January 2019

Duration: 36 Months

Coordinating Partner: CERN



European Commission



Consortium

Includes Buyers and Experts in the preparation, execution and promotion of the Procurement of R&D



EMBL-EBI



PIC
port d'informació
científica

Buyers

Procurers - Public organisations committing funds to contribute to a joint-procurement



Consortium

Experts

addestino
innovation delivered.



Experts – Partner organisations bringing expertise in requirement assessment and promotion activities, not part of the Buyers Group

Challenge

Basic Scientific Data
Archiving & Bit
Preservation

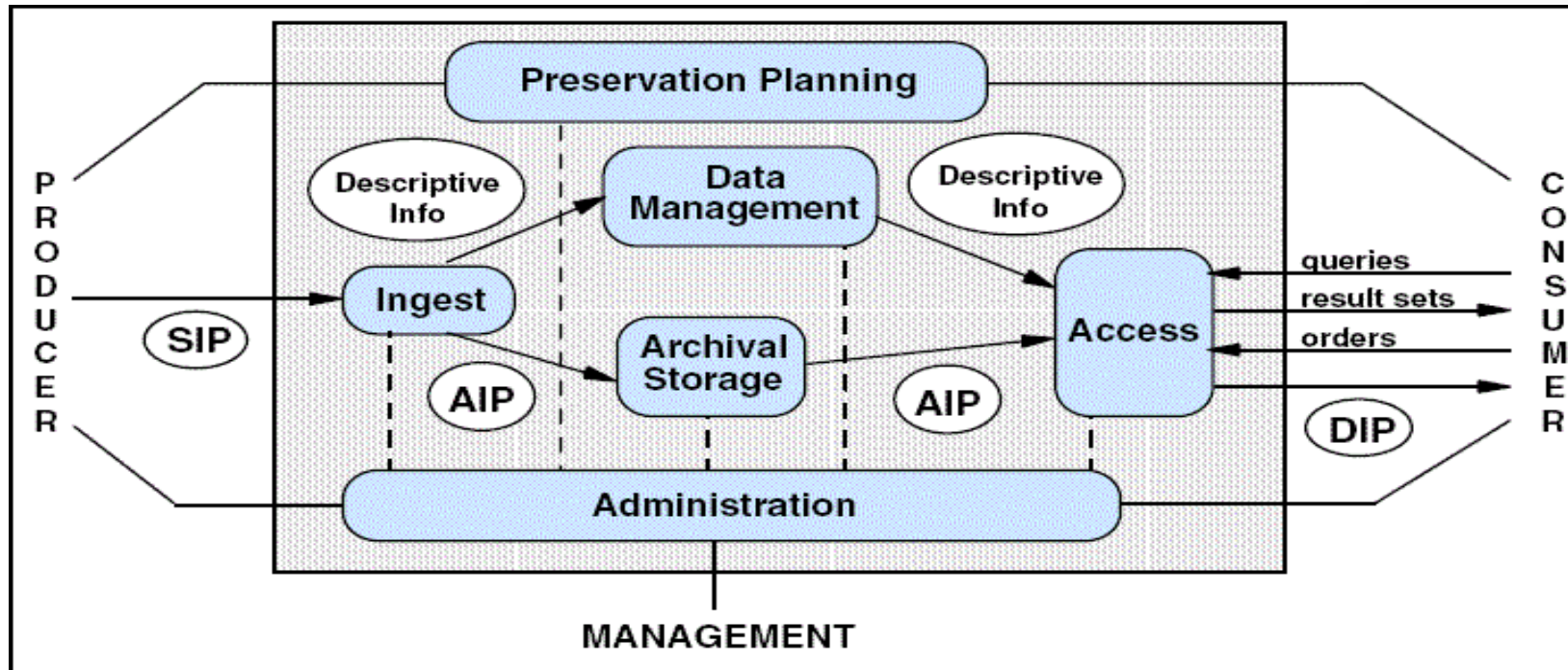


Data volumes and complexity growing; Communities Growing; Needs of advanced functionality increase

Objective: perform R&D to demonstrate long-term preservation and archiving services for scientific data in the PB range under F.A.I.R. principles, using commons solutions, while research groups keep total stewardship of their data sets

- ☁️ OAIS, FAIR and European Regulation (GDPR)
- ☁️ European Open Science Cloud (EOSC) integration
 - ☁️ Reduce fragmentation expanding existing solutions to several scientific domains
 - ☁️ Access through GÉANT network; Federated AAI support
- ☁️ Scalability: PB data volume of multi domain scientific data; High sustained ingest rates (1-10 Gbps)
- ☁️ Cost-effective and transparent business models: range of purchasing and deployment options, stimulating uptake by the wider research community

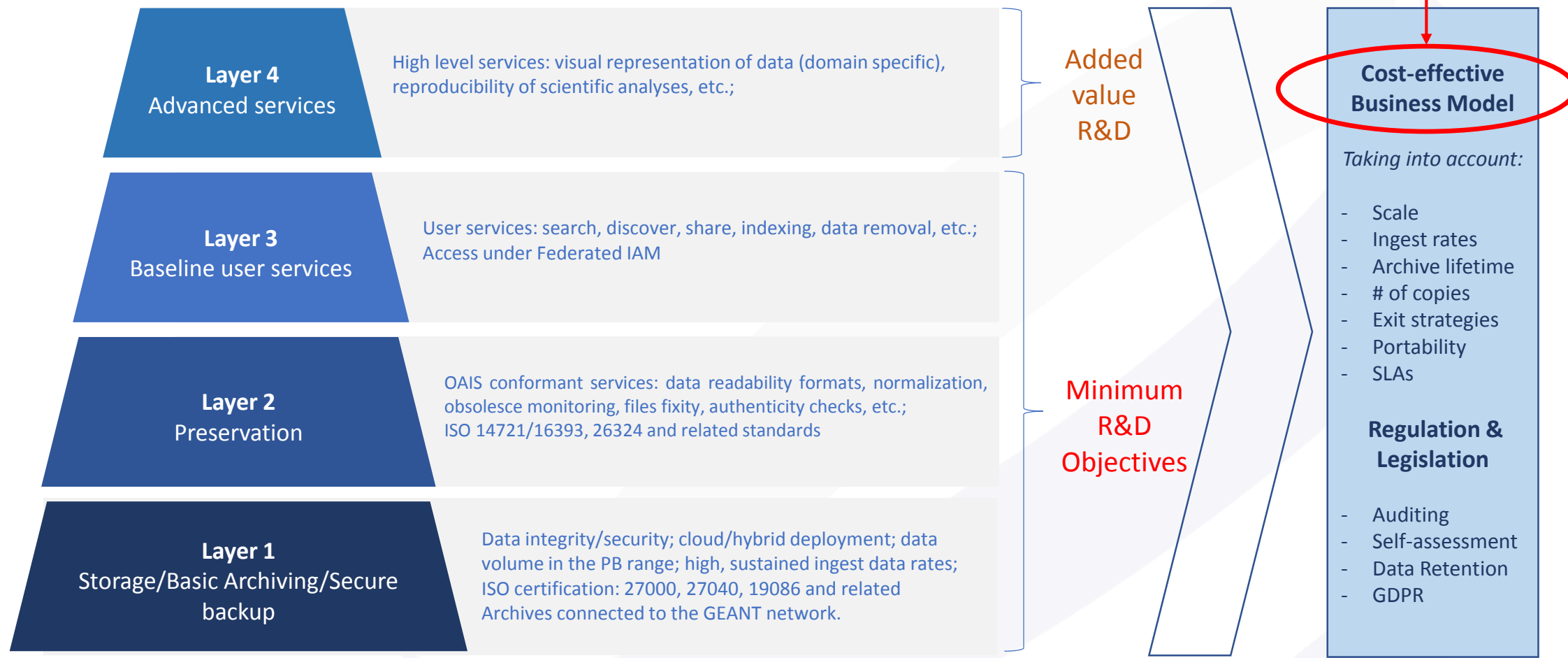
OAIS Reference Model



☁ Relevant Standards

- ☁ Preservation: ISO 14721/16393, 26324 and related
- ☁ Infrastructure Services: ISO 27000, ISO 27040, 19086




R&D Challenge



ARCHIVER & European Open Science Cloud (EOSC)



EOSC vision:

-  To give the European Union a global lead in research data management and ensure that European scientists reap the full benefits of data-driven science
-  ARCHIVER Objective: to make resulting services available in the EOSC catalogue
-  EOSC Rules of Engagement evolving: will be presented during the the project

Market Potential

ESFRI Projects

RIs in a preparation phase selected for scientific case excellence and maturity.

ENERGY

EU-SOLARIS
IFMIF-DONES
MYRRHA
WindScanner

ENVIRONMENT

ACTRIS
DANUBIUS-RI
DiSSCo
eLTER

HEALTH & FOOD

AnaEE
EMPHASIS
EU-IBISBA
ISBE
METROFOOD-RI
MIRRI

PHYSICAL SCIENCES & ENGINEERING

EST
KM3NeT 2.0

SOCIAL & CULTURAL INNOVATION

E-RIHS
EHRI

ESFRI Landmarks

RIs already implemented or in an advanced Implementation Phase.

ENERGY

181 ECCSEL ERIC
182 JHR

ENVIRONMENT

EISCAT_3D
EMSO ERIC
EPOS
EURO-ARGO ERIC
IAGOS
ICOS ERIC
LifeWatch ERIC

HEALTH & FOOD

BBMRI ERIC
EATRIS ERIC
ECRIN ERIC
ELIXIR
EMBRIC ERIC
ERINHA
EU-OPENSOURCE ERIC
Euro-Biomed
INFRAFRONTIER
INSTRUCT ERIC

PHYSICAL SCIENCES & ENGINEERING

CTA
ELI
ELT
EMFL
ESRF EBS
European Spallation
Source ERIC
European XFEL
EUPH
HL-LHC
ILL
SKA
SPIRAL2

SOCIAL & CULTURAL INNOVATION

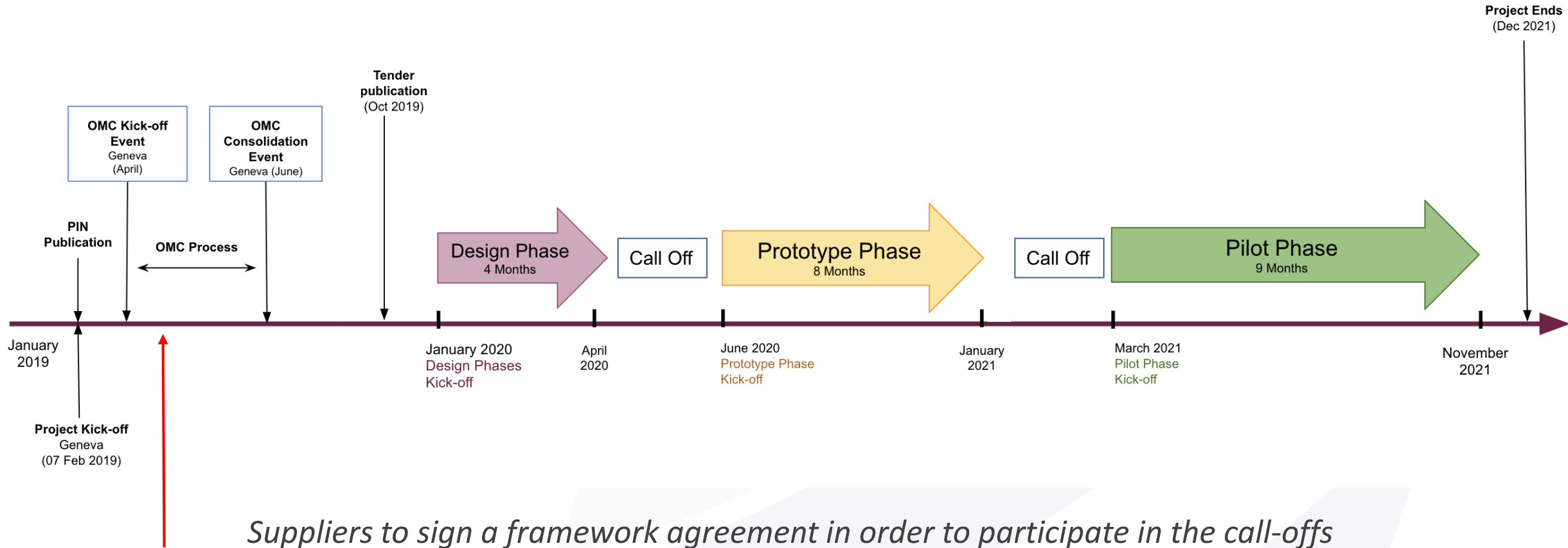
CESSDA ERIC
CLARIN ERIC
DARIAH ERIC
ESS ERIC
SHARE ERIC

DATA, COMPUTING AND DIGITAL RESEARCH INFRASTRUCTURES

PRACE

<http://roadmap2018.esfri.eu/media/1049/roadmap18-part3.pdf>

ARCHIVER timeline



We are here

*Suppliers to sign a framework agreement in order to participate in the call-offs
Goal: Services to be commercialized after the end of the PCP*

Summary of ARCHIVER activities so far

Open Market Consultation Kick-Off event – 8th of April

- ☁️ 70 participants from 26 companies physically present
 - ☁️ Digital Preservation Experts, Cloud Providers, Software integrators
- ☁️ 42 participants connected remotely (via webcast)
- ☁️ Planning poker to assess Value vs. Risk in a direct dialogue with companies

A little bit of terminology: **#archiving** is moving **#data** no longer used to a lower tier of storage for long-term retention, while **#Digitalpreservation** is a series of activities necessary to ensure continued access to digital materials for as long as necessary (source: @andsdata)



Archiver @ArchiverProject · Apr 8
 How risky would be for your #IT company to procure services that would allow #research teams to ingest 20 Pb of datasets, doubling them every 2 years for a 20 years timeframe? Innovating the #archiving market is not easy - #planningpoker now at #OMC event archiver-project.eu/planning-poker...



CERN, T-Systems, Exoscale and LIBNOVA

All material available at:

<https://www.archiver-project.eu/open-market-consultation-kick-event>

ARCHIVER in the EOSC-hub week

☁ EOSC demand side event

- ☁ Overview of current EOSC activities
- ☁ Session on role of Procurement in the EOSC context
- ☁ State-of-the art and landscaping discussions

☁ Early Adopters

- ☁ A number of organisations have expressed interest
- ☁ Early Adopters Kit to be made available during May 2019

The role of procurement in the EOSC: Archiver's contribution to the European Open Science Cloud



The EOSC is an ambitious initiative aiming at the federation of existing and planned digital infrastructures for research. It seeks to remove barriers among disciplines and countries and make it easier for researchers to share and access the digital resources they need. In order to realise the EOSC vision, one of the key aspects to be addressed is to simplify the way funders can channel fundings to procure resources and communities to consequently obtain access.

Acting as a collective of procurers, the ARCHIVER consortium aims to create an eco-system for specialist ICT companies active in archiving and digital preservation, willing to introduce innovative services capable of supporting the expanding needs of research communities, under a common innovative procurement activity for the advanced stewardship of publicly funded data in Europe. These innovative services will be ready to be commercialized, by December 2021, potentially benefiting the EOSC research community at large.

Events

Tuesday, 7 May, 2019

Open Market Consultation event in Barcelona

Thursday, 23 May, 2019

Open Market Consultation event in London (Stansted Airport)

Wednesday, 5 June, 2019

Open Market Consultation Consolidation event

Thursday, 9 May, 2019

Training on Digital Preservation and Open Archival Information System (OAIS)



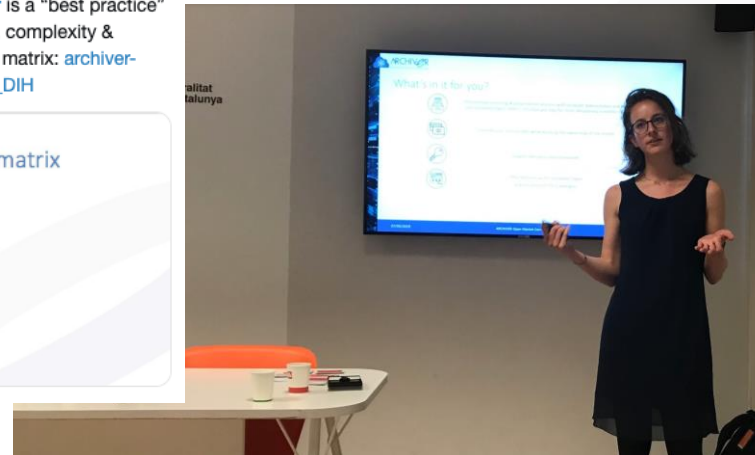
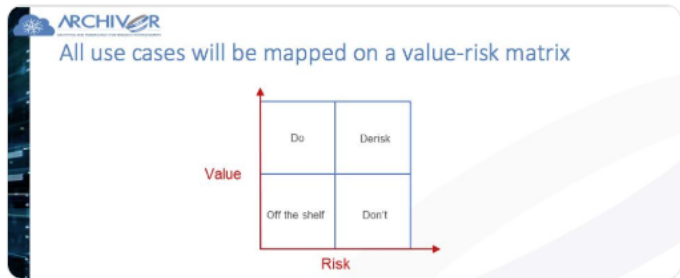
Open Market Consultation event – 7th of May Barcelona

☁ 40 participants from 17 companies physically present

☁ Digital Preservation Experts, Cloud Providers, Software integrators



 **Archiver** @ArchiverProject · May 7
Innovating the #archiving market is not easy. #Planningpoker is a “best practice” workshop moderation technique, used for estimating #value, complexity & required effort. All #usecases will be mapped on a value-risk matrix: [archiver-project.eu/planning-poker...](https://www.archiver-project.eu/planning-poker...) @dataverseorg @IQSS @EOSC_DIH



All material available at:

<https://www.archiver-project.eu/open-market-consultation-kick-event>

OAIS Webinar – 9th of May

☁ 17 participants

☁ Representatives of the Buyers Group, Companies and Research Organisations

All material available at:

<https://www.archiver-project.eu/all-events>

Training on Digital Preservation and Open Archival Information System (OAIS)

09/05/2019



ARCHIVER organized 1-hour webinar training on Digital Preservation and Open Archival Information System (OAIS) for end-users of digital preservation services. The training will be delivered by experts from the Digital Preservation Coalition (DPC).

RECORDING FROM THE EVENT



AGENDA

11.00 - 11.10: Welcome

11.10 - 11.30: An Introduction to Digital Preservation - William Kilbride (DPC)

11.30 - 11.50: Digital Preservation Standards: the OAIS model and more - Sharon McMeekin (DPC)

11.50 - 12.00: Q&A

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Open Market Consultation Consolidation event

News

Why reinvent the wheel for FAIR? A blog-post from Barbara Sierman

"Digital preservation exists already for more than 20 years. For lots of problems there are already solutions". Barbara Sierman, chair of the Open Preservation Foundation Board and Digital Preservation consultant at the Koninklijke Bibliotheek (KB), works as an advisor on various topics related to the preservation and long-term accessibility of digital collections.

The role of procurement in the EOSC: Archiver's contribution to the European Open Science Cloud

João Fernandes, CERN and Archiver coordinator, will explain Archiver innovation potential to service providers, research managers and procurement and purchasing experts gathered in Prague for the EOSC-Hub week

Draft Tender Documents Published (update)

☁ Draft versions of the tender documents are now available during the OMC process, including: <https://www.archiver-project.eu/draft-tender-documents>

- ☁ RfT, Framework Agreement and Functional Specification;
- ☁ Annex 2 (Selection Criteria); Annex 4 (Award Criteria);
- ☁ Initial list of Milestones and Deliverables;

☁ Q&A from the OMC also publicly available

☁ You are able to make comments on the technical documents and ask more questions

Draft Tender Documents

In order to stimulate an open dialogue with companies interested in the ARCHIVER project during the OMC process, the **Draft Tender Documents** are made publicly available for consultancy. Stakeholders are invited to **consult** the documents for information and **comment** the documents available for consultancy.

The ARCHIVER Request for Tender is expected to be published in the Official Journal of the European Union (OJEU) in October 2019.

Draft Tender Documents for Consultancy:

- Functional Specifications
- Annex 1: General Tender Submission Form - *available soon*
- Annex 2: Qualification Questionnaire
- Annex 3: Compliance Questionnaire - *available soon*
- Annex 4: Evaluation Questionnaire
- Annex 5: Financial Offer - *available soon*
- Deliverables and Milestones

Draft Tender Documents for Information:

- Request for Tenders - *available soon*
- Framework agreement - *available soon*
- Work Order - *available soon*

To comment on a draft document:

1. Highlight the area you want to comment on
2. Click on the "comment" icon on the top right of the draft document
3. Write and submit your comment

The ARCHIVER Buyers Group, have published the draft documents for information and consultation purposes in the framework of the ARCHIVER Open Market Consultation. You are encouraged to provide comments and suggestions, which we will read. We are particularly interested in your feedback on the proposed scope of the R&D challenge and the feasibility and risk for you to participate in the project. We might take some, all or part of your comments into consideration in future drafts of this document, but we do not commit to doing so.

New versions of the Draft Tender Documents will be made available after the **OMC Event in London (Stansted airport)**.

A mail will be sent out to the suppliers mailing list when a new version of the documents is made available in this webpage. If you want to be added to this mailing list, please send an email to omcinfo@archiver-project.eu.

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FAQ

To stimulate an open dialogue with companies interested in the ARCHIVER project, all information given in answers to questions raised by potential suppliers will be documented and published in this FAQ.

This page will be regularly updated as new questions are answered.

Procurement / Legal:

What will be the time period during which contractors have to commercially exploit the results of the PCP before ownership of the results transfers to the Buyers Group ?

This time period has not been fixed yet. However, and as an indication, in HelixNebula Science Cloud, the last PCP project coordinated by CERN, the contractors were given 2 years to commercially exploit their results. The time period for ARCHIVER will be confirmed in the Framework Agreement final draft released with the Request for Tenders.

How will the actual price and virtual price be used to evaluate tenders ?

It is likely that only the actual price will be taken into consideration for the evaluation of the bids. The final evaluation criteria and formula will be indicated in the Request for Tenders.

If firms reply to the Request for Tender in a Consortium, do the firms need to be from the same country?

No. Firms replying to the Request for Tender in a Consortium can be from the same country or from different countries. There is no restriction on where firms responding to the Request for Tender have to be located. However, it is a requirement of the PCP that the majority of the R&D activities, including the main researchers working on the contracts, be located in EU Member States or Horizon 2020 Associated Countries.

Any Results we develop would be significantly based on our Background IP. Considering that, how is it possible for you to use and possibly sublicense the Results?

The Buyers Group will require a sub-licensable licence to use the Results for the purposes of the Framework Agreement and for their own non-commercial use. This would include a sub-licensable right to use any Background IP or Sideground IP owned by the contractor that is necessary for the use of the Results for the afore-mentioned non-commercial purposes.

In addition, the Buyers Group may require a sub-licensable licence to exploit the Results. This would include a sub-licensable right to exploit any Background IP or Sideground IP owned by the contractor that is necessary for the exploitation of the Results. However, any such licence would be granted under fair and reasonable conditions which may include financial compensation for the contractor. It is also intended that a one year "embargo" period would apply before the Buyers Group may require any such licence.

Please refer to the draft Framework Agreement section 7.3 for further details. In order to distinguish between Background IP and Results, the first deliverable you will have to provide under the PCP

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Early Adopters

Objective: Encourage wide deployment outside the Buyers Group of solutions developed during the project, ARCHIVER will engage with a group of “Early Adopters”.

Benefits:

-  **Be consulted for feedback** on the tender documents before its publication, scheduled on October 2019
 -  **Access parts of the R&D** produced by the ARCHIVER Contractors across all phases of the project
 -  **Access to limited capacity** made available by the Buyers Group during the pilot phase to test the services developed
-  Early Adopters will be listed on the Request for Tender (RfT)



Preparation of a technical summary for each use case

- ☁ Problem to solve
- ☁ Lifecycle and workflow characteristics
 - ☁ Including basic and “bonus” use cases to solve
- ☁ Authentication and Management
- ☁ Data and Metadata description
- ☁ Interface
- ☁ Reliability, Compliance and Validation requirements
- ☁ Cost-effectiveness requirements
 - ☁ Some including minimum cost thresholds

Next Open Market Consultation Event



 Registration open: <https://www.archiver-project.eu/all-events>

Rest of the Agenda for Today

☁ Tender Process and Requirements, *Joshua Luke Davison (CERN)*

☁ Deployment Scenarios, *Representatives of the Buyers Group*

13.00 - 14.00 – Lunch Break

☁ Deployment Scenarios, *Representatives of the Buyers Group*

☁ GEANT Network connectivity, *Vincenzo Capone (GEANT)*

15.15 - 15.40 – Coffee Break

☁ Federated Identity Management Overview, *Hannah Short (CERN)*

☁ Wrapping up and Next Steps, *Marion Devouassoux (CERN)*

Event ends at 16:40

Summarizing, what's in it for you?



Demonstrate archiving & preservation services for petabyte data volumes, high ingest sustained data rates (1-10 Gbps per day) for multi-disciplinary scientific data



Diversify your offer and commercialize resulting services by the end of the project



Support the open data movement



Offer services via the European Open Science Cloud (EOSC) Catalogue



Access the public funded European Research Infrastructures (RIs) as a new market segment

Great thanks to EMBL-EBI for the organization of the event

EMBL-EBI




Buyers



Lead Partner



EMBL-EBI 



Experts





Accelerating Science