
CHALLENGES TO DESIGN PHASE

» PREservation FORMAts for culture information/e-archives (PREFORMA) «

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PREFORMA Presentation Design Phase
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EVALUATION CRITERIA



- How to evaluate the different designs provided by the different suppliers:
 - Did the suppliers use standard modeling languages (e.g. UML)?
 - Did the suppliers carry out usability-related measures?
 - Did the suppliers apply appropriate methods that actively involve users?
 - Did the suppliers involve established standards and specifications?
 - Did the suppliers build on open-source software or frameworks?
 - Is the option of a single supplier preferred compared with consortia?
 - Did the suppliers understand the required effort / budget relationship?

- What are file formats used, and which of them to address within project?

PRESERVATION FORMATS



MXF | MPEG | IMX | XDCAM HD422 |
DPX | DCP | JPEG2000 | MOV |
MPEG2 | AVI | MPEG4 | AVC | PDF 1.4
| PDF/A1 | TIFF 6.0 | JPEG | RAW |
AS-07 | MPEG|AF | PDF | MKV | FFV1
| OGG | Dirac | PNG | WebM | VP8 |
OGG | Theora | PDF/A2 | PDF/A3 |
LPCM

PREFORMA FILE FORMATS



Content type	Standard specifications
TEXT	ISO 32000-1:2008 (PDF 1.7) ISO 19005-1:2005 (PDF/A-1) ISO 19005-2:2011 (PDF/A-2) ISO 19005-3:2012 (PDF/A-3)
IMAGE	ISO 12234-2:2001 (TIFF/EP) ISO 12369:2004 (TIFF/IT)
MOVING IMAGE	OGG MKV ISO 15444-1 (JPEG2000 core coding system) FFV1 Dirac LPCM

SUSTAINABILITY CRITERIA



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- Has the format been adopted by digital preservationists?
 - Has the format been adopted by PREFORMA stakeholders?
 - Has the format been adopted by service providers?
 - Does the license of the format allow for developing open source software?
 - Is the standard specification document available either freely or at a nominal charge?

LESSONS LEARNED: STEPS



-
- 16 submissions received on time, 10 passed threshold process

 - The procedure to evaluate the bids consisted of four different phases:
 - Phase 1: Individual evaluations (3 per submission, domain experts)
 - Phase 2: Consolidated reports (1 per submission)
 - Phase 3: Requests for clarification (in case of open questions)
 - Phase 4: Hearings (in order to clarify remaining open issues)

 - The procedure was completed by a Consensus Meeting:
 - Final ranking of the proposals (in general and per file type)
 - Decisions taken and suppliers informed

LESSONS LEARNED: DATA



Training data

Comprises data set for extent and scope of digital objects acquired/ingested by the memory institution. Compiled and used only by suppliers for training software components but known to project partners.

Test data

Comprises data set for extent and scope of digital objects acquired/ingested by the memory institution. Used by suppliers and project partners for testing the tools.

Demonstration data

Comprises data set with a selection of files for digital objects acquired/ingested by the memory institution. Includes valid/conform files as well as corrupted files. Used by suppliers and project partners (and third parties) for demonstrating and endorsing.

LESSONS LEARNED: UCD

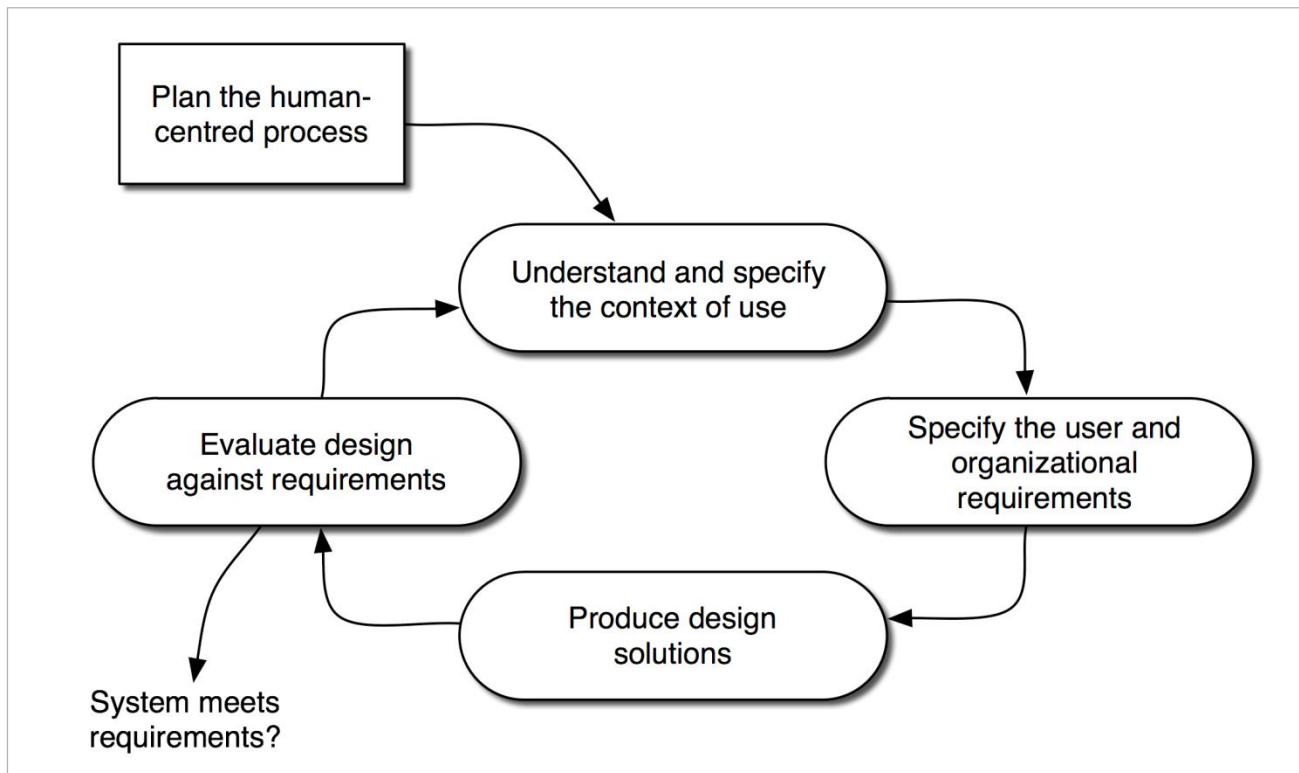


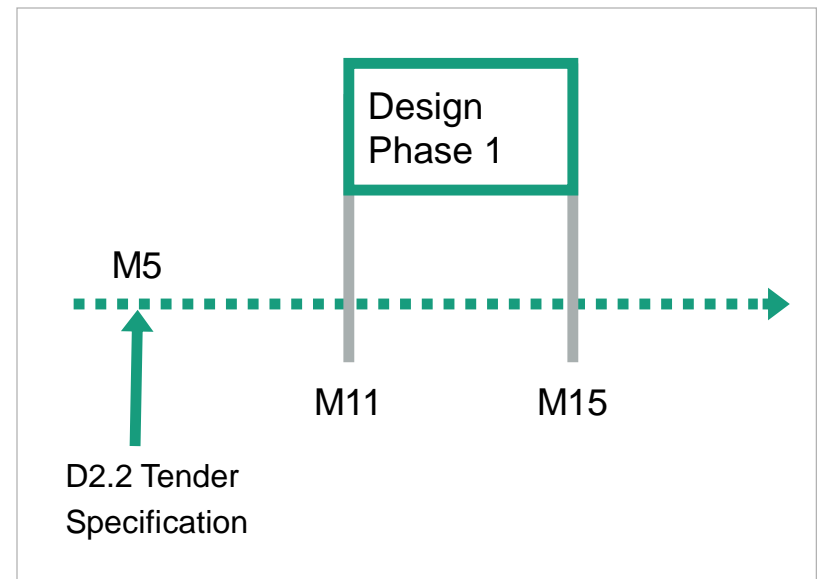
Figure: The human-centred design process (adopted from ISO 13407)

DESIGN PHASE 1 (M11–M15)



- Six suppliers selected by the tender procedure are required to develop an appropriate design for the expected PREFORMA software
- Input = D2.2 Tender Specifications
 - Functional requirements (function of the software and/or its components)
 - Technical requirements (technologies, standards, specifications, etc. to be used)

→ Requirements serve as basis for the suppliers' own in-depth req. analysis



DESIGN PHASE 1

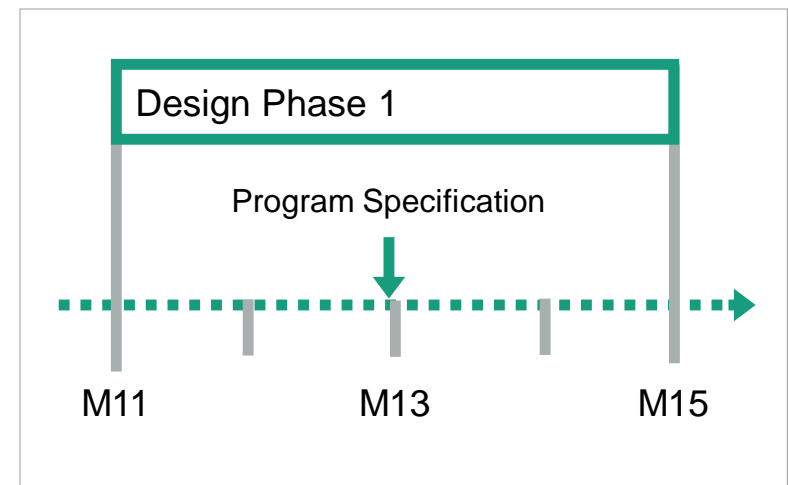


■ Tasks to be done by the suppliers:

1. M11 – M12: Preparation / refinement of a functional specification (in-depth analysis of the functional and technical requirements)

■ Output = Program specification (end of M12)

→ Describes the intended behavior of the software documented by use cases, appl. scenarios, etc.



DESIGN PHASE 1

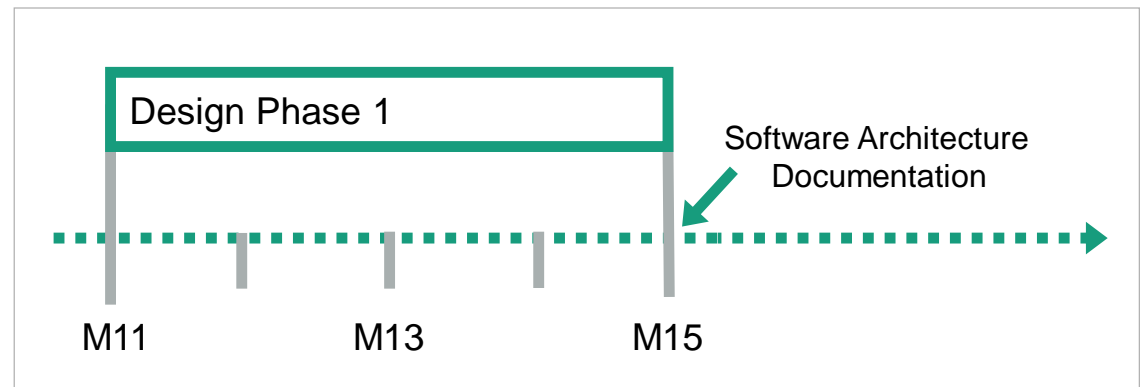


■ Tasks to be done by the suppliers:

2. M13 – M14: Developing a high-level structure of the software

■ Output = Software architecture documentation (end of M14)

→ Describes the structure of the different components and how they are connected to each other



DESIGN PHASE 1



- Workshop is planned at the beginning of M15
 - Presentation and defense of the suppliers' program specifications and software architecture documentations
 - 60 min presentation + 20 min discussion
 - Central location (e.g. Brussels)
- Results serve as additional evaluation input for Phase 2

DESIGN PHASE 2 (M23–M26)

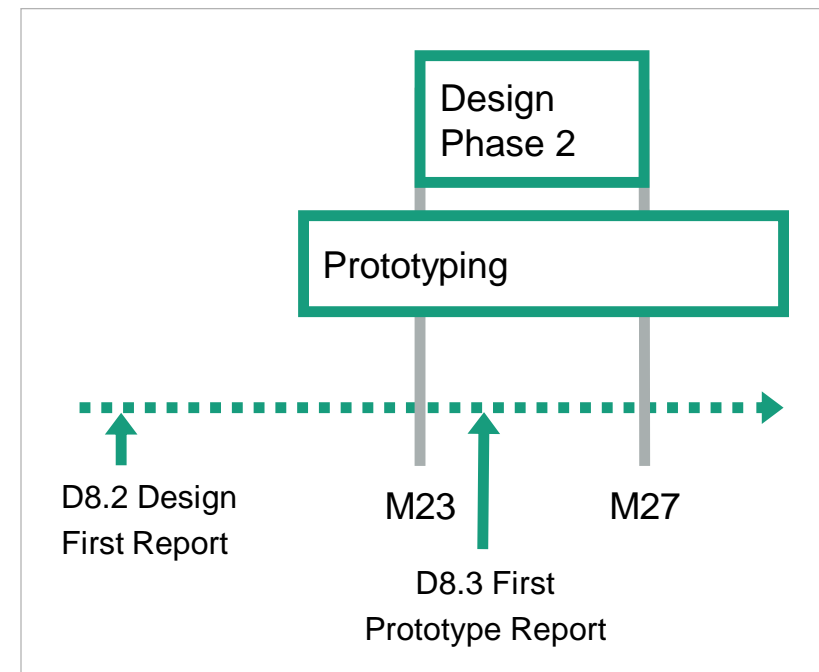


PREFORMA

- Three suppliers selected by the competitive evaluation to update (re-design) the design of the their prototypes

- Input = D8.2 Design – First Report
- Input = D8.3 First Prototype Report
 - Feedback on the first prototype about functionality, adherence to best practices, etc.

→ Reports serve as basis for the design phase 2



DESIGN PHASE 2



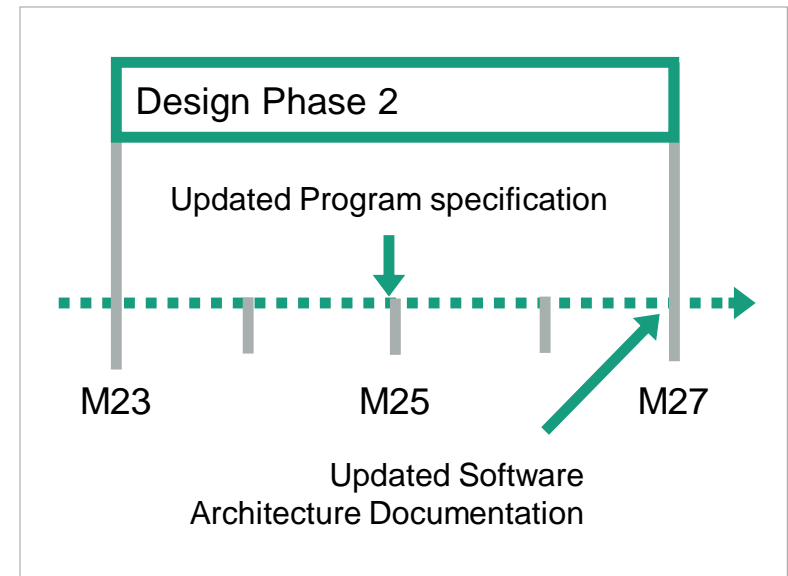
■ Tasks to be done by the suppliers:

1. M23 – M26: Update of the initial design

→ WP lead supports the suppliers in meeting the report notes, comments, recommendations, etc.

- Output = Updated program specification (end of M24)
- Output = Updated software architecture documentation (end of M26)

■ Second workshop allowing suppliers presenting / defending their design



S&T CHALLENGES TO DESIGN PHASE

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THANK YOU FOR YOUR
ATTENTION

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