

Defining the PREFORMA Challenge

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OPF Webinar: PREFORMA Challenge
14th June 2016



PCP Schedule



- ❑ January 13th: Project kick-off
- ❑ June 12th: Publication tender
- ❑ August 12th: Deadline submission
- ❑ August 18th: Individual evaluation
- ❑ September 24th: Consensus Meeting
- ❑ October 6th: Invitation to Negotiation
- ❑ October 17th: Award decision
- ❑ November 1st: Start design phase

Challenge Brief



Empower memory institutions to gain full control over the technical properties of digital content intended for long-term preservation.



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Challenge Brief



i.e. container, encoding,
embedded metadata,
etc.

Empower memory institutions to gain full control over the **technical properties** of digital content intended for long-term preservation.



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Challenge Brief



Empower **owners** to gain full control over the **technical properties of digital content** intended for long-term preservation.

i.e. text, image, sound and moving image



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Empower memory institutions to gain full control over the technical properties of **digital content** intended for long-term preservation

i.e. deposited & digitized content



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Empower memory institutions to gain full control over the technical properties of digital content intended for **long-term preservation.**

i.e. developing a preservation strategy (transformation, re-packaging, emulation)



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Challenge Brief



i.e. addressing people that
produce preservation files

Empower memory institutions to **gain full control** over the technical properties of digital content intended for long-term preservation by memory institutions.



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□ Develop an **open source conformance checker** that:

- checks if a file complies with standard specifications
- checks if a file complies with the acceptance criteria of the memory institution
- reports back to human and software agents
- perform simple fixes

□ Establish an ecosystem around an **open source reference implementation** that:

- generates useful feedback for those who control software
- advances improvement of the standard specification
- advances development of new business cases for managing preservation files



File 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



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File formats



	AUDIO VISUAL			TEXT	IMAGE
	broadcast	film	consumer		
Adopted by PREFORMA stakeholders?	MPEG-IMX (MXF/MPEG2) XDCAM HD422 (MXF/MPEG4)	DPX DCP (MXF/JPEG2000)	MOV/MPEG2 AVI/MPEG2 MPEG/MPEG2 MPEG/MPEG4-AVC	PDF 1.4 PDF/A1	TIFF 6.0 JPEG JPEG2000 RAW
Adopted by service providers?	AS-07 (MXF/MPEG2) (MXF/JPEG2000) FIMS (MXF/MPEG2)	DCDM (TIFF 6.0) DCP (MXF/JPEG2000) IMF (MXF/MPEG4)	MPEG-AF	PDF	JPEG2000 TIFF
Available under free and open license?	MKV/FFV1 OGG/Dirac	PNG	WebM/VP8 OGG/Theora	PDF/A1 PDF/A3 PDF/A3	PNG
PREFORMA Challenge Brief					

File formats



adoption?	AUDIO VISUAL			TEXT	IMAGE
	broadcast	film	consumer		
Adopted by PREFORMA stakeholders?	MPEG-IMX (MXF/MPEG2) XDCAM HD422 (MXF/MPEG4)	DPX DCP (MXF/JPEG2000)	MOV/MPEG2 AVI/MPEG2 MPEG/MPEG2 MPEG/MPEG4-AVC	PDF 1.4 PDF/A1	TIFF 6.0 JPEG JPEG2000 RAW
Adopted by service providers?	AS 07 (MXF/MPEG2) (MXF/JPEG2000) FIMS (MXF/MPEG2)	DCDM (TIFF 6.0) DCP (MXF/JPEG2000) IMF (MXF/MPEG4)	MPEG-AF	PDF	JPEG2000 TIFF
Available under free and open license?	MKV/FFV1 OGG/Dirac	PNG	WebM/VP8 OGG/Theora	PDF/A1 PDF/A3 PDF/A3	PNG
PREFORMA Challenge Brief	?			PDF/A	?



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File formats



uncompressed/ lossless?	AUDIO VISUAL			TEXT	IMAGE
	broadcast	film	consumer		
Adopted by PREFORMA stakeholders?	MPEG-IMX (MXF/MPEG2) XDCAM HD422 (MXF/MPEG4)	DPX DCP (MXF/JPEG2000)	MOV/MPEG2 AVI/MPEG2 MPEG/MPEG2 MPEG/MPEG4- AVC	PDF 1.4 PDF/A1	TIFF 6.0 JPEG JPEG2000 RAW
Adopted by service providers?	AS 07 (MXF/MPEG2) (MXF/JPEG2000) FIMS (MXF/MPEG2)	DCDM (TIFF 6.0) DCP (MXF/JPEG2000) IMF (MXF/MPEG4)	MPEG-AF	PDF	JPEG2000 TIFF
Available under free and open license?	MKV/FFV1 OGG/Dirac	PNG	WebM/VP8 OGG/Theora	PDF/A1 PDF/A3 PDF/A3	PNG
PREFORMA Challenge Brief	MKV OGG JPEG2000(?) FFV1 Dirac LPCM			PDF/A	TIFF 6.0 JPEG2000(?)



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File formats



Open standard?	AUDIO VISUAL			TEXT	IMAGE
	broadcast	film	consumer		
PREFORMA stakeholders	MPEG-IMX (MXF/MPEG2) XDCAM HD422 (MXF/MPEG4)	DPX DCP (MXF/JPEG2000)	MOV/MPEG2 AVI/MPEG2 MPEG/MPEG2 MPEG/MPEG4-AVC	PDF 1.4 PDF/A1	TIFF 6.0 JPEG JPEG2000 RAW
Industry standards	AS 07 (MXF/MPEG2) (MXF/JPEG2000) FIMS (MXF/MPEG2)	DCDM (TIFF 6.0) DCP (MXF/JPEG2000) IMF (MXF/MPEG4)	MPEG-AF	PDF	JPEG2000 TIFF
Open standards	MKV/FFV1 OGG/Dirac	PNG	WebM/VP8 OGG/Theora	PDF/A1 PDF/A3 PDF/A3	PNG
PREFORMA	MKV (?) OGG JPEG2000 (?) FFV1 Dirac LPCM (?)			PDF/A	TIFF 6.0 (?)



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What we have chosen (eventually...)



□ TEXT > strengthen the consensus

- 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 > improve the consensus

- ISO 12234-2:2001 (TIFF/EP)
- ISO 12369:2004 (TIFF/IT)

□ MOVING IMAGE > enter virgin territories...

- OGG / MKV
- FFV1 / Dirac / ISO 15444-1 (JPEG2000 core coding system)
- LPCM



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Tender



- ❑ 16 tenders / 14 supplier teams
- ❑ 6 tenders not eligible
- ❑ 6 projects invited for the design phase
- ❑ 3 projects invited for the prototyping phase



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THANK YOU

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