



THE QUEST FOR OPEN AV STANDARDS & THE PREFORMA CHALLENGE

No Time to Wait!
Standardizing FFV1 & Matroska for Preservation



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Two Efforts Merging



(c) olexandra Lytvyn



PREFORMA



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preforma-project.eu

PROJECT N.1. **VeraPDF: THE PDF/A CONFORMANCE CHECKER ACCEPTED INDUSTRY-WIDE**

by *Open Preservation Foundation, PDF Association, Digital Preservation Coalition, Dual Lab, KEEP SOLUTIONS*

A unique collaboration, the VeraPDF Consortium brings together an end user community and a software industry rooted in the principle of interoperability based on ISO standardized technology... [access project page >>](#)

[>> View all the successful proposals that participated to the design phase](#)

RESERVED AREA

OTHER EXISTING TOOLS

ARCHIVEMATICA

JPYLYZER

PROJECT N.2. **DPF MANAGER: DIGITAL PRESERVATION FORMATS MANAGER**

Name	Country	ROLE	
Riksarkivet	Sweden	Project Coordinator +	
Promoter Srl	Italy	Technical + Communication Coordinator	
Packed Expertisecentrum Digitaal Erfgoed Vzw	Belgium	Technical Partner	
Fraunhofer Gesellschaft Zur Foerderung Der Angewandten	Germany	Technical Partner	
Hogskolan I Skovde University of Skovde	Sweden	Technical Partner	
Universita Degli Studi di Padova	Italy	Technical Partner	
Stichting Nederlands Instituut voor Beeld En	Netherlands	Memory	
Koninklijk Instituut Voor Het Kunstpatrimonium	Belgium	Memory	
Greek Film Centre Ae	Greece	Memory	
Local Government Management Agency An Gníomhaireacht Bainistiochta Rialtais	Ireland	Memory Institution	
Stiftung Preussischer Kulturbesitz	Germany	Memory	
Ayuntamiento De Girona	Spain	Memory	
Eesti Vabariigi Kultuuriministeerium	Estonia	Memory	
Kungliga Biblioteket	Sweden	Memory	



PREFORMA



“Open standards would
save public sector €1 billion a year”

European Commission
Digital Agenda 25 June 2012

AN OPEN STANDARD FOR AV

Content type	Standard specifications
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TEXT	<p>ISO 32000-1:2008 (PDF 1.7)</p> <p>ISO 19005-1:2005 (PDF/A-1)</p> <p>ISO 19005-2:2011 (PDF/A-2)</p> <p>ISO 19005-3:2012 (PDF/A-3)</p>
IMAGE	<p>ISO 12234-2:2001 (TIFF/EP)</p> <p>ISO 12369:2004 (TIFF/IT)</p>
MOVING IMAGE	<p>Open standard:</p> <ul style="list-style-type: none">• maintained by a not-for-profit organization,• available either freely or at a nominal charge.• IPR made irrevocably available on a royalty-free basis.

STANDARDS IN USE

- Sound and Vision, Netherlands
 - > MXF OP1a / D10 30/50
 - > MXF OP1a / XDCAM HD
 - > DPX
- Greek Film Centre, Greece
 - > DCP
- Kungliga Biblioteket, Sweden
 - MOV-AVI/MPEG2-MPEG4
- Ayuntament de Girona, Spain
 - MOV-AVI/MPEG2-MPEG4



FUTURE MEMORY
STANDARDS

SOUND AND VISION

SOUND AND VISION FORMATS



Archive Operations

SUSTAINABILITY ANALISIS



- 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?

Open standard?	AUDIOVISUAL			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 (?)





PREFORMA



“is this the right tool for you?”

John Caldwell
The Signal 17 November 2015

PUBLIC PROCUREMENT



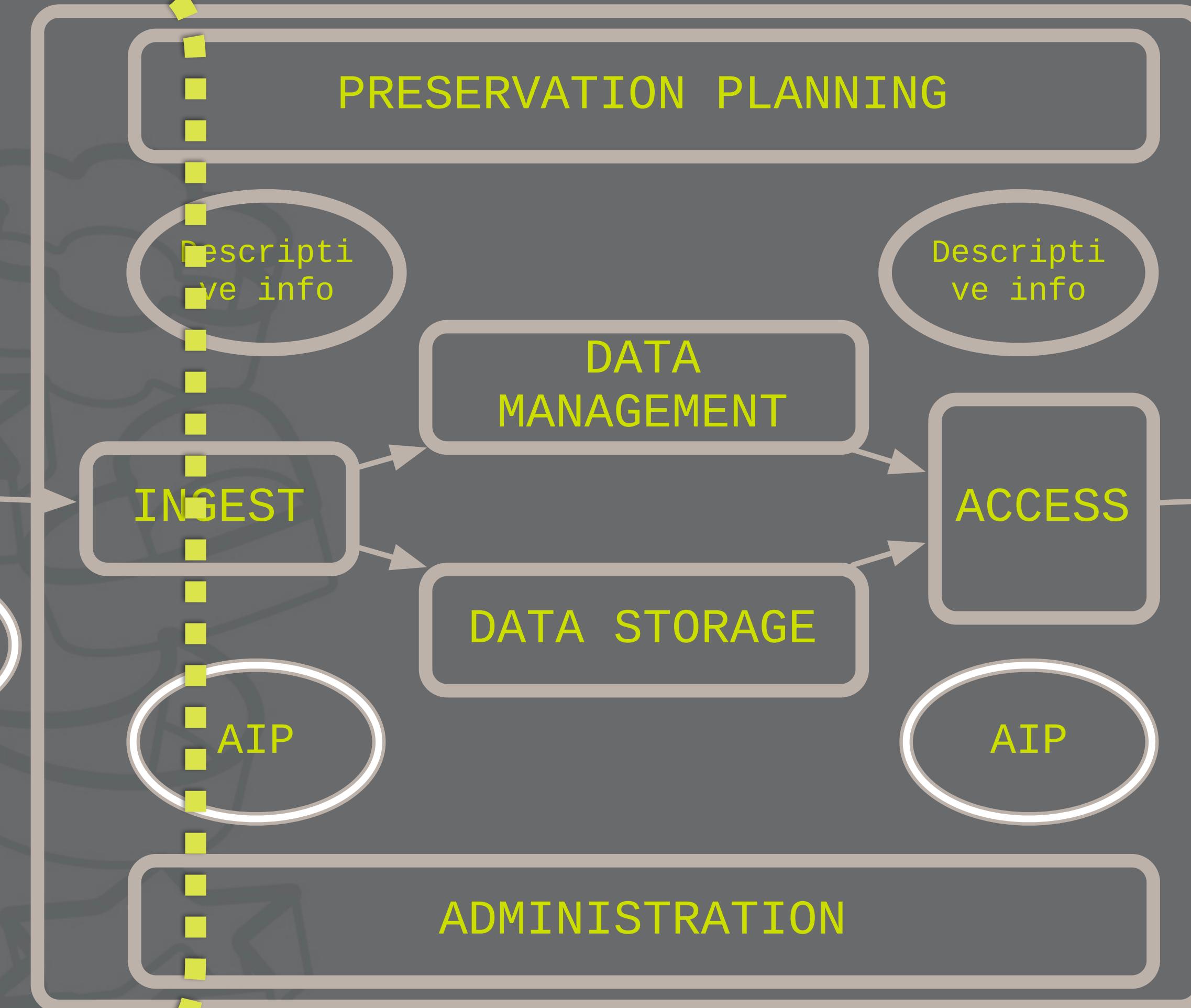
- open-source toolset for conformance checking
- should allow for deployment in different infrastructures and environments
- establish a network of common interest
 - to gain control over the technical properties of preservation files

THE PREFORMA CHALLENGE



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MANAGEMENT



C
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PREFORMA

FUTURE MEMORY
STANDARDS

Conformance Checking



- File has been produced according to the specifications of a standard file format
 - File matches the acceptance criteria for long-term preservation by a memory institution
- Reports which properties deviate from the standard specification and acceptance criteria
 - In human and machine readable format
- Performs automated fixes for simple deviations in the metadata of the preservation file.

Project Outcomes



VeraPDF Consortium:

- Open Preservation Foundation
- PDF Association
- Digital Preservation Coalition

PDF/A Validation



TI/A Standard Initiative:

- Digital Humanities Lab / University of Basel
- Agents Research Lab / University of Girona
- Easy Innova DPF Manager



Drop video files here



(c) Asen Ognyanov



Thank You.

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