Report on dissemination activities 1 and plans for standardisation and dissemination

Deliverable D6.2

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Abstract:	This document reports on dissemination and standardisation activities carried out by the DAVID project partners during the first year and planned within the second year.
	Main effort was dedicated to the set-up of the project web-site (http://www.david-preservation.eu), the creation of several public deliverables and the presentation of DAVID goals and first results. Deliverables and presentations (if possible) are available from the project web-site. DAVID actively contributed to the standardisation activities EBU QC, EBU/AMWA FIMS QA as well as MPEG preservation related activity MP-AF.

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1	2013-10-24	Document created
2	2013-11-11	ORF contributions included
3	2013-11-12	JRS contributions added, summary and conclusions updated
4	2013-11-15	HSA, CTI and INA contributions added, version for internal review
5	2013-12-03	ITInnov contributions and intern. review response included, finalis.
6	2013-01-29	Minor editing corrections

1 Table of Contents

2 Executive Summary

This document is a report on dissemination and standardisation activities carried out by the project partners during the first year and planned within the second year.

In the first year the main effort was dedicated to the set-up of the project web-site at http://www.david-preservation.eu. The DAVID Business Card has been developed as an easy entry point to the website.

Four public deliverables have been delivered during the Year 1. Project partners have made presentations in nine symposiums, conferences, workshops or exhibitions. Public deliverables and presentations (if possible) are available from the project web-site.

In respect to standards DAVID very actively contributed to EBU QC, EBU/AMWA FIMS as well as the MPEG preservation related activity MP-AF. Several DAVID partners represent the project by participating in meetings to promote the solutions developed by the project.

Furthermore, the plans for dissemination and standardisation for the second year of the project are also described.

3 Introduction

3.1 Purpose of this Document

This document summarises the dissemination and standardisation activities of the project in the first 12 months and outlines the plans for dissemination and standardisation of the next 12 month.

3.2 Scope of this Document

The document lists the activities and provides pointers to further documentation (e.g. publications, slides, etc.)

3.3 Status of this Document

This is the final version of D6.2.

4   Dissemination Tools and Mechanisms

4.1 Dissemination Mechanisms

The project uses the following mechanisms for disseminating project results

- **Articles in targeted magazines and journals:** DAVID will submit articles to targeted international magazines and other appropriate publications (e.g. the International Journal on Digital Libraries).
- **Papers at scientific conferences:** DAVID results will be presented at targeted international and regional scientific conferences and workshops (e.g. the International Conference on Preservation of Digital Objects, International Conference on Image Processing, International Workshop on Quality of Multimedia Experience and SMPTE motion imaging journal.
- **Targeted media and publicity activities:** The project will distribute targeted media (e.g. a DAVID business card) and other PR material.
- **Information activities within DAVID partner organisations:** DAVID partners inform their senior managers about DAVID, its progress and its benefits. This acts as a catalyst for disseminating DAVID results. It also helps to keep DAVID business, dissemination and exploitation focussed.
- **DAVID public Website:** The public DAVID Website ensures that all interested parties are informed about the project and its progress, and can access the publicly available results of the DAVID project. The address of the public DAVID Website is http://www.david-preservation.eu.
- **Individual partners' homepages:** Project partners will provide information about DAVID on their homepages (with a focus on their share of the work, of course) and will link to the project's homepage for further information (which will also increase the search engine ranking of the DAVID homepage).
- **End User Workshop:** The final Evaluation-Event will be organised as an open workshop for end-users; for this purpose specialists in the domain from other AV-safeguarding institutions will be invited to participate in this event. During the workshop the results will not only evaluated, but all findings and developments will be presented to the participants.
- **Knowledge Sharing:** Knowledge will be shared with / actively provided to the audiovisual archive community (e.g. FIAT/IFTA, PrestoCentre, Medien Archive Austria) and via major broadcast exhibitions (e.g. IBC, NAB) for the largest possible exploitation of public project results.

5 Dissemination Activities in Year 1

5.1 Website

The DAVID website www.david-preservation.eu serves as the primary source of information for the public. It provides information about the project DAVID such as the idea behind this project, the main project goals, information about the consortium, contact details of partner's and detailed partner descriptions.

The scientific publications and presentations, and the public deliverables produced by the project are presented at this website and are updated regularly.

- Publications or presentations can be accessed from:
  http://david-preservation.eu/publications/scientific-publications-presentations/
- Public deliverable published by DAVID can be found at:
  http://david-preservation.eu/publications/public-deliverables/

The news section informs the public on upcoming presentations, conferences, events, development and released technologies associated to DAVID.

The links section contains links to research projects, technological solutions, standardisation initiatives and institutions relevant to the DAVID project.

The website is updated regularly.

A contact page has been set up in order to contact the project coordination via david-office@joanneum.at to send questions or requests.

Figure 1 below shows a screen shot of the DAVID website which contains the following main section:

- Project
- News
- Goals
- Consortium
- Publications
- Links
- Contact

Figure 1: Screen shot of the DAVID website

5.2 Public Documents

Public deliverable published by DAVID can be found at http://david-preservation.eu/publications/public-deliverables/

Publications or presentations can be accessed from http://david-preservation.eu/publications/scientific-publications-presentations/

5.3 Publications and Presentation and Scientific/Technical Events

#	Category	Status	Partner(s) responsible/involved	Author(s)	Conference, Journal, Event	Date of publication / event	Location of event	Title
1.	Presentation	Published	JRS	P. Schallauer	PrestoPRIME Final Showcase	21-22.11.2012	Vienna, AT	Future Projects: DAVID
2.	Paper	Published	JRS	P. Schallauer, H. Fassold, A. Hofmann, W. Bailer, S. Wechtitsch	International Conference on Multimedia Modelling 2013	7-9.1.2013	Huangshan, China	Improving Preservation and Access Processes of Audiovisual Media by Content-based Quality Assessment
3.	Presentation	Published	JRS	W. Bailer	2nd International Workshop on Standards and Technologies in Multimedia Archives and Records	18-19.1.2013	Lausanne, CH	MPEG Multimedia Preservation Activities
4.	Presentation (in German)	Published	ORF	C. Bauer	Managing Board Meetings of Media-Archives-Austria (MAA) Association	1.2.2013 and 19.6.2013	Vienna, AT	Das DAVID Projekt und seine Bedeutung für Massenmigrationen österreichischer AV-Bestände
5.	Report	Published	ITInnov, CTI, INA, JRS	P. Schallauer, P. Walland, M. Hall May, H. Fassold, J. Houpert, L. Laborelli, W. Bailer	DAVID Website	25.4.2013	DAVID Website	State of the Art Report on Damage Prevention and Repair of Digital AV Media – Where DAVID started from

#	Category	Status	Partner(s) responsible/involved	Author(s)	Conference, Journal, Event	Date of publication / event	Location of event	Title
6.	Presentation	Published	CTI	J. Houpert	International Broadcasting Convention 2013	13-17.9.2013	Amsterdam, NL	Format Compatibility Analysis and Modelling of QC workflows– First Results
7.	Presentation	Published	JRS	P. Schallauer	International Broadcasting Convention 2013	13-17.9.2013	Amsterdam, NL	Digital BETACAM Dropout Detection – First Results
8.	Presentation	Published	HSA	F. Hoeller	International Broadcasting Convention 2013	13-17.9.2013	Amsterdam, NL	Interlace Issues Detection – First Results
9.	Presentation	Published	CTI	J. Houpert	International Association of Sound and Audiovisual Archives (IASA) BAAAC Conference 2013	6-10.10.2013	Vilnius, LT	Preservation of MXF File Collections - long-term Usability Challenges
10.	Interview (in German)	Accepted	JRS	P. Schallauer	ORF Radio Ö1, "Digital Leben" or "Matrix	18.10.2013	Graz, AT	Erhaltung des audiovisuellen kulturellen Erbes durch DAVID
11.	Presentation (in German)	Published	JRS	P. Schallauer	Kolloquium des Institute für Rundfunktechnik (IRT)	21.10.2013	Munich, DE	Essenz Qualitätsbeurteilung in Video und Film - Was verändert sich gerade

#	Category	Status	Partner(s) responsible/involved	Author(s)	Conference, Journal, Event	Date of publication / event	Location of event	Title
12.	Presentation, Paper	Published	JRS	M. Matton, W. Bailer, M. Sano, A. Messina, J.-P. Évain, P. Schallauer	Federation Internationale des Archives de Television / International Federation of Television Archives (FIAT/IFTA) World Conference 2013	25-28.10.2013	Dubai, UA	The MPEG-7 AudioVisual Description Profile Standard for Describing Results of Automatic Annotation Services with VidiCert DigiBeta damage detection application
13.	Presentation (in German)	Accepted	CTI	J. Houpert	ARD ZDF Medienakademie	27-28.11.2013	Munich, DE	Qualitätsmanagement in MXF-Workflows
14.	Paper, Presentation	Accepted	JRS	Werner Bailer and Georg Thallinger	6. Forum Medientechnik	28.-29.11.2013	St. Pölten, AT	Interoperable Metadata for Preservation of Multimedia Content

5.4 Other dissemination activities

5.4.1   DAVID Business Card

The DAVID Business Card serves as a lightweight entry point to the DAVID website by providing the website URL in plain text as well as QR encoded. The card is intended to be distributed at any DAVID dissemination event and activity.

Figure 2: DAVID Business Card, left: front side, right: back side.

5.4.2   International Broadcasting Convention (IBC) 2013

First DAVID results have been presented at the International Broadcasting Convention's Future Zone (booth # 8.F48).

First DAVID results on damage detection in audiovisual media (on essence based Digital BETACAM tape dropout detection) and video quality related standardisation activities (EBU QC, FIMS QA) have been presented by JRS.

As the booth presented work on quality analysis of members of the EBU QC group (JRS, CTI, ORF), it was on the list of related booths distributed at the EBU booth, attracting many visitors. Thus the booth also showed a poster of the table of QC checks the EBU QC group (including DAVID partners) is specifying (see picture below).

Figure 3: Presentations and discussions ongoing at the IBC booth

The booth has been organised in collaboration with the TOSCA-MP project which is developing a distributed content analysis and search infrastructure for audiovisual media.

HSA had together with CTI a booth (#5.C41) at the IBC and were presenting their products and also first research results from the DAVID project to the audience.

6   Dissemination Plans for Year 2

6.1 Targeted Conferences, Events and Journals

Dissemination will continue targeting new conferences and publications, and contributing to yearly recurrence of relevant events. The project website will be update with new deliverables and publications.

6.1.1   JRS

JRS will target publishing results of content based damage detection and repair research (e.g. on Digital BETACAM tape dropout detection and repair, digital sensor noise repair) at conferences in the area of image processing and pattern recognition, e.g. IEEE International Conference on Image Processing, IEEE International Conference on Pattern Recognition, and International Workshop on Quality of Multimedia Experience. For results on metadata modelling, the International Conference on Preservation of Digital Objects (iPres) and International Journal on Digital Libraries will be targeted. Also more user-oriented venues such as FIAT/IFTA and EBU Production Technology Seminar will be targeted.

6.1.2   ITInnov

IT Innovation Centre will focus on publication of results on workflow modelling and understanding of risk in preservation workflows at international conferences and in peer-reviewed journals.

We will target events such as IASA, Presto events (such as Screening the Future, date and venue tbc), Preservation and Archiving Special Interest Group (PASIG), International Conference on Preservation of Digital Objects (iPRES, Melbourne, October 2014), NAB Las Vegas (April 2014/2015), International Broadcast Convention (IBC, Amsterdam September 2014), Broadcast Video Exhibition (BVE, London February 2014) and FIAT/IFTA World Congress.

Journals we might target later in the project include AV Insider, SMPTE motion imaging journal, IASA journal, International Journal of Digital Curation.

6.1.3   CTI

CTI will target publishing results on format compatibility issue detection and repair RTD at conferences in the area of digital media quality control as well as modelling and execution for automated quality control workflows.
Venues as International Broadcast Conference in Amsterdam, NAB Las Vegas, possibly the FIAT-IFTA World Congress and IASA 45th Annual Conference in South Africa will be targeted in 2014. The EBU QC-related taskforce and EBU/AMWA FIMS meetings will be address for presentation of results and findings in 2014. CTI plans also to be present at local German based conferences like Hamburg Open, FKTG Fachtagung and the IASA German / Swissgerman branch meeting.

6.1.4   HSA

HSA will show the first prototype of the Advanced Field Analyser at the MCI Hamburg Open 2014 on the 23.01.2014. This is an exhibition and get together of the media broadcasting industry in Hamburg, Germany.

It is also very likely that HSA will attend with a booth at the NAB SHOW 2014 from April 7-10 in Las Vegas. This is one of the biggest international exhibitions in the broadcasting industry and therefore a very good opportunity to present DAVID research prototypes to potential users.

On the IBC 2014 from September 12-16 HSA is planning to show the available DAVID prototypes to the audience. The IBC is the most important exhibition in the broadcasting industry in Europe.

There might be a series of smaller events where HSA will have the possibility to show DAVID results to the target audience. These events are not fully planned at the time writing this deliverable.

6.1.5   ORF

ORF will target two major groups: at one hand the results and findings of DAVID will constantly reported to the MAA (Media-Archives-Austria) association as the main body in the domain in Austria; as a first result from the early presentation a special task-force dedicated to technical issues in the domain in Austria will be founded in late 2013. At the other hand ORF will target groups outside Austria, where ORF-representatives are involved in; this includes FIAT/IFTA (here the Preservation & Migration Commission of the International Federation of TV-Archives; experts from the commission will be invited to the evaluation workshop), IASA (since MAA is the official Austrian IASA-branch, the results will be presented in the 2015-world-conference (planned for Vienna)) and EBU (QC-related taskforce; presentation of results and findings within the next meetings in 2014).

6.1.6   INA

INA will target as a user reaching general awareness on the project, mentioning and presenting - when this is not done at the project level – the DAVID project in audiovisual archive meetings (AMIA, FIAT/IFTA).

In terms of dissemination of research results, the main two conferences considered for submitting research papers on de-convolution and quality enhancement will be ICIP (IEEE International Conference on Image Processing), and ICASP (International Conference on Acoustics, Speech, and Signal Processing).

6.2   DAVID End User Test Workshops

Since the final evaluation-event will be organised as an open workshop, specialists in the domain from other AV-safeguarding institutions will be invited to participate in this event. During the workshop the results will not only evaluated by those, but all findings and developments will be presented to the participants and open discussions will be held. This will be a perfect stage to disseminate the project results and prove their usability; the participants of this evaluation workshop will also be invited to bring along their own material, so both the quality of the evaluation results and the dissemination aspect will benefit from this open approach.

To prepare this workshop and to convince experts to take part in it, there will already be announcements and promotion for this coming event during the second project year; as soon as the quality and state of development of the tools in DAVID will be sufficient for that purpose, selected experts will be invited prior to the final evaluation event to visit the testbed at ORF and gain some first experience. Especially the new MAA-taskforce (=IASA)-members and members from the Preservation & Migration Commission of FIAT/IFTA are in the focus here. This will support the direct dissemination of the project results in the entire domain via those bodies.

6.3   NAB Labs Futures Park

It is planned that the DAVID project will apply for the *NAB Labs Futures Park* 2014. In case of acceptance NAB provides exhibition space and the opportunity to show new research results to the very large audience of NAB visitors. Presentations and demonstrations of DAVID research results include the topics understanding and managing damage (media damage and its consequences, overview on risks and damage prevention with risk management framework), video essence damage detection and repair with DigiBeta dropout and field issues detection and repair examples, quality improvement and super-resolution of archived content, and new technologies for MXF error analysis and repair and technologies for fault detection in media workflows.

7   Standardisation Activities in Year 1

During Year 1, DAVID partners have made several contributions to different international standardisation efforts:

7.1 ISO/IEC MPEG Multimedia Preservation Application Format (MP-AF)

JRS, ORF and INA have made contributions to the MPEG Multimedia Preservation Application Format (MP-AF). The aim of MP-AF is to establish interoperable preservation metadata for audiovisual content. Several input documents about the representation of technical, quality and process metadata were submitted to the MPEG meetings in the reporting period (see below), and members of the partners were present at the meetings and contributed to the MP-AF Adhoc group (AhG). The work resulted in a preliminary working draft at the 104th MPEG meeting in April 2013. At the same meeting, the requirements for extensions to MPEG-7 for quality metadata were accepted by the requirements group. A proposal, aligned with the EBU QC definitions of quality checks, has been submitted and presented at the 105th MPEG meeting. The discussion on the scope of the extension will continue at the upcoming meetings. The preservation process metadata representation developed in WP3 has been contributed to the standardization work.

A Committee Draft (CD) of MP-AF is expected for April 2014.

List of input documents with contributions from DAVID:

Werner Bailer (JRS), Nir Sherwinter (Ex Libris), Laurent Boch (RAI), Francesco Gallo (Eurix), Jean-Hugues Chenot (INA), "Technical Metadata Vocabularies", ISO/IEC JTC1/SC29/WG11 MPEG2013/M28118 Geneva, Switzerland, Jan. 2013

Jean-Hugues Chenot (INA), Werner Bailer (JRS), "Examples of Preservation Metadata", ISO/IEC JTC1/SC29/WG11 MPEG2013/M28121, Geneva, Switzerland, Jan. 2013

Werner Bailer, Peter Schallauer (JRS), Roberto Borgotallo (RAI), "MPEG-7 Extensions for Quality Metadata", ISO/IEC JTC1/SC29/WG11 MPEG2013/M28897, Incheon, Korea, Apr. 2013

Werner Bailer, Peter Schallauer (JRS), Roberto Borgotallo (RAI), "Proposal for MPEG-7 Extensions for Wrapper and Bitstream Quality Metadata", ISO/IEC JTC1/SC29/WG11 MPEG2013/M29792, August 2013, Vienna, Austria

Werner Bailer, Peter Schallauer (JRS), Roberto Borgotallo (RAI), "Proposal for MPEG-7 Extensions for Visual Quality Metadata", ISO/IEC JTC1/SC29/WG11 MPEG2013/M29793, August 2013, Vienna, Austria

Werner Bailer (JRS), Christoph Bauer (ORF), "Representing Metadata of Audiovisual Preservation Processes", ISO/IEC JTC1/SC29/WG11 MPEG2013/M31093, October 2013, Geneva, Switzerland

Werner Bailer (JRS), "Use Case: Possible format migration need", ISO/IEC JTC1/SC29/WG11 MPEG2013/M31094, October 2013, Geneva, Switzerland

7.2 EBU QC

The programme has a simple Terms of Reference: "…how to best implement Quality Control (QC) in radio and television production facilities, which are increasingly file-based".

In order to do this the QC programme was formed as a collaboration between the EBU member broadcasters and the QC vendors (JRS, Tektronix, Interra, Digimetrics, Cube-Tec, Amberfin, Emotion, VidCheck, Venera, Media Service, Minnetonka) who's names are well known in the file, measurement and QC world.

EBU QC is defining a set of QC checks, a first set of these test definitions (draft of 53 tests) has been published at http://tech.ebu.ch/docs/tech/tech3363.zip

EBU QC is collaborating with FIMS on the implementation of Quality Control in SOA environments.

JRS, ORF and CTI contributed to the EBU QC working group and its coordination with the FIMS Service Definition Project on Quality Analysis. Major contributions have been made for the definition of baseband (essence) based QC tests dedicated to the archive migration, production and delivery use cases.

7.3 EBU/AMWA FIMS

FIMS (Framework for Interoperable Media Services) is an international consortium of more than 90 companies. The goal of FIMS is to define web service interfaces (SOAP and REST). Interfaces for content capture, transform and transfer have already been specified. SMPTE is supporting the FIMS initiative and the FIMS v1.07 specification has been accepted for publishing as Registered Disclosure Document by SMPTE. The specification of the interface for managing repositories has been announced at IBC 2013. Reference implementations exist in both SOAP and REST. Technical work has started on the definition of the interface for Quality Analysis / Control. Beside this ongoing work future priorities are, in order, "automatic metadata extraction", "IMF/OPL", "timecode support" and "media asset management". More information on FIMS and its members can be found at http://www.fims.tv.

DAVID is represented in FIMS by CTI and JRS. These DAVID partners have been active in promoting the need for FIMS to develop SOA service interface for automatic metadata extraction. This is now high on the list of FIMS and a charter is being defined by the FIMS Business Board chaired by Turner Broadcasting International (Atlanta).

FIMS is also working on Quality Analysis/Control in close cooperation with EBU QC mentioned above.

During the first project year, JRS and CTI continued their contribution to the FIMS activities (in online "WebEx" meetings as well as in physical meetings), especially of the FIMS working group on definition of a service interface for quality analysis (FIMS Service Definition Project on Quality Analysis). The group started its work in April 2013, and is currently collecting use cases.

8 Standardisation Plans for Year 2

Year 2014 should be a key year for standardisation in the field of automatic metadata extraction and quality control. DAVID members representing the project in MPEG, EBU QC and FIMS will be strongly solicited.

8.1 EBU/AMWA FIMS

Within the second year of the project, a draft of the FIMS QA service interface specification is expected. Some DAVID partners plan to implement FIMS compliant version of the quality analysis services. The second aspect in FIMS QA is the specification of the report format. DAVID partners aim to align this format between EBU QC, FIMS QA and MPEG MP-AF.

8.2 MPEG MP-AF

Within the second year of the project, a Committee Draft of the specification is expected, which will contain specifications for the quality analysis results produced by the tools in DAVID, as well as for preservation process metadata. Depending on the progress of the standardisation work, DAVID can possibly contribute to the implementation of reference software for MP-AF.

8.3 EBU-QC

Within the second year of the project, a draft specification of a significantly extended set of the QC test definitions is expected (some 100 to 130 are planned). DAVID partners plan to contribute to the specification of this extended set of test definitions, especially for the definition of baseband (essence) based QC tests dedicated to the archive migration, production and delivery use cases.

8.4 AMWA AS-07

The application specification AS-07 is targeted to support the preservation communities need for an MXF compliant format constraint preserving rich metadata and original carrier information for long-term preservation activities. CTI is an official AMWA AS-07 test partner and it is planned within the second year of the project to pre-validate the specification before it becomes publically available.

9 Conclusions

All originally set objectives have been met:
Public communication plans have been respected through the development of the DAVID website and by the contribution of partners to international conferences, workshops and several presentations. Standardisation activities started early in the project and are progressing very well. DAVID and the partners involved have successfully influenced relevant standardisation activities in ISO/IEC MPEG MP-AF, EBU QC and EBU-AMWA FIMS.

There are clear plans concerning scientific publications and standardisation activities for the second year of the project.

10 Glossary

Terms used within the DAVID project, sorted alphabetically.

AMIA	Association of Moving Image Archivists
AMWA	Advanced Media Workflow Association
AVDP	Audio Visual Description Profile
EBU	European Broadcasting Union
FIAT/IFTA	Federation Internationale des Archives de Television / International Federation of Television Archives
FIMS	Framework for Interoperable Media Services
IASA	International Association of Sound and Audiovisual Archives
IBC	International Broadcasting Convention
ICASP	International Conference on Acoustics, Speech, and Signal Processing
ICIP	International Conference on Image Processing
IEEE	Institute of Electrical and Electronics Engineers
ISO/IEC	International Organization for Standardization/International Electrotechnical Commission
MAA	Media-Archives-Austria
MCI	Media Consult International
MP-AF	Multimedia Preservation Application Format
MPEG	Moving Picture Experts Group
NAB	National Association of Broadcasters
QA	Quality Assessment, Quality Analysis
QC	Quality Control
QR	Quick Response
SOA	Service-Oriented Architecture
TOSCA-MP	Task-oriented search and content annotation for media production
URL	Uniform Resource Locator

Partner Acronyms

CTI	Cube-Tec International GmbH, GE
HSA	HS-ART Digital Service GmbH, AT
INA	Institut National de l'Audiovisuel, FR
ITInnov	University of Southampton - IT Innovation Centre, UK
JRS	JOANNEUM RESEARCH Forschungsgesellschaft mbH, AT
ORF	Österreichischer Rundfunk, AT