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Exploring Europe's Television Heritage in Changing Contexts

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1 Project Objectives

1.1 EUscreen major aim and result

The major objective of EUscreen is to stimulate the use of television archive content for the widest range of European user constituencies and communities and thus to advance active engagement with the cultural memory of Europe both at a national and a European level. Through its synergy with Europeana, EUscreen enables alignment of European audiovisual content with the digitised cultural heritage of Europe.

EUscreen is achieving this by building a highly interoperable digitised collection of television material, which supports the exploration of Europe's television heritage in changing contexts. A critical mass of audiovisual content and its metadata has been made accessible through the EUscreen platform. EUscreen has investigated, exploited and extended existing tools in order to create a highly interoperable environment to enable content sharing among the EUscreen partners and with Europeana, for which EUscreen delivers the audiovisual component.

Solutions for contextualisation from a comparative European television perspective have been proposed through the development of editorial mechanisms (a topical and genre approach, as well as the presentation of curated Virtual Exhibitions) and the development of user-led activities such as rating and tagging systems (commenting), blogs etc, to support use of programme content.

In developing such demand-led access, the project expects to create appropriate conditions for multicultural and multilingual access and use of audiovisual (television) content. Through investigation of user specifications, EUscreen has developed and evaluated use case scenarios for using content for research, learning, and leisure and creative re-use regardless of the language and cultural boundaries. Furthermore the content will be analysed and contextualised in a European perspective in an e-journal.

1.2 EUscreen Approach and Work plan

As a Best Practice Network for interoperability EUscreen has chosen the following solutions for achieving a highly interoperable digitised collection of television material, which supports the exploration of Europe's television heritage in changing contexts:

- 1. Recruiting as many as possible of the relevant European stakeholders in the television domain that at present are 'doing it alone'. At a conceptual level it investigated the metadata level of these stakeholders so as to define the common metadata schema that needs to be achieved to make interoperability feasible. It builds upon the EBU Core and upon the Video Active metadata schema, both of which needed reinvestigation and review for purposes of interoperability.
- 2. Making accessible a critical mass of audiovisual content and its metadata through the EUscreen platform. In order to achieve semantic linking with Europeana, EUscreen will be



fully compliant with the functional specification defined by Europeana². Moreover, a metadata export system has been developed enabling access of e-learning, leisure and research applications of European television heritage in external applications.

- 3. In developing demand-led access with the help of, for example query logs and a web-based tagging system, the project creates appropriate conditions for multicultural and multilingual access and use of audiovisual (television) content. Through investigation of user specifications, EUscreen developed and evaluated scenarios for applied use cases for using content for research, learning and leisure and creative re-use regardless of the language and cultural boundaries.
- 4. EUscreen proposes a pragmatic approach to the issue of rights and draws on experiences of other projects such as the Video Active project to select, clear and deliver digitised programme content that is not hindered by restrictive IPR legislation, rules, precedents or contracts. In order to innovate and develop harmonised and long-term solutions to variable and complex IPR restrictions a working group has been formed to focus on IPR issues and solutions. On top of that, EUscreen reviews and assesses nation-specific IPR limitations and their implications for EUscreen and for wider user-communities. In order to support the future creative reuse and exploitability of television content from audiovisual archives, EUscreen is mapping the future possibilities, requirements and best practices regarding rights issues and open content licensing in open culture production through scenario work and limited experiments with real user communities.
- 5. In order to make archive content understandable and meaningful, all content will be accompanied by detailed descriptions of its original source and how it appeared (for example, TV channel, programme and schedule details; script material; lost material such as live and unrecorded introductions; information and documentation from other relevant broadcasting stakeholders such regulators or trade unions). Users will also be invited to contribute further material (e.g. reminiscences of watching television programmes, or working on its production, links to press articles, books, and existing course materials).
- 6. EUscreen consortium members have organised themselves into four topic-driven working groups (WG). Each WG provides (under the responsibility of its leader) materials, guidelines and an exhaustive coverage of major topics of interest in the field of access and use of audiovisual content, and television content in particular. More specifically, each WG contributes to the organisation of all the public activities of the Network, such as workshops and conferences, deciding the topics of interest and providing relevant speakers and materials for these events.

EUscreen's work plan is divided into seven work packages (WPs) each of which represents an important part of the work to be performed during the project. The WP titles are as follows:

- WP1 Project Management
- WP2 Network activities
- WP3 Information and Access
- WP4 Semantic Access and Integration

² Note that EUscreen consortium members are active contributors to the technical Work Packages of Europeana V1 (the core project).



- WP5 Use Case development
- WP6 Validation of applications
- WP7 Awareness and Dissemination

The main structure of the project management structure can be seen in the diagram below.

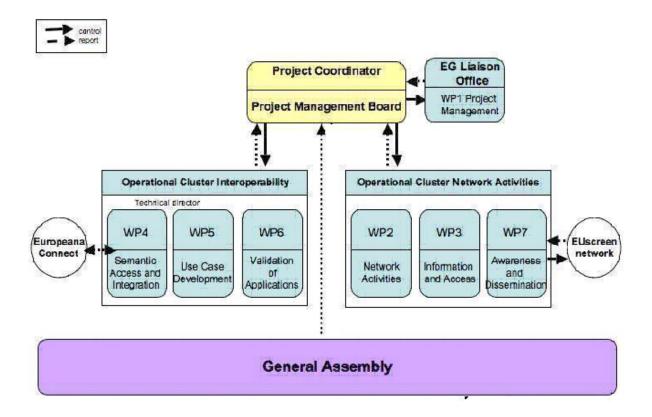


Figure 1. Project management structure

The work plan reflects a step-by-step approach towards the launch of the online portal. The step-wise approach does not indicate that each work package will only begin once the previous one has been terminated, since several WPs commence simultaneously and will feed into each other. To help manage and organise the process, the 36 months work plan is structured into four phases. These four (interrelated) steps will be completed in a cycle as detailed below:

- 1. User requirements and metadata schema definition M1-M8
- 2. Interoperability guidelines and system development M1-14
- 3. First integrated system and fist user scenario field trials M15-22
- 4. Feedback, adjustment and second user scenario field trials: M23-36



	Name		Key outcomes
A	Initial investigations and project establishment	Milestone 1	Project Website, Quality Assurance Plan, User Group Definition, First assessment of metadata standards used.
В	Requirements defined for first version of the portal		D5.2 Initial user requirements (M6)
С	Interoperability guidelines and system development	Milestone 2	Definition of the EUscreen interoperability guidelines (including common metadata schema) and Functional specifications. Definition of content selection policy. Delivery of D3.1 Content selection, metadata and technical handbook and glossary. After assessment of metadata schema and regional workshops.
D	First version of the Euscreen portal	Milestone 3	Launch of first integrated EUscreen portal, including securing full interoperability with Europeana. Delivery of D4.3 First version of the EUscreen system (M14). First batch of items online. First user scenario field trials.
Е	Feedback, Adjustment and second user scenario field trials	Milestone 4	Results from first field trials are studied and incorporated in updated EUscreen portal. Second batch of items online. Second round of field trials. Establishment of the EUscreen foundation.
F	Best practice definition and Completion	Milestone 5	Results of second field trials incorporated in definition of Best Practice. Delivery of EUscreen core collection and Final Conference.

Cardinal, overarching activities regarding content selection (notably WP3) and networking activities (WP2) run in parallel to these phases. Each phase finishes with a major milestone, signed off by the Project Management Board. All the major deliverables are tied to milestones, to facilitate technical and Consortium management, risk assessment and planning any corrective action.

1.3 EUscreen and eContentplus

The overall aim of the eContentplus 2008 programme is 'to make digital content in Europe more accessible, usable and exploitable'.

Action 5.1 Best Practice Networks for interoperability of digital libraries aims at improving interoperability of digital libraries held by museums, archives and libraries across a large numbers of EU member states making them accessible through Europeana. Moreover the case for digital libraries is to support Europe to be present in the cultural and creative industries of the 21st century; to enable development of value-added services for research, learning and leisure; and to allow citizens to access collective European heritage. In order to be able to achieve this more content should be prepared for inclusion in Europeana.

Finally, a Best Practice Network for interoperability of digital libraries should address issues relating to standard-based interoperability between digital objects and collections and cross-cultural search and retrieval of digital content held by major cultural institutions.

EUscreen is of direct relevance to these aims as:



- EUscreen brings together a critical mass of already digitised television archive content coming from across Europe, able to constitute a true European data collection.
- The content will be made available through Europeana; the two metadata sets will be made interoperable (supporting syntactic, semantic and multilingual interoperability). The content itself is of enormous public interest. Television images are witnesses of our past and present and, as such, they are indispensable components of national identity. At the same time television images give meaning to our place in the 'global village' and in the European public sphere. The television archive content that EUscreen will offer represents access to the cultural history (and memory) of European nations (and collective European experience).
- EUscreen creates access to this content through a multilingual portal supporting the languages of the content providers in the consortium, also ensuring interoperability with other collections.
- Usability of the selected content will be enhanced through the development of online tools for specific user groups in four fields: (1) research, (2) learning, (3) leisure/culture heritage and (4) creative reuse. These will be tested and provided as best practice applications for using digital audiovisual (broadcast) material.
- The content will have rich metadata, based on commonly developed metadata schema.
- The EUscreen portal will be based upon established standards and offers good and efficient search capabilities at a cross-European level for well-defined user groups that will be supported to actively engage with the selected content.
- The access to the EUscreen data is free. In order to deal with copyright issues in a sensible manner it will use the expertise gained with the Video Active project. To cope with matters of restrictions it uses a flexible technical architecture, allowing material to be physically located in any of the partners' locations as well as supporting streaming from the central website server. Besides this pragmatic approach, EUscreen will develop strategies and solutions for dealing with complex right issues.
- It is innovative in that it enables a truly European cross-cultural exploration of a huge amount of audiovisual content, while at the same time facilitating the exploitation of information and intelligence provided by users. This requires technology to support interoperability and creative participation.



2 Consortium

The EUscreen consortium consists of 28 core partners and 7 associate partners from 19 European countries. This includes stakeholders, technology partners, libraries, and academics with expertise in e-learning, research, contextualization and the development and participation of user groups. The archives supply their digital content; the universities are the link to endusers and play an important role in the development of a strategy for selecting the content and in delivering the necessary contextual information. The ICT developers will be responsible to supply the technology needed. The project partners operate at national and international levels and their expertise and backgrounds are complementary. This will guarantee the uptake ('multiplier effect') of the proposed solutions. Networking activities are developed to share the expertise available in the consortium both among its members and among relevant parties outside the consortium.

2.1 Core consortium

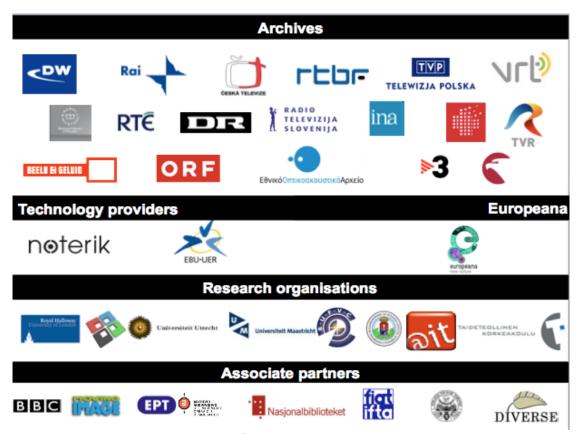


Figure 2: EUscreen consortium

EUscreen consists of 28 partners playing the following roles:

• Utrecht University is the overall **coordinator** of the project.



- Seventeen archives are represented in the consortium: <u>Danmarks Radio</u>, <u>Deutsche Welle</u>, <u>Hellenic National Audiovisal Archive</u>, <u>Institut National de l'Audiovisuel</u>, <u>Cinecittà Luce</u>, <u>Osterreichische Rundfunk</u>, <u>Radiotelevisione Italiana</u>, <u>Radio-Télévision Belge de la Communauté Française</u>, <u>Raidió Teilifís Éirann</u>, <u>Radiotelevizija Slovenija</u>, <u>Kungliga Biblioteket</u>, <u>Televisió de Catalunya</u>, <u>Telewizja Polska</u>, <u>Televiziunea Română</u>, <u>Vlaamse Radio & Televisie</u>, <u>Ceská Televize</u> and <u>Nederlands Insituut voor Beeld en Geluid</u>. Seventeen archives deliver content and metadata. Some of these also have responsibilities for WPs, such as Luce (WP2 Network Activities), KB (WP6 Validation of Applications) and S&V (WP7 Awareness and Dissemination).
- Eight research partners (ATiT, ELTE, National Technical University of Athens, Royal Holloway University of London, TAIK, Utrecht University, Maastricht University and British Universities Film & Video Council), three of which are responsible for developing content selection policy, for a review and revision of the Video Active metadata schema and content selection policy as well as for contextualisation (RHUL in co-operation with BUFVC, UU and MU). The research partner TAIK is responsible for the uptake of IPR issues and developing a strategy for short-term, mid-term and long-term solutions. ELTE is responsible for the development of scenarios for use cases of cultural television content in different contexts. The research partner ATiT contributes to developing these scenarios for use cases in educational contexts in particular. The technical research partner (NTUA) is responsible for establishing the technical infrastructure and the requested levels of interoperability, also with Europeana, including semantic processing.
- Two technical partners (<u>European Broadcasting Union</u> and <u>Noterik</u>); Noterik is responsible for developing EUscreen web services and system integration (as part of WP4) and EBU for developing guidelines for metadata interoperability and integration (as part of WP3).
- **Participant Europeana** (<u>Europeana Foundation</u>) provides a gateway to the cultural heritage network and contributes to the establishment of interoperability.

2.2 Associated members and Advisory board

EUscreen has eight associated members: <u>FIAT/IFTA</u>, <u>AAMOD</u>, <u>Politechnico di Torino</u>, <u>ERT</u>, <u>DIVERSE</u>, <u>Nasjonalbiblioteket</u> Norway, <u>Memoriav</u> and <u>BBC</u>.

In addition the project has agreed on the installation of an **Advisory Board**. This group meets twice during the duration of the project, with a formal agenda related to the project progress and to exploitation trends and questions. As the members of the Advisory Board represent important areas in the field on which EUscreen plays, they are expected to offer reality checks and to advise independently in all relevant matters that EUscreen will address. Members of the advisory board are: Peter Kaufman (Intelligent TV), Harald Mayer (Joanneum Research), Sue Malden (FOCAL), Georg Eckes (European Film Gateway), Poppy Simpson (BFI), Paulo Villegas (Telefonica) and Bert Mulder (The Hague University).



3 Project Results/Achievements

The project marks the following milestones:

Milestone number	Milestone name	Date	Means of verification
M1	Initial investigations and project establishment	M3	Project Website, Quality Assurance Plan, User Group Definition, First assessment of metadata standards used.
M2	User requirements and metadata schema	M8	Definition of the EUscreen interoperability guidelines (including common metadata schema) and Functional specifications. Definition of content selection policy.
M3	Integrated system and fist user scenario field trials	M14	Launch of first integrated EUscreen portal, including securing full interoperability with Europeana. First batch of items online. First user scenario field trials.
M4	Feedback, Adjustment and second user scenario field trials	M24	Results from first field trials are studied and incorporated in updated EUscreen portal. Second batch of items online. Second round of field trials. Establishment of the EUscreen foundation.
M5	Best practice definition and completion	M36	Results of second field trials incorporated in definition of Best Practice. Delivery of the EUscreen core collection of European television heritage. Final Conference.

Table 1: EUscreen Milestones

In the second year of EUscreen we proceeded to work on the first version of the EUscreen system and worked towards milestone 3 and 4. This includes the following key elements:

- First version of he EUscreen system (D4.3)
- Report on EUscreen web services (4.4)
- Review of IPR limitations and recommendations (D5.2.1)
- User scenarios in learning, research and leisure/cultural heritage and open cultural production (D5.3)
- Online access to Audiovisual Heritage Status Report (D7.6.1)
- The Interoperability Guidelines (D4.5)
- Initial Report on System Evaluation (D6.1)
- Updated Dissemination Plan (D7.4)
- Second version of the EUscreen system (D4.6)
- Updated User scenarios (D5.4)
- Preparation of e-journal (D3.2.1)
- Progress report 4 (D1.2.4)
- Evaluation Report on First Field Trails for Use Case Scenarios (D6.2)

A beta version of the portal was launched in January 2011; thereupon use case scenarios were developed to explore the potential use of EUscreen content in the focused fields of learning, research, leisure and open cultural production (remix). These were included in the user testing carried out in Spring 2011 and reported to be assesses with a view to the revising of the



system by the end of the second year (ready to be launched on 27 October 2011). In the meantime editorial strategies were developed to contextualize the EUscreen content. They include the preparation of curated Virtual Exhibitions, on two topics, History of European Television and Being European, for each of which content providers select material from their holdings. TAIK designed the necessary wireframes to visualize the graphic design.

Also the EUscreen e-journal has been prepared in editorial terms and in terms of design (by TAIK). Furthermore, EUscreen organised three workshops as part of its networking activities as well as an international conference. One workshop addressed IPR legislations in the audiovisual sector and discussed an inventory executed by TAIK among the project members to assess the levels of access to content that EUscreen offers as well as the IPR issues involved. The international conference on the topic of Use and Creativity, held in Stockholm, also included two workshops, one on the exploitation of EUscreen services in the focused fields that the project defined, the other on sustainability of audiovisual digitized content.



4 Target Users & their Needs

Various user groups will benefit from the outcome of the project as described in the table below that summarises the target users and their needs.

The country coverage for all target users includes the countries covered by the EUscreen consortium; i.e. 18 member states plus Switzerland. This number is to be extended as the network grows.

Target user description	Needs	Involvement & Role
PUPILS AND TEACHERS IN PRIMARY EDUCATION	Studying digital resources related to courses. Knowledge about how to look for audiovisual information on the Internet for both pupils and teachers. By assisting in finding attractive material for that age, pupils will learn how and what to look for when audiovisual material is needed in education. Teaching staff explores media resources in order to use them in support of their teaching practise, and to recommend their usage to pupils.	External experimental groups
STUDENTS AND TEACHERS IN SECONDARY EDUCATION	Knowledge about how to find and use audiovisual material for homework, and research projects. Selecting and grouping information about relevant audiovisual material will help this target group to get used to on-line audiovisual archives in learning. The end users are obviously the students in the schools; usage of pedagogical materials is guided by the teachers looking for suitable media material on subjects such as history, art, media and so forth and in language teaching.	External experimental groups
HIGHER EDUCATION AND ACADEMIC RESEARCH	Studying differences between various cultures, comparative research on media coverage. Large amount of audiovisual material with versatile metadata easy to use for research. EUscreen will allow academic researchers to find any programme content they are looking for in the catalogues of any of the project partners' archives. This will allow them to access that content via traditional or online routes. Where programme content is available online it will be in a high quality format, in its original form, systematically searchable and supported by contextual information.	Partner in the consortium (academics). External consultation (ETHN). External experimental groups (higher education and academics).
MEDIA PROFES- SIONALS	Cross cultural research, knowledge about a foreign country's media scenery. By making available a large number of audiovisual material of many country's television programmes, in different languages, media professionals will be able to compare coverage of various events in different countries, assess each country's media policies, get information background of	External group, part of network.



	specific events, etc.	
GENERAL PUBLIC	Better knowledge of a European country. By having access to a foreign country's television programme in its own language, virtual and real travellers will be better informed about the cultural life of the given country.	Registered users on the EUscreen portal
FUBLIC	Creative use and remix into user-generated content.	External experimental groups.
CULTURAL	Increase revenues of their copyrighted material in new	
HERITAGE	publications (documentaries, textbooks, etc.);	Partners in the
INSTITUTIONS	Combine wide ranges of different knowledge sources to	consortium
(E.G.	establish new insights;	Active
MUSEUMS,	Enabling the creation of large inter-archival exhibitions	organisations in
CULTURAL	thus adding new meaning or making them accessible to a	Europeana
FESTIVALS,	different or larger audience;	Laropeana
LIBRARIES)	different of farger additioned,	

Table 2: Summary of target users and their needs

4.1 Critical Mass

EUscreen not only has major networking capacity, it also brings together an unrivalled collection of European audiovisual archive material. This will ensure the critical mass necessary to demonstrate the added value of using the proposed standards to the collection owners throughout Europe. It is the very fist time this collection will be brought together.

The more than 180 collections of the 17 archive partners plus Memoriav and the BBC comprise 20,5 million items of video and radio programmes, and another 10,8 million stills. They are involved in migration projects and currently exploring how to make (parts of) their rich assets accessible through the Internet. Some of the archives are true frontrunners in this field; others have just started this activity. The amount of content to be contributed through EUscreen can be seen as a critical mass considering the fact that the bulk of archival collections still has not been digitised or cannot be made available before copyright agreements have been drawn up. EUscreen aims to make >35.000 television items available through the EUscreen portal and through Europeana. And additionally, thousands of digitised documents and stills that provide contextual information, the so-called 'EUscreen core collection of European television heritage'. This constitutes a critical mass for making a proof of concept for unified access to digitised items (using EBU Core as one of the basic components).

4.2 User group definitions and initial user requirements

The Deliverable D5.1 *User group definitions and initial user requirements* covers issues related to the general definition of the user groups that are targeted as the most likely users of the EUscreen portal. The aim of this definition is to be able to extract the functional user requirements for the front-end stemming from the specific use cases related to these user groups, the technical development has to comply with.



With a view to the development of use case scenarios we have defined four focused fields (Learning, Research, Leisure and creative-reuse) each listed with more specified type of users. In total 15 different groups of users were identified:

Learning

- Pupils of primary/secondary education
- Parents of pupils of primary/secondary education
- Teachers of primary/secondary education
- Curriculum developers of primary/secondary education
- Policy makers of primary/secondary education

Research

- Academic researcher affiliated
- Academic researcher non affiliated
- University student
- University professor

Leisure/cultural heritage

- General user
- Librarian
- Curator
- Archivist

Creative re-use

- Artist
- Media professional

The methodology of use case definition and user scenario development was exposed and explained. An itinerary from use cases to user scenarios was drawn together with a template for user scenarios. Functional user requirements were extracted from results of research and experiments (for instance in focus group meetings) and also from previous experiences of EUscreen partners. A list of main use cases and technical requirements was built including a prioritization of functional user requirements to help starting system design, i.e. defining technical specifications and designing wireframes.

Furthermore, a market analyses was conducted (by Sound and Vision), providing more insight in expectations of users.

Thereupon for each of the above-mentioned focused fields several use case scenarios were developed. For each focused field one was chosen to be included in the user testing. On top of that a remix workshop was carried out in Helsinki to explore the possibilities and conditions of re-using audiovisual content.



5 Underlying Content

5.1 EUscreen architecture

The technical standards enabling interoperability form an important dimension of the technical achievements. In order to achieve semantic interoperability, a common automatic interpretation of the meaning of the exchanged information is needed, i.e. the ability to automatically process the information in a machine-understandable manner. The first step of achieving a certain level of common understanding is a representation language that exchanges the formal semantics of the information. Then, systems that understand these semantics can process the information and provide web services like searching, retrieval.

Many different metadata schemas or in a broader sense, sets of elements of information about resources, are being used in this domain, across a variety of technical environments and scientific disciplines. EUscreen has developed an ingestion mechanism providing a user friendly environment that allows for the extraction and presentation of all relevant and statistical information concerning input metadata together with an intuitive mapping service that uses the EUscreen Metadata schema, and provides all the functionality and documentation required for the providers to define their crosswalks. The workflow (Figure 2) consists of four phases, each responsible for specific services to ensure the quality of the ingestion process:

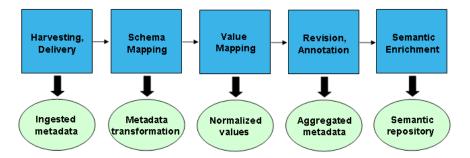


Figure 3. Metadata Ingestion Workflow

The Workflow consists of five steps. The first is *harvesting/delivery*, which refers to collection of metadata from content providers through common data delivery protocols, such as OAI-PMH, HTTP and FTP is implemented as a web service, where authentication is required to perform a series of tasks that correspond to work flow steps. The harvesting service is an application written in the Java and hosted on a web server by the Tomcat servlet engine. Data is imported into a PostgreSQL database in xml format. Once uploaded, the xml structure is parsed and represented in a relational database table.

Second is the *Schema Mapping* that aligns harvested metadata to the common reference model. A graphical user interface assists content providers in mapping their metadata structures and instances to the EUScreen metadata model, using an underlying machine-understandable mapping language. It supports sharing and reuse of metadata crosswalks and establishment of template transformations.



The next step is *Value Mapping*, focusing on the alignment and transformation of a content provider's list of terms to the authority file or external source introduced by the reference model. It provides normalization of dates, geographical locations or coordinates, country and language information or name writing conventions.

Revision/Annotation, being the fourth step, enables the addition of annotations, editing of a single or group of items in order to assign metadata not available in the original context and, further transformations and quality control checks (e.g. for URLs) according to the aggregation guidelines and scope.

Finally, the *Semantic Enrichment* step focuses on the transformation of data to a semantic data model, the extraction and identification of resources and the subsequent deployment of an RDF semantic repository.

5.1.1 EBUcore, Solr and Multilinguality

In order to achieve semantic interoperability with external web applications, EUscreen metadata are exported in EBUcore [5], which is an established standard in the area of audiovisual metadata. EBUcore has been purposefully designed as a minimum list of attributes to describe audio and video resources for a wide range of broadcasting applications including for archives, exchange and publication. It is also a Metadata schema with well-defined syntax and semantics for easier implementation. It is based on the Dublin Core to maximize interoperability with the community of Dublin Core users. EBUcore expands the list of elements originally defined in EBU Tech 3293-2001 for radio archives, also based on Dublin Core. The metadata is stored in RDF format to improve the search functionality and enable the alignment with external resources.

In EUscreen portal, retrieval is performed using the Solr framework. Solr is an open source enterprise search platform from the Apache Lucene project. Its major features include powerful full-text search, hit highlighting, faceted search, dynamic clustering, database integration, and rich document handling. Providing distributed search and index replication, Solr is highly scalable. Solr uses the Lucene Java search library at its core for full-text indexing and search, and has REST-like HTTP/XML and JSON APIs that make it easy to use from virtually any programming language. Solr's powerful external configuration allows it to be tailored to EUscreen retrieval application without Java coding, and it has an extensive plug-in architecture for more advanced customization.

Finally, EUscreen has created a SKOS multilingual thesaurus (15 languages) based on the subject terms of IPTC standard and the geographical places of GeoNames. The thesaurus supports multilingual retrieval services and links to open data resources that could be used for enrichment and to contextualize the collection.

5.1.2 Video Play out

EUscreen requires content providers to provide MPEG 4 part 10 (normally known as H.264). EUscreen advises to encode in a bit rate between 500 and 1000 kb/sec, as this resembles SD quality video. Since the client playback method will be a Flash player with h.264 streaming,



EUscreen demands that providers have streaming servers that are capable stream videos to a Flash client. In practice this means using one of the available Flash streaming servers. This will leave room for the content providers themselves to add html5 or Silverlight server programs to create a 100% coverage of the possible technologies. EUscreen supports four scenarios:

- 1. Content provider transcodes and files are hosted by service provider Noterik
- 2. Content provider transcodes and the content provider hosts
- 3. Noterik transcodes and Noterik hosts
- 4. Noterik transcodes, and the content provider hosts

5.1.3 The Mapping Tool

Metadata mapping is a crucial step of the ingestion procedure. It formalizes the notion of 'crosswalk' by hiding technical details and permitting semantic equivalences to emerge as the centre piece. It involves a graphical, web-based environment where interoperability is achieved by letting users create mappings between input and target elements. User metadata imports are not required to include the adopted XML schema. Moreover, the set of elements that have to be mapped are only those that are populated. As a consequence, the actual work for the user is easier, while avoiding expected inconsistencies between schema declaration and actual usage.

The structure that corresponds to a user's specific import is visualized in the mapping interface as an interactive tree that appears on the left hand side of the editor (Figure 3). The tree represents the snapshot of the XML schema that the user is using as input for the mapping process. The user is able to navigate and access element statistics for the specific import.

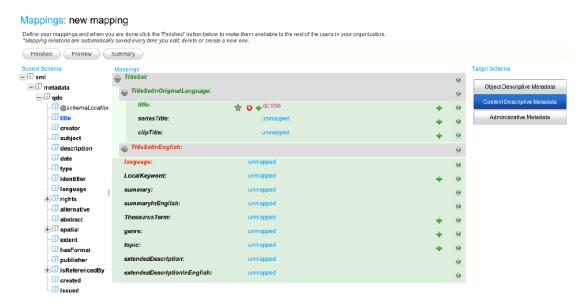


Figure 4. Mapping Interface

The interface provides the user with groups of high-level elements that constitute separate semantic entities of the target schema. These are presented on the right hand side as buttons, which are then used to access the set of corresponding sub-elements. This set is visualized on



the middle part of the screen as a tree structure of embedded boxes, representing the internal structure of the complex element. The user is able to interact with this structure by clicking to collapse and expand every embedded box that represents an element along with all relevant information (attributes, annotations) defined in the XML schema document. To perform an actual mapping between the input and the target schema, a user has to simply drag a source element and drop it on the respective target in the middle.

The user interface of the mapping editor is schema-aware regarding the target data model and enables or restricts certain operations accordingly, based on constraints for elements in the target XSD. For example, when an element can be repeated then an appropriate button appears to indicate and implement its duplication. User's mapping actions are expressed through XSLT style sheets, i.e. a well-formed XML document conforming to the namespaces in XML recommendation. XSLT style sheets are stored and can be applied to any user data, can be exported and published as a well-defined, machine understandable crosswalks and shared with other users to act as template for their mapping needs. Features of the language that are accessible to the user through actions on the interface include:

- string manipulation functions for input elements;
- 1-n mappings;
- m-1 mappings with the option between concatenation and element repetition;
- structural element mappings;
- constant or controlled value assignment;
- conditional mappings (with a complex condition editor);
- value mappings editor (for input and target element value lists).

5.2 EUscreen front-end design

Representatives of the four primary user groups, e.g. secondary education, academic research, the general public and the cultural heritage domain were consulted in order to define user requirements and design front-end functionality. The main challenge for the portal's front-end is to include advanced features for specific use cases without overwhelming the users with a complex interfaces. The Helsinki University of Arts and Design adapted a component-based conceptual model that accommodates this requirement (Figure 5.)





Figure 5. EUscreen Homepage.

Implementation of the front-end services is not done in the traditional way using serverside programming language like php, java or asp. EUscreen implemented a 'server-less' front-end APIs where a javascript/flash proxy system handles the communication with the back-end services. The result will be a front-end system that can be 'installed' on any plain html web server without any need for server-side technologies. This means it can be hosted and moved to any location or multiple locations. It also means partners can use these APIs to integrate parts of the functionality in their own intranet and internet systems using simple 'embed' ideas. This method is gaining more ground, for example companies like Google who provides these types of APIs for services like Google Maps.

5.3 Content selection guidelines and metadata definition

The content selection policy for EUscreen is divided into three strands. These are:

1. **Historical Topics:** 14 important topics in history of Europe in the 20th Century. (70% of EUscreen content).



Arts and Culture	National Holidays, Festivals, Anniversaries, Annual Events	
Disasters	Politics and Economics	
Education	Religion and Belief	
Environment and Nature	Society and Social Issues	
Health	Transportation, Science and Technology	
Lifestyle and Consumerism	Wars and Conflict	
The Media	Work and Production	

Figure 6. Historical Topics

- 2. **Comparative Virtual Exhibitions**: These will take a more collaborative and comparative approach to selecting and presenting audio-visual material (10% of EUscreen content not included elsewhere in EUscreen). Two themes have been defined: 1. History of European Television and 2.Being European.
- 3. **Content Provider Virtual Exhibitions**: Each content provider will be able to select their own content, and support it with other digital materials and textual information, on a subject(s) or topics(s) *of their own choosing*. (20% of EUscreen content not included elsewhere in EUscreen).

The actual specific amount is dependent on how many items of content each provider has promised to EUscreen, and this is discussed and monitored in liaison with. Content providers select their own content for their own exhibition that will reflect the Content Providers' own interests and archival strengths. The content is supported by a range of contextual information (including still images, documentation and text).

EUscreen metadata schema includes 39 elements (18 mandatory elements) that are based on EBUcore schema that are backward compatible with the Video Active schema and fully mappable to EDM 5.2.

Programme classification in EUscreen is broken down into seven main headings for reasons of simplicity and scalability. The details of the subheadings for each field are below.

• **News:** Including news bulletins, news magazine programme, politics programmes, current affairs, newsreels, discussion programmes about events in the news, feature programmes about events in the news, elections, party conferences, political speeches, political broadcasts, live (outside broadcasts) of state occasions.



- **Drama/Fiction:** Including series drama, serial drama, single drama (teleplays), cop/police/detective/crime dramas, soap opera, telenovela, family sagas, docudrama/drama-documentary, animated drama, telefantasy and science fiction.
- Entertainment and performing arts: Including comedy, stand-up comedy, situation comedy, sketch shows, political comedy, satire, cartoons (for adults and/or children) quiz and game shows, celebrity talk shows, variety shows, cabaret, dancing shows, talent competitions, music programmes and concerts (popular and classical), ballet, pantomime and mime.
- **Factual Programming:** Including documentary (observational/fly-on-the-wall), 'reality' television, docu-soap, historical programmes, science programmes, natural history programmes, biographical documentaries, government information films, documentaries about the arts, travel programmes, lifestyle programmes about shopping, cookery, fashion, homes, gardens and hobbies.
- Advertisements: Including all commercial advertisements for consumer products and services.
- **Interstitials and trailers:** Including trailers for future programmes and events, and channel idents and logos, continuity announcements.
- Sport: Including regional, national and international sporting events



6 Summary of Activities

The project has had a very good second year. The activities that have taken place in the second year of the project are mostly directed towards Milestone 3: an integrated system and first user scenario field trials. The launch of the first integrated EUscreen portal, including full interoperability with Europeana, was online in October 2011.

First user scenarios in the focused fields were made ready and assessed and tested in field trials (WP5 + WP6).

The approaches to the Virtual Exhibitions have been developed as well as their graphic design to be further assessed and elaborated. Content has now been selected for the Comparative Virtual Exhibitions and is ready to be implemented early 2012.

The E-journal (form, business model etc.) has been developed. Editorial work has now started to deliver a first issue early 2012.

Additionally dissemination and network activities are ongoing. EUscreen will keep on maintaining clustering activities with Europeana and FIAT/IFTA.

In the third year of the project EUscreen will establish the EUscreen foundation.

All consortium partners have engaged themselves with the project. The feeling in the project is that a lot has already been achieved. This holds especially given the complexity of bringing such a large number of partners together and the complexity of dealing with different archives, and cultural traditions. Also the selection policy on content clearly had to be channelled more then might have been understood from the outset given the complexity of rights in individual partner archives. A lot of effort has been put into investigations into the content providers' holdings, the proposed selection strategy and into supporting them with organizing their internal work flow. Helpdesks are made available to consult on content/metadata issues and on technology (working with the tools). Content providers have worked hard to meet the demands of the selection policy, selecting, uploading and ingesting content and metadata.

6.1 Activities in the third year

- Report on semantic interoperability with Europeana (D4.8)
- Final version of the EUscreen system (D1.2.5)
- EUscreen Association (D7.5)
- Evaluation report on second trials for use case scenarios (D6.3)
- Review of IPR limitations and recommendations (D5.2.2)
- Online Access to Audiovisual Heritage Status Report (D7.6.2)
- Final Report, including Summary of Intern. Conferences and Working Group reports and Final report on EUscreen core collections (D1.5)
- Final Financial Statement (D1.6)
- Final report on the portal and the web services (D4.10)



- Best practice applications (D5.5)
- Final report on system evaluation (D6.4)
- Final exploitation report (D7.7)
- Final dissemination report (D7.8)
- Multimedia Project Presentation (D7.9)
- Delivery E-journal (D3.2.2)



7 Impact & Sustainability

7.1 Dissemination

Deliverable D7.3 First Communication and Dissemination Plan listed the planned dissemination activities and its execution. A second deliverable, D7.4. Updated Dissemination Plan, describing the dissemination strategy and activities within EUscreen followed in April 2011. The First Dissemination Plan contained the initial planning of the activities and strategies and provided the baseline for the evaluation of the first 18 months of EUscreen. D7.4. reported on the findings of this evaluation.

The table below shows the reach of the EUscreen Network, which is continually expanding as the project proceeds.

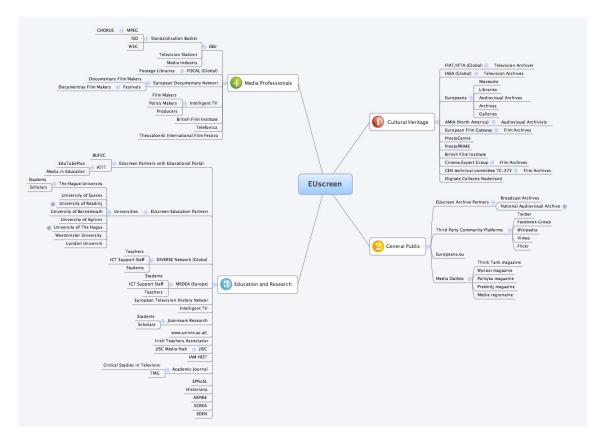


Figure 7: Reach of EUscreen network

Regarding networked activities we have set up four working groups on

- 1. metadata standards and interoperability,
- 2. rights issues,
- 3. digitisation policies and guidelines and
- 4. new service development and business models.

Each consortium partner joined at least one working group.



7.1.1 Execution

The First Dissemination Plan contained two matrices that showed the impact of the different channels on the different user groups and stakeholders. These are also included here and updated where necessary with experiences from the lessons learned.

White = no impact / Grey = some impact / Black = high impact

User group	Primary education:	Primary education:	Secondary education: students	Secondary education: teachers	Higher education/academic	Media professio- nals	Cultural heritage institutions	General public
Means	pupils	teachers	Statements	teachers	research	iidis	Institutions	
Project								
website								
RSS feeds/								
Mailing								
lists								
Portal								
Flyers								
Promotional								
video								
Multimedia								
project								
presentation								
Twitter								
Facebook								
Wikipedia								
YouTube								
Research/								
educational								
networks								
General								
public								
networks								
Media								
professional								
networks								
Cultural								
Heritage								
Networks								
Conferences								
&								
Workshops								
Events								
Publications								
Awards								

Table 3: Overview of which dissemination mean addresses which target group



A similar matrix was constructed for the relevant stakeholders, see below. White = no impact / Grey = some impact / Black = high impact

Stakeholders	Content providers	Standardization bodies	Research partners
			The second of th
Means			
Project website			
RSS feeds/			
Mailing lists			
Portal			
Flyers			
Promotional video			
Multimedia project			
presentation			
Twitter			
Facebook			
Wikipedia			
YouTube			
Research/			
educational			
networks			
General public			
networks			
Media professional			
networks			
Cultural Heritage			
Networks			
Conferences &			
Workshops			
Events			
Publications			
Awards			

Table 4: Overview of which dissemination mean addresses which target group

The overview shows that some user groups can only be reached by a limited number of channels. This is the case with pupils and students in secondary. However, students and pupils are highly influenced by their teachers, who in return are influenced by educational networks and bodies. The general public is also addressed through a limited set of channels (mainly social media and the portal), but these channels are heavily used by the general public (see section 2.5 Social Media) and provide enough possibilities for EUscreen to reach this user group. Also, the new marketing plans (section 4.2. New Marketing Plans) will focus on increasing the efficiency of the social media channels. Stakeholders and user groups like researchers, media professionals and cultural heritage institutions on the other hand, can be addressed easily through many channels.



7.1.2 Organisation

An editorial board was formed during the first six months of the project, consisting of partners with more than two months of dissemination. The editorial board is chaired by the WP7 leader and is responsible for updates about EUscreen on the project website, the network activities on the social media platforms and gathering relevant news and updates from other related projects, networks and institutions. All partners are invited to contribute to the project website, papers, conferences and workshops and are asked to undertake at least one dissemination activity per user group.

7.1.3 Measuring impact

The project has described a number of success indicators relating to accessibility and networking. Underneath a description of the methods that will be used to measure these indicators.

- 1. Google analytics: monitoring the number and behavior of visitors on the portal and things like click-troughs from Europeana, Google, Wikipedia, etc.
- 2. Social media: monitoring the members on Facebook and the number of followers on Twitter
- 3. EUscreen network: monitoring the statistics from the organized conferences, like the number of conferences and workshops, the number of visitors and the number of contributions.
- 4. Visibility of EUscreen: keeping track of publications in journals, print and web references and contributions to conferences.

Furthermore, the project published its deliverable *D7.6.1*. Online Access to Audiovisual Heritage Status Report³ in January 2011, which gives an overview of the accessibility of audiovisual heritage online and measures how the landscape in which EUscreen is developed is changing in the course of the project. It also gives an enumeration of neighbouring projects and possible partners for further development.

7.1.4 Workshops in year 1

In the second year, two workshops were organised within the framework of the second international EUscreen conference on use and creativity, on September 16th at the National Library in Stockholm, Sweden:

- 1. EUscreen user community. How EUscreen services can be exploited in learning, research, leisure/cultural heritage and creative reuse.
- 2. Funding opportunities and sustainable business models for the digitisation of audiovisual material.

³ Referred to as D7.6.1. from this point on.



On the entire conference, up to 120 attendees visited and engaged in diverse discussions on the conference's topics. From the EUscreen partner network, the European Commission, JISC, and PrestoCentre Speakers held presentations that stirred lively discussions in an audience coming from all over Europe and from the different domains of EUscreen's user focus. A full report and all the presentations and video recordings can be found on-line at blog.euscreen.eu.

Besides workshop there were clustering activities with Europeana and FIAT/IFTA. EUscreen representatives are actively participating in the Europeana Data Model Group, the Communication Group and in the IPR Group, as well as the Cinema Expert Group and the CEN TC 372 Metadata Standards for Cinematographic Works group. Additionally, EUscreen organised a workshop during the 2011 FIAT/IFTA World Conference in Turin and launched its implementation of Linked Open Data at the International Conference on Theory and Practice of Digital Libraries in Berlin.

7.2 Rethinking Television History: The European Dimension

In offering a flexible platform to which new collections can be added, EUscreen contributes to the presentation of Europe in the digital cultural and creative industries, stimulating use and reuse of enriched content on a permanent base. EUscreen contributes to the impact and visibility of Europe's cultural heritage material in the public domain via a web portal. Member states have invested human and financial resources into digitisation. This investment will now become rewarding as access is created and usability is stimulated and improved. The coordination, integration and interoperability of the heritage institutes participating in EUscreen will lead to a system of European cultural resources, and will underpin standards (notably EBU core) and interoperability. Moreover the envisioned large-scale accessibility of television archive content, the user-led demand approach together with the development of use cases in four different fields will enable comparative and integrative research into the history of television in Europe as well as interactive and creative participation (information sharing). Thus the project will be able to contribute to increasing cross-cultural knowledge in a field that is still underdeveloped. This is an important step towards a truly European cultural knowledge arena.

7.3 Exploitation

Task 2.3 includes a study in possible business models. One of the building blocks is the SWOT analysis (below), based on the results from the analysis of the trends in online media consumption, the inventory of video platforms and the responses to the focus groups and questionnaires.

Strengths	Weaknesses		
Content:	Content:		
 A heterogeneous television collection across language boundaries Offering unique content which is not available elsewhere 	Limited content offered (EUscreen focuses on European television, people looking for content from other continents might be disappointed)		
 Multilingual access 	 Discrepancies in content offered per 		



- Metadata from reliable sources Technology:
 - An interoperable platform (easy to add new collections) for partners
 - A variety of search options
 - Fully interoperable with Europeana

Context:

- Opportunities for in-depth, comparative academic research on European television history
- Stimulate awareness of the role of television in the construction of European cultural identities
- Dissemination of knowledge in ejournal

Collaboration:

- Network of leading audiovisual archives
- A consortium that combines expertise on various areas and therefore reduces costs and increases efficiency

- archive and the amount of available content per country (makes comparison of European material difficult)
- Lack of multilingual access to content through subtitles
- Lack of multilingual access when parts of the metadata are only available in English and the original language

Technology:

- Technical dependencies and durability (relying on technical developments and architecture)
- Standardisation and interoperability

Context:

• Lack of time to contextualise all the content

Collaboration:

• Reaching the milestones can be jeopardised by the large amount of partners (27 partners from 19 countries and three year time span)

Opportunities

- Growing market with users who have access to the Internet.
- Growing number of consumers of online video with an interest in audiovisual heritage material
- Growing need for contextualised materials.
- Only platform besides Video Active in the Market Survey that offers multilingual access, interoperability, and contextualisation by partners (unique in the market)
- Considerable increase of associate content provider partners and increase of relevant content

Threats

- Intellectual Property Rights (complex rights issues for television material)
- Competition (other initiatives that offer a comparable service)
- Problems of long term funding (sustainability)

Table 5: SWOT analysis

There are various ways of defining and using a business model, but one model that is rapidly gaining in popularity both inside and outside the cultural heritage sector is the one that has been developed by Osterwalder and Peigneur. It combines multiple elements for previous business models and puts the user at the centre of the model.

Osterwalder defines a business model as follows: "[It] describes the rationale of how an organization creates, delivers, and captures value." He calls this the business model concept



- a useful tool for conceptualising ideas. It provides an organisation with a framework for defining the course of action for new projects. Osterwalder's model does not just focus on capturing economic value, but can also be used to visualise and incorporate social and cultural value. Also, the user is at the centre of this model. This means that the business model canvas by Osterwalder is a great tool to use for conceptualising business models for EUscreen, since "one of the guiding principles of EUscreen is to support user-led demand and interest for services and content as well as the development of scenarios for using this content in different contexts (research, learning and leisure and for the benefit of open culture production)." (EUscreen DoW, p.8). Task 2.3 defined a general business model for EUscreen, and possible revenue models are investigated. This forms the basis for the specific business model for EUscreen.

Osterwalder divides the business model concept in nine different building blocks, which together make up the business model canvas:

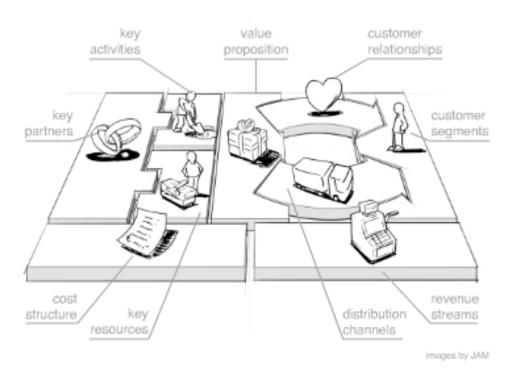


Figure 8: Osterwalder's business model canvas

Based on Osterwalder's canvas and building blocks mentioned above, the following general business model EUscreen can be developed:

KP	KA	YP	CR	CS
EUscreen consortium	Platform		Community	Education
members	management	Access to		
		interoperable,		Media profs
Software supplier /	Enriching audiovisual	multilingual,		



RR	Costs per content part Personnel costs	ner for digitisation and	storage		sibility / interaction wit hrough creative re-use	h archival audiovisual
KR Online platform Audiovisual content	•	nfrastructure of the plat	form and		•	
KR Europeana Online platform Partner websites	CS			RS		
CH CH		Online platform			EUscreen portal	

Table 6: Business Model Canvas for EUscreen.

From the overview of various revenue models (cf. Task 2.3) it has become clear that it is possible to implement a donation module into the platform itself, and that sponsoring or funding can continue to help sustain EUscreen. However, it can be expected that even though the basis of EUscreen is a free model, indirect revenue can be generated by providing information on the copyrights holders and links to the archives that can help with acquiring licenses and rights clearance for using the content outside of the EUscreen portal. Licensing is one of the most successful ways of gaining income for digital cultural heritage, therefore this indirect form of revenue might prove to be important for sustaining EUscreen.

Very few platforms use only one revenue model and well-known and large online video platforms like the Internet Archive, ITN Source, Getty Images and INA have even incorporated three or more. Unfortunately, it was not possible to gather a lot of numbers and figures concerning the amount of revenue that was generated by the platforms in this Market Survey. Therefore it is hard to say very concretely which ones seem to work the best. The important thing to take away from the analyses of the revenue models is that EUscreen will have to be creative, and that it is important to keep investigating various ways in which the platform can sustain itself when the funding period ends.



8 Conference Report: Second International EUscreen Conference on 'Use and Creativity'

In September, EUscreen held its second international conference, with a focus on use and creativity, to pose a number of key questions; how can the different intended user groups of EUscreen be involved and make creative (re-)use of the multitude of materials that are on the site? What are the best practices in the field of audiovisual presentation and education that we should draw on for inspiration?

EUscreen is a platform that strives to provide access and tools for different uses to different user and learning communities. The speakers at the conference reflected the variety of user groups and came from backgrounds as diverse as the archival community, the scholarly world, publishing, law, and government institutions.

8.1 The Archival Perspective: Providing & Curating

Various speakers from the archival community presented on the preservation practices necessary to bring archival materials out to the public through web transmittance. Roland Sejko gave a historical overview of the LUCE archive's holdings. He drew attention to the contents of their archives and the organisation's continued desire to collect and link them to material held in other archives. He also pointed out that a great deal of the archive content had never been used, which called attention to how such material could be used by researchers and the importance of promoting archive holdings to the wider academic community. Martin Bouda offered an insight into Czech Television's archive project for scanning their holdings and emphasised the requirement to preserve as well as to promote and enable access. This point was also raised by the Swedish Film Institute's Kaja Hedstrom, who presented a case study of a web platform. The Filmarkivet portal⁴ is aimed at a broad, generally interested audience who would - because of language constraints - mostly be confined within the borders of Sweden. The issue of language is one which is crucial for the EUscreen community as the project aims to find a solution for its different language sources and users.

Providing and curating the cultural heritage of Europe for a broad audience in inventive ways is a core task of Europeana. Aubéry Escande presented the various means in which a recent Europeana project drew upon user's participation to enhance its large collection of digital objects. As part of this process visitors are invited to add their personal stories by using advanced web technologies, crowdsourcing, storytelling and live events for specific communities. He described how a project on the First World War called on people to provide their own artefacts to help them explore narratives of the conflict and its impact. Focusing on individual stories that catch the imagination and hosting days where people are encouraged to bring in physical objects about the First World War encouraged greater engagement from the general public. Foregrounding personal stories rather than grand narratives and encouraging consideration of these stories from a range of perspectives offered users the opportunity to respond to ideas of shared histories and of the importance of bringing these histories to others.

The issue of curating was also addressed by Dagan Cohen from Upload Cinema who gave an inspiring presentation as he showed how the best of web content could be brought to the

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⁴ Link: <www.filmarkivet.se>



cinema screen. Upload Cinema selects and screens programs made of compiled YouTube items in a variety of cinemas all over Europe. Cohen commented on how this project enabled the power of the user to be recognised and suggested how such work foregrounds the way in which people engage with online material. He suggested that screening material in this way indicated a shift away from the power of the archive curator or the academic voice of authority and instead focused upon the power of the public.

Discussion also addressed the notion of a crisis of search in which authoritative indications and technical algorithms are perhaps giving way to social recommendations such as those shared on social media sites. One EUscreen content provider actively wondered what role archives had to play in this new digital world in merging the role of users and producers of content.

8.2 Academia: Researching the Moving Image

Jérôme Bourdon closed the first day with a thorough analysis of how the media has illustrated, reported and involved our daily lives and memories in the context of the Isreali-Palestinian conflict. He related the need for a thorough reflection on media practices and the importance of research into the shaping of stories by the media. It is these back-stories that inform our views on current and past conflicts and the way they then become a part of our own daily experience. A lively debate followed which emphasised the importance of contextualizing media materials about conflicts with so many layers and threads, and on what it is, exactly, that separates memory (personal, close to ourselves) from knowledge (the things we see, hear, learn).

One way to encourage the academic community to engage with the contents of archives was outlined by Dana Mustata the next day. She illustrated the pragmatic approach she adopted when working on her own PhD and the tools, resources and attitudes television historians need in the practice of research. Using a clip of Ceausescu's last live broadcast, which started the Live Romanian Revolution 1989, she argued that a variety of sources are needed to understand how television works and to achieve an integrative understanding of the medium. Mustata noted that EUscreen's big plus is access, but that there is a minus point: as the providers select for researchers what they think is relative or important, this selection process takes something away from them. EUscreen is a new gateway for historiography, building bridges between academics and archivists in which further platforms for understanding could be the e-Journal and the comparative exhibitions, which will be a way to reflect with authors and views of how we told the story. As a platform, EUscreen is enhancing the understanding of television and can be a means reflecting on how we are making television history at this time.

Andreas Fickers expanded on this crossover between the worlds of academia and of archive, by presenting his "Blurred dreams of a TV Historian": the idea of a pan-European television history journal, first presented at the FIAT conference of 2003. The idea was to have an online free access academic journal to maintain quality and a showcase for the creative use of digitized audiovisual materials. This journal is currently under development and will draw attention to the work of projects like EUscreen and reach out to new audiences with its combination of technological, linguistic and thematic innovation. He spoke about reflections from the editorial board and how writing for an online environment is challengingly different from traditional academic writings. He emphasised the need to adapt and structure the



narrative without losing the academic standards, as online one is "viewing rather than reading"

8.3 Audiovisual and Online Tools for Education

Contextualisation received an equal amount of attention in the presentations that adhered to the field of education and spreading knowledge. Peter Kaufman and Pere Arcas gave inspiring talks on how online tools are already changing the nature of how students today can access the heritage of yesterday. Today, students can download apps that guide them through the works of T.S. Eliot⁵ and demand an entirely different way of learning and contemplating the content of such texts. Pere Arcas's projects include the seminal *Draw me a Story*⁶, a project in which a user interface was crafted in which children can - with a minimum amount of guidance - use and remix the various sources that are available online. By creating, crafting and expanding existing sources, they engage with the world in different ways than we ever thought possible, and greatly enhance their learning experiences by practicing and putting the content to use.

Paul Ashton of the Times Education Supplement focused on how audiovisual material can be contextualized from the teacher's side to engage students with the teaching curriculum in an active manner. Through a demonstration of a range of clips, he suggested how packages of clips of readily available online content could be provided to schools to allow for classroom discussion and increase visual learning. Ashton commented that using video clips to promote questioning by children could be used pedagogically to address specific parts of the learning curriculum. In the discussion that which followed this paper, there was broad agreement about the usefulness of video material being used in the classroom this way with some calling attention to the need for learning to be structured and the clips to be placed in context. The point was also raised that no use of online video is a 'free' activity, and in order to be successful, issues such as copyright and platform sustainability need to be well calculated in the set-up of any project.

8.4 Guidelines for Using and Reusing Audiovisual Content

These issues of Sustainability and limitations of online use were the focus of the second workshop. Here a a number of case studies revealed how clear, distinct aids and ides were given as tools to benefit the opening up of access to a wide user base. Johan Axhamn from Stockholm University gave a clear overview of the role IPR issues have plagued and troubled archives all over the world, and how a tool such as the Extended Licensing Model can become an aid for archives and rights holders to enable them to move forward and clear the fog that exists on many audiovisual assets. As the audience of the conference consisted of a mix of rights holders, caretakers, and rights clearance institutes, interest was high and in the discussion which followed the different groups were able to review their own views on the issue.

Catherine Grout from JISC and Marius Snyders from the PrestoCentre discussed how their initiatives can connect communities to enable sharing of resources and knowledge and also to offer advice on digitisation, online reuse and educational use. The video that the JISC Film &

⁵ Link: http://itunes.apple.com/us/app/the-waste-land/id427434046?mt=8

⁶ Link: http://www.tv3.cat/sales/genres/970/children/Draw-me-a-story



Sound Think Tank made⁷ gave a clear and distinct overview of the many issues that both plague and are beneficial to archives, educational institutes and online projects such as EUscreen. It also indicated why it is so crucial for users in this day and age to have access to clear, contextualized, open sources of audiovisual information. PrestoCentre offers advice to archives worldwide who want to benefit from mutual sources of information to strengthen the processes they use to bring their content into the digital realm. PrestoCentre also offers advice and help on long-term digital storage and how archives and projects can make their materials accessible to users from all walks of life.

Luca Martinelli from the European Commission gave a clear overview of the various sources and infrastructures that exist to support access to audiovisual heritage. He situated the EUscreen project within a number of subsequent decisions and recommendations to the European Commission that laid out the importance of audiovisual heritage and the need for open, online access to these materials in order for them to be useful to a broad audience. He gave a draft overview of future undertakings of the European Commission, drawing attention to the way the commission invests in Europe's heritage to ensure it remains a lively source for all kinds of users and how EUscreen is one of the best practices that are out there to realize this scope.

8.5 Conclusion: The Road Ahead

The two-day conference in Stockholm was a lively, stimulating and varied gathering. It offered an opportunity for EUscreen partners to share and exchange ideas for the further development and sustainability of the platform itself, but also for interested users, rights holders and scholars to discuss questions about the nature of online heritage, the needs and forms of online access and the scope of needs of different users. About 120 people attended the conference and engaged in lively discussions on memory, heritage, culture and education. It offered the EUscreen consortium a range of options on how best to proceed in the final year of the project, and a number of these options and certain topics of discussion will be explored further in later workshops and work sessions.

8.6 Links

Conference Twitter Feed: http://twapperkeeper.com/hashtag/EUscreen

Conference Pictures: https://secure.flickr.com/photos/euscreen/sets/72157627655982043/

Conference Videos: http://webcast.euscreen.eu/meeting.html

Conference presentations: http://www.slideshare.net/event/second-international-euscreen-

conference-on-use-and-creativity

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⁷ Link: https://www.youtube.com/watch?v=qMLf5mpifNc>



9 Further Information

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