



AXMEDIS

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**Automating Production of Cross Media Content
for Multi-channel Distribution**

www.AXMEDIS.org

Instrument: Integrated Project

**Thematic Priority: Knowledge Technologies and Content Creation,
cross media content for leisure and entertainment**

Publishable Results (M25-36)

Period Covered: from September 2006 to August 2007

Start date of project: 1 September 2004

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Project web site: www.AXMEDIS.org

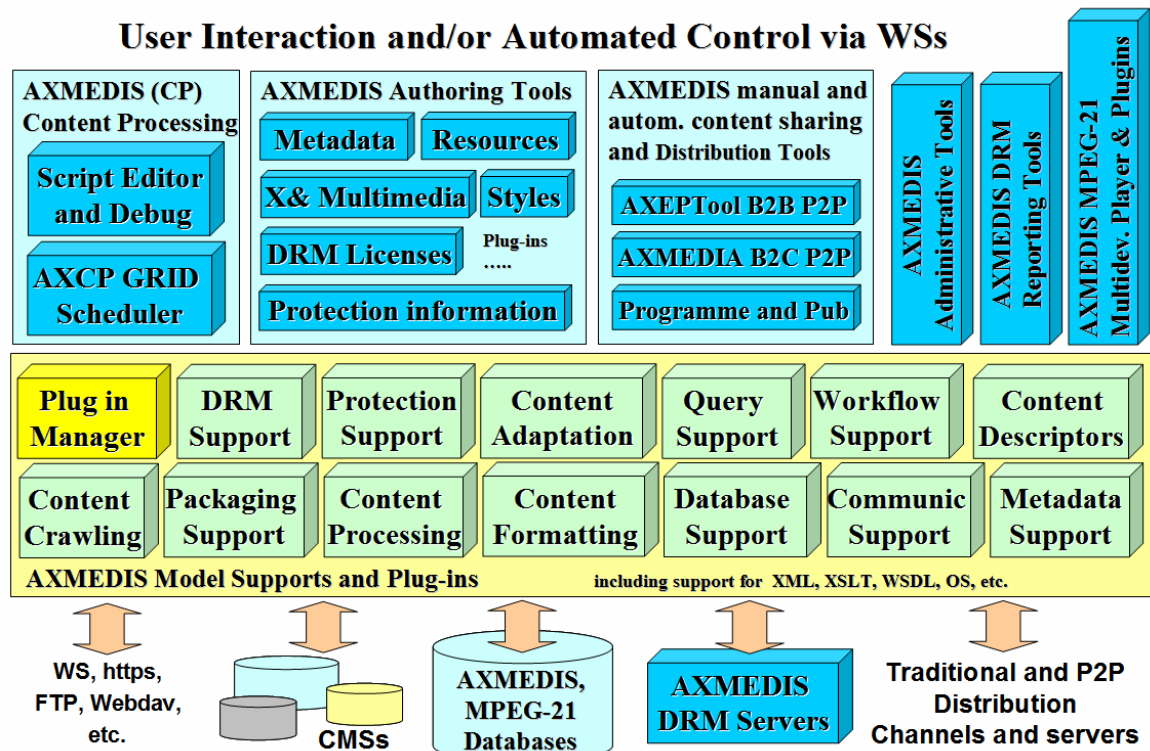
Publishable results

After the first 36 months of activity it is possible to see the AXMEDIS framework completed and many demonstrators accessible and functional 24 on 24, 7 days on 7. In fact, from a scientific and technical viewpoint, the consortium has:

- Defined a cross media content model for managing any kind of content model and protecting it with the support of MPEG-21 DRM;
- Collected and formalized detailed requirements, use cases, test cases and scenarios (including their updated versions), regarding automated content production, protection and distribution over multichannel;
- **Development of a set of basic enabling technologies** in WP4 and WP5 as a results of the research activity such as: cross media model, protection models and tools, workflow integration, GRID language for cross media content processing, database modelling for MPEG-21 and AXMEDIS, license formalisation and DRM interoperability, formatting algorithms based on SMIL descriptors and genetic algorithms, integrated P2P architecture with fast seeding, adaptation and transcoding algorithms and processing tools (for video, audio, documents, and images), multichannel distribution, architecture and tool for AXMEDIS/MPEG-21 editing, architecture and tools for AXMEDIS/MPEG-21 playing with rights enforcement, algorithms and support for protecting complex cross media content, streaming of MPEG-21/AXMEDIS objects, etc.
- **Produced the specification of AXMEDIS framework and thus the technical documentation** addressing the identified needs and requirements. These documents have been published and include:
 - Specification and technical documentation of AXMEDIS cross media model
 - Specification and technical documentation of AXMEDIS editors and tools, workflow, metadata, etc.
 - Specification and technical documentation of AXMEDIS content processing area with GRID language for media processing, scheduler, fault tolerant architecture, content processing algorithms, adaptation, fingerprint, communication, access to databases, etc.
 - Specification and technical documentation of AXMEDIS P2P network (including AXEPTools, AXMEDIA for P2P clients and related servers),
 - Specification and technical documentation of AXMEDIS database and query support
 - Specification and technical documentation of AXMEDIS protection models and tools, including the domain management aspects
 - Specification and technical documentation of AXMEDIS players and tools for PC, PDA, Mobiles, STB,
 - Specification and technical documentation of Programme and Publication Tools, integration with AXMEDIS content processing, and with Satellite distribution
 - Specification and technical documentation of Demonstrators of the AXMEDIS framework and platform for distribution and other activities,
 - Specification and technical documentation of AXMEDIS database and query support, access to AXMEDIS certifier and supervisor, AXCS, for reporting and statistics
 - Specification and technical documentation of AXMEDIS protection models and tools, PMS client and Server, AXMEDIS Certifier and Supervisor, registration, certification of users, certification authority
 - Specification and technical documentation of AXMEDIS players and tools, usage of OSMO MPEG-4 and SMIL players (PC stand alone based, PC based on Active X, PC based on Mozilla Plug in, PDA based)
 - Specification and technical documentation of AXMEDIS framework and platform Demonstrators
- Improved and management of the User Group, collection of questionnaires and usage of them for improving requirements, specification and tools,

- Identification and usage of metrics and reference parameters to measure work progressed and results achieved in relation to planned work and time schedule,
- Improvement and refinement of AXMEDIS results and related Exploitation plan, also taking into account the new partners,
- Production of the refined version of the exploitation plan
- **Dissemination and general demonstration, training:**
 - Produced dissemination material (flyer, press cutting, DVD, CD, project presentation, tutorial, video, posters, web pages, etc.) and published them on the web, and distributing them in different occasions, from conferences to fairs and other manifestations,
 - Produced training documentation and material, and organisation and deploy of training courses as tutorial days,
 - Organized the AXMEDIS 2005 conference held in November-December 2005, Florence, Italy,
 - Organized the AXMEDIS 2006 conference held in Leeds, UK, December 2006,
 - Organized the Workshop on Content Production, April, 2007, Rome, Italy,
 - Organized the AXMEDIS 2007 conference to be held in Barcelona, November 2007-,
 - Production and demonstration of several videos for the major AXMEDIS tools, distribution of them via AXMEDIS P2P and on YouTube,
 - Dissemination of results via several conference attendance/organisation, articles submission, development and distribution of supportive dissemination material (CD, DVDs, posters, flyers, etc.)
 - Promotion of the AXMEDIS at IBC2007, with a special WEB page, press promotion, advertising, invitation, production of dissemination material, presentation of major AXMEDIS products,
 - Production of the dissemination report and plan
- **AXMEDIS Framework and its demonstration**
 - Completed implementation of AXMEDIS Framework,
 - Continuous update of the AXMEDIS Framework tools, documentation and components,
 - Distribution of a several versions of AXMEDIS tools for:
 - content production (manual and automated)
 - content playing, with related AXMEDIS content for demonstration (in AXMEDIS format),
 - content protection and DRM
 - for P2P content distribution and sharing
 - for content managing on databases
 - Set up and maintenance of a stable AXMEDIS P2P network with the major AXMEDIS partners as supernodes of the network, distribution of content on the stable AXMEDIS P2P network
 - Set up and maintenance of AXMEDIS stable services:
 - AXMEDIS User Registration and certification
 - AXMEDIS Tools certification
 - AXMEDIS PMS, for the AXMEDIS DRM
 - AXMEDIS Certifier and Supervisor, for the AXMEDIS DRM
 - Production of a set of documents for promoting the AXMEDIS framework:
 - AXMEDIS for all,
 - user manual of major AXMEDIS tools,
 - user manual of the AXMEDIS content processing GRID java script language,
 - user manual for the P2P network tools,
 - etc.
- **Affiliation programme**
 - set up of the affiliation programme

- promotion of the Affiliation programme
- acceptance and integration of new affiliated partners, providing them access to the AXMEDIS Framework,
- **Content production and modelling**
 - Produced the documentation and guidelines of content for validation, including content itself for AXMEDIS MPEG-21 validation,
 - Production of content and tools for test and validation, they have been downloaded in many many instances from the AXMEDIS portal,
- **Demonstration and AXMEDIS Framework Exploitation**
 - Specification and realisation of the demonstrators for multichannel distribution via internet (PC), via kiosks (PC and PDA), towards mobiles and via satellite data broadcast (PC and STB/PVR, media centers),
- **Integration of new partners coming from the take ups,**
 - Completion of the requirements and of the specification for the AXMEDIS-4HOME demonstrators,
 - Completion of the requirements and of the specification for the AXMEDIS-ELTEO demonstrators,
- **WEB portal:**
 - Improvement of the performance in download from the AXMEDIS portal
 - Production and improvement of an AXMEDIS Wiki portal for providing promotional documentation about AXMEDIS Framework,
 - Integration of a powerful search engine to provide it to users of the AXMEDIS portal to search into public and/or private documentation,
 - Integration of a BLOG for collecting impressions from the public attracted on the AXMEDIS portal,



Results achieved

The main results achieved in this third year are:

- The completion of the AXMEDIS Framework, its improvement and maintenance, AXMEDIS framework guidelines, source code repository for AXMEDIS framework (several versions collected), source code validation;
- The definition and the implementation of a set of components and tools which permits the implementation of a large set of possible configurations for automated content production, protection and multichannel distribution with and without DRM;
- the definition of a general architecture for multichannel distribution with interoperable terminals and content (including DRM support);
- tools for content composition and formatting, definition of GRID rule formalization, language (and integrated development environment) for content composition and formatting, initial results in terms of composition and formatting algorithms development and application, SMIL profile, SMIL templates, genetic algorithms for style parameters optimizations;
- Definition of AXMEDIS cross media data model and MPEG-21, transformations from protected to non protected objects and vice-versa, AXMEDIS file format proposed at MPEG ISO as MPEG-21 file format as MPEG CMIP MAF;
- AXMEDIS authoring tools including: metadata editor and viewer, hierarchy editor, MPEG-21 editor, SMIL/visual Editor, DRM Editor, protection editor, behavior editor, etc.;
- AXMEDIS player tools including: video player, audio player, SMIL player, DOC viewer, OSMO MPEG4 player, HTML player, metadata viewer, DIP AXMEDIS Script player, etc. They have been enforced into different integrated players for: PC, active X server, Mozilla, STB/PVR, PDA, and mobile (in progress) etc.;
- AXMEDIS player with customizable skins, development of a set of them;
- First integration of MPEG-21 DIP/DIM functionalities into AXMEDIS model, players and editor, mainly for the PC players;
- AXMEDIS content processing tools, based on JavaScript for production and processing content via GRID technology, development of an integrated development environment for producing and testing GRID rules, scheduler for putting in execution jobs/processes on GRID nodes, control of CPU Node usage, control of GRID operation via web service, allocation of job/processes considering: starting time, process needs and profile, GRID node profile, etc.; addition of several functionalities such as: manipulation of additional format, production of emails and SMS, management of protected content, integration of DIA processing, etc.
- AXMEDIS protection processor for AXMEDIS tools (editors, players and GRID nodes), supporting IPMP of MPEG-21 and much more;
- Improvement of MPEG-21 IPMP, accepted contribution to ISO;
- AXMEDIS database, and query support, for indexing, query and retrieval of AXMEDIS objects including PAR (potentially available rights);
- content crawler integrated with AXMEDIS Content processing engine to access to many databases and communication channels;
- Integration of MPEG-21 DIA profiling and related taking decision engine for content adaptation mainly for the mobile cases;
- algorithms for estimating and using content fingerprint, performing adaptation and transcoding, exploiting fingerprinting for content recognition and identification;
- Completion of the AXMEDIS P2P architecture and set up, including Query Support, catalogues for content and object tracker, performance analysis of the P2P network;
- Completion of the accounting managing and reporting tool, and statistical reporting and set up;
- AXMEDIS DRM integration and completion including, PMS and Certifier and Supervisor, registration portal, certification authority;
- Better definition of contractual and legal aspects, from contract to license and related mutual processing, verification of licenses;

- Verification of DRM and distribution for mobiles, OMA usage from AXMEDIS content processing; Integration analysis of AXMEDIS DRM with standards and commercial solutions such as OMA;
- Completion of the algorithms for fingerprint and descriptors estimation and for content adaptation;
- Business models for distribution via satellite data broadcast, integration with AXMEDIS content factory EUTELSAT (satellite data broadcast);
- Development of Domain Management with PMS domain, study and improvement of OMA and MPEG-21 Domains;
- Definition of the editorial formats for PC, PDA, Mobiles and STB;
- collection of content for test and validation, integrated version of content, formatting guidelines and styles;
- completion of prototypes of the full end-to-end demonstrators for content production, protection and distribution of TISCALI (PC via client server and P2P);
- completion of prototypes of the full end-to-end demonstrators for content production, protection and distribution of ILABS (mobiles, kiosks and PDA);
- Workflow support (OpenFlow and BizTalk) for interfacing AXMEDIS tools with workflow tools and governing real content production factories;
- Completion of the requirements and specification for the AX4HOME and AXELTEO demonstrators, implementation of early mock up demonstrator for them.
- Set up of AXMEDIS public stable services for
 - AXMEDIS P2P network with the major AXMEDIS partners as supernodes of the network, distribution of content on the stable AXMEDIS P2P network for B2B-P2P and C2C-P2P,
 - AXMEDIS DRM: User Registration and certification, Tools certification, PMS (license server), Certifier and Supervisor;
- Distribution of AXMEDIS tools such as: AXMEDIS Editor, PC players, content processing tools, DRM editor, programme and publication, P2P client tools, PDA player, etc.; They can be tested by using the above mentioned facilities and content included into the packages and the additional AXMEDIS content and Rules that can be downloaded from the portal;
- Production and distribution of technical informative material including: AXMEDIS specification, AXMEDIS technical notes, user manuals, flyers, white papers, slides, etc.;
- Organization of activities of dissemination and demonstration including: AXMEDIS 2006 conference, workshop on content production 2007, IBC 2007, etc.;
- Production and distribution of dissemination material: DVD, CD, reports, documents, reports, examples, videos, flyers, etc. Most of them have distributed/downloads in thousands of copies;
- Improvement of the WEB portal services: more informative content, more easy to get downloads, more hits, more velocity and reliability;
- Realization and deploy of training activities as tutorial days and workshops, and distribution of related training material from the WEB portal and at the events.

Intentions for use and impact: The AXMEDIS results are mainly exploitable for

- organizing and automating the content production and distribution back officer activities, reducing related costs. This result is mainly due to the
 - AXMEDIS Content Processing platform, AXCP GRID, solution, tools and language,
 - Availability of relevant number of functionalities into the AXCP language and solution including: content processing, CMS access, transcoding, coders, encoders, communication capabilities, information processing, etc.;

- enabling the distribution of content on multichannel architectures and introducing cross media models which enforce more interactivity into the content player for the final users. This result is mainly due to the:
 - AXMEDIS cross media model and tools,
 - AXMEDIS players for PC, PDA, STB and mobiles (their customization and reuse in source code for creating other players in other platforms or customized players),
 - AXMEDIS Content Processing platform, AXCP GRID platform, for multichannel content production, adaptation, transcoding, etc.;
- enabling the distribution of content with an open and interoperable DRM. This is mainly due to:
 - the adoption of MPEG-21 and OMA standards,
 - the transcoding of MPEG-21 into OMA and viceversa,
 - usage of the AXMEDIS Content Processing platform, AXCP GRID solution, for the uniform back office management of DRM supported channels. With the AXCP GRID back office, other different DRM models can be easily added,
 - usage of AXMEDIS DRM tools: certification authority, registration portal, PMS (license server), certifier and supervision, etc.
- enabling the distribution of content via P2P setting up B2B, B2C, C2C and B2B2C models. This is mainly due to the AXMEDIS P2P solution based on:
 - AXMEDIS P2P tools and hierarchical architecture derived from BitTorrent with the possibility of its controllability,
 - AXMEDIS Content Processing platform, AXCP GRID platform, to control and P2P architecture, publication, downloading, seeding, monitoring, and getting statistical information and reporting;
- the AXMEDIS Infrastructure and framework per se accessing to
 - advanced State of the Art and standards solutions,
 - knowledge and tools for content production, protection and distribution,
 - tutorials on content: general aspects and state of the art, content production and protection, on distribution tools, on general AXMEDIS aspects, etc.,
 - tools, content, and source code of the related tools,
 - experience about the usage of the AXMEDIS solutions and tools from several industrial partners such as TISCALI, ILABS, HP, TEO, BBC, SIAE, ELION, XIM, TI, AFI, etc.

The project as also foreseen the possibility of “affiliating” new partners in project life due course. Presently we have registered a number of affiliations (SIAE, RIGEL, GESFOR, ALBENIZ, PENTEX, etc.). The rational for this is that there are many **reasons to get affiliated to AXMEDIS**, which can be summarized as follow:

- Obtaining access to an *open platform* that can be customized for your production, protection and distribution needs, related training and technical material and documentation;
- *Reduction of costs* for content gathering, processing, production, protection and distribution;
- Saving money in accessing at innovative technologies for content production and distribution, integrated environment;
- Accessing to strongly innovative technology to trial it;
- Adopting a standard model (MPEG-21) for content and licenses modeling and thus for inserting DRM in your business;
- Exploiting and trial of new business models;
- Setting up of one-stop service for content protection and DRM set up;
- Acquiring a larger control about content usage;
- Allowing reporting to your business customers which rights are exploited on their content;
- Allowing the management of rights reporting for multimedia products;
- Creating customized players;

- Exploiting capabilities of secure legal P2P distribution;
- Setting up and create a customized distribution channel interoperable with others;
- Setting up some new service (empowering your present solution) on the basis of AXMEDIS technology;
- Establishing contacts with other business partners interested in exploiting similar technology;
- Allowing using a solution that can be safer and more flexible with respect to state of the art;
- Promoting your AXMEDIS based solutions to the AXMEDIS community and the general public and global sector industry via the AXMEDIS dissemination and promotion channels;
- Promoting your AXMEDIS based solutions at AXMEDIS conferences and workshops;
- Contributing to the AXMEDIS Framework is allowing you to continuing accessing to the framework reducing the costs for its accessibility.

For such reasons **research institutions and technology providers** are interested in getting affiliated with AXMEDIS, in more detail, once affiliated it will be possible for them to:

- access at low cost a the whole AXMEDIS framework by means of which several different configurations and solutions may be built to cover the needs of the value chain actors and tested with low effort;
- access at tools based on MPEG-21 standard;
- exploit the AXMEDIS Framework to make business with it for the reasons reported in the above list;
- collaborate with relevant and well known research institutions and companies of the areas, may be defining collaborative projects and strategic commercial goals;
- develop and test new algorithms and tools with respect to the state of the art solutions, in a very easy and cheap manner;
- add new content models and new DRM models and make them interoperable with MPEG-21 and others already in place on AXMEDIS;
- make visible and promote towards other AXMEDIS partners the produced algorithms, solutions and tools that can be used for content processing and modelling and that can be in some how integrated into the AXFW or proposed on the market. These tools may be provided for dissemination and promotion via AXMEDIS portal as demonstrators with limited capabilities;
- attend AXMEDIS training and tutorial days, access to training material;
- access to mailing list for sharing ideas on the future improvement of the AXMEDIS framework;
- etc.

An updated description of **AXMEDIS Framework** can be obtained from its coordinator. Demonstrations of AXMEDIS tools and of the whole AXMEDIS Framework are provided at AXMEDIS conferences and workshops, and in other occasions listed on AXMEDIS Portal. The AXMEDIS Framework can be accessed by following the Affiliation programme. The Affiliation to AXMEDIS may be performed by subscribing an Affiliation Agreement with an AXMEDIS Contractor.

In the M25-M36 period the AXMEDIS project has produced several publishable results, which can be recovered from the AXMEDIS Portal <http://www.AXMEDIS.org/>
A lot of additional material can be accessed from the AXMEDIS portal for example, training courses, tutorials, video, posters, and additional documentation.

Requirements

Deliverable	Deliverable title
DE2.1.1.2.1	User Requirements, First Update of DE2.1.1a AXMEDIS-de2-1-1-2-1-user-requirements-firs-update-v2-5.pdf

Use Cases and test cases

Deliverable	Deliverable title
DE2.1.1.2.2	Use Cases and Scenarios, First Update of DE2.1.1a AXMEDIS-de2-1-1-2-2-use-cases-and-scenarios-first-update-v3-0-consolidated-public.pdf
DE2.2.1.2	Test cases and content description, First Update AXMEDIS-de2-2-1-2-test-cases-and-content-description-first-update-v2-3.pdf

Reports on Basic Enabling Technologies

Deliverable	Deliverable title
DE4.1.1.2	Content Modelling and managing, first update AXMEDIS-de4-1-1-2-content-modeling-and-managing-1st-upd-v1-6.pdf
DE4.2.1.2	Content indexing, monitoring and querying, first update AXMEDIS-de4-2-1-2-content-indexing-monitoring-and-querying-v1-0.pdf
DE4.3.1.3	CONTENT COMPOSITION AND FORMATTING, FINAL VERSION axmedis-de4-3-1-3-content-composition-and-formatting-v1-2.pdf
DE4.4.1.3	CONTENT SHARING AND PRODUCTION ON P2P, FINAL VERSION axmedis-de4-4-1-3-content-sharing-and-production-on-p2p-v1-1.pdf
DE4.5.1.3	CONTENT PROTECTION AND SUPERVISION, FINAL VERSION axmedis-de4-5-1-3-content-protection-and-supervision-v1-0.pdf
DE4.6.1.2	Content Distribution via Internet, first update AXMEDIS-de4-6-1-2-content-distribution-via-internet-1st-upd-v1-5.pdf
DE4.7.1.2	Content Distribution toward mobiles, first update AXMEDIS-de4-7-1-2-content-distribution-toward-mobiles-1st-upd-v1-4.pdf
DE4.8.1.3	CONTENT DISTRIBUTION VIA SATELLITE DATA BROADCAST, FINAL VERSION axmedis-de4-8-1-3-content-distribution-via-satellite-data-broadcast-v1-0.pdf
DE4.9.1.2	The Usability issues for the AXMEDIS production tools, first update AXMEDIS-de4-9-1-2-the-usability-issues-for-the-AXMEDIS-production-tools-1st-upd-v1-2.pdf

AXMEDIS Framework, Specifications and Documentation

Deliverable	Deliverable title
DE5.1.2.2	AXMEDIS Framework for all, first update axmedis-de5-1-2-2-axmedis-for-all-update-v4-0-pub.pdf
DE5.0.1.2	AXMEDIS Major Tools User Manuals and installation manual, first update axmedis-de5-0-1-2-axmedis-user-manuals-v1-4-pub.pdf
DE5.0.1.2, Annex 1	ANNEX 1: AXMEDIS Content Processing multimedia language user manual, programming manual axmedis-de5-0-1-2-annex-1-content-processing-script-language-user-manuals-v1-3-pub.pdf
DE5.0.1.2, Annex 2	ANNEX 2: AXMEDIS P2P user manual axmedis-de5-0-1-2-annex-2-axmedis-user-manuals-v1-4.pdf
DE5.0.1.2, Annex 3	AXMEDIS plug ins for Content Processing, Editor and Players, User Manual, Technical Reference axmedis-de5-0-1-2-annex3-axmedis-plugin-sdk-v1-1.pdf FULL Software Development Kit with examples and source code axmedis-de5-0-1-2-annex3-axmedis-plugin-sdk-v1-1-full-version-software.zip
DE5.1.3.1	AXMEDIS Framework Guidelines AXMEDIS-de5-1-3-1-framework-guidelines-v2-2.pdf
DE3.1.2.2.1	Specification of General Aspects of AXMEDIS framework, first update of DE3.1.2 part A AXMEDIS-de3-1-2-2-1-spec-of-ax-gen-asp-of-AXMEDIS-framework-upd-v1-2.pdf
DE3.1.2.2.2	Specification of AXMEDIS Command Manager, first update of DE3.1.2 part B AXMEDIS-de3-1-2-2-2-spec-of-ax-cmd-man-upb-v1-6.pdf
DE3.1.2.2.3	Specification of AXMEDIS Object Manager and Protection Processor, first update of DE3.1.2 part B AXMEDIS-de3-1-2-2-3-spec-of-axom-and-protproc-upb-v2-0.pdf
DE3.1.2.2.4	Specification of AXMEDIS Editors and Viewers, first update of DE3.1.2 part B AXMEDIS-de3-1-2-2-4-spec-of-ax-editors-and-viewers-upb-v2-1.pdf
DE3.1.2.2.5	Specification of External AXMEDIS Editors/Viewers and Players, first update of DE3.1.2 part B AXMEDIS-de3-1-2-2-5-spec-of-external-editors-viewers-players-upb-v2-3.pdf
DE3.1.2.2.6	Specification of AXMEDIS Content Processing, first update of DE3.1.2 part C AXMEDIS-de3-1-2-2-6-spec-of-ax-content-processing-upc-v1-5.pdf
DE3.1.2.2.7	Specification of AXMEDIS External Processing Algorithms AXMEDIS-de3-1-2-2-7-spec-of-ax-external-processing-algorithms-v2-2.pdf
DE3.1.2.2.8	Specification of AXMEDIS CMS Crawling Capabilities, first update of part of DE3.1.2 AXMEDIS-de3-1-2-2-8-spec-of-ax-cms-crawling-capab-v1-3.pdf

DE3.1.2.2.9	Specification of AXMEDIS database and query support, first update of part of DE3.1.2 AXMEDIS-de3-1-2-2-9-spec-of-ax-database-and-query-support-v1-14.pdf
DE3.1.2.2.10	Specification of AXMEDIS P2P tools, AXEPTTool and AXMEDIS, first update of part of DE3.1.2 AXMEDIS-de3-1-2-2-10-spec-of-axeptool-and-axmedia-tools-v1-5.pdf
DE3.1.2.2.11	Specification of AXMEDIS Programme and Publication tools, first update of part of DE3.1.2 AXMEDIS-de3-1-2-2-11-spec-of-ax-progr-andpub-tool-v1-6.pdf
DE3.1.2.2.12	Specification of AXMEDIS Workflow Tools, first update of part of DE3.1.2 AXMEDIS-de3-1-2-2-12-spec-of-ax-workflow-tools-v1-6.pdf
DE3.1.2.2.13	Specification of AXMEDIS Certifier and Supervisor and networks of AXCS, first update of part of DE3.1.2 AXMEDIS-de3-1-2-2-13-spec-of-axcs-and-networks-v1-5.pdf
DE3.1.2.2.14	Specification of AXMEDIS Protection Support, first update of part of DE3.1.2 AXMEDIS-de3-1-2-2-14-spec-of-protection-support-uph-v1-9.pdf
DE3.1.2.2.15	Specification of AXMEDIS accounting and reporting, first update of part of DE3.1.2 AXMEDIS-de3-1-2-2-15-spec-of-ax-accounting-and-reporting-v1-6.pdf

Reports on Demonstrators

Deliverable	Deliverable title
DE9.1.4	Integrated Prototype of CMS integration and feedback axmedis-de9-1-4-integrated-prototype-of-cms-integration-and-feedback-v1-7.pdf
DE9.2.4	Integrated Prototype of automating content production and formatting into CMSs of integrators axmedis-de9-2-4-integrated-proto-of-autom-cont-prod-and-form-into-cms-v1-5.pdf
DE9.3.4	Integrated Prototype of content production and distribution in push and on-demand for i-TV axmedis-de9-3-4-integrated-prot-content-distribution-via-satellite-data-broadcast-v1-5.pdf
DE9.4.4	Integrated Prototype of content production and distribution on-demand for PC axmedis-de9-4-4-integrated-prototype-of-content-production-and-distribution-on-demand-for-pc-v1-0.pdf
DE9.5.4	Integrated Prototype of content production and distribution on-demand for Mobile phones, and new generation of PDAs axmedis-de9-5-4-integrated-proto-of-cont-prod-and-dist-on-demand-for-mobile-and-pdas-v2-4.pdf
DE9.6.4	Integrated Prototype of content production and distribution to kiosks and local PDAs axmedis-de9-6-4-integrated-proto-of-cont-prod-and-dist-via-kiosks-on-pda-v2-3.pdf
DE12.2.2.1	AXMEDIS-ELTEO Requirements axmedis-de12-2-2-1-elteo-requirements-v2-8.pdf
DE12.2.3.1	AXMEDIS-ELTEO Specification axmedis-de12-2-3-1-ax-elteo-spec-v2-1.pdf
DE12.1.2.1	AXMEDIS-4HOME Identification of Technological components Required for Apparatus and Ontology Analysis axmedis-de12-1-2-1-4home-usecase-and-reqs-analysis-v1-0.pdf
DE12.1.3.1	AXMEDIS-4HOME Architecture of Proposed Experimental Set Up, Specification axmedis-de12-1-3-1-spec-of-ax4home-architecture-v1-0.pdf

AXMEDIS Conference and workshops

Deliverable	Deliverable title
DE7.1.2.1	Workshops for users, decision makers and managers http://www.AXMEDIS.org/AXMEDIS2005/
DE11.4.1	AXMEDIS 2005 Conference http://www.AXMEDIS.org/AXMEDIS2005/
DE7.2.1.2	Intermediate AXMEDIS Training Courses, 2006 axmedis-de7-2-1-2-training-material-intermediate-v0-5.pdf
DE11.4.1.2	AXMEDIS 2006 Conference http://www.AXMEDIS.org/AXMEDIS2006/ http://ieeexplore.ieee.org/xpl/RecentCon.jsp?punumber=4041313
DE7.1.2.2	Tutorial and/or workshop users, decision makers and managers http://www.libreriauniversitaria.it/c_power_search.php?shelf=BIT&q=axmedis
	AXMEDIS 2007 conference http://www.AXMEDIS.org/AXMEDIS2007/
	Content production workshop http://www.axmedis.org/cmcp2007/

Dissemination Material

Deliverable	Deliverable title
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DE11.1.4.3	Project Brochures, version 3 axmedis-de11-1-4-3-project-brochures-revised-m36-v1-0.pdf
DE11.1.4.2	Project Brochures, revised AXMEDIS-de11-1-4-2-project-brochures-revised-v3-0.pdf
DE11.1.5.1	Project Brochures for tools/aspects/areas axmedis-de11-1-5-1-broschures-tools-areas-flyers-v1-1.pdf

Content models, editorial formats

Deliverable	Deliverable title
DE8.5.1.2	Collection of editorial formats and DRM rules for multi-channel, update axmedis-de8-5-1-2-editorial-formats-and-drm-rules-for-multichannel-first-update-v1-0.pdf
DE8.2.1.2	Content Selection Guidelines, First Update AXMEDIS-de8-2-1-2-contentselectionguidelines-v1-3.pdf
DE8.4.1.3	AXMEDIS Editorial Format Guidelines and basic examples, second Update axmedis-de8-4-1-3-editorial-format-guide-and-examples-second-update-v1-2.pdf
DE8.3.1.2	Multilingual guidelines and technical solutions, first update AXMEDIS-de8-3-1-2-multilingualguidelinesandtechnicalsolutions-v1-1.pdf
DE8.1.1.3	Content for Test Cases, Validation, and Demonstration, first update axmedis-de8-1-1-3-content4testcasesandvalidation-v1-1.zip

Prototypes Deliverables

The above mentioned public prototypes are publicly accessible by downloading the file in the following which can be easily installed:

- **AXMEDIS major tools** for production and processing, and players:
 - http://www.axmedis.org/documenti/view_documenti.php?doc_id=3269
- **AXMEDIS P2P AXEPTTool**, please download and install to join the AXMEDIS P2P network with a super node:
 - [axeptool-p2p-setup-v3-2-23.exe](#)
 - http://www.axmedis.org/documenti/view_documenti.php?doc_id=3386
- **AXMEDIS AXMEDIA P2P tool**, please download and install to join the AXMEDIS P2P network:
 - [axmedia-p2p-setup-v1-3.exe](#)
 - http://www.axmedis.org/documenti/view_documenti.php?doc_id=3321
- **AXMEDIS players for PDA:**
 - http://www.axmedis.org/documenti/view_documenti.php?doc_id=3168
 - Content for PDA
http://www.axmedis.org/documenti/view_documenti.php?doc_id=3246
- **AXMEDIS DVD as distributed at IBC 2007** (it has to be used with an AXMEDIS P2P client since it is more than 4Gbyte),
<http://www.axmedis.org/documenti/AXMEDIS-DVD-July07-for-IBC07.iso.torrent>

Additional (with respect to those automatically installed with the above installable file) AXMEDIS objects and AXCP rules can be obtained from:

- **Examples of AXMEDIS objects:**
 - Wiki page: <http://www.axmedis.org/tiki/tiki-index.php?page=AXMEDIS+Cross+Media+Content%3A+Examples>
 - Content to be downloaded:
http://www.axmedis.org/area_4/doc.php?l_s=struttura&gruppo=22&order_by=data&asc_desc=asc
 - From the AXMEDIS P2P network that can be joined with the above mentioned tools: AXEPTTool or AXMEDIA
- **Example of the major AXMEDIS tools:**
 - WEB page: <http://www.axmedis.org/tiki/tiki-index.php?page=AXMEDIS+Tools+at+Work>

- Videos: <http://www.axmedis.org/tiki/tiki-index.php?page=Early+Demonstrations+and+Videos>
- To be downloaded
http://www.axmedis.org/documenti/view_documenti.php?doc_id=3269
- AXMEDIS plug ind development tool kit:
http://www.axmedis.org/documenti/view_documenti.php?doc_id=3292
- **Examples of the AXMEDIS Javascript for content production and distribution:**
- Web page: <http://www.axmedis.org/tiki/tiki-index.php?page=AXMEDIS+Content+Processing+Scripts>
 - AXCP java script user manual :
http://www.axmedis.org/documenti/view_documenti.php?doc_id=3168

Dissemination Material

Dissemination Material		
Flyer	Version 3.1 of the 3xA4 AXMEDIS General Flyer http://www.axmedis.org/documenti/view_documenti.php?doc_id=2712	
Flyer	AXCP flyer, AXMEDIS Content processing http://www.axmedis.org/documenti/view_documenti.php?doc_id=3359	
Flyer	AXMEDIS DRM flyer http://www.axmedis.org/documenti/view_documenti.php?doc_id=3360	
Flyer	AXMEDIS editor and tools http://www.axmedis.org/documenti/view_documenti.php?doc_id=3357	
Flyer	AXMEDIS P2P network and tools http://www.axmedis.org/documenti/view_documenti.php?doc_id=3358	
Flyer	AXCP Technical note , AXMEDIS Content Processing axmedis-tech-note-n3901-axcp-white-paper-v2-3.pdf http://www.axmedis.org/documenti/view_documenti.php?doc_id=3455	
Slides/Video	100 and more reasons to adopt AXMEDIS: http://www.axmedis.org/documenti/view_documenti.php?doc_id=3332	
DVD with content and tools	AXMEDIS DVD as distributed at IBC 2007 (it need to be used with an AXMEDIS P2P client since it is more than 4Gbyte), http://www.axmedis.org/documenti/AXMEDIS-DVD-July07-for-IBC07.iso.torrent	
Web page	AXMEDIS at IBC 2007 http://www.axmedis.org/ibc2007/	
Video	Promotional Video for the IBC 2007: http://www.axmedis.org/documenti/view_documenti.php?doc_id=3369	
Presentation	SIAE trial presentation on Video http://www.axmedis.org/documenti/view_documenti.php?doc_id=2922	
White paper	AXMEDIS for All: http://www.axmedis.org/documenti/view_documenti.php?doc_id=3108	
Banner	AXMEDIS 2005 Banner http://www.AXMEDIS.org/documenti/view_documenti.php?doc_id=1398	
Banner	AXMEDIS 2006 Banner http://www.AXMEDIS.org/documenti/view_documenti.php?doc_id=1588	
Banner	AXMEDIS 2007 Banner http://www.axmedis.org/documenti/view_documenti.php?doc_id=3504	
Flyer	French Flyer (v2-2) http://www.AXMEDIS.org/documenti/view_documenti.php?doc_id=1242	12
Flyer	Spanish Flyer http://www.AXMEDIS.org/documenti/view_documenti.php?doc_id=1205	12
Flyer	Italian Flyer http://www.AXMEDIS.org/documenti/view_documenti.php?doc_id=1179	12
Flyer	German Flyer http://www.AXMEDIS.org/documenti/view_documenti.php?doc_id=1165	12
Flyer	English Flyer http://www.AXMEDIS.org/documenti/view_documenti.php?doc_id=1163	12

DE11.1.4.3 Brochure	Project Brochures Revised, ver.: M36 http://www.axmedis.org/documenti/view_documenti.php?doc_id=3411	36
	AXMEDIS project brochure v3.1.3 http://www.axmedis.org/documenti/view_documenti.php?doc_id=3502	
	AXMEDIS project brochure v3.1.3, single pages version http://www.axmedis.org/documenti/view_documenti.php?doc_id=3503	
DE11.1.4.2 Brochure	AXMEDIS Brochure v3-0 http://www.AXMEDIS.org/documenti/view_documenti.php?doc_id=2035 AXMEDIS Brochure v3-0 Lower resolution http://www.AXMEDIS.org/documenti/view_documenti.php?doc_id=2036 AXMEDIS Brochure v3-0 Single page format http://www.AXMEDIS.org/documenti/view_documenti.php?doc_id=2034	16
	AXMEDIS Project Brochure: http://www.AXMEDIS.org/documenti/view_documenti.php?doc_id=1991	21
	AXMEDIS Project Brochure (updated): http://www.AXMEDIS.org/documenti/view_documenti.php?doc_id=2712	29
Conference Poster	AXMEDIS2005 Conference Poster (also illustrated below) http://www.AXMEDIS.org/documenti/view_documenti.php?doc_id=889	
Conference Poster	AXMEDIS2006 Conference Poster (draft, see design below) http://www.AXMEDIS.org/documenti/view_documenti.php?doc_id=2259	
DE11.1.3 Poster	Poster 02 – Vertical Poster http://www.AXMEDIS.org/documenti/view_documenti.php?doc_id=1347	13
	Poster 04 – Vertical Poster http://www.AXMEDIS.org/documenti/view_documenti.php?doc_id=1347	13
	AXMEDIS Overview Poster http://www.AXMEDIS.org/documenti/view_documenti.php?doc_id=1434	13
	Design 1 on Technical Aspects, version 0.5 http://www.AXMEDIS.org/documenti/view_documenti.php?doc_id=1339	
	Design 2 on Distribution Aspects, version 1.5: http://www.AXMEDIS.org/documenti/view_documenti.php?doc_id=1340	
	Design 3 for General, version 0.5: http://www.AXMEDIS.org/documenti/view_documenti.php?doc_id=1341	
	Design 4 on Processing, version 1.1: http://www.AXMEDIS.org/documenti/view_documenti.php?doc_id=1342	
	Poster 02– Vertical Banner AXMEDIS 2006: http://www.AXMEDIS.org/documenti/view_documenti.php?doc_id=1567	16
	Poster 04– Vertical Banner AXMEDIS 2006: http://www.AXMEDIS.org/documenti/view_documenti.php?doc_id=1566	16
	Poster – Automating Content/Metadata Life-Cycle: http://www.AXMEDIS.org/documenti/view_documenti.php?doc_id=3361	36
	Poster – AXMEDIS Tools: http://www.AXMEDIS.org/documenti/view_documenti.php?doc_id=3362	36
	Poster – IBC Poster for AXMEDIS: http://www.AXMEDIS.org/documenti/view_documenti.php?doc_id=3363	36
	Vertical poster with all partners logos, ver. April 2007 http://www.axmedis.org/documenti/view_documenti.php?doc_id=3496	
	Vertical Banner with all partners logos, version for AXMEDIS 2006 Conference: http://www.axmedis.org/documenti/view_documenti.php?doc_id=2631	
Folder	AXMEDIS Folder http://www.AXMEDIS.org/documenti/view_documenti.php?doc_id=509	
DE11.1.5 Flyers	Flyer – AXMEDIS Editor and Players: http://www.AXMEDIS.org/documenti/view_documenti.php?doc_id=3357	36
	Flyer – AXMEDIS P2P: http://www.AXMEDIS.org/documenti/view_documenti.php?doc_id=3358	36
	Flyer – AXMEDIS Automated Content Processing: http://www.AXMEDIS.org/documenti/view_documenti.php?doc_id=3359	36
	Flyer – AXMEDIS Digital Rights Management: http://www.AXMEDIS.org/documenti/view_documenti.php?doc_id=3360	36
	Comparison of AXMEDIS vs other DRM solutions	

	AXMEDIS solution against the state of the art and competitors	
	MS Word version of AXMEDIS at IBC 2007 presentation letter (short version)	
	MS Word version of AXMEDIS at IBC 2007 presentation letter (long version)	
Main Public Web Pages		
Web page	AXMEDIS Portal Main Web page: http://www.AXMEDIS.org	
Overview	AXMEDIS at IBC 2007 http://www.axmedis.org/ibc2007/	
Downloads	AXMEDIS Downloads http://www.axmedis.org/documenti/documenti.php	
Tools	AXMEDIS major tools http://www.axmedis.org/tiki/tiki-index.php?page=AXMEDIS+Tools+at+Work	
Framework	AXMEDIS Framework http://www.axmedis.org/tiki/tiki-index.php?page=AXMEDIS+Framework+for+all	
Examples	AXMEDIS Java Script examples http://www.axmedis.org/tiki/tiki-index.php?page=AXMEDIS+Content+Processing+Scripts	
Object, content	AXMEDIS Object Examples http://www.axmedis.org/tiki/tiki-index.php?page=AXMEDIS+Cross+Media+Content%3A+Examples	
4HOME	AXMEDIS 4HOME main web page: http://ax4home.axmedis.org/	
AXMEDIS Overview	AXMEDIS Project Overview slides: http://www.AXMEDIS.org/overview.php	
Derived Projects	AXMEDIS Derived Projects (WP9, affiliation, take up): http://www.AXMEDIS.org/derived_projects.php	
Wiki	AXMEDIS Wiki: http://www.AXMEDIS.org/tiki/index.php	
AXMEDIS2005	AXMEDIS 2005 Conference: http://www.AXMEDIS.org/AXMEDIS2005/	
AXMEDIS2006	AXMEDIS 2006 Conference: http://www.AXMEDIS.org/AXMEDIS2006/	
CMPS 2007	AXMEDIS 2007 workshop on content production: http://www.axmedis.org/cmcp2007/	
AXMEDIS2007	AXMEDIS 2007 Conference: http://www.AXMEDIS.org/AXMEDIS2007/	
Affiliations	AXMEDIS Affiliation : http://www.AXMEDIS.org/affiliation.php	
Public Documents	AXMEDIS Access to public documents: http://www.AXMEDIS.org/documenti/documenti.php	
Statistics	AXMEDIS WEB statistics: http://www.AXMEDIS.org/statistics.php	
Partners	AXMEDIS Partners: http://www.AXMEDIS.org/partners.php	
Search	AXMEDIS Search service http://www.axmedis.org/gsearch?q=&x=13&y=13	
Blog	AXMEDIS Blog: http://www.AXMEDIS.org/blog/gbook.php	
Demonstration Videos		
Several VIDEOS	Demonstrations and videos http://www.AXMEDIS.org/tiki/tiki-index.php?page=Early+Demonstrations+and+Videos	

	Public Tutorial and Presentations	
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	General tutorial: Slides http://www.axmedis.org/documenti/view_documenti.php?doc_id=2659 http://www.AXMEDIS.org/documenti/view_documenti.php?doc_id=2710	
video	Part 1 Video General Tutorial : http://www.axmedis.org/documenti/view_documenti.php?doc_id=2714	
video	Part 2 Video General Tutorial : http://www.axmedis.org/documenti/view_documenti.php?doc_id=2715	
video	Part 3 Video General Tutorial : http://www.axmedis.org/documenti/view_documenti.php?doc_id=2716	
video	Part 4 Video General Tutorial : http://www.axmedis.org/documenti/view_documenti.php?doc_id=2719	
video	Part 5 Video General Tutorial : http://www.axmedis.org/documenti/view_documenti.php?doc_id=2772	
video	Part 6 Video General Tutorial : http://www.axmedis.org/documenti/view_documenti.php?doc_id=2773	
slides	Content Production tutorial at AXMEDIS 2006 http://www.axmedis.org/documenti/view_documenti.php?doc_id=2667	
slides	Automated Content Production tutorial at AXMEDIS 2006 http://www.axmedis.org/documenti/view_documenti.php?doc_id=2655	
slides	Distribution tutorial at AXMEDIS 2006 http://www.axmedis.org/documenti/view_documenti.php?doc_id=2666	
slides	Workflow tutorial at AXMEDIS 2006 http://www.axmedis.org/documenti/view_documenti.php?doc_id=2680	
slides	Presentation at DMIN 2006, http://www.AXMEDIS.org/documenti/view_documenti.php?doc_id=2005	
slides	Presentation at INCOM2005: http://www.AXMEDIS.org/documenti/view_documenti.php?doc_id=1069	
slides	Presentation at IST2004: http://www.AXMEDIS.org/documenti/view_documenti.php?doc_id=346	
slides	Tutorial at IEEE ICECCS 2005: http://www.AXMEDIS.org/documenti/view_documenti.php?doc_id=1032	
slides	Workflow tutorial 2006: http://www.AXMEDIS.org/documenti/view_documenti.php?doc_id=2652	
slides	Presentation at University of Modena: http://www.AXMEDIS.org/documenti/view_documenti.php?doc_id=3090	
slides	Presentation at AICA 2006 http://www.AXMEDIS.org/documenti/view_documenti.php?doc_id=2468	
	Workshop Presentation at CMCPS2007 http://www.AXMEDIS.org/documenti/view_documenti.php?doc_id=2931 Rome Workshop videos (Italian) Part 1: http://www.AXMEDIS.org/documenti/view_documenti.php?doc_id=2986 Part 2: http://www.AXMEDIS.org/documenti/view_documenti.php?doc_id=2987	

AXMEDIS Questionnaire:

- General Questionnaire, version 3.3:
http://www.AXMEDIS.org/documenti/view_documenti.php?doc_id=3196
- Business Questionnaire, version 1.0:
http://www.AXMEDIS.org/documenti/view_documenti.php?doc_id=684

Additional materials and press cuttings can be found online form the AXMEDIS web site, www.AXMEDIS.org .

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Workshops, Tutorials and Demonstrations Performed

Workshops and Demonstrations Performed, up to M12				
Partner	Title	Date	Event	Location
Laurence Pearce [XIM]	AXMEDIS	May 2005	1st Clustering Workshop on Cross-Media European Projects, INCCOM2005 http://www.inccom.org/index.php?option=com_content&task=view&id=58&Itemid=112	Valladolid, Spain
Paolo Nesi,	AXMEDIS	May 2005	Exhibition, eLearning Conference http://www.elearningconference.org/exhibition/AXMEDIS.htm Last accessed August 2005	Brussels, Belgium
Isabella Longo [AFI]	AXMEDIS	Jan 2005	Exhibition, MIDEM2005 http://www.midem.com	Cannes, France
P. Bellini, I. Bruno, P. Nesi, D. Rogai, A. Vallotti	New services for the public in a technology-related approach: the AXMEDIS project inside a library	Sep 2005	European Research Fair	Paris, France
Paolo Nesi (DSI-DISIT)	Tutorial on Multimedia content distribution and protection	2005	IEEE International Conference on Engineering Complex Computer Systems	Shanghai, China
FUPF	Rights and Trust in Multimedia Information Management	September 2005	9th IFIP TC-6 TC-11 Conference on Communications and Multimedia Security	Viena, Austria
Workshops and Demonstrations Performed, M12 to M24				
Partner	Title	Date	Event	Location
FUPF	Generation of Standardised Rights Expressions from Contracts: An Ontology Approach?	October 2005	The 3rd International Workshop on Regulatory Ontologies (WORM 2005)	Larnaca, Cyprus
UNIVLEEDS, FHGIGD, DSI	AXMEDIS On-Demand Programme and Publication	30 Nov – 2 Dec 2005	AXMEDIS2005	Florence, Italy
ANSC	New Services for the Public in a	30 Nov – 2 Dec	AXMEDIS2005	Florence, Italy

	Technology-related Approach: the AXMEDIS Project Inside Accademia Nazionale di Santa Cecilia	2005		
DSI, TISCALI, EUTELSAT, AFI	AXMEDIS General Tutorial	30 Nov – 2 Dec 2005	AXMEDIS2005 training and demo	Florence, Italy
ILABS, XIM, DSI, UR	AXMEDIS Production Tutorial	30 Nov – 2 Dec 2005	AXMEDIS2005 training and demo	Florence, Italy
TISCALI, EUTELSAT, ILABS, UNIVLEEDS	AXMEDIS Distribution Tutorial	30 Nov – 2 Dec 2005	AXMEDIS2005 training and demo	Florence, Italy
Paolo Nesi (DSI-DISIT)	Tutorial on Multimedia content distribution and protection	2005	IEEE International Conference on Engineering Complex Computer Systems	Shanghai, China
Paolo Nesi (DSI-DISIT)	Presentation of AXMEDIS	Nov 2005	DMIN, Digital Media	Italy, Torino
P. Nesi, D. Rogai, A. Vallotti (DSI-DISIT)	Presentation of AXMEDIS	Feb 2006	DMP General Assembly	Ivrea
P.Bellini, I. Bruno, P. Nesi, D. Rogai, A. Vallotti (DSI-DISIT)	New Services for the Public in a Technology-Related Approach: the AXMEDIS Project Inside a Library	Sep 2005	AI*IA Workshop for Cultural Heritage	Milan Italy
Workshops and Demonstrations Performed, M25 to M36				
Partner	Title	Date	Event	Location
UPC	An implementation of a trusted and secure DRM architecture.	Oct 30 - Nov 1, 2006	First International Workshop on Information Security (IS'06)	Montpellier, France
UPC	Use of SAML for single sign-on access to multimedia contents in a peer-to-peer network.	Oct 30 - Nov 1, 2006	First International Workshop on Information Security (IS'06)	Montpellier, France
UPC	A multimedia content interchange framework for TV producers	Dec 2006	2nd International Conference on Automated Production of Cross Media Content for Multi-channel Distribution	Leeds, UK
UPC	Towards the interoperability between MPEG-21 REL and Creative Commons licenses	Dec 2006	2nd International Conference on Automated Production of Cross Media Content for Multi-channel Distribution	Leeds, UK
UPC	Protection of MP3 music files using Digital Rights Management and	Dec 2006	2nd International Conference on Automated Production of Cross Media Content for Multi-channel Distribution	Leeds, UK

	symmetric ciphering			
UPC	Translation between XML- based rights expressions using UML and relational models	Dec 2006	2nd International Conference on Automated Production of Cross Media Content for Multi-channel Distribution	Leeds, UK
DSI, ALL	Tutorial on AXMEDIS Framework Overview & Applications	Dec 2006	2nd International Conference on Automated Production of Cross Media Content for Multi-channel Distribution	Leeds, UK
ILABS, DSI, UNIVLEEDS, FUPE, AFI	Tutorial on AXMEDIS Content Production and Authoring	Dec 2006	2nd International Conference on Automated Production of Cross Media Content for Multi-channel Distribution	Leeds, UK
FHGIGD, DSI, UR	Tutorial on AXMEDIS Content Processing and Automatic Production	Dec 2006	2nd International Conference on Automated Production of Cross Media Content for Multi-channel Distribution	Leeds, UK
UR, XIM, HP	Tutorial on Content Production Management via Workflow and AXMEDIS	Dec 2006	2nd International Conference on Automated Production of Cross Media Content for Multi-channel Distribution	Leeds, UK
ILABS, TISCALI, EUTELSAT, UNIVLEEDS	Tutorial on AXMEDIS Multi- channel Content Distribution	Dec 2006	2nd International Conference on Automated Production of Cross Media Content for Multi-channel Distribution	Leeds, UK
DSI	Workshop on Cross Media Content Production and Sharing	April 2007	CMCPS2007 Workshop on Cross Media Content Production and Sharing	Rome, Italy

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