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D3.3.3-Report on activities carried out by NEM Forum and recommendations to NEM Researchers

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Abstract

In order to ensure that the NEM activities are complemented with the widest set of views and are not limited to the most active NEM members and researchers, the Open Forum was created 4 years ago. In this forum, in addition to the regular participants of NEM, individual experts are invited to comment and contribute and express their views in a sort of supporting think-tank.

This deliverable reports on the preparation process, activities, discussions and recommendations of the Open Media Forum during the meetings held under the FutureNEM duration.

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Impressum

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Executive summary

The FutureNEM task 3.3 "Support to Open networked media discussion Forum – The NEM Forum" contemplates the support to the discussions carried out within the Open Forum, as a think tank capable to advise NEM on key issues of relevance to NEM. NEM Open Media Forum held its first meeting in Saint Malo, France, on October 2008.

This deliverable includes a summary of activities, discussions and recommendations conducted in the NEM Open Media Forum. It analyses the background that allowed the discussion to appear as a complement to other NEM activities as well as a way of engaging more people to create and share new ideas, openly discussing the future of the sector.

The NEM Open Media Forum has proven successful and effective in both quantitative (people that joined and participated in the discussions) and qualitative (quality of the experts and dynamism of the debates and discussions) aspects, and it is regarded as a very useful tool for the dissemination of NEM Activities, and foster cooperation between NEM participants and with external stakeholders. This was recently acknowledged by the NEM General Assembly held in Torino, September 2011, as well as by the NEM Steering Board, held in Istanbul, November 2011.

The sequence of debates during last meetings of the NEM Open Forum can be summarized as follows:

2008	2009	2010
Celtic and FP7 Calls 4 /5 →	Future Work programme → priorities	Importance to exploit results of the R&D efforts
	Standardization →	Standardization work items and priorities
	PPP	
Mobile Multimedia →	New generation Mobile TV	
	Education challenges →	Education and training activities Education European Master
Media in the Web 2.0		
		International Cooperation

In 2011 the issues under discussion were:

- **Standardization regulatory package**. Offering continuity to the discussions held in the past 2 meetings
- **SMEs participation in the NEM Research activities**. Opening a new topic for discussion in the Forum
- **International Cooperation**. Following the successful discussions had around this theme in the past meeting.

In the field of standardization, some of the most relevant topics that were mentioned during the discussions were:

- Understanding the new 2011 standardization regulatory package

- Debate on the efficient mechanisms to connect research results and standardization processes
- Promotion activities from Standardization Organizations to host contributions from research projects and related services
- Some relevant standardization activities connected with the networked media field
- Confirmation on the need of continue working on the best ways to make efficient use of the research funds when dedicated to support standardization activities, through more flexible Grant Agreement mechanisms.
- Very active reaction of FP7 projects working in the standardization domain, by having responded to the FutureNEM survey. 80% of the FP7 projects do include standardization activities in their respective work plans.
- Update of the NEM position paper on standardization
- Outcome of the debates: Update of the current NEM Position Paper, to be conducted by the NEM Steering Board and highlight the above issues, particularly on the need of finding more flexible mechanisms for FP7 Grant Agreements allowing matching of the standardization processes.

The following projects responded to the survey carried out by NEM Open Media Forum with the support of FutureNEM:

- ALICANTE, MediA Ecosystem Deployment through Ubiquitous Content-Aware Network Environments

- CNG, Community Network Games, Exent Technologies.

- COAST, COntent Aware Searching, retrieval and sTreaming

- COMET, COntent Mediator architecture for content-aware nETworks, Telefónica I+D

- ENVISION, Co-optimisation of overlay applications and underlying

- FASCINATE, Format-AgnosticSCript-based INterAcTive Experience

- I-SEARCH, A unified framework for multimodal content search

- MUSCADE, Multimedia Scalable 3D for Europe

- OCEAN, Open ContEnt Aware Networks

- OPTIMIX, Optimisation of Multimedia over wireless IP

- OPEN MEDIAWEB

- OPTIBAND, Optimization of bandwidth for IPTV video streaming

- PLAYMANCER: A European Serious Gaming 3D Environment

- P2P-Next, Next Shared Content Distribution Platform

- TA2, Together Anytime Together Anywhere

After the open debate maintained during the Torino´s meeting among all the experts, it was concluded that an update of the current NEM Position Paper on Standardization, to be conducted by the NEM Steering Board, was necessary. This review of the position paper should highlight the above issues, particularly on the need of finding more flexible mechanisms for FP7 Grant Agreements allowing matching of projects research results to the standardization processes.
The summary on how to connect research results and standardization was summarized in the following chart:

> **Outcome of the standardization debate**: **Update of the current NEM Position Paper, to be conducted by the NEM Steering Board and highlight the above issues, particularly on the need of finding more flexible mechanisms for FP7 Grant Agreements allowing matching of the standardization processes.**

After the initial debate on standardization, the discussion moved to the issue of how to support NEM SME participants in their involvement in R&D activities.

In this sense, and after the detailed survey conducted by the NEM SME Activity, nothing was detected in the NEM practices, processes or positions that may harm SMEs interests. Nonetheless, a call was made to NEM GA, NEM SB, NEM EG to extend the targeted research programmes and objectives beyond the current focus on objective 1.5 challenge 1 of FP7. Other research programmes and objectives, of particular interest to SMEs, should be more visible and promoted by NEM; like for example: research for SMEs, challenge 4 calls for SMEs focused projects, Eurostars programme, etc.

As main outcome of these debates on SMEs it can be summarized that NEM should extend the scope of its targeted Research Programmes and their Calls to cover other work programmes and other objectives in addition to FP7 challenge 1 - objective 1.5, and match the corresponding activities (networking sessions), announcements, etc, in accordance with these extended interests.

Outcome of the debates: **NEM should extend the scope of its targeted Research Programmes and their Calls to cover other work programmes and other objectives in addition to FP7 challenge 1 objective 1.5, and match the corresponding activities (networking sessions), announcements, etc, in accordance with these extended interests. NEM SB and NEM EG are called for to pay more attention to these other opportunities.**

Finally, the last topic addressed during the meeting was international cooperation. Mention was made to the interest that Networked Media has raised in a number of countries around the world (India, Russia, Africa, Latin America, etc.). In particular, representatives from the Technical University of Caribbean from Colombia did participate in the NEM Summit 2010 and are now also participating in the NEM Summit 2011, as well as in the debates of the NEM Open Media Forum, expressing interest to reach cooperation projects where Colombian Universities can get involved.

A call to NEM participants was made in order to update the GlobalNEM position paper including all the recent interests that NEM has raised beyond Europe and making explicit mention to concrete research groups that show serious commitment such as it is the case of the Technical University of Caribbean from Colombia.

> **Outcome of the debates: note taken on the interest from Colombian researchers to actively work with NEM researchers. Call to NEM participants to update the GlobalNEM position paper**

Once the debates in 2011 finalized, a brainstorming session on some possible issues for future debates within the NEM Open Media Forum was held. The following proposals can be mentioned:

- Enlarge participation of Small and Medium size Enterprises (SMEs) in the regular activities of NEM and NEM related research projects.

- New Societal challenges. How NEM can contribute. Which European Societal challenges are of highest priority from the NEM points of view?

- Transversal research cooperation. Identify mechanisms which can foster the launch of transversal projects including NEM related technologies, as main core technologies or supporting technologies, but addressing other sectors: health, transport, security, space, etc. Cooperation with emerging Public-Private Partnerships (Future Internet.

- Extensive use of Regional Structural Funds. Identify mechanisms by which current Structural Funds can be made available to support NEM Strategic Research Agenda. Organize NEM days within the annual European Regions Week?

The facilitator of the NEM Open Media Forum debates, Dr. J. Seseña, thanked to all participants for the interest on the discussions within the Open Media Forum as well as the lively exchange of ideas which has happened during the life of the Forum and invited all these experts to continue and strength this activity that has demonstrated to be extremely useful for NEM and its members.

A draft of the NEM Position Paper on standardization is currently being under consideration by the NEM Steering Board. Annex IV.

List of authors

Company	Author
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1. Introduction

The Open Media Forum is a permanent think tank anticipating ideas, expressing comments about how NEM, Networked Media and the new super-sector are evolving and elaborating on new trends that may guide to new research topics in the sector. This forum is supported by senior experts (mostly those working in NEM members), with strategic profiles rather than research profiles. Their opinions are sought as a complement to other corporate or R&D Institutions positions since thanks to their wide experience and reliable criteria they can make breakthrough proposals and help NEM to think out of the box.

This type of Forum was demonstrated as crucial to promote attention from high level staff of industries when launching NEM and therefore it was considered that re-launching the Forum could be a powerful tool for helping NEM to drive the platform, identify future research topics and open the platform to external experts' opinions.

In order to launch the Networked Media Open discussion forum (the NEM Forum), a document on goals, scope, membership, etc., was produced late 2007 and distributed to NEM Steering Board, NEM Executive Group and the European Commission, for comments and guidance. Once the proposal was approved the Forum initiated its activity organizing its first meeting in coordination with the NEM Summit in 2008. Since that moment 3 additional meetings took place in 2009, 2010 and 2011.

This document includes a summary of activities, discussions and recommendations conducted in the NEM open forum in the last meeting held on September 27th 2011 in Torino (Italy) in coordination with the 2011 NEM Summit.

2. Background on the open Media Forum discussions

The Open Media Forum is carried out through meetings organized and promoted by FutureNEM targeting specific comments on points in the SRA and NEM Vision, of current interest to the NEM community. At each meeting, the members are given presentations and demonstrations by experts on key topics as well as presentations from the FutureNEM team. The Forum has then starting material to launch discussions.

It also receives inputs developed by projects working under FP7, Celtic and, in particular, FutureNEM and is asked to comment and provide their views regarding key issues of relevance. The agenda of the Forum is proposed by the NEM Executive Group.

The Forum works in order to provide comments, advice, suggestions and recommendations, as appropriate, to NEM, European Commission, Member States, Eureka, as applicable, mainly on strategic orientation on trends in the NEM field, actions and technologies required to match the needs of Users and Society, etc.

As NEM is already well driven by industrial goals, the complement of views from users of the NEM technologies and other external experts, the intermediate exploitation entities and planners and prescriptors of technology provide new ideas, confirm current trends and assist the whole of the research community to shape the future R&D path.

In addition, NEM forum provides an opportunity to newcomers to NEM to better understand the progress and achievement of NEM as well as what has happened with NEM during last period.

The Forum meets about once per year, in a timely manner taking opportunity of other key events (like for example, NEM General Assembly, Commission events, etc.) in order to minimize travelling.

The sequence of debates during last meetings of the NEM Open Forum can be summarized as follows:

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- **International Cooperation**. Following the successful discussions had around this theme in the past meeting.

3. Logistic issues

3.1 Attendance

Attendees	Organization	Contact
Alexandru Stan	IN2 Search interfaces Develop Ltd	as@in-two.com
Amela Karahasanovic	Sintef IKT	Amela@sintef.no
Anne Lehouck	European Commission	Anne.lehouck@cencenelec.eu
George Ioannidis	IN2 Search interfaces Develop Ltd	gi@in-two.com
Georg Thalinger	Joanneum Research	Georg.thallinger@joanneum.at
Guy Marechal	MEMNON	Guy.noel.marechal@gmail.com
Hadmut Hölken	Holken Consultants & Partners	holken@holkenconsultants.com
Jacques Beslot	Blended Learning	Jamesijo4g@gamil.com
Lorena Medina	Universidad Tecnologica del Caribe	Lore.medina25@hotmail.com
Luc Van den Berghe	CEN CENELEC Management Centre	lucvanderberghe@cencenelec.eu
Marco Serena	University of Firenze, Disit Lab	serena@dsi.unifi.it
Mu Mu	Lancaster University	m.mu@lancaster.ac.uk

Nicola Mitolo	AxmediaTech, SRL	mitolo@axmediatech.com
Pablo Bonaveri	Vice-Chancellor Research, U. T. Caribe, Colombia	Pablo.bonaveri@uac.edu.co
Paolo Nesi	University Firenze Disit Lab	nesi@dsi.unifi.it
Paul Walland	IT Innovation Centre	pww@it-innovation.ston.ac.uk
Pierre Pleven	Institut Telecom	Pierre.pleven@inst.rurtelecom.fr
William Knowles	Lancaster University (P2P-Next)	c.knowles@lancaster.ac.uk
FutureNEM supporters to Networked Media Open discussion Forum		
Jean Dominique Meunier	Technicolor, Chairman NEM	Jean-dominique.meunier@technicolor.com
Pierre Yves Danet	France Telecom, Vice Chair NEM	Pierre-yves.danet@orange.com
Andy Bower	BBC, ViceChair NEM	Andy.bower@bbc.co.uk
Julián Seseña	Rose Vision	jsesena@rose.es

Meeting of the Open Media Forum, Room 15A Escola Politecnica di Torino, Sept 27th, 2011

3.2 Venue

The meeting was organized at the Escola Politecnica di Torino on September 27th between 10:00 – 12:30. The meeting was moderated by Dr. Julián Seseña.
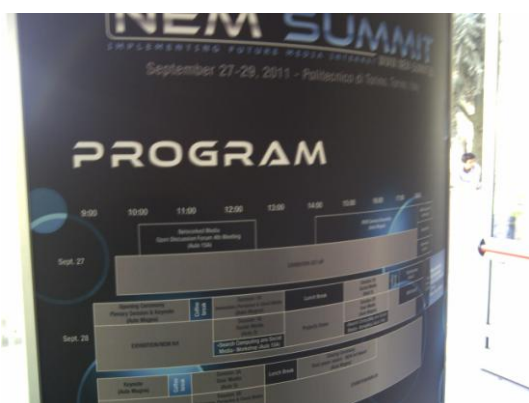
Labels at the NEM Summit and meeting room

3.3 Organization of the 4ᵗʰ meeting

At each meeting, the facilitator of the NEM Open Media Forum, Dr. Seseña, proposes a number of topics to the Steering Board for debating openly within the NEM Forum. These topics are mainly those already raised in the NEM debating paper. This debating document tries to provoke debates within the NEM Open Discussion Forum and is intended to serve as a basis to motivate discussions on specific issues, following the previous two formal meetings which. This document served to raise debates in the period 2010 - 2011.

The NEM Forum previously three meetings, at the occasion of the NEM Summits: 2008 (Sint Malo), 2009 (Saint Malo), 2010 (Barcelona) and the recent one here reported held in Torino (September 2011). During the last years a large number of discussions have been launched within the Forum, for example about "New generation mobile TV-Market and Technology", "International cooperation" or regarding the participation of the "NEM Small and Medium Enterprises" in the NEM platform and the research programmes. As a consequence of these discussions new NEM Activities were launched and now International Cooperation and NEM SME related activities are carried out also within GlobalNEM and NEM SME Activity.

A number of topics are identified and described to generate comments and inputs from the interested stakeholders. They are:

- **International cooperation**. Need to enlarge and extend research with researchers overseas. Regions of priority.

- Enlarge participation of **Small and Medium size Enterprises (SMEs)** in the regular activities of NEM and NEM related research projects.

- **New Societal challenges**. How NEM can contribute. Which European Societal challenges are of highest priority from the NEM points of view?

- **Standardization**. To what extend NEM related projects and NEM activities can foster standardization activities. Is there a possibility to build a standardization work programme priorities in relation to NEM technologies, services and applications?

- NEM meetings to demonstrate and disseminate the results of NEM related projects; promotion of a sort of **NEMinvest Forum**, where investors, capital ventures, users and buyers of technology, can understand the results achieved by NEM related projects and further exploitation can be organized, fostered.

- **Simplification of research programmes** at European, National and Regional levels. Possible measures to simplify procedures, reviews, etc. Moving controls from a-priori assessment to a-posteriori checks.

- **Transversal research cooperation**. Identify mechanisms which can foster the launch of transversal projects including NEM related technologies, as main core technologies or supporting technologies, but addressing other sectors: health, transport, security, space, etc. Cooperation with emerging Public-Private Partnerships (Future Internet, Green Car, Energy efficient buildings, etc.)

- **Extensive use of Regional Structural Funds**. Identify mechanisms by which current Structural Funds can be made available to support NEM Strategic Research Agenda. Organize NEM days within the annual European Regions Week?

- **Public procurement**. Explore to what extend the public procurement can constitute the first and crucial push for the adoption of the results of NEM technologies and NEM related projects achievements. Can NEM community be organized to serve as pole of discussion and promotion for public procurement?

Comments are expressed to the following email: jsesena@rose.es or at the NEM website, discussion forum page, or through the NEM social network page at LinkedIn or at the NEM Forum meetings, whenever becomes appropriate for the participant.

Background on previous discussions within the NEM Forum can be found at www.nem-initiative.org

4. Notes from the 4th NEM Open Forum

4.1 Standardization issues

In addition to the previous debates which the NEM Forum have already held, during last months, the European Commission has issued a communication on "A strategic vision for European standards: moving forward to enhance and accelerate the sustainable growth of the European economy by 2020". NEM Forum, with the support of FutureNEM, has organized the involvement of the key experts from the European Commission DG Enterprise and Industry in order to debate and understand the upcoming regulation on this field, known as the "standardization package".

Dr. J. Seseña introduced the context of standardization and NEM. Supporting documents and material for the debate were introduced:

- **FutureNEM D3.3.1.** Updated inventory on relevant standards for networked media

- **FutureNEM D3.3.2.** Standardization gaps

- **COM(2011) 311/2** Communication from the Commission to the Eruopean Parliament, the council and the European Economic and Social Committee. A strategic vision for European standards: moving forward to enhance and accelerate the sustainable growth of the European economy by 2020.

- **COM (2011) 315,** Proposal for a Regulation of the European Parliament and of the Council on European Standardization and amendment of several Council directives

- **NEM position paper on standardization.**

He also referred to the survey conducted to NEM related projects, asking for a number of topics and including the following request for data and opinions:

- Basic Information

- Your project, is considering any activity on NEM-related standards, either existing standards or targeting development of new standards?

- Does your contractual project work plan include any standardization activities?

- Please, indicate which % of project time /project resources are dedicated to standardization activities.

- At what project stage are planned the standardization activities?

- Have the project plans to submit formal contributions to standardization bodies/standardization consortia?

- Which ones of the following topics could include your contributions to standardization bodies/standardization consortia?

- In your opinion, what are the main barriers/problems for R&D projects to efficiently contribute to standardization bodies/standardization consortia?

- In your opinion, what are the main regulatory/procedural/contractual barriers for R&D projects to efficiently contribute to standardization bodies/standardization consortia? Please, comment.

- What are your recommendations / suggestions to foster project contributions from R&D projects to standardization bodies?

The following projects responded to the survey:

- ALICANTE, MediA Ecosystem Deployment through Ubiquitous Content-Aware Network Environments
- CNG, Community Network Games, Exent Technologies.
- COAST, COntent Aware Searching, retrieval and sTreaming
- COMET, COntent Mediator architecture for content-aware nETworks, Telefónica I+D
- ENVISION, Co-optimisation of overlay applications and underlying
- FASCINATE, Format-AgnosticSCript-based INterAcTive Experience
- I-SEARCH, A unified framework for multimodal content search
- MUSCADE, Multimedia Scalable 3D for Europe
- OCEAN, Open ContEnt Aware Networks
- OPTIMIX, Optimisation of Multimedia over wireless IP
- OPEN MEDIAWEB
- OPTIBAND, Optimization of bandwidth for IPTV video streaming
- PLAYMANCER: A European Serious Gaming 3D Environment
- P2P-Next, Next Shared Content Distribution Platform
- TA2, Together Anytime Together Anywhere

Some key results of the survey, of merit to mention, are:

Question	Facts
Are running FP7 projects considering any activity on NEM-related standards, either existing standards or targeting development of new standards	Yes (80% of the projects)
Are running FP7 projects considering any activity on NEM-related standards, either existing standards or targeting development of new standards	Yes (80% of the projects)
Are standardization related activities included in the formal work plan of the project DoW?	Yes (80% of the projects)
Which percentage of project resources are planned to support Standardization related activities?	Less than 5 % XXXXXXX 5 – 15 % X 15-20 % X

At what time the standardization related activities are planned?	Beginning XXXX End of project lifetime XXXXXXXX

Question	Facts	
At which representation level are made the contributions to Standardization bodies: on behalf of the Consortium or under individual partner basis	On behalf of consortium On individual basis	XXX XXXXXXXX
At which representation level are made the contributions to Standardization bodies: on behalf of the Consortium or under individual partner basis	On behalf of consortium On individual basis	XXX XXXXXXXX

Perceived Barriers	Level of concern
Barriers related to standardization procedures	XXXXXXXX
Barriers to influence standardization bodies.	XXXXXXXXXX
Barriers on management standardization activities	XXX
Barriers on knowledge about the advantages of standardization	XX
Barriers on incentives for standardization activities	XXX
Problems related to IPR protection	XXX
Standardization costs are too high	XXXXXXX
Other (please specify): In my opinion, the main problem is that a project duration is relatively small in comparison with the time needed for making a technology adopted within a standard. The only pertinent way to participate to the standardization is to have within the consortium partners already participating to standards or partners committing to continue the standardization after the end of the project.	X

Taking into consideration the inputs from the above projects, which kindly provided relevant information to FutureNEM and the debates within the NEM Open Media Forum on standardization, launched at the occasion of the meeting in the NEM Summit in Barcelona (2010) and Torino (2011), FutureNEM has been able to elaborate on a number of standardization issues like: areas where further work on standardization is recommended, main activities of the current research projects inputting to the standardization bodies, as well as main barriers and possible solutions to optimize and make more efficient the connection between research projects and standardization activities.

The document also contains some updated references to key work items underway in several standardization bodies (ETSI, IETF, MPEG, SMPTE, ISO/IEC, 3GPP. Consideration is also given to the main priorities of the ICT standardization work programme. More information on this document and the individual resonses received to the standardization questionnaire can be found in annexes 4 and 5 of this document.

After this introduction, **Mrs Anne Lehouck**, who kindly accepted the invitation sent by NEM to participate in the NEM Open Media Forum, introduced the current Communication from Commission on the Standardization regulatory package. This allowed directly interact with the NEM experts on a number of affairs of concern to the NEM researchers deeply involved in the activities of standardization.

Mrs. Anne Lehouck at the Open Media Forum

The summary of the Communication: strategic vision 2020

- Over all objective: the European standardisation system should be able to respond to new challenges, including new domains such as climate change. It should therefore be flexible, comprehensive, inclusive, efficient and technically up-to-date

- Describes the detailed standardisation policy implemented by the Commission including the non- regulatory actions

- Implemented by the Commission as from the date of adoption

- Measurement and assessment whether strategic objectives have been reached will be done by 2013 at the latest

Standardisation ICT and interoperability**:**

- Main concern is to ensure interoperability between devices, applications, services and networks with the objective to reap the full benefit of ICT

- By promoting the use of standards in European legislation, public policy and public procurement

- Building on the synergy between ESO's and fora&consortia

- Implement the proposals brought forward by the White Paper (2009)

- Regulation will allow referencing of selected fora&consortia specifications in public procurment. Selection is based on compliance with quality criteria

- The Commission will increasingly use selected fora&consortia specifications, compliant with the same quality criteria, in public policies

- By end 2011, the Commission will set up a dedicated multi-stakeholder platform to advise the Commission on matters related to the implementation of the ICT standardisation policy

- Member States should increase the use of standards including the selected ICT standards in public procurement

In the specific area of ICT, the regulatory package foresees:

- Chapter IV- article 9: Recognition of technical specifications in the field of ICT

- « Either on proposal from a public authority referred to in Directive 2004/18/EC or on its own initiative, the Commission may decide to recognise technical specifications which are not national, European or international standards and meet the requirments set out in Annex II, as ICT standards »

- Article 10: Use of ICT standards in public procurment

- « ICT standards referred to in Article 9 shall constitue common technical specifications referred to in Directives 2004/17/CE and 2004/18/EC? And Regulation (EC)No 2342/2002

Mr. Van Den Berghe (CEN CENELEC) introduced expressed the welcoming of CEN CENELEC to the standardization regulatory package as it underlines the importance of standardization for European economic and social life. He mentioned that it is therefore valuable to have these proposals and debates such as this. The Commission consultation process since 2008 (more for ICT) has resulted in a comprehensive set of proposals, but it would be surprising if we not have some reservations on the detail.

Talking about R&D and standardization, he recalls: "*standards can help to bridge the gap between research and marketable products or services." "A systematic approach to research, innovation and standardisation should be adopted at European and national level to improve the exploitation of research results, help best ideas to reach the market and achieve wide market uptake.*"

Pre-normative research: R&D likely to generate new matters for standardisation, usually in advance of these activities, (i.e. work anticipating future standards). CENELEC has produced a book, STAIR, on how to exploit the results of R&D in the standardization domain, and there is an online service to support researchers on the path to follow in the standardization domain:

- ✓ www.cen.eu/go/research
  www.cenelec.eu/go/research

- ✓ a helpdesk research@cencenelec.eu

Mr Van Den Berghe further stressed a number of points explaining on the connection between Research and standardization:

- Faster and easier access to markets

- Dissemination of your research results

- Opportunity to network

- Enhancement of the economic value of your research project

- Helping access to public procurement markets

- Interoperability

- Codification of the state of the art

- Reassurance for consumers
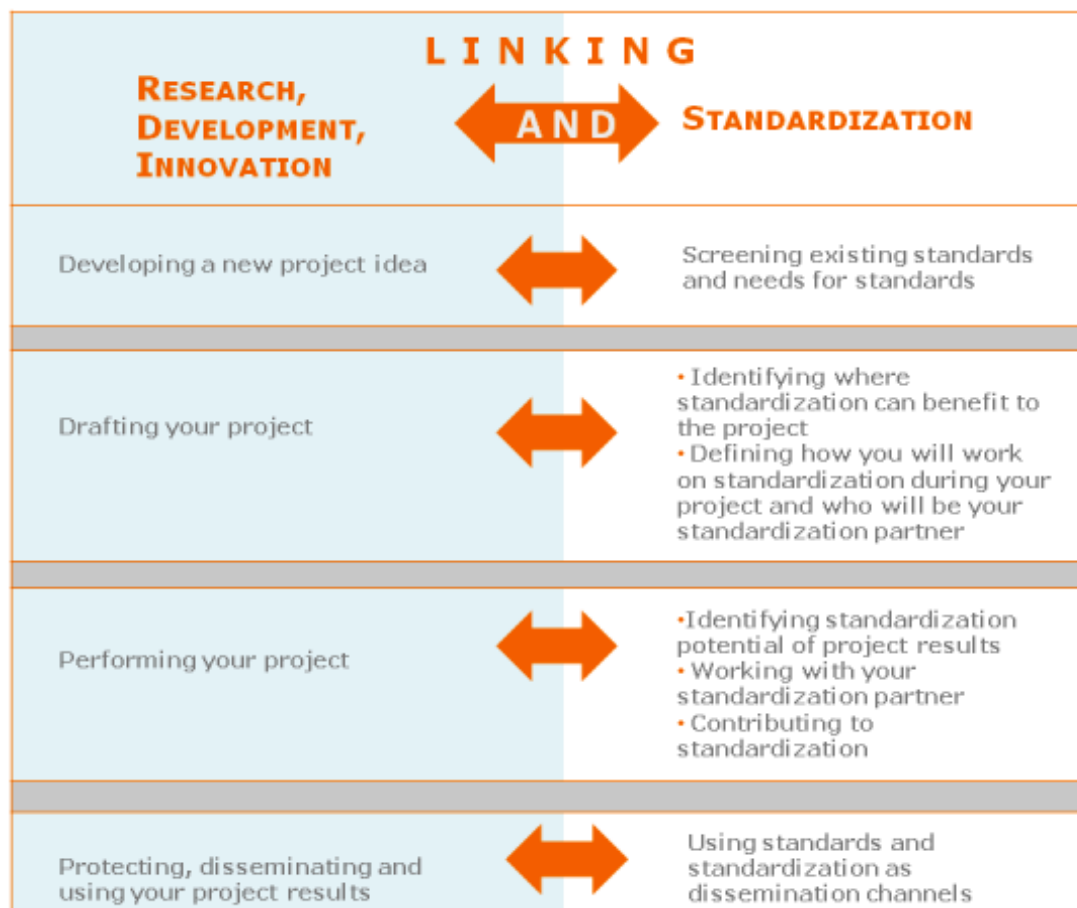
Although **Chantal Bonardi** (ETSI) could not participate in this meeting, she kindly reported on the main activities ongoing within ETSI MCD Technical Committee:

- New publications (available, free of charge, at http://pda.etsi.org/pda/queryform.asp):

- Technical Report on Subtitles distribution, situation and perspectives (TR 102 989): it describes current ways of distributing subtitling information from the producer to the operator and consumer device. Evaluation of gaps and missing links between existing standards and common practices/requirements.

- Technical Report on Programme guide information distribution, situation and perspective (TR 102 988): it describes current ways of distributing programme guide information of linear TV services from the producer to the operator and consumer device. Evaluation of gaps and missing links between existing standards and common practices/requirements.

- Technical Report on 3D Gaming Graphics Delivery Overview (TR 102 794): the TR includes Use cases, requirements, overview of potential solutions and a gap analysis. Options for the actual delivery include the specification of a transport protocol for streaming OpenGL-ES 2.0 primitives over a TCP connection or streaming of specialized 3D models.

- Technical Report on Audience Measurement (TR 102 688-8): the scope of this report is to access activities and business plans underway with relevance to audience measurement in order to specify requirements.

Work progressing on:
- Technical Specification on CDN Interconnection, use cases and requirements (TS 102 990). Status: stable draft which continues to be developed.

- Technical Report on analysis for CA/DRM interoperability (TR 101 532): Architecture, Requirements and Mechanisms for interoperable CA/DRM-solutions supporting horizontal CPE markets. Status: working draft.

- Technical report on Content Distribution Infrastructure (CDI) (TR 102 688-9): the scope of the Content Distribution Infrastructures work item is to assess the domain of Content Distribution Infrastructures, to identify and classify existing or upcoming solutions and the related standards. The scope should cover Internet Content Distribution as well as operator content distribution in fixed and mobile scenarii and remain architecture-neutral to best serve the largest possible set of target architectures. Status: draft currently in approval process by correspondence until 3rd October.

- Technical Specification on 3D Gaming Graphics Delivery Overview taking into account the conclusions of TR 102 794. Status: drafting work has not started yet.

Possible future topics:
- TV apps

- Content injection

The following points were subsequently debated extensively during the meeting:

- The Regulatory package would not impose any specific Standardization Organization (SO) where the standardization activities should be carried out. Researchers would have full flexibility to select the appropriate SO or other fora or consortia.

- However, the regulation would point to protect specifications, rather than bodies to develop these specifications.

- There is support to SMEs, including some mechanisms and financial actions, to be channeled through different paths

- The ICT standardization platform would be composed of about 65 members, including 14 representatives from Associations, 27 representatives from Member States, 17 representatives from Standardization bodies.

- How to contribute to the standardization organizations as result of research projects? How to better map the schedule of typical development of standardization work items, and the schedule of the projects? The current position of NEM regarding this issue was debated and claims were made towards more flexible approach of FP7 / Horizon 2020 Grant agreements when projects have the perspective to effectively contribute to standardization bodies. This flexibility would allow the more efficient use of the funds available from the European Commission funding projects to carry out research activities in a regular manner as per the typical standards development pace.

> **Outcome of the standardization debate**: **Update of the current NEM Position Paper, to be conducted by the NEM Steering Board and highlight the above issues, particularly on the need of finding more flexible mechanisms for FP7 Grant Agreements allowing matching of the standardization processes.**

4.2 NEM SMEs

As most of the time of the Open Media Forum meeting was consumed on the standardization affairs, a rapid review of the outcome of the NEM surveys to SMEs was made. Dr. Seseña reported on the statistical results of the survey and the poor response by SMEs to the second survey, due to the renewal of the membership application update.

It can be concluded from the survey that SME participants in NEM have not detected any barrier on the way NEM develops its positions, its strategic research agenda, its vision, etc., as most of the results of the SME survey do coincide with the general priorities of NEM. There are not insurmountable barriers for NEM participants to be actively in the NEM activities.

However, claims were made that NEM has focused too much on the opportunities raised by FP7 objective 1.5. While noting that the scope of the FP7 workprogramme in the objective 1.5 do fall quite well within the competences of the NEM SME participants, it was made evident that NEM is losing other opportunities in other Calls and other programmes, which would be also of specific interest to the NEM SMEs. Among others, the following research opportunities were mentioned:

- Challenge 4
- Capacities programme: Research for SMEs, Research for SMEs Associations
- Eurostars
- …

> **Outcome of the debates**: **NEM should extend the scope of its targeted Research Programmes and their Calls to cover other work programmes and other objectives in addition to FP7 challenge 1 objective 1.5, and match the corresponding activities (networking sessions), announcements, etc, in accordance with these extended interests. NEM SB and NEM EG are called for to pay more attention to these other opportunities.**

Additional information can be found at the NEM website, in the area of NEM SME Activity.

4.3 International Cooperation

Short time was left for debating on International Cooperation aspects. Mentioned was made to the interest that Networked Media has raised in a number of countries around the world (India, Russia, Africa, Latin America, etc.). In particular, representatives from the Technical University of Caribbean from Colombia did participate in the NEM Summit 2010 and are now also participating in the NEM Summit 2011, as well as in the debates of the NEM Open Media Forum, expressing interest to reach cooperation projects where Colombian Universities can get involved.

The GlobalNEM position paper is regularly updated to include references on opportunities for cooperation with countries around the world.

More information is available in the NEM website within the area of GlobalNEM. Invitation to contribute on updates to this position paper was made.

> **Outcome of the debates: note taken on the interest from Colombian researchers to actively work with NEM researchers. Call to NEM participants to update the GlobalNEM position paper**

4.4 Acknowledgments

The facilitator of the NEM Open Media Forum debates, Dr. J. Seseña, thanked to all participants for the interest on the discussions within the Open Media Forum as well as the lively exchange of ideas which has happened during the meeting.
He specially thanked to the invited experts, Mrs. Anne Lehouck (European Commission) and Mr Luc Van Den Berghe (CEN Cenelec), as well as to Mr. Jean Dominique Meunier (Technicolor, NEM Chairman), Mr. Pierre Yves Danet (France Telecom, NEM Vice Chair) and Mr. Andy Bower (BBC, NEM ViceChair).

5. Main issues and recommendations from the 2011 meeting

Main issues on discussions and outcome from the 4th meeting are here below briefed:

- **Standardization affairs**
    o Understanding the new 2011 standardization regulatory package
    o Debate on the efficient mechanisms to connect research results and standardization processes
    o Promotion activities from Standardization Organizations to host contributions from research projects and related services
    o Some relevant standardization activities connected with the networked media field
    o Confirmation on the need of continue working on the best ways to make efficient use of the research funds when dedicated to support standardization activities, through more flexible Grant Agreement mechanisms.
    o Very active reaction of FP7 projects working in the standardization domain, by having responded to the FutureNEM survey. 80% of the FP7 projects do include standardization activities in their respective work plans.
    o Update of the NEM position paper on standardization
    o Outcome of the debates: Update of the current NEM Position Paper, to be conducted by the NEM Steering Board and highlight the above issues, particularly on the need of finding more flexible mechanisms for FP7 Grant Agreements allowing matching of the standardization processes.

> **Outcome of the standardization debate**: Update of the current NEM Position Paper, to be conducted by the NEM Steering Board and highlight the above issues, particularly on the need of finding more flexible mechanisms for FP7 Grant Agreements allowing matching of the standardization processes.

- **Support to NEM SME participants**
    - o Nothing detected in the NEM practices, processes, positions which may harm SMEs interests.
    - o Call made to NEM GA, NEM SB, NEM EG to extend the targeted research programmes and objectives beyond the current focus on objective 1.5 challenge 1 of FP7. Other research programmes and objectives, of particular interest to SMEs, should be more visible and promoted by NEM; like for example: research for SMEs, challenge 4 calls for SMEs focused projects, Eurostars programme, etc.
    - o Outcome of the debates: NEM should extend the scope of its targeted Research Programmes and their Calls to cover other work programmes and other objectives in addition to FP7 challenge 1 - objective 1.5, and match the corresponding activities (networking sessions), announcements, etc, in accordance with these extended interests. NEM SB and NEM EG are called for to pay more attention to these other opportunities.

> **Outcome of the debates**: **NEM should extend the scope of its targeted Research Programmes and their Calls to cover other work programmes and other objectives in addition to FP7 challenge 1 objective 1.5, and match the corresponding activities (networking sessions), announcements, etc, in accordance with these extended interests. NEM SB and NEM EG are called for to pay more attention to these other opportunities.**

- **International Cooperation Opportunities**
    - o The wide interest of worldwide communities on research within NEM field was noted. Invitation to update the current GlobalNEM paper was made.
    - o Special mention was made on the high interest from Colombian researchers to cooperate with European researchers in the NEM field. Participants from Colombian have been present in the NEM Summit 2010 and NEM Summit 2011.
    - o Outcome of the debates: note taken on the interest from Colombian researchers to actively work with NEM researchers. Call to NEM participants to update the GlobalNEM position paper

> **Outcome of the debates: note taken on the interest from Colombian researchers to actively work with NEM researchers. Call to NEM participants to update the GlobalNEM position paper**

6. Future topics for NEM Open Media Forum debates

As possible issues for future debates within the NEM Open Media Forum, the following can be mentioned:

- Enlarge participation of **Small and Medium size Enterprises (SMEs)** in the regular activities of NEM and NEM related research projects.

- **New Societal challenges**. How NEM can contribute. Which European Societal challenges are of highest priority from the NEM points of view?

- **Transversal research cooperation**. Identify mechanisms which can foster the launch of transversal projects including NEM related technologies, as main core technologies or

supporting technologies, but addressing other sectors: health, transport, security, space, etc. Cooperation with emerging Public-Private Partnerships (Future Internet.

- **Extensive use of Regional Structural Funds**. Identify mechanisms by which current Structural Funds can be made available to support NEM Strategic Research Agenda. Organize NEM days within the annual European Regions Week?

NEM Open Forum participants are invited to raise comments on the above issues as per their own views and positions with respect to these critical items.

7. Annexes

7.1 Annex I: NEM Forum participants

This list includes to all those who have expressed their interest to get involved in the debates of the Networked Media Open Discussion Forum.

Name	Organization
A.M. Kondoz	University of Surrey
Alexandru Stan	IN2 Search interfaces Develop Ltd
Amedeo Zuccaro	ST Microelectronics
Amela Karahasanovic	Sintef IKT
Andreas Weber	Institut für Informatik II - Universität Bonn
Andrew Perkis	University of Norway Science and Tech, Start up companies Adactus And Digital Cinema
Aranka foldessy	ICT financial market place team
Bruno Aidan	Alcatel-Lucent
Carmen Mc Williams	Grassroots Arts and Research UG
Chantal Bonardi	ETSI
Christoph Dosch	IRT
David Wood	EBU
Denis Abraham	TDF
Dennis Garcia	CINTEL(Colombia)
Enrique Areizaga Sanchez	Robotiker
Enrique Menduiña	Telefonica I+D
Eugenio Triana	Professor Ad Honorem- ETSII Univesidad Politécnica de Madrid
Federico Jimenez	SDI Digital
Fernando Pereira	(Instituto Superior Tecnico)
Florent Genoux	SIGMA ORIONIS
Gatti Barbara	Cenelec
Georg Thalinger	Joanneum Research
George Ioannidis	IN2 Search interfaces Develop Ltd
Georges Martínez	(Motorola) DVB-UMTS
Gerard Faria	Teamcast
Guillermo Cisneros	ETSIT Universidad Politécnica de Madrid
Guy Marechal	MEMNON
Halid Hrasnica	Eurescom
Hadmut Hölken	Holken Consultants & Partners
Hugh Look	Rigthscom Limited
Jaime Delgado	Universitat Politecnica de Catalunya
Jacques Beslot	Bretagne French
Jan Bouwen	ALCATEL - Strategic Project Lead Residential Networked Applications
Jean Charles Point	JCP Consult
Jean Gelissen	Philips Research Laboratories Office - NMC Principal S. Advisor
Jean Jacques Delmas	TDF
Jean-Pierre Evain	EBU
Jean-Yves Savary	TDF
Joan Manuel Espejo	Abertis Telecom
Joao Da Silva	University of Luxembourg

Jose Manuel Menendez	UPM Madrid
John Cosmas	(Brunel U.) video processing and MM systems
José Jiménez	Telefonica I+D
John Ketchell	CEN CENELEC
José Luis Sevillano	AIE - GIART - FILAIE - Rights Collecting Societies
Josephus van Sas	Alcatel-Lucent
Juha Kaario	Nokia
Ken McCann	ZetaCast. Sponsored by Microsoft
Knud Bohle	Institute for technology assessment and systems analysis, Alemania
Latid Ladid	University of Luxembourg
Leandro de Haro Ariet	(UPM) Smart antennas
Leonardo Chiariglione	Convenor IEC/IEC JTC1 - NMC Principal Strategic Advisor
Lorena Medina	Universidad Tecnologica del Caribe
Luc Van den Berghe	CEN CENELEC
M. Luc Mathan	Orange - France Telecom group
Michael Rader	Institute for technology assessment and systems analysis (ITAS)
Marco Serena	University of Firenze, Disit Lab
Margot Dor	ETSI
Marine Villalba	CIU CEGETEC (Uruguay)
Miguel Alborg	IDI EIKON (Spain)
Miguel Pérez Subías	Asociación de Usuarios de Internet
Mikołaj Leszczuk	AGH University of Science and Technology
Mu Mu	Lancaster University
Murat Tekalp	KOÇ University
Nadia Magnenat-Thalmann	MIRALab / C.U.I., University of Geneva
Nicola Mitolo	AxmediaTech, SRL
Patrick Baudelaire	Thomson Multimedia
Pablo Bonaveri	Vice-Chancellor Research, U. T. Caribe, Colombia
Paolo Nesi	ECLAP Project
Paul Szucs	Senior Manager Technology and Standards, Sony Europe, Member Open IPTV
Paul Walland	IT Innovation Centre
Peter Siebert	DVB Project
Phillipe Letellier	GET
Pierre-Yves Danet	Orange - France Telecom group
Pierre Pleven	Institut Telecom
Rebekka porath	Philips
Renata Guarneri	CREATENET - EAI
Renaud di Francesco	Sony UK, Broadcast cluster EICTA
Roger Torrenti	SIGMA ORIONIS
Safak DOGAN	University of Surrey
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Susan Schwarze	OSGI Forum and Prosyst (VP)
Tatyana Lyadnova	BELISA (Belarus)
Tomas Cid	SDI Digital
Thorsten Herfet	Intel (CE Standars Manager) - DHWG
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Valérie Blavette	Orange - France Telecom group
Volker Hahn	Fraunhofer (Germany)
Walter Dees	Philips
William Knowles	Lancaster University (P2P-Next)
Yolanda Ursa	INMARK

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Isidro Laso Ballesteros	Unit D2, European Commission
Anne Lehouck	European Commission
Bartolomé Arroyo	European Commission
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Antonio Alfaro	Rose
Pierre Yves Danet	France Telecom, Vice Chair NEM
Ruben S Niño	Rose
Yves-Marie Le Pannerer	Technicolor
Jean-Dominique Meunier	Technicolor, NEM Chairman

7.2 Annex II: Agenda 4th NEM Open Media Forum meeting 2011

NEM SUMMIT 2011
Networked Media OPEN Discussion Forum

NETWORKED MEDIA OPEN DISCUSSION FORUM 4TH MEETING

Europe's Future in the Networked Media

Room # 15A, Politecnico di Torino, Torino, Italy, September 27th, 10:00 – 12 :30
Details of venue: http://www.nem-summit.eu/venue

AGENDA

1. **Welcome and opening by Networked Media Open Discussion Forum Chair and Coordinator.** Dr. Julián Seseña, President ROSE Vision, Coordinator NEM Open Forum, 5´

2. **Introduction of participants.** 5´

OPEN TO ENHANCING THE EUROPEAN STANDARDIZATION LANDSCAPE

3. **The FutureNEM inventory of standards relevant to networked media and Standardization gaps analysis.** FutureNEM team

4. **European Commission Communication on Standardization: a strategic vision for European standards: Moving forward to enhance and accelerate the sustainable growth of the European economy by 2020.**

Anne Lehouck, DG ENTR, European Commission

Invited participants:

- FP7 research projects having Standardization activities within their work plan: ALICANTE, CNG, COAST, COMET, ENVISION, FASCINATE, I-SEARCH, MUSCADE, OCEAN, OPTIMIX, OPEN MEDIA WEB, OPTIBAND, PLAYMANCER, P2P-Next, TA2

- NEM Members

- Standardization Organizations and Fora:

    . Chantal Bonardi, ETSI

    . Luc Van den Berghe, CEN-CENELEC

    .

Supporting documents and material for the debate:

- FutureNEM D3.3.1. Updated inventory on relevant standards for networked media

- FutureNEM D3.3.2. Standardization gaps

- COM(2011) 311/2 Communication from the Commission to the Eruopean Parliament, the council and the European Economic and Social Committee. A strategic vision for European standards: moving forward to enhance and accelerate the sustainable growth of the European economy by 2020.

- COM (2011) 315, Proposal for a Regulation of the European Parliament and of the Council on European Standardization and amendment of several Council directives

- NEM position paper on standardization.

Possible output of the debates: Update of the position paper on standardization

OPEN TO PROMOTION OF ACTIVE SME INVOLVEMENT IN NEM

5. **NEM SME Activity. NEM SME Membership. Presentation of Results of the survey to SMEs. Lessons for Action.** FutureNEM team

Invited participants:

- NEM Members, particularly SMEs

Discussion – debate

OPEN TO THE WORLD. INTERNATIONAL COOPERATION

6. **GlobalNEM. NEM beyond Europe. Benefits and risks derived from the International Cooperation. Updates of the NEM position on International Cooperation.**

Invited participants:

- FP7 projects having ICPC partners in their Consortia
- ICPC interested participants

Summary and conclusions, 5´

7.3 Annex III: Debating Paper

The latest version of the debating paper can be consulted in the NEM website, area of NEM Open Media Forum.

7.4 Annex IV: Standardization position paper
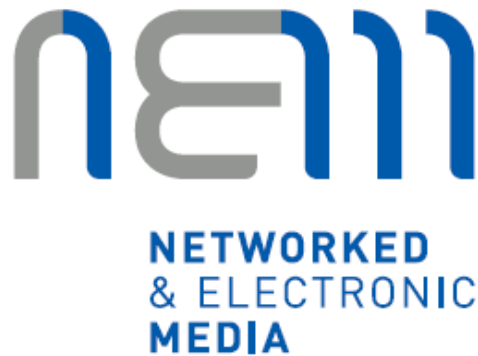
Position Paper on Standardization in the Networked and Electronic Media field
(Draft for Review)

This document constitutes a position paper of the NEM Technology Platform, elaborated with the support of the SA FutureNEM

Content

Draft Review of the Position Paper on Standardization in the Networked and Electronic Media field

November, 2011

7.4.1   Introduction.

This document tries to reflect the views of the NEM Community towards the enhancement of the standardization processes on technologies related to NEM.

- Editor: Dr. Julián Seseña, jsesena@rose.es, Tel +34 630047191, ROSE Vision, Spain.

This document has been discussed by the NEM Steering Board at its meeting in June 2008 in Berlin and further on at the NEM Open Media Forum held in Torino, September 2011, within the frame of the NEM Summit and NEM General Assembly meeting. Since the first meeting, a call was made to all NEM participants in order to make contributions and define priorities for this kind of activities. The list of interested experts who have participated in the final drafting of the document and expressed interest on the subject is provided here below.

At its meeting in Torino, the NEM Open Media Forum recommended NEM Steering Board to develop an updated and revised NEM Position Paper on Standardization.

Outcome of the standardization debate: **Update of the current NEM Position Paper, to be conducted by the NEM Steering Board and highlight the above issues, particularly on the need of finding more flexible mechanisms for FP7 Grant Agreements allowing matching of the standardization processes.**

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Additional experts and invited persons participated in the Torino meeting of the NEM open Media Forum

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7.4.2   NEM and Standardization

The NEM Initiative aims at building a sustainable European leadership in content production and networking technologies. Its objective is to promote a consistent European approach to the convergence of media and telecommunication which will be the heart of the Future Media Internet. The NEM European Technology Platform is an industry-led initiative which aims at fostering the convergence between the audiovisual and the telecom technologies.

The NEM constituency includes all organisations working in the area, among which content providers, broadcasters, network equipment manufacturers, networks and service providers, academia, standardisation bodies and government institutions. Those actors share a common Vision and produce a Strategic Research Agenda, as well as position papers in order to accelerate the development of the new sector in a harmonised and fruitful way, and place European industry at the forefront of the information era. One important area of the NEM efforts addresses the Standardization of NEM technologies and NEM related services and applications.

The NEM Vision sets the NEM research priorities for the coming years –short and midterm- They concern research on:

⇒ Digital Content – Design of rich media content by professionals and non-professionals supported by open and standardised tools for content creation, storage, representation, and indexing ensuring interoperability of various content formats, including efficient search and selection engines, and creation of new innovative media applications

⇒ Distributed Media Applications – Realisation of integrated multi-content communications, integration of classical and new media applications, and creation or adaptation of content dedicated to specific user groups, supported by novel open software and tools for integration of multimedia communications applications

⇒ Future Media Delivery Networks and Network Services – Establishment of autonomous networking and communications architectures, multidimensional network interoperability, universal and seamless service provisioning, Quality of Service and Quality of Experience in future service aware networks for media transport

⇒ New User Devices and Terminals - Integrated, scalable, and modular multimedia devices and gateways for home, portable and mobile devices with auto-configuration and auto-maintenance features and application programming interfaces for new media applications

⇒ NEM Enabling Technologies – Development of full set of necessary horizontal enabling technologies, ensuring realisation and implementation of NEM research objectives

The NEM would like to be instrumental to push, and when feasible, coordinate standardization efforts with the most relevant standards group to NEM:

⇒ ITU:
Besides the classical broadcast or CE-related standardisation bodies (DVB, CEA, ATIS) the awareness of this important change in the media world has led the ITU to establish the IPTV Focus Group.
While this has already been mentioned in the last report the visibility of the ITU-T IPTV FG has increased significantly. An important measure is that lots of confidential documents (ATIS IIF, Broadband Forum and also DVB documents) have been input to ITU and therewith now are in the public domain. In addition to

the IPTV work, ITU SG4 (satellite services) and SG6 (terrestrial services), are crucial for standardization of NEM related technologies

⇒ CENELEC:
The CENELEC TC 206 committee is taking care of "Consumer equipment for entertainment and information and related sub-systems"
Most of work items are related to NEM activities. Among them, it can be mentioned:
- Equipment interfaces for set top boxes in the digital television domain
- Common interface specification for conditional access and other decoder applications
- Satellite channel router to control outdoor units in the receiving television systems with single dwelling and multiple dwelling units

⇒ ETSI:
Being the body that standardised the successful GSM standard, and being one of the three Standard Development Organisation (SDO's) that are officially recognised by the European Commission, ETSI is well known ICT-related standards body in Europe. It was established in 1988. At that moment, the standardisation of GSM was in fact already well on its way within CEPT, the European body of telecommunications administrations, but it was regarded desirable to take the GSM development out of CEPT and bring it into a new-to-be-established body.
Nowadays, ETSI has approximately 700 ETSI member organisations, from some 60 countries world-wide. The institute focuses on *Information and Communications Technologies (ICT), including fixed, mobile, radio, converged, broadcast and internet technologies.*
Recently, ETSI has called for a new Technical Committee on Media Content Delivery, which is launching activities.

⇒ DVB:
DVB has produced several specifications relevant to the NEM field of work: The DVB-SH, a hybrid satellite and terrestrial system working in the sub-3GHz frequency domain, enables reception of media related services also in areas that are not (yet) covered terrestrially. During the year, active participation has been made at the finalization of the new standard DVB-SH, which has the potential to extend the mobile television services to any corner in the European geography, by using hybrid interconnection between satellite and terrestrial.
DVB-S2 has established itself as the de facto standard for HD satellite transmission. Nearly all satellite HD programmes use H.264 video coding and rely on DVB-S2 transmission to keep the relative bandwidth requirements (portion of a 27 or 30MHz satellite transponder) about the same as for MPEG-2/ DVB-S-based SD transmission. Using those technologies implies the same costs for an HD channel as compared to an SD channel using older technology (which it has to do due to the installed receiver base).
DVB-IPI specifies the DVB-IPTV. The Handbook 1.3 ad the HN Guidelines have been published during the course of this reporting period. They include several extensions to the available specifications and they suite as the connection to other international organisations like the ITU and the DLNA.

⇒ UPnP/ DLNA:
Also in the UPnP and DLNA arena lots of news have happened recently: DLNA has published its Expanded Guidelines in January 2007. Besides QoS (based on UPnP QoS) it includes link protection guidelines and therewith allows local distribution of premium content.

UPnP hast started work on QoS 3.0 which for the first time will include the users' preferences into the policy enforcement. This is highly relevant to the NEM domain.

⇒ <u>OMA:</u>
OMA (Open Mobile Alliance): international organization, developing open, market driven interoperable specifications. The OMA focus is on services enablers, to offer functionalities to the application level for building the services to the end-users. TI involvement in almost all the OMA working group aimed to the standardization of several enablers, like Broadcast services, Digital Rights Management, Content Delivery, Rich Media Environment and many others.

⇒ <u>MPEG:</u>
ISO-IEC Moving Picture Experts Group (MPEG): Standardization of digital content representation dedicated to rich-media interactive and streamable services. NEMi and NEM/TP members are involved in MPEG-4, MPEG-7, MPEG-21 standardization area.

⇒ <u>Open IPTV Forum:</u>

The OIPF is a pan-industry initiative with the purpose of producing end to end specifications for IPTV, to take the next generation of IPTV into the mass market. The basis for this activity is the existing and emerging technologies and specifications from a number of other SDOs and interest groups. After publications, the OIPF specifications can be submitted to one or more relevant standard-setting organizations for acceptance as an IPTV Standard. At present the Forum has published an end-to-end Functional Architecture and seven volumes of technical specifications, covering: Protocols, Content Metadata, Media formats, Execution Environments and Content and Service Protection.
The specified technologies, together with the profiles that will be delivered in spring 2009, will allow the industry to deploy IPTV networks and devices that interoperate, both for basic and advanced services.
The Forum has started to work on Release 2 Specifications, which will extend the functionalities of Release 1: integration between fixed and mobile networks, extended functionalities for parental control and support for enhanced EPG including local contents are just a few examples of the planned extensions.

⇒ <u>IEEE:</u>
Originally called the Institute of Electrical and Electronics Engineers, the organization broadened its activities in such a way that it no longer uses this name but kept its initials. IEEE's Constitution defines the purposes of the organization as "scientific and educational, directed toward the advancement of the theory and practice of electrical, electronics, communications and computer engineering, as well as computer science, the allied branches of engineering and the related arts and sciences".
Standards-making in IEEE takes place in the so-called IEEE Standards Association (IEEE-SA). In the ICT field, the following standards are most probably the best known ones:
- the IEEE 802.3 Ethernet standard;
- the IEEE 802.11 Wireless Networking standards (popularly known as WiFi)
- the IEEE 1394 "Firewire" standard
- the IEEE 802.15.1 "Bluetooth standard"
Interesting recent standardization efforts include:
- IEEE 802.16 "WiMax" wireless networking standard

- IEEE 802.15.4 "ZigBee" standard for low-distance, low-power communications.

⇒ IETF:
   The internet Engineering Task Force develops and promotes Internet standards, in particular the TCP/IP protocol suit. Initially government-funded researches joined its activities, but in 1991 doors were open to any interested party. The TCP/IP protocol is possibly one of the most used and most successful protocols in the world, and is also the basic building blocks for many other system standards, such as 3GPP.
   Involvement and contribution to the IETF processes is on individual basis. There is no such thing as a formal membership or membership environment. People become active in IETF by participating in discussions on mailing lists, contributing drafts on technology, or simply showing up at meetings.. There is no formal voting mechanism: IETF uses the principle of "rough consensus". IETF's current shape and practices are, for a large part, the result of the rather specific culture and attitude of the individuals that were involved in the early development of the internet.

More details reports have been produced by the support action FutureNEM, which provide more details about the landscape standardization as well as standardization gaps (www.nem-initiative.org):

- **FutureNEM D3.3.1.** Updated inventory on relevant standards for networked media

- **FutureNEM D3.3.2.** Standardization gaps

Other relevant documents are:

- **COM(2011) 311/2** Communication from the Commission to the Eruopean Parliament, the council and the European Economic and Social Committee. A strategic vision for European standards: moving forward to enhance and accelerate the sustainable growth of the European economy by 2020.

- **COM (2011) 315,** Proposal for a Regulation of the European Parliament and of the Council on European Standardization and amendment of several Council directives

- **Public Consultation on the standardization package. Overview of responses.** European Commission, June 2010.

Open standards should be developed to allow the easiest market access (market base and customer acceptance).

The standardisation and regulation landscape for network electronic media comprises the whole value network including content generation, content protection, content distribution and content rendering (incl. storage).

7.4.2.1   The Opinion of NEM related projects
The following projects responded to a specific survey carried out by NEM with the support of FutureNEM (Support Action funded by the European Commission FP7):

- ALICANTE, MediA Ecosystem Deployment through Ubiquitous Content-Aware Network Environments
- CNG, Community Network Games, Exent Technologies.
- COAST, COntent Aware Searching, retrieval and sTreaming
- COMET, COntent Mediator architecture for content-aware nETworks, Telefónica I+D
- ENVISION, Co-optimisation of overlay applications and underlying
- FASCINATE, Format-AgnosticSCript-based INterAcTive Experience
- I-SEARCH, A unified framework for multimodal content search
- MUSCADE, Multimedia Scalable 3D for Europe
- OCEAN, Open ContEnt Aware Networks
- OPTIMIX, Optimisation of Multimedia over wireless IP
- OPEN MEDIAWEB
- OPTIBAND, Optimization of bandwidth for IPTV video streaming
- PLAYMANCER: A European Serious Gaming 3D Environment
- P2P-Next, Next Shared Content Distribution Platform
- TA2, Together Anytime Together Anywhere

Some key results of the survey, of merit to mention, are:

Question	Facts
Are running FP7 projects considering any activity on NEM-related standards, either existing standards or targeting development of new standards	Yes (80% of the projects)
Are running FP7 projects considering any activity on NEM-related standards, either existing standards or targeting development of new standards	Yes (80% of the projects)
Are standardization related activities included in the formal work plan of the project DoW?	Yes (80% of the projects)
Which percentage of project resources are planned to support Standardization related activities?	Less than 5 % XXXXXXX 5 – 15 % X 15-20 % X
At what time the standardization related activities are planned?	Beginning XXXX End of project lifetime XXXXXXXX

Question	Facts	
At which representation level are made the contributions to Standardization bodies: on behalf of the Consortium or under individual partner basis	On behalf of consortium On individual basis	XXX XXXXXXXX
At which representation level are made the contributions to Standardization bodies: on behalf of the Consortium or under individual partner basis	On behalf of consortium On individual basis	XXX XXXXXXXX

Perceived Barriers	Level of concern
Barriers related to standardization procedures	XXXXXXXX
Barriers to influence standardization bodies.	XXXXXXXXXX
Barriers on management standardization activities	XXX
Barriers on knowledge about the advantages of standardization	XX
Barriers on incentives for standardization activities	XXX
Problems related to IPR protection	XXX
Standardization costs are too high	XXXXXXX
Other (please specify): In my opinion, the main problem is that a project duration is relatively small in comparison with the time needed for making a technology adopted within a standard. The only pertinent way to participate to the standardization is to have within the consortium partners already participating to standards or partners committing to continue the standardization after the end of the project.	X

7.4.3   The European Level

7.4.3.1   ICT Standardisation in FP7

In FP7, the **Cooperation specific programme**, the main source for funding R&D project, include pre-normative and co-normative research relevant to improving interoperability and the quality of standards and their implementation. In this context, platforms that bring together stakeholders with the research community to consider strategic research agendas relevant to other policy areas may play a role. The dissemination and transfer of knowledge is a key added-value of European research, dissemination towards standard defining organisation is an integral task of the programme.

The programme rules governing the **dissemination of research results** ensure that, where appropriate, the participants protect the intellectual property generated in actions, use and disseminate those results. Detailed provisions regarding dissemination and use of project results are generally covered by the consortium agreement in order to leave to the participants the choice on how to better exploit research results according to their business strategies.

In **FP7 contracts** standardisation activities can be considered within collaborative research, in which case costs related to standardisation activities can be reimbursed up to 100%, both in STREPs (strategic research projects) and IPs (large scale integrated projects). They can also take place subsequently, in which case they must be part of the dissemination and use plan produced at the end of the project, although with the risk that the powerful Consortium position to input Standardization is disbanded and non coordinated once the project ends.

Indeed, the potential impact through the development, dissemination and use of project results, (which includes standardisation when appropriate), is one of the 4 **evaluation criteria** for project proposals.

During the process of elaboration of the **multi annual work programmes** the research community, industry and member states are participating intensively in the consultations organised by the Commission. This provides an effective mechanism to arbitrate between the various needs (including standardisation) in defining the priorities for the programme. Within the ICT 2007-2008 R&D work programme standardisation is part of many of the objectives. Whenever opportunities for standardisation should be exploited, specific measures, specific topics or objectives for standardisation are mentioned. As illustrated below the option chosen do vary according to the particular context of the strategic objectives. This diversity reflects the optimal choices for the sector concerned.

> *- Global standards for a new generation of ubiquitous and extremely high capacity network and service infrastructures.*
> *- Opportunities for standardisation should be exploited.*
> *- Coordination and support actions for standardisation/for international standardisation and interoperability initiatives.*
> *- Open tool frameworks facilitating new entrants and the integration of the tool chain including associated standardisation*
> *- Support may also be provided to industry-driven initiatives for sharing software source code and for standardisation activities in the broader embedded systems domain.*
> *- Global consensus towards standards*
> *- Common pan-European architecture, standards*
> *- systems and services for independent living, smart workplaces and mobility.*
> *- Contribution to standards setting, and strategic international cooperation with US and Japan*
> *- Interoperability roadmaps should be elaborated when developing competitive standards*

7.4.3.2   The new standardization regulatory package. European Commission ICT Standardization Work Programme

The legal basis for European standardisation, including the ICT domain, is [Directive 98/34/EC]. One of its main elements is constituted by the formal recognition of three European Standards Organisations (ESOs), CEN, CENELEC and ETSI, active in various degrees in the ICT domain. This recognition entails financial support at the European

level. Standards resulting from an open consensus building process and published by recognised standardisation bodies are by nature voluntary and non binding documents.

ICT standardisation is part of the general standardisation activities, and contributes to policy objectives to improve the competitiveness of European industry, as specified in the Lisbon strategy.

The summary of the Communication: strategic vision 2020

- Over all objective: the European standardisation system should be able to respond to new challenges, including new domains such as climate change. It should therefore be flexible, comprehensive, inclusive, efficient and technically up-to-date

- Describes the detailed standardisation policy implemented by the Commission including the non- regulatory actions

- Implemented by the Commission as from the date of adoption

- Measurement and assessment whether strategic objectives have been reached will be done by 2013 at the latest

Standardisation ICT and interoperability:

- Main concern is to ensure interoperability between devices, applications, services and networks with the objective to reap the full benefit of ICT

- By promoting the use of standards in European legislation, public policy and public procurement

- Building on the synergy between ESO's and fora&consortia

- Implement the proposals brought forward by the White Paper (2009)

- Regulation will allow referencing of selected fora&consortia specifications in public procurement. Selection is based on compliance with quality criteria

- The Commission will increasingly use selected fora&consortia specifications, compliant with the same quality criteria, in public policies

- By end 2011, the Commission will set up a dedicated multi-stakeholder platform to advise the Commission on matters related to the implementation of the ICT standardisation policy

- Member States should increase the use of standards including the selected ICT standards in public procurement

In the specific area of ICT, the regulatory package foresees:

- Chapter IV- article 9: Recognition of technical specifications in the field of ICT

- « Either on proposal from a public authority referred to in Directive 2004/18/EC or on its own initiative, the Commission may decide to recognise technical specifications which are not national, European or international standards and meet the requirements set out in Annex II, as ICT standards »

- Article 10: Use of ICT standards in public procurement

- « ICT standards referred to in Article 9 shall constitue common technical specifications referred to in Directives 2004/17/CE and 2004/18/EC? And Regulation (EC)No 2342/2002

The 2010-2013 ICT standardization Work programme does cover a number of priority domains which are listed in the following table:

- Domain 1a: eHealth
- Domain 1b: Standardisation in the field of regulated medicinal products
- Domain 2: eInclusion
- Domain 3: Intelligent transport
- Domain 4: RFID
- Domain 5: Electronic signatures
- Domain 6: eInvoicing
- Domain 7: eSkills and eLearning
- Domain 8: ICT for sustainable growth
- Domain 9: Internet of things
- Domain 10: ePublishing
- Domain 11: eSecurity
- Domain 12: eBusiness
- Domain 13: eGovernment
- Domain 14: Support to standards implementation
- Domain 15: Emergency Communications
- Domain 16: Digital content

7.4.3.3 The Connection R&D projects and Standardization bodies. How to make it for efficient?.

FP7 provides a good opportunity for financial support of standardisation activities provided they fit within the strategic objectives of a collaborative project (STREP for targeted actions or IP for more ambitious and strategic activities). It remains up to the consortia to integrate such actions within the scope of their project proposals and budget, or to leave standardisation to individual participants, or to propose another organisation for standardisation (e.g. in a cross programme coordinated manner in some sectors). However, experiences of exploiting R&D results and standardization have demonstrated a gap which is making more inefficient the optimum exploitation of the R&D results. The problem is more acute when voluntary R&D projects achieve results suitable to become inputs to Standardization bodies, but when the project is ready to make relevant input to Standardization (this usually happen at the end of project life), the consortium is disbanded, thus making more difficult the continuation of the support activities to the standardization process.

The following figure depicts a typical timing of a European R&D project. Work packages naming are provided just for illustrative purposes. The activities of the project related to Standardization are usually lightly touched during the whole duration of the project, with some inefficiency, as the project has not achieved relevant results till the end of the project life. In this way, the project waste resources inefficiently connecting with Standard bodies at early stages of its research work plan and simultaneously, the project is not exploiting its results in the Standardization world because when available, the project would usually end.

Current typical timing R&D project and its Standardization activities

ACTIVITY	Year 1			Year 2			Year 3		
	M1	M2	M3	M1	M2	M3	M1	M2	M3
WP1: Project Management									
wp 1.1.- Reporting to EC									
WP 2.- Definition of Requirements and General Scenarios									
WP 3.- Development of Technology 1									
wp 3.1.- Definition of Specifications									
wp 3.2.- Development of Hardware									
wp 3.3.- Development of Middleware and Applications									
WP 4.- Development of Technology 2									
wp 4.1.- Definition of Specifications									
wp 4.2.- Development of Hardware									
wp 4.3.- Development of Middleware and Applications									
WP 5.- Demonstrator									
WP 6.- Contribution to Standardization and Regulatory bodies									

The outcome of the above situation is that many R&D projects, which voluntary have decided to produce substantial outputs suitable to be input to standardization bodies, and for which activities they have got funds from public sources (FP7, Eureka, National R&D programmes), become frustrated as the consortium is disbanded at the just time they have got relevant results (usually the end of the project lifetime). Efforts continue to conduct standardization activities beyond the life of the Consortium but these efforts are less efficient because of pragmatic, legal, administrative or technical reasons, as the Consortium is not longer motivated to further cooperate beyond the project end and can not continue making use of the funds available because the project has ended beyond its lifetime.

In order to solve the above gap which represents a major inefficiency and easting of available funds, projects should found more flexibility on the legal terms and administrative aspects of their contractual relationship with the authority managing the R&D programme. In the case for example of FP7 programme, when a project foresees the achievement of results potentially suitable for producing inputs to standardization bodies, the contract should foresee that some activities could be conducted after the project formally ends but assuming that funds will continue to be applicable during this extended period. The benefit of this approach is to avoid the current rejection of the whole Consortium to extend the life of the project for all partners (with the associated financial consequences, legal, administrative issues) thus not facilitating the continuation of activities from some partners in the standardization domain under the framework of the project.

The proposed process would allow the project to formally end at its expected lifetime end, thus closing the regular legal, administrative, financial actions required to be completed by the project. But simultaneously, few activities would be allowed to continue after the project ends, thus ensuring the cooperation of few partners related to these activities and, even more, providing endorsement to the funding of these extended activities which are not necessarily spent during the regular lifetime of the project, but exactly when the

efforts are really done (usually 1 to 2 years after the project end, when the project is capable to submit and exploit its results to Standardization bodies).

With respect to the legal framework of the R&D funding programmes, this proposed extension should not represent any reduction of liabilities of the partners being funded by public funds, as the typical contracts foresee the capability of the funding Organizations to conduct any review during a period of 5 years after the project end. This means that any irregular use, or not use at all, of the funds foreseen for the extended period by the partners concerned (clearly identified) will have the same guarantees of review and audit as any other activity concluded within the regular lifetime of the project. In addition, when necessary, an extra small focused review of the project could be organized at the end of year 5 for this specific extended activity affecting only to the partners involved.

Proposed timing interfacing R&D and Standardization

ACTIVITY	Year 1	Year 2	Year 3			Year 4			Year 5		
			M1	M2	M3	M1	M2	M3	M1	M2	M3
WP1: Project Management											
WP 2.- Definition of Requirements and General Scenarios											
WP 3.- Development of Technology 1											
WP 4.- Development of Technology 2											
WP 5.- Demostrator											
WP 6.- Contribution to Standardization and Regulatory bodies											
Effective contributions of the project to Standardization (During Years 4 and 5 the WP 6 would be allowed to automatically extend its activities if a plan for contribution to standardization bodies is prepared and approved at the latest review of the project)											

7.4.3.4   Beyond FP7 EU projects

The time span of a typical EU research project is typically between 3 and 5 years which in many cases only partially overlap the timescale of standardisation actions related to related R&D results. Several initiatives can also prove to be useful for bridging the gap between EU funded R&D projects and standardisation:

European Technology Platforms (ETPs) provide a framework for stakeholders, led by industry, to define research and development priorities, timeframes and action plans on a number of strategically important issues. They play a key role in ensuring an adequate focus of research funding on areas with a high degree of industrial relevance, by covering the whole economic value chain and by mobilising public authorities at national and regional levels. The Strategic Research Agendas defined by those platforms have in some cases identified standardisation as one of their priorities, and in other cases are considering this aspect for up coming revisions of the SRAs. By providing access to a broader base of R&D stakeholders they could prove to be effective interlocutors. Some

Technology Platforms are launching specialized groups dealing with international cooperation having the development of Standards at worldwide level as a priority goal.

Joint Technology Initiatives (JTIs) are public-private partnerships set up at European level to address strategic areas where research and innovation are essential to European competitiveness. A novel element of the Seventh Framework Programme for Research, Technological Development and Demonstration Activities, JTIs support large-scale multinational research activities. They bring together private and public partners to define common objectives of wide societal relevance and to combine funding and knowledge in order to fulfil these objectives. The first JTIs launched will start operating in 2008, and might be an efficient tool for linking research to standardisations activities.

Lead Market Initiatives are yet another instrument that might strengthen links between ICT research and standardisation. For example standardisation is expected to be a major concern in the **eHealth LM** initiative as a mean to effectively overcome the interoperability barriers. Furthermore such initiatives go beyond R&D and include other measures such as the provision of clarification and guidance for applying the legal framework, networking of public procurers, as well as information of users, doctors, health managers and public authorities on eHealth benefits.

Beyond such initiatives where standardisation and research have a clear role, in might be necessary in the longer term to consider other programmes such as the **Competitiveness and Innovation Framework Programme (CIP).** The launch large scale pilots as currently envisaged in the ICT PSP operational programme may provide effective support to further link research and standardisation (in particular through the promotion of ICT standards).

Finally the research efforts supported by the European Union represent only a small percentage of the total effort in a given domain. In Europe the overall R&D effort is also involving many more actors than those participating in EU project consortia. It is necessary to consider the broader European research picture. An interesting example is the recent partnership signed up between ETSI and ERCIM to better consider standardization early in the R&D cycle. The generalisation and promotion of such initiatives may provide very effective means to reinforce le link between research and standardisation, spanning across all possible levels (corporate, regional, national and European).

7.4.4   Summary of Positions and Recommendations

Based on the views of NEM participants and particularly those directly related to the standardization activities, the following recommendations represent a summary of actions that Europe should implement in order to exploit the most of research projects and their impact on the standardization processes.

> ➢ **NEM technology platform includes members all over Europe and can be a forum for discussion on Standardization priorities. NEM community is ready to provide inputs to the on going consultation processes of European Commission regarding the ways to improve the European standardization mechanism. Some ideas on the best connection of FP projects and their abilities to input standardization forum are described in this document. European Commission is invited to explore the contractual and legal mechanisms to facilitate the deepest and most active participation of FP projects in the standardization context, which should not bound by the contractual limits of a typical FP project, particularly on scheduling, milestones, etc.**

> **NEM has a number of technologies and areas where standardization should be considered as a priority. Cooperation between NEM and ETSI TC MCD committee will be kept, as well as with other fora and consortia.**

> ➢ **NEM considers that the primary aim for a new technology or service should move towards exploiting the feasibility of standardization, as a way to provoke mass markets and trust from end-users.**
> ➢ **NEM is ready to set Agreements with European Standardization Fora and Consortia in order to promote the acceptance of NEM related projects (FP, Eureka, Celtic, National programmes) outputs in the standardization domain.**

7.5 Annex V: Individual responses to the standardization questionnaire

7.5.1   Fascinate project

1. Basic Information

About Your Project
Project Acronym   FascinatE
Project Title   Format-AgnosticSCript-based INterAcTive Experience
Project CoordinatorGeorg Thallinger (georg.thallinger@joanneum.at)
Start Date: February 2010
Duration: July 2013

http://www.fascinate-project.eu/

2. Your project, is considering any activity on NEM-related standards, either existing standards or targeting development of new standards?

[X] Yes   [ ] No

If you chose "yes", please specify which ones, which standard bodies are related, etc.?

DVB-IPTV, ETSI MCD, ETSI TISPAN, EBU, IETF, MPEG, VCEG, W3C, SMPTE

3. Does your contractual project work plan include any standardization activities?

[X] Yes   [ ] No

If you chose "no" go to question nr. 8

4. **Please, indicate which % of project time /project resources are dedicated to standardization activities.**

X	0 - 5%
	5 - 15%
	15 – 30%
	> 30%

5. **At what project stage are planned the standardization activities?**

1 Project begins	2	3	4	5 Project ends
	X	X	X	X

Indicate when is estimated that the project will work on standardization related issues during the project lifetime.

6. **Have the project plans to submit formal contributions to standardization bodies/standardization consortia?**

X	Yes		No

If you chose "yes", to whom?

	CENELEC
X	ETSI
	ITU
	ISO / IEC
	IEEE
X	DVB
X	IETF
	3GPP
X	W3C
X	SMPTE
X	EBU
	OMA
	Others (Specify)

_____

Are the above planned contributions to be made by the project consortium (or by one or several partners on behalf of the project consortium) or are they planned to be submitted by individual project partners? Cross the applicable.

_____On behalf of the Project Consortium   __X__On individual partner basis

7. **Which ones of the following topics could include your contributions to standardization bodies/standardization consortia?**

(Select 'X')

Media-related applications and business models	
• Value web	X
• Social networking and media sharing	
• User satisfaction and quality of experience	X
Content creation	
• New forms of content	X
• Representation of content	X
• Tools for content creation and manipulation	X
• Overcoming human language barriers	
Networking and delivery infrastructure	
• Intelligent delivery	X
• Quality of Service	

• Network architecture		X
• Home and extended home networks		X
Content search and media presentation		
• Automated semantic annotation		X
• Authentic, true-to-original media reproduction		X
• Virtual reality		
• User-system interaction		X
• Effective recommendation systems		
• User number measurement and user behaviour logging		
Technology drivers and enabling technologies		
• Security privacy and trust		
• Rights management		
• Federated virtual devices		
• Federated services		
• Contextual awareness		X
• Location		X
• Identity management and AAA		
• Personalisation/Profiling		X
• Charging and payment		
• Multimedia Middleware		X
• Assisted Living		
• Power management technologies - energy saving		
• Spectrum economy		

8. **In your opinion, what are the main barriers/problems for R&D projects to efficiently contribute to standardization bodies/standardization consortia?** (s*elect cross the first, second or third most important ones)*

1) Barriers related to standardization procedures	
2) Barriers to influence standardization bodies.	X
3) Barriers on management standardization activities	
4) Barriers on knowledge about the advantages of standardization	
5) Barriers on incentives for standardization activities	
6) Problems related to IPR protection	
7) Standardization costs are too high	
8) Other (please specify):	

9. **In your opinion, what are the main regulatory/procedural/contractual barriers for R&D projects to efficiently contribute to standardization bodies/standardization consortia? Please, comment.**

> There are no severe regulatory/contractual/procedural barriers to contribute to standards. In nearly all cases not the R&D projects themselves, but the participating companies, research institutes and universities are involved in the standardization bodies. They act in the first place on their own behalf and secondly on behalf of the R&D project. For this obviously, the entity has to be member of the standardization body. Mostly the major players will play a major role in the standardization body, but this has nothing to do with the R&D project. If a standard proposal comes out of an R&D project with main industry actors in it, the chance will be high that the proposal might eventually be accepted by the standardization body.

10. **What are your recommendations / suggestions to foster project contributions from R&D projects to standardization bodies?**

> Encourage all R&D projects to pay more attention to standardization, but only if this is appropriate. For example, standardization can be a quite efficient way of disseminating early results. It is, however, not an option to extend the R&D projects with a "standardization"-only track to allow post-project standardization activities. If companies are interested to standardize, they will certainly allocate the required resources for this activity.

7.5.2   OMWeb project

1. Basic Information

About Your Project
Project Acronym   __OMWeb_____
Project Title   ___Open Media Web _____
Project Coordinator___Philipp Hoschka_____
Start Date: __1/1/2010_____
Duration: __24 months_____

2. Your project, is considering any activity on NEM-related standards, either existing standards or targeting development of new standards?

[x] Yes   [ ] No

If you chose "yes", please specify which ones, which standard bodies are related, etc.?

Points of Interest/Augmented Reality
Standards body: W3C

3. Does your contractual project work plan include any standardization activities?

[x] Yes   [ ] No

If you chose "no" go to question nr. 8

4. Please, indicate which % of project time /project resources are dedicated to standardization activities.

[ ]	0 - 5%
[ ]	5 - 15%
[ ]	15 – 30%
[x]	> 30%

5. At what project stage are planned the standardization activities?

1 Project begins	2	3	4	5 Project ends
x	x	x	x	x

Indicate when is estimated that the project will work on standardization related issues during the project lifetime.

6. Have the project plans to submit formal contributions to standardization bodies/standardization consortia?

[ ] Yes   [x] No

If you chose "yes", to whom?

[ ]	CENELEC
[ ]	ETSI
[ ]	ITU
[ ]	ISO / IEC
[ ]	IEEE
[ ]	DVB

☐	IETF
☐	3GPP
☐	W3C
☐	SMPTE
☐	EBU
☐	OMA
☐	Others (Specify)

_____

Are the above planned contributions to be made by the project consortium (or by one or several partners on behalf of the project consortium) or are they planned to be submitted by individual project partners? Cross the applicable.

____On behalf of the Project Consortium   ____On individual partner basis

7. Which ones of the following topics could include your contributions to standardization bodies/standardization consortia?

(Select 'X')

Media-related applications and business models	
• Value web	
• Social networking and media sharing	
• User satisfaction and quality of experience	
Content creation	
• New forms of content	
• Representation of content	
• Tools for content creation and manipulation	
• Overcoming human language barriers	
Networking and delivery infrastructure	
• Intelligent delivery	
• Quality of Service	
• Network architecture	
• Home and extended home networks	
Content search and media presentation	
• Automated semantic annotation	
• Authentic, true-to-original media reproduction	
• Virtual reality	
• User-system interaction	
• Effective recommendation systems	
• User number measurement and user behaviour logging	
Technology drivers and enabling technologies	
• Security privacy and trust	
• Rights management	
• Federated virtual devices	
• Federated services	
• Contextual awareness	
• Location	
• Identity management and AAA	
• Personalisation/Profiling	
• Charging and payment	
• Multimedia Middleware	
• Assisted Living	
• Power management technologies - energy saving	
• Spectrum economy	

8. In your opinion, what are the main barriers/problems for R&D projects to efficiently contribute to standardization bodies/standardization consortia? (s*elect cross the first, second or third most important ones*)

1) Barriers related to standardization procedures	
2) Barriers to influence standardization bodies.	

3)	Barriers on management standardization activities	
4)	Barriers on knowledge about the advantages of standardization	x
5)	Barriers on incentives for standardization activities	x
6)	Problems related to IPR protection	
7)	Standardization costs are too high	
8)	Other (please specify):	

9. In your opinion, what are the main regulatory/procedural/contractual barriers for R&D projects to efficiently contribute to standardization bodies/standardization consortia? Please, comment.

> a. issues funding standards body membership fees
> b. standards don't "count" for researcher CVs (publications do)

10. What are your recommendations / suggestions to foster project contributions from R&D projects to standardization bodies?

> Spread results of Copras project to motivate projects, in particular "Standardization guidelines for IST research projects interfacing with ICT standards organizations"
> http://www.w3.org/2004/copras/docu/D15.html
>
> and "Interactive Standardisation Guidelines"
> http://www.w3.org/2004/copras/docu/faq/Overview.html

7.5.3   COMET project

1. Basic Information

> About Your Project
> Project Acronym   COMET
> Project Title   COntent Mediator architecture for content-aware nETworks
> Project CoordinatorFrancisco Javier Ramón Salguero (Telefónica I+D)
> Start Date: 1st January 2010
> Duration: 36 months

2. Your project, is considering any activity on NEM-related standards, either existing standards or targeting development of new standards?

[X] Yes   [ ] No

If you chose "yes", please specify which ones, which standard bodies are related, etc.?

> *ETSI – Network architecture for content mediation*
>
> *IETF, IRTF – Content-based record structure for mediation directory*

3. Does your contractual project work plan include any standardization activities?

[X] Yes   [ ] No

If you chose "no" go to question nr. 8

4. Please, indicate which % of project time /project resources are dedicated to standardization activities.

[X] 0 - 5%
[ ] 5 - 15%
[ ] 15 – 30%
[ ] > 30%

5. At what project stage are planned the standardization activities?

1 Project begins	2	3	4	5 Project ends
			X	

Indicate when is estimated that the project will work on standardization related issues during the project lifetime.

6. Have the project plans to submit formal contributions to standardization bodies/standardization consortia?

[X] Yes   [ ] No

If you chose "yes", to whom?

[ ] CENELEC
[X] ETSI
[X] ITU
[ ] ISO / IEC
[ ] IEEE
[ ] DVB
[ ] IETF
[ ] 3GPP
[ ] W3C
[ ] SMPTE
[ ] EBU
[ ] OMA
[X] Others (Specify)
IRTF_____

Are the above planned contributions to be made by the project consortium (or by one or several partners on behalf of the project consortium) or are they planned to be submitted by individual project partners? Cross the applicable.

____On behalf of the Project Consortium   __X__On individual partner basis

7. Which ones of the following topics could include your contributions to standardization bodies/standardization consortia?

<div align="right">(Select 'X')</div>

Media-related applications and business models	
• Value web	
• Social networking and media sharing	
• User satisfaction and quality of experience	
Content creation	
• New forms of content	
• Representation of content	
• Tools for content creation and manipulation	
• Overcoming human language barriers	
Networking and delivery infrastructure	
• Intelligent delivery	X
• Quality of Service	X
• Network architecture	X
• Home and extended home networks	
Content search and media presentation	
• Automated semantic annotation	
• Authentic, true-to-original media reproduction	
• Virtual reality	
• User-system interaction	
• Effective recommendation systems	
• User number measurement and user behaviour logging	
Technology drivers and enabling technologies	
• Security privacy and trust	
• Rights management	
• Federated virtual devices	
• Federated services	
• Contextual awareness	
• Location	
• Identity management and AAA	
• Personalisation/Profiling	
• Charging and payment	
• Multimedia Middleware	
• Assisted Living	
• Power management technologies - energy saving	
• Spectrum economy	

8. In your opinion, what are the main barriers/problems for R&D projects to efficiently contribute to standardization bodies/standardization consortia? (s*elect cross the first, second or third most important ones)*

1)	Barriers related to standardization procedures	X
2)	Barriers to influence standardization bodies.	X
3)	Barriers on management standardization activities	
4)	Barriers on knowledge about the advantages of standardization	
5)	Barriers on incentives for standardization activities	
6)	Problems related to IPR protection	X
7)	Standardization costs are too high	
8)	Other (please specify):	

9. In your opinion, what are the main regulatory/procedural/contractual barriers for R&D projects to efficiently contribute to standardization bodies/standardization consortia? Please, comment.

Limited time: Results with a potential for standardization are typically produced towards the end of R&D projects and the standardization process is normally longer than the remaining project time.
Limited resources: Standardization requires dedication, perseverance, and travel budget usually beyond the levels available in R&D projects, especially STREPs.
Limited interest: Standardization is mainly of interest to (large) industrial partners, and especially to vendors, who are normally the minority in an R&D consortium.
IPR/Standardization trade-off: Standardization is useful for eliminating market fragmentation, but at the same time it can impact a company's chances for differentiation. However, both patenting and standardization are usually contractual obligations an R&D consortium, so partners can get confused.

10. What are your recommendations / suggestions to foster project contributions from R&D projects to standardization bodies?

Assess standardization potential towards the end of the project and provide a supplementary funding framework to support the partners who will be involved in the standardization effort (even beyond the end of the R&D project).
Institute a mechanism for counseling R&D projects on the uses, benefits, and processes of standardization.
Lower expectations on standardization for "small" R&D projects.

7.5.4   CNG project

1. Basic Information

About Your Project
Project Acronym   __CNG_____
Project Title   __Community Network Games_____
Project Coordinator   __Alex Shani, Exent Technologies Ltd. _____
Start Date: __1/02/2010_____
Duration: __30 months_____

2. Your project, is considering any activity on NEM-related standards, either existing standards or targeting development of new standards?

[x] Yes [ ] No

If you chose "yes", please specify which ones, which standard bodies are related, etc.?

> *ISO/IEC SC29 WG 11 (MPEG)*

3. Does your contractual project work plan include any standardization activities?

[x] Yes [ ] No

If you chose "no" go to question nr. 8

4. Please, indicate which % of project time /project resources are dedicated to standardization activities.

[x] 0 - 5%
[ ] 5 - 15%
[ ] 15 – 30%
[ ] > 30%

5. At what project stage are planned the standardization activities?

1 Project begins	2	3	4	5 Project ends
xxx	x	x	x	xx

Indicate when is estimated that the project will work on standardization related issues during the project lifetime. Note: the number of "x" indicates the level of work on standards: in the initial phase the project did an analysis of the standards with potential impact on the project and standards for which the project can contribute, and during the project a close collaboration between the project and MPEG committee is foreseen.

6. Have the project plans to submit formal contributions to standardization bodies/standardization consortia?

[x] Yes [ ] No

If you chose "yes", to whom?

[ ] CENELEC
[ ] ETSI
[ ] ITU
[x] ISO / IEC
[ ] IEEE
[ ] DVB
[ ] IETF
[ ] 3GPP
[ ] W3C
[ ] SMPTE
[ ] EBU
[ ] OMA
[ ] Others (Specify)

_____

Are the above planned contributions to be made by the project consortium (or by one or several partners on behalf of the project consortium) or are they planned to be submitted by individual project partners? Cross the applicable.

__x__On behalf of the Project Consortium   __x__On individual partner basis

7. Which ones of the following topics could include your contributions to standardization bodies/standardization consortia?

(Select 'X')

Media-related applications and business models	
• Value web	
• Social networking and media sharing	
• User satisfaction and quality of experience	
Content creation	
• New forms of content	X
• Representation of content	X
• Tools for content creation and manipulation	X
• Overcoming human language barriers	
Networking and delivery infrastructure	
• Intelligent delivery	
• Quality of Service	
• Network architecture	
• Home and extended home networks	
Content search and media presentation	
• Automated semantic annotation	
• Authentic, true-to-original media reproduction	
• Virtual reality	
• User-system interaction	
• Effective recommendation systems	
• User number measurement and user behaviour logging	
Technology drivers and enabling technologies	
• Security privacy and trust	
• Rights management	
• Federated virtual devices	
• Federated services	
• Contextual awareness	
• Location	
• Identity management and AAA	
• Personalisation/Profiling	
• Charging and payment	
• Multimedia Middleware	X
• Assisted Living	
• Power management technologies - energy saving	
• Spectrum economy	

8. In your opinion, what are the main barriers/problems for R&D projects to efficiently contribute to standardization bodies/standardization consortia? (s*elect cross the first, second or third most important ones)*

1) Barriers related to standardization procedures	
2) Barriers to influence standardization bodies.	X
3) Barriers on management standardization activities	X
4) Barriers on knowledge about the advantages of standardization	X
5) Barriers on incentives for standardization activities	
6) Problems related to IPR protection	
7) Standardization costs are too high	
8) Other (please specify): In my opinion, the main problem is that a project duration is relatively small in comparison with the time needed for making a technology adopted within a	X

> standard. The only pertinent way to participate to the standardization is to have within the consortium partners already participating to standards or partners committing to continue the standardization after the end of the project.

9. In your opinion, what are the main regulatory/procedural/contractual barriers for R&D projects to efficiently contribute to standardization bodies/standardization consortia? Please, comment.

> Different standardization consortia have different rules and it is difficult to judge them as a whole. In general, there is no barrier for a project to contribute, other that the partners should be aware about what is happening in different standardization bodies. However, it may happen that some standardization bodies have strict rules with respect to IPRs, that are not acceptable by some partners or by the whole consortium (e.g. W3C is not accepting patented technologies, while an industrial partner in a project is protecting the business by having patents).

10. What are your recommendations / suggestions to foster project contributions from R&D projects to standardization bodies?

> First a better communication should be done (from the standardization bodies to the projects) and inform different projects on the existence of similar or close work in the standardization agenda.
>
> The Commission may have a dedicated service that is analyzing the projects from a cluster and is aware about the standardization activities in the domain, and trigger the attention to the project partners. The communication can be done during the Concertation meetings.
>
> For each next call for projects, the commission can call also for a CA on standardization activities in a specific domain.
>
> Projects should include (or hire during the project execution) standardization partners (or consultants).

7.5.5   ALICANTE project

1. Basic Information

About Your Project	
Project Acronym	ALICANTE
Project Title	MediA Ecosystem Deployment through Ubiquitous Content-Aware Network Environments
Project Coordinator	Daniel NEGRU
Start Date:	1/03/2009
Duration:	36 months

2. Your project, is considering any activity on NEM-related standards, either existing standards or targeting development of new standards?

[x] Yes   [ ] No

If you chose "yes", please specify which ones, which standard bodies are related, etc.?

ITU SG 16

ITU SG 9

ISO/IEC MPEG

Open IPTV Forum

IETF

HGI

W3C

3. Does your contractual project work plan include any standardization activities?

[x] Yes   [ ] No

If you chose "no" go to question nr. 8

4. Please, indicate which % of project time /project resources are dedicated to standardization activities.

[ ] 0 - 5%
[ ] 5 - 15%
[x] 15 – 30%
[ ] > 30%

5. At what project stage are planned the standardization activities?

1 Project begins	2	3	4	5 Project ends
	x	x	x	

Indicate when is estimated that the project will work on standardization related issues during the project lifetime.

6. Have the project plans to submit formal contributions to standardization bodies/standardization consortia?

[x] Yes   [ ] No

If you chose "yes", to whom?

[ ] CENELEC
[ ] ETSI
[x] ITU
[x] ISO / IEC
[ ] IEEE
[ ] DVB
[x] IETF
[ ] 3GPP
[ ] W3C

	SMPTE
	EBU
	OMA
x	Others (Specify)
	Broadband Forum (BBF)

_____

Are the above planned contributions to be made by the project consortium (or by one or several partners on behalf of the project consortium) or are they planned to be submitted by individual project partners? Cross the applicable.

__x__On behalf of the Project Consortium   ____On individual partner basis

7. Which ones of the following topics could include your contributions to standardization bodies/standardization consortia?

(Select 'X')

Media-related applications and business models	
• Value web	
• Social networking and media sharing	x
• User satisfaction and quality of experience	x
Content creation	
• New forms of content	
• Representation of content	x
• Tools for content creation and manipulation	x
• Overcoming human language barriers	
Networking and delivery infrastructure	
• Intelligent delivery	
• Quality of Service	x
• Network architecture	x
• Home and extended home networks	x
Content search and media presentation	
• Automated semantic annotation	
• Authentic, true-to-original media reproduction	
• Virtual reality	
• User-system interaction	
• Effective recommendation systems	
• User number measurement and user behaviour logging	
Technology drivers and enabling technologies	
• Security privacy and trust	
• Rights management	
• Federated virtual devices	
• Federated services	
• Contextual awareness	
• Location	
• Identity management and AAA	
• Personalisation/Profiling	x
• Charging and payment	
• Multimedia Middleware	x
• Assisted Living	
• Power management technologies - energy saving	
• Spectrum economy	

8. In your opinion, what are the main barriers/problems for R&D projects to efficiently contribute to standardization bodies/standardization consortia? (s*elect cross the first, second or third most important ones*)

1)	Barriers related to standardization procedures	x
2)	Barriers to influence standardization bodies.	x
3)	Barriers on management standardization activities	x
4)	Barriers on knowledge about the advantages of standardization	
5)	Barriers on incentives for standardization activities	x
6)	Problems related to IPR protection	
7)	Standardization costs are too high	x
8)	Other (please specify):	

9. In your opinion, what are the main regulatory/procedural/contractual barriers for R&D projects to efficiently contribute to standardization bodies/standardization consortia? Please, comment.

> Getting into a standardization body and being recognized there takes a lot of time and money.

10. What are your recommendations / suggestions to foster project contributions from R&D projects to standardization bodies?

> Allow for more PMs allocated to this activity. Currently, only very few PMs are usually allocated which is even not enough to attend all meetings. However, successful contribution to standardization bodies requires also time to prepare, coordinate inputs and outputs including editing the actual standards.

7.5.6   OPTIMIX project

1. Basic Information

About Your Project	
Project Acronym	OPTIMIX_____
Project Title	Optimisation of Multimedia over wireless IP links via X-layer design _
Project Coordinator	_____R. Fracchia_____
Start Date:	_____01/03/09_____
Duration:	_____36 months_____

2. Your project, is considering any activity on NEM-related standards, either existing standards or targeting development of new standards?

[x] Yes   [ ] No

If you chose "yes", please specify which ones, which standard bodies are related, etc.?

ITU, IETF

3. **Does your contractual project work plan include any standardization activities?**

[x] Yes   [ ] No

If you chose "no" go to question nr. 8

4. **Please, indicate which % of project time /project resources are dedicated to standardization activities.**

x	0 - 5%
	5 - 15%
	15 – 30%
	> 30%

5. **At what project stage are planned the standardization activities?**

1 Project begins	2	3	4	5 Project ends
x	x	x	x	x

Indicate when is estimated that the project will work on standardization related issues during the project lifetime.

6. **Have the project plans to submit formal contributions to standardization bodies/standardization consortia?**

[x] Yes   [ ] No

If you chose "yes", to whom?

	CENELEC
	ETSI
x	ITU
	ISO / IEC
	IEEE
	DVB
x	IETF
	3GPP
	W3C
	SMPTE
	EBU
	OMA
	Others (Specify)

_____

Are the above planned contributions to be made by the project consortium (or by one or several partners on behalf of the project consortium) or are they planned to be submitted by individual project partners? Cross the applicable.

_____On behalf of the Project Consortium   __x__On individual partner basis

7. Which ones of the following topics could include your contributions to standardization bodies/standardization consortia?

(Select 'X')

Media-related applications and business models	
• Value web	
• Social networking and media sharing	
• User satisfaction and quality of experience	
Content creation	
• New forms of content	
• Representation of content	x
• Tools for content creation and manipulation	
• Overcoming human language barriers	
Networking and delivery infrastructure	
• Intelligent delivery	x
• Quality of Service	
• Network architecture	x
• Home and extended home networks	
Content search and media presentation	
• Automated semantic annotation	
• Authentic, true-to-original media reproduction	
• Virtual reality	
• User-system interaction	
• Effective recommendation systems	
• User number measurement and user behaviour logging	
Technology drivers and enabling technologies	
• Security privacy and trust	
• Rights management	
• Federated virtual devices	
• Federated services	
• Contextual awareness	
• Location	
• Identity management and AAA	
• Personalisation/Profiling	
• Charging and payment	
• Multimedia Middleware	
• Assisted Living	
• Power management technologies - energy saving	
• Spectrum economy	

8. In your opinion, what are the main barriers/problems for R&D projects to efficiently contribute to standardization bodies/standardization consortia? (s*elect cross the first, second or third most important ones)*

1)	Barriers related to standardization procedures	
2)	Barriers to influence standardization bodies.	x
3)	Barriers on management standardization activities	x
4)	Barriers on knowledge about the advantages of standardization	
5)	Barriers on incentives for standardization activities	
6)	Problems related to IPR protection	
7)	Standardization costs are too high	
8)	Other (please specify):	

9. In your opinion, what are the main regulatory/procedural/contractual barriers for R&D projects to efficiently contribute to standardization bodies/standardization consortia? Please, comment.

10. **What are your recommendations / suggestions to foster project contributions from R&D projects to standardization bodies?**

7.5.7   PLAYMANCER project

1. **Basic Information**

About Your Project	
Project Acronym	PLAYMANCER_____
Project Title	PLAYMANCER: A European Serious Gaming 3D Environment
Project Coordinator	Costas Davarakis_____
Start Date:	01 November 2007_____
Duration:	43_months_____

2. **Your project, is considering any activity on NEM-related standards, either existing standards or targeting development of new standards?**

☐ Yes   ☒ No

If you chose "yes", please specify which ones, which standard bodies are related, etc.?

3. **Does your contractual project work plan include any standardization activities?**

☐ Yes   ☒ No

If you chose "no" go to question nr. 8

4. **Please, indicate which % of project time /project resources are dedicated to standardization activities.**

☐ 0 - 5%
☐ 5 - 15%
☐ 15 – 30%
☐ > 30%

5. At what project stage are planned the standardization activities?

1 Project begins	2	3	4	5 Project ends

Indicate when is estimated that the project will work on standardization related issues during the project lifetime.

6. Have the project plans to submit formal contributions to standardization bodies/standardization consortia?

☐ Yes   ☐ No

If you chose "yes", to whom?

☐	CENELEC
☐	ETSI
☐	ITU
☐	ISO / IEC
☐	IEEE
☐	DVB
☐	IETF
☐	3GPP
☐	W3C
☐	SMPTE
☐	EBU
☐	OMA
☐	Others (Specify)

_____

Are the above planned contributions to be made by the project consortium (or by one or several partners on behalf of the project consortium) or are they planned to be submitted by individual project partners? Cross the applicable.

____On behalf of the Project Consortium   ____On individual partner basis

7. Which ones of the following topics could include your contributions to standardization bodies/standardization consortia?

(Select 'X')

Media-related applications and business models	
• Value web	
• Social networking and media sharing	
• User satisfaction and quality of experience	
Content creation	
• New forms of content	
• Representation of content	
• Tools for content creation and manipulation	
• Overcoming human language barriers	
Networking and delivery infrastructure	
• Intelligent delivery	
• Quality of Service	
• Network architecture	
• Home and extended home networks	
Content search and media presentation	
• Automated semantic annotation	
• Authentic, true-to-original media reproduction	
• Virtual reality	

• User-system interaction	
• Effective recommendation systems	
• User number measurement and user behaviour logging	
Technology drivers and enabling technologies	
• Security privacy and trust	
• Rights management	
• Federated virtual devices	
• Federated services	
• Contextual awareness	
• Location	
• Identity management and AAA	
• Personalisation/Profiling	
• Charging and payment	
• Multimedia Middleware	
• Assisted Living	
• Power management technologies - energy saving	
• Spectrum economy	

8. In your opinion, what are the main barriers/problems for R&D projects to efficiently contribute to standardization bodies/standardization consortia? (s*elect cross the first, second or third most important ones)*

1)	Barriers related to standardization procedures	X
2)	Barriers to influence standardization bodies.	
3)	Barriers on management standardization activities	
4)	Barriers on knowledge about the advantages of standardization	
5)	Barriers on incentives for standardization activities	
6)	Problems related to IPR protection	
7)	Standardization costs are too high	X
8)	Other (please specify):	

9. In your opinion, what are the main regulatory/procedural/contractual barriers for R&D projects to efficiently contribute to standardization bodies/standardization consortia? Please, comment.

> Rules for participating in standardization bodies are a bit complex.
> Very long (and sometimes tedious) procedures, overhead to small collaborative projects (STREPS, Coord. Actions, etc.)

10. What are your recommendations / suggestions to foster project contributions from R&D projects to standardization bodies?

> A new type of collaborative project has to emerge, totally devoted to discover best practices and good results in EU-funded projects and start the standardization activities towards promoting them into European and/or International standards.

7.5.8   I-SEARCH project

1.   Basic Information

About Your Project	
Project Acronym	I-SEARCH
Project Title	A unified framework for multimodal content search
Project Coordinator	Dr. Dimitrios Tzovaras
Start Date:	1/1/2010
Duration:	36 months

2.   Your project, is considering any activity on NEM-related standards, either existing standards or targeting development of new standards?

[v] Yes   [ ] No

If you chose "yes", please specify which ones, which standard bodies are related, etc.?

> *MPEG-7*

3.   Does your contractual project work plan include any standardization activities?

[ ] Yes   [ ] No

If you chose "no" go to question nr. 8

4.   Please, indicate which % of project time /project resources are dedicated to standardization activities.

v	0 - 5%
	5 - 15%
	15 – 30%
	> 30%

5.   At what project stage are planned the standardization activities?

1 Project begins	2	3	4	5 Project ends
			v	

Indicate when is estimated that the project will work on standardization related issues during the project lifetime.

6.   Have the project plans to submit formal contributions to standardization bodies/standardization consortia?

[v] Yes   [ ] No

If you chose "yes", to whom?

	CENELEC
	ETSI
	ITU
	ISO / IEC
	IEEE
	DVB
	IETF
	3GPP
	W3C
	SMPTE
	EBU
	OMA
v	Others (Specify) MPEG-7

_____

Are the above planned contributions to be made by the project consortium (or by one or several partners on behalf of the project consortium) or are they planned to be submitted by individual project partners? Cross the applicable.

_____On behalf of the Project Consortium   __v__On individual partner basis

7. Which ones of the following topics could include your contributions to standardization bodies/standardization consortia?

(Select 'X')

Media-related applications and business models	
• Value web	
• Social networking and media sharing	
• User satisfaction and quality of experience	
Content creation	
• New forms of content	
• Representation of content	
• Tools for content creation and manipulation	
• Overcoming human language barriers	
Networking and delivery infrastructure	
• Intelligent delivery	
• Quality of Service	
• Network architecture	
• Home and extended home networks	
Content search and media presentation	
• Automated semantic annotation	v
• Authentic, true-to-original media reproduction	
• Virtual reality	
• User-system interaction	
• Effective recommendation systems	
• User number measurement and user behaviour logging	
Technology drivers and enabling technologies	
• Security privacy and trust	
• Rights management	
• Federated virtual devices	
• Federated services	
• Contextual awareness	
• Location	
• Identity management and AAA	
• Personalisation/Profiling	
• Charging and payment	
• Multimedia Middleware	
• Assisted Living	
• Power management technologies - energy saving	
• Spectrum economy	

8. **In your opinion, what are the main barriers/problems for R&D projects to efficiently contribute to standardization bodies/standardization consortia?** (s*elect cross the first, second or third most important ones)*

1)	Barriers related to standardization procedures	v
2)	Barriers to influence standardization bodies.	v
3)	Barriers on management standardization activities	
4)	Barriers on knowledge about the advantages of standardization	
5)	Barriers on incentives for standardization activities	
6)	Problems related to IPR protection	
7)	Standardization costs are too high	v
8)	Other (please specify):	

9. **In your opinion, what are the main regulatory/procedural/contractual barriers for R&D projects to efficiently contribute to standardization bodies/standardization consortia? Please, comment.**

Answers from question 8

10. **What are your recommendations / suggestions to foster project contributions from R&D projects to standardization bodies?**

More informative workshops between the Standardisation bodies and the project coordinators are needed to better understand how we can contribute to the standards

7.5.9 OPTIBAND project

1. Basic Information

About Your Project
Project Acronym   OptiBand
Project Title   Optimization of bandwidth for IPTV video streaming
Project Coordinator   Gal MOR
Start Date: 1/1/2010
Duration: 30 months

2. Your project, is considering any activity on NEM-related standards, either existing standards or targeting development of new standards?

[X] Yes   [ ] No

If you chose "yes", please specify which ones, which standard bodies are related, etc.?

> *3GPP SA4#62, TDoc S4-110024, " Rate adaptation with SVC MGS scalability" (TR 26.904 V1.0.2)*
>
> *3GPP SA4#62, TDoc S4-110149, " Rate adaptation with SVC MGS scalability" (TR 26.904 V1.0.2)*

3. Does your contractual project work plan include any standardization activities?

[ ] Yes   [X] No

If you chose "no" go to question nr. 8

4. Please, indicate which % of project time /project resources are dedicated to standardization activities.

[ ] 0 - 5%

[ ] 5 - 15%
[ ] 15 – 30%
[ ] > 30%

5. At what project stage are planned the standardization activities?

1 Project begins	2	3	4	5 Project ends

Indicate when is estimated that the project will work on standardization related issues during the project lifetime.

6. Have the project plans to submit formal contributions to standardization bodies/standardization consortia?

[ ] Yes   [ ] No

If you chose "yes", to whom?

[ ] CENELEC
[ ] ETSI
[ ] ITU
[ ] ISO / IEC
[ ] IEEE
[ ] DVB
[ ] IETF
[ ] 3GPP
[ ] W3C
[ ] SMPTE
[ ] EBU
[ ] OMA
[ ] Others (Specify)
_____

Are the above planned contributions to be made by the project consortium (or by one or several partners on behalf of the project consortium) or are they planned to be submitted by individual project partners? Cross the applicable.

____On behalf of the Project Consortium   ____On individual partner basis

7. Which ones of the following topics could include your contributions to standardization bodies/standardization consortia?

(Select 'X')

Media-related applications and business models	
• Value web	
• Social networking and media sharing	
• User satisfaction and quality of experience	
Content creation	
• New forms of content	
• Representation of content	
• Tools for content creation and manipulation	
• Overcoming human language barriers	
Networking and delivery infrastructure	
• Intelligent delivery	
• Quality of Service	
• Network architecture	
• Home and extended home networks	
Content search and media presentation	
• Automated semantic annotation	
• Authentic, true-to-original media reproduction	
• Virtual reality	
• User-system interaction	
• Effective recommendation systems	
• User number measurement and user behaviour logging	
Technology drivers and enabling technologies	
• Security privacy and trust	
• Rights management	
• Federated virtual devices	
• Federated services	
• Contextual awareness	
• Location	
• Identity management and AAA	
• Personalisation/Profiling	
• Charging and payment	
• Multimedia Middleware	
• Assisted Living	
• Power management technologies - energy saving	
• Spectrum economy	

8. In your opinion, what are the main barriers/problems for R&D projects to efficiently contribute to standardization bodies/standardization consortia? (s*elect cross the first, second or third most important ones)*

1)	Barriers related to standardization procedures	X
2)	Barriers to influence standardization bodies.	X
3)	Barriers on management standardization activities	
4)	Barriers on knowledge about the advantages of standardization	
5)	Barriers on incentives for standardization activities	
6)	Problems related to IPR protection	
7)	Standardization costs are too high	X
8)	Other (please specify):	

9. In your opinion, what are the main regulatory/procedural/contractual barriers for R&D projects to efficiently contribute to standardization bodies/standardization consortia? Please, comment.

> Standard bodies involve several industrial companies and academic institutes that try to standardize their methods, which in some cases, are different from the work done by the project. In such cases, it requires intensive political activity and requires a lot of iterations and efforts to bring all proposals together to one acceptable standard draft, which may be different from the original proposal of the project.

10. What are your recommendations / suggestions to foster project contributions from R&D projects to standardization bodies?

> Allocate enough budget to accomplish the full standardization process, including all interim iterations to consistently push the project interest and influence the standard activities

7.5.10   TA2 project

1. Basic Information

> About Your Project
> Project Acronym   _____TA2_____
> Project Title   _____Together Anywhere Together Anytime _____
> Project Coordinator   ____Peter Stollenmayer (stollenmayer@eurescom.eu)
> Start Date: _____01.02.2008_____
> Duration: _____4 years_____

2. Your project, is considering any activity on NEM-related standards, either existing standards or targeting development of new standards?

☐ Yes   [x] No

If you chose "yes", please specify which ones, which standard bodies are related, etc.?

>

3. Does your contractual project work plan include any standardization activities?

[X] Yes   ☐ No

If you chose "no" go to question nr. 8

4. Please, indicate which % of project time /project resources are dedicated to standardization activities.

☐	0 - 5%
X	5 - 15%
☐	15 – 30%
☐	> 30%

5. At what project stage are planned the standardization activities?

1 Project begins	2	3	4	5 Project ends
X	X	X		X

Indicate when is estimated that the project will work on standardization related issues during the project lifetime.

6. Have the project plans to submit formal contributions to standardization bodies/standardization consortia?

[X] Yes   [ ] No

If you chose "yes", to whom?

	CENELEC
	ETSI
	ITU
X	ISO / IEC
	IEEE
	DVB
X	IETF
	3GPP
X	W3C
	SMPTE
	EBU
	OMA
	Others (Specify)

_____

Are the above planned contributions to be made by the project consortium (or by one or several partners on behalf of the project consortium) or are they planned to be submitted by individual project partners? Cross the applicable.

____On behalf of the Project Consortium   _X___On individual partner basis

7. Which ones of the following topics could include your contributions to standardization bodies/standardization consortia?

(Select 'X')

Media-related applications and business models	
• Value web	
• Social networking and media sharing	X
• User satisfaction and quality of experience	X
Content creation	
• New forms of content	
• Representation of content	X
• Tools for content creation and manipulation	
• Overcoming human language barriers	
Networking and delivery infrastructure	
• Intelligent delivery	
• Quality of Service	
• Network architecture	
• Home and extended home networks	X
Content search and media presentation	
• Automated semantic annotation	X
• Authentic, true-to-original media reproduction	
• Virtual reality	X
• User-system interaction	X

• Effective recommendation systems	X
• User number measurement and user behaviour logging	
Technology drivers and enabling technologies	
• Security privacy and trust	
• Rights management	
• Federated virtual devices	
• Federated services	
• Contextual awareness	
• Location	
• Identity management and AAA	
• Personalisation/Profiling	
• Charging and payment	
• Multimedia Middleware	
• Assisted Living	
• Power management technologies - energy saving	
• Spectrum economy	

8. **In your opinion, what are the main barriers/problems for R&D projects to efficiently contribute to standardization bodies/standardization consortia?** (s*elect cross the first, second or third most important ones)*

1)	Barriers related to standardization procedures	
2)	Barriers to influence standardization bodies.	X
3)	Barriers on management standardization activities	
4)	Barriers on knowledge about the advantages of standardization	
5)	Barriers on incentives for standardization activities	
6)	Problems related to IPR protection	X
7)	Standardization costs are too high	
8)	Other (please specify):	

9. **In your opinion, what are the main regulatory/procedural/contractual barriers for R&D projects to efficiently contribute to standardization bodies/standardization consortia? Please, comment.**

> More and more, standardization activities are being driven by focused commercial interests. There is less room for a R&D perspective that is not backed by a major market force. The participation in the standards process, which often involves person years of effort, is often incompatible with the resources of research partners.

10. **What are your recommendations / suggestions to foster project contributions from R&D projects to standardization bodies?**

> It would be good if the EU joined certain standardization bodies directly, and if special funding existed to stimulate this work. This would be especially useful for research partners.

7.5.11   COAST project

1.   Basic Information

About Your Project	
Project Acronym	COAST
Project Title	COntent Aware Searching, retrieval and sTreaming
Project Coordinator	Agostino Galluzzo; Theodore Zahariadis
Start Date:	01/02/2010
Duration:	30 months

2.   Your project, is considering any activity on NEM-related standards, either existing standards or targeting development of new standards?

[X] Yes   [ ] No

If you chose "yes", please specify which ones, which standard bodies are related, etc.?

IETF (Application Level Traffic Optimization WG, Peer-to-Peer Streaming Protocol WG, Decoupled Application Data Enroute WG, Audio Video Transport Core Maintenance WG, Content Distribution Network Interconnection BOF)

ETSI (TISPAN Next Generation Networks, Media Content Distribution)

ISO/IEC (ISO Base Media File Format-ISO/IEC 14496-12, AVC File Format-ISO/IEC 14496-15, Dynamic Adaptive Streaming over HTTP-ISO/IEC 23001-6)

DLNA (DLNA Networked Devices Interoperability Guidelines, Media Format Profiles)

3.   Does your contractual project work plan include any standardization activities?

[X] Yes   [ ] No

If you chose "no" go to question nr. 8

4.   Please, indicate which % of project time /project resources are dedicated to standardization activities.

X	0 - 5%
	5 - 15%
	15 – 30%
	> 30%

5.   At what project stage are planned the standardization activities?

1 Project begins	2	3	4	5 Project ends
X	X	X	X	X

Indicate when is estimated that the project will work on standardization related issues during the project lifetime.

6.   Have the project plans to submit formal contributions to standardization bodies/standardization consortia?

[X] Yes   [ ] No

If you chose "yes", to whom?

	CENELEC
X	ETSI
	ITU
X	ISO / IEC
	IEEE
	DVB
X	IETF
	3GPP
	W3C
	SMPTE
	EBU
	OMA
X	Others (Specify)
	DLNA

Are the above planned contributions to be made by the project consortium (or by one or several partners on behalf of the project consortium) or are they planned to be submitted by individual project partners? Cross the applicable.

_____On behalf of the Project Consortium   X On individual partner basis

7. **Which ones of the following topics could include your contributions to standardization bodies/standardization consortia?**

(Select 'X')

Media-related applications and business models	
• Value web	
• Social networking and media sharing	
• User satisfaction and quality of experience	
Content creation	
• New forms of content	
• Representation of content	
• Tools for content creation and manipulation	X
• Overcoming human language barriers	
Networking and delivery infrastructure	
• Intelligent delivery	X
• Quality of Service	X
• Network architecture	X
• Home and extended home networks	X
Content search and media presentation	
• Automated semantic annotation	
• Authentic, true-to-original media reproduction	
• Virtual reality	
• User-system interaction	
• Effective recommendation systems	
• User number measurement and user behaviour logging	X
Technology drivers and enabling technologies	
• Security privacy and trust	
• Rights management	
• Federated virtual devices	
• Federated services	
• Contextual awareness	X
• Location	X
• Identity management and AAA	
• Personalisation/Profiling	X
• Charging and payment	
• Multimedia Middleware	X
• Assisted Living	
• Power management technologies - energy saving	
• Spectrum economy	

8. In your opinion, what are the main barriers/problems for R&D projects to efficiently contribute to standardization bodies/standardization consortia? (s*elect cross the first, second or third most important ones)*

1)	Barriers related to standardization procedures	X
2)	Barriers to influence standardization bodies.	X
3)	Barriers on management standardization activities	
4)	Barriers on knowledge about the advantages of standardization	
5)	Barriers on incentives for standardization activities	X
6)	Problems related to IPR protection	
7)	Standardization costs are too high	
8)	Other (please specify):	

9. In your opinion, what are the main regulatory/procedural/contractual barriers for R&D projects to efficiently contribute to standardization bodies/standardization consortia? Please, comment.

> While R&D projects normally acquire operational experience of the standardization topics only towards the end of the project, standardization activities normally require a long time to be established, thus there is only a little window for R&D project to really make a considerable impact

10. What are your recommendations / suggestions to foster project contributions from R&D projects to standardization bodies?

> Try to find a way to continue supporting standardization activities of partners based on R&D project result after the project ends (e.g., with special calls for standardization projects deriving from R&D projects) allowing the project partners to establish and finalize their standardization contributions.