

## A successful NEM General Assembly



**At the NEM GA held in Brussels a significant evolution happened. After two years of discussion about the Strategic Research Agenda and the priorities that the community need to address, we moved on to the first discussion on the work we should do realise the NEM objectives**

... The first major item at the NEM GA was the election of some new steering board members. We had about 25 candidates for 14 positions so there was some hot competition for the posts. All the candidates made short presentations highlighting their company capabilities and what they could bring to the NEM Initiative and then the assembled GA cast their votes in a secret ballot.

The following companies have been elected for the NEM Steering Board:

### Category: Industry and content

- > Hewlett-Packard, represented by Nick Wainwright
- > Ericsson, represented by Martin Körling
- > STMicroelectronic, represented by Eric Schutz

### Category: Academia and research

- > Waterford Institute of Technology - TSSG, represented by Willie Donnelly
- > Queen Mary University of London, represented by Ebroul Izquierdo
- > University of Amsterdam, represented by Arnold Smeulders

## diary

### POLICYevents

- > THE IST 2006 CONFERENCE  
21-23 November, Helsinki
- > NEM NETWORKING SESSION  
22 November 2006, 14:00-15:30  
IST event, Helsinki
- > NEM STEERING BOARD  
11-12 December 2006, Geneva
- > INTERPLATFORM MEETING  
12 December 2006, Geneva

### ISTevents

- > BROADCAST, CABLE & SATELLITE 2006 - A CEBIT EVENT  
23 - 26 November, Istanbul
- > DIGITAL HOLLIWOOD EUROPE  
29 November - 1 December 2006, London
- > 2<sup>ND</sup> CONFERENCE ON FUTURE NETWORKING TECHNOLOGIES (CONEXT)  
4-7 December 2006, Lisbon
- > "FIRST INTERNATIONAL CONFERENCE ON SEMANTICS AND DIGITAL MEDIA TECHNOLOGY (SAMT 2006) / FORMER EUROPEAN WORKSHOP ON THE INTEGRATION OF KNOWLEDGE, SEMANTIC AND DIGITAL MEDIA TECHNOLOGIES (EWIMT)"  
6-8 December 2006, Athens

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**Category: User view and/or SME**

- › Omega Research, represented by Roger Torrenti
- › Aido, represented by Elena Boronat
- › Game, represented by Malte Behrmann
- › GWT-TUD, represented by Sven Zeisberg
- › Rose Vision, represented by Julian Seseña
- › Swissmedia, represented by Roland Grunder

**Category: Network Operator/ Broadcaster Views (elected by acclamation)**

- › Abertis telecom, represented by Joan Manel Espejo
- › Eurescom, represented by David Kennedy

In addition the Pôle de compétitivité "Images & Réseaux" from France, represented by Christiane Schwartz, was invited to become an observer member of the NEM Steering board.

**Talking Technical**

The entire second day of the NEM GA was devoted to assisting the emergence of projects that will implement the NEM SRA. First Luis Rodriguez-Roselló, Head of Unit, Networked Audiovisual Systems, Directorate General Information Society and Media, gave an update on the status of FP7 and what we should consider there. Then we quickly went into discussion on project ideas.

Over two fast moving sessions around 50 organisations presented their expressions of Interest and ideas for projects and we had some discussion on how to proceed. What was probably more important is that the participants had the time and informa-

tion to identify potential partners with similar interests so that already discussion groups are forming with a view to preparing proposals.

We had some discussion then on how to proceed and some clear actions emerged. First the expressions of interest from the meeting would be posted on the NEM website to allow follow up and further discussion to occur. Second an additional webspace is made available on the NEM site to post new ideas and look for partners. Then we discussed how to keep the conversations going and the NEM office is offering to provide e-mail exploders and discussion groups but in the meeting the exact structure of such discussion groups was not finalised. For the moment we will allow it to grow organically and NEM members may request such support if they have a group emerging.

**Conclusion**

The main point now is that 2007 will be the year of the project proposals. The NEM community is now working towards proposals for FP7 call1, call 2 and the Eureka CELTIC call. The next NEM GA is going to be held early next spring and there we will have a discussion on how the NEM proposals fit together and what milestones a proposal should include to be part of the NEM community ...

**Further information**

<http://www.nem-initiative.org/public/structure/GA.htm>

**DAVID KENNEDY, HALID HRASNICA,**  
 EURESCOM

## Upcoming Calls from European Commission Framework Programme

The European Commission is making good progress on the preparation for the first Calls for Proposals in ICT. Consultations with Member States are still underway, however positions are converging; and therefore we can expect that the draft Workprogramme that will be distributed at the IST Conference in Helsinki will be a commonly agreed draft reaching a broad consensus. If all goes on as planned, the first Call for Proposals is expected to be launched shortly before the year end or early next year with an intended deadline before end of April

... What will be in the upcoming Workprogramme of interest for NEM stakeholders? Generally speaking I would say that the "leitmotiv" of Convergence inspiring the creation of the NEM Technology Platform is underpinning the whole ICT future research and in particular the convergence of media, consumer electronics, services and networks is the driving force of the Networked Media sector. As I made clear at my talk to the NEM General Assembly, one can recognise easily the contributions of the NEM Strategic Research Agenda in the current draft R&D plans.

The main features of the media revolution are key elements underpinning the future R&D: user centric media, socially shareable, personalised and

## diary



- > **THE 3<sup>RD</sup> BROADBAND EUROPE CONFERENCE**  
**11-14 December, Geneva**
- > **2<sup>ND</sup> INTERNATIONAL CONFERENCE ON AUTOMATED PRODUCTION OF CROSS MEDIA CONTENT FOR MULTI-CHANNEL DISTRIBUTION, IEEE PRESS PROC**  
**12-15 December, Leeds, UK**
- > **SETTOPBOX 2007 [CONFERENCE&EXHIBITION] / STB2007**  
**6-8th February 2007 Seoul, Korea**
- > **FTTH COUNCIL EUROPE CONFERENCE**  
**7-8th February 2007, Barcelona**
- > **3 GSM**  
**12-15 February 2007, Barcelona**
- > **CELTIC INFORMATION DAY, CALL 5**  
**21 February 2007, Berlin**
- > **CELTIC EVENT 2007**  
**22-23 February 2007, Berlin**
- > **IEEE VIRTUAL REALITY 2007**  
**10-14 March 2007, Charlotte, North Carolina, USA**
- > **13<sup>TH</sup> EUROPEAN WIRELESS CONFERENCE**  
**1-4 April 2007, Paris**
- > **3 DTV-CONFERENCE**  
**7-9 May 2007, Kos Island, Greece**
- > **EUROITV 2007**  
**May-07, Amsterdam**
- > **INTERACTIVEDME**  
**19-22 June 2007, Singapore**
- > **16<sup>TH</sup> IST MOBILE AND WIRELESS COMMUNICATIONS SUMMIT**  
**1-5 July 2007, Budapest**

providing pervasive user experiences, higher quality content produced by the professional and non professional users blurring the former barriers between professional and non-professional content creators. All the above are giving shape to a new media wave, which is non-linear and participatory. That new wave has been coined as "Networked Media". It is not by chance that this is precisely the title of a compelling Objective of the envisioned Workprogramme.

Previous Framework Programmes have contributed to the emergence of standards and new applications: more efficient coding, new delivery platforms, more interactivity, mobile broadcasting, etc. Now time is ripe to support the next wave of user-centric media so as to ensure Europe's leading role in the future generation of media and ensuring the take-up of new media usages backed by a competing European industry capable to aggregate interests of Consumer Electronics, ICT, Media and Service industries.

Meeting this challenge will require leadership in the developments of the novel generation of media technologies providing higher performances in terms of intelligence, scalability, flexibility, speed, capacity, ease of use and at the lowest possible cost. This means to learn the lessons from the most innovative trends in ICT and media: ensure that content and services work anywhere on any device and on any network; traditional broadcasting (one to many) is to be replaced by one to some, on-demand, at any time and cater for the needs of social networks without any central distribution.

New requirements are therefore to be

met: new delivery patterns based on interoperable network and service infrastructure, better access (search engines, context aware), cross-media consumption, service discovery and more compelling user experiences (based on 3D media, virtual and augmented reality and more innovative applications based on higher degrees of interactivity).

The new Workprogramme encompasses two technology strands: multimedia services and distribution infrastructures and multimedia systems and application platforms detailing many of the above technological requirements at the various levels.

But technologies are not enough as if we want a wide adoption of new digital media consumption and production patterns and new usage forms, we need to design new business models able to integrate the different perspectives of European industries and the diversity of stakeholders. Complementing the above technology strands with roadmapping, coordination with related regional, national or European initiatives and supporting standardisation and interoperability efforts is therefore also part of the Workprogramme.

Europe has sufficient talent and know-how to cope with the challenges raised by Networks, Media and Services of the future. To succeed however these resources must be pulled together. Some conditions are key: R&D investment by the private sector needs to be substantially increased, greater coordination and focus of R&D is to be achieved, as ambitioned by NEM, a more agile view of convergence together with more disruptive approaches is needed



and more importantly innovation must be unleashed: we should ensure we put users at the centre so as to try to anticipate future usages of media. The upcoming Call for Proposals of the ICT theme in Framework Programme provides an excellent opportunity to support all these endeavours ...

**LUIS RODRÍGUEZ-ROSELLÓ,**  
 HEAD OF UNIT "NETWORKED AUDIO VISUAL SYSTEMS" DIRECTORATE GENERAL INFORMATION SOCIETY AND MEDIA

## National Technology Platform mirrors of NEM being launched

... National Technology Platforms in the area of technologies covered by NEM are being launched and consolidating their structures. The needs to organise the NEM sector at national level seems to be very important and some countries have been launching their own national platforms in the NEM sector. This is relevant in those countries where the participation of SMEs in R&D projects is high. Those national initiatives are being launched either to act:

- › as mirrors of the European NEM technology platform;
- › or national initiatives to promote national R+D activities in the NEM sector.

Those national platforms are a source of information, potential partnerships

and proposals initiatives, where the members can work collectively channelling proposals and participations to the R+D programmes, either at regional, national or European level.

In order to establish a fluent communication with National Technology Platforms (NTP), NEM set up a special Mirror Group where national technology platforms, in addition to national R+D programme managers, can discuss the main issues of interest from a regional or national perspective.

Previous NEMletter reported on the Spanish eNEM technology platform, launched by mid 2005. During NEM GA, there were announcements on other national initiatives launching NEM related national technology platforms. This is the case of NEM platforms in The Netherlands, Lithuania, Romania, Slovenia. Proposers and Managers of national NEM technology platforms are invited to use this NEMletter to further report about on going activities ...

**JULIÁN SESEÑA,** ROSE VISION

## The standardization contribution of NEM

**While standards are important in many areas – often for security or liability reasons – they are even more important for the Networked Electronic Media environment: They are a key enabler (or in absence sometimes the road blocker) for the market itself**

- › Networks are the means to transport content and by such connect the content provider and the content consumer. For those two important protagonists in the value network, standards are the precondition to implement viable business models.
- › Media form an increasing amount of the content to not only be transported but also decoded – “understood” – by the consumer. Same as on networks, standards are essential to enable content providers to prepare their content in a generic and affordable format and at the same time enable end device manufacturers to build cheap devices required for mass market adoption.

In both areas we've seen big successes and big failures (Ethernet & WLAN vs. ATM & HiperLAN/2 in the network domain and MPEG-2 & H.264 vs. MPEG-4 Part 2 / DVlX in the media domain) and it sometimes is difficult to judge why standards fail or succeed.

### Generation of “Standards”

To speed up processes and bring together the industrial stakeholders within the value network SIGs (Special Interest Groups) play an increasingly important role. While in the past these industrial consortia have been formed to prepare joint work in SDOs (Standards Developing Organizations) and vanished once the standardization work began, the impact of those groups has increased significantly in the past years:

- › On the one hand SIGs develop specifications that are input into SDOs on special fast tracks (often via so called Joint Technical Committees to ensure co-ordination

amongst all relevant SDOs). Good examples of those groups in the NEM area are DVB (Digital Video Broadcast) or UPnP (Universal Plug and Play). DVB for example inputs its specifications via the JTC Broadcast, a joint technical committee between ETSI, CENELEC and the EBU to become ETSI or CENELEC standards (TS) or European norms (EN) eventually.

- On the other hand, SIGs help to organize the “jungle” of partially overlapping specifications to avoid fragmentation of the market where SDOs have not properly cared for uniqueness. Good examples of those groups are HGI (Home Gateway Initiative) and DLNA (Digital Living Network Alliance). The output of those groups usually is called a guideline, because it references specifications and/or standards and documents how they should be implemented and combined to generate a working system.

To overcome the problem of missing coordination the WSC (World Standards Cooperation) manages the activities of ISO, ITU and IEC. The WSC has invited to a consultation meeting on “The Digital Home”, and several NEM representatives have been on the list of invitees and participants.

#### Activities of the NEM members

NEM members in general, but also NEM Steering Board members – who communicate and to the extent possible co-ordinate their standardization work amongst the NEM Steering Board – are active on a variety of important European but also international standards (the following list by no means is complete):

- On mobile TV NEM members drive the work within DVB and therefore (see above) ETSI and CENELEC. NEM members in addition set up the whole ecosystem to enable mobile TV. Driving the Mobile DTV Alliance, coordinating IP Datacast-based mobile TV services with OMA (including building the appropriate trust models with the CMLA) and making the TV Anytime Forum results ETSI standards are only few of the activities carried out.
- IPTV delivery and related ecosystem issues like Quality of Service and Electronic Service Guides build the foundation for a radical change in broadcast in the upcoming years: IP protocols will separate content from its delivery. For the first time, broadcast signals will not (or at least in a restricted manner) be produced for a single, dedicated broadcast link. Several upcoming FP7 activities will exploit this development and standardization has to ensure it really takes place. NEM members play a dominant role in DVB-IPTV/IPI, in the DSL Forum, the Home Gateway Initiative and in the DLNA that ensures local distribution of DTV content in the extended home. Even though broadcast to a certain extent has been a geo-specific issue in the past, IPTV is a real global question and that’s why NEM members actively promote European solutions in US bodies like the ATIS IIF and in international SDOs, like in the ITU-T IPTV Focus Group.
- A further branch of work in FP7 will deal with multimedia middleware for the converged era, trying to provide for scalable,

open and flexible run-time environments. Today, no such middleware exists and the variety of dedicated solutions in the TV space (incl. MHP), the games space and the personal computing arena is enormous.

As in the fields above actual standardization work tries to lay the foundation for these potential FP7 project and NEM members are heavily involved in the MPEG-E M3W middleware specification.

#### Summary

Standardization will lay the foundation for a lot of NEM related work under FP7. For the first time, by the pure fact the FP7 is nearly twice as long as all its predecessors, there is a real collaboration between projects envisioning their results at the end of the program and standardization that has to be available around mid of the program. To further support the global exploitation of European R&D and to maintain or even increase the weight of Europe in a world of global NEM standards the European Commission should take the involvement of ETPs, but also from upcoming IPs and STREPs into standardization very sincere.

A result from European collaborative R&D projects to be converted into standards is a prerequisite for midterm success and sustainability! ...

**THORSTEN HERFET, INTEL**



## Can the NEM help European regulation of new media?

**Regulation comes in many forms, but its fundamental purpose is always the same. It is to serve the public interest. It is introduced where its absence would serve the public interest less well**

... The "value chain" for media begins with the user, passes through the media content, the application player, the transport system, to the content creator. Regulation can be applied to each layer, though its application must be limited to layers and circumstances where there is a net public gain – or at least we can hope this is the case.

Regulation can be applied to spectrum to ensure its use is fair and in the public interest. It can be applied to content to ensure that it reflects society's values, and to protect the vulnerable. It can be applied to business to help stimulate competition. It can be applied in other areas too.

New Media and their networks will need regulation. New Media will be affected by regulation, and regulation will affect new media. Technical evolution will affect regulation.

The Steering Board of the NEM considered that, because of its knowledge of technical evolution, the NEM may be able to provide important advice for regulators of new media. It could prepare analysis papers which are submitted to regulatory bodies to help

them plan and arrange better regulation. The NEM may be uniquely able to inform regulators about the potential future of networked electronic media. This should help make better informed regulations, and give them maximum life.

The NEM has thus created an Ad-hoc group to examine if and when the NEM could help to advise regulators. The group is open to all members who wish to join. The subject is new territory. We don't know yet how far we can help, or indeed whether any advice we give will be heeded.

The first project the Ad hoc group examined was the new draft of the former Directive 'Television without Frontiers', which is under now discussion in the different European instances. The new draft is intended to provide content regulation for new media services in a proportionate way. It provides different levels of content regulation, the strength of which is proportional to the impact and influence of the media. The Directive proposes to segregate media services into "linear services" and "non linear services". Linear services are those where the service is scheduled for the user, and non-linear services are those where the services are scheduled by the user. This is meant to separate different degrees of interest and different levels of personal responsibility.

The NEM regulation group tried to understand how far this was a distinction that could be made and maintained in practice, based on its knowledge of technology. This is not easy in a world of broadcasting, Internet, podcasting, and VCRs. It is a world of 'convergence' where the media experience for the uses becomes less distinguishable over time. Thus the key area where the NEM

Regulation Group thought it could help was to advise on the practicality of the distinction between linear and non linear media. This is a subject which has taxed many meetings over the past two years outside the NEM.

Although a simplification, on balance it seemed to the Ad hoc group that the distinction could be made today. But it will get less easy as time goes on. For example, in five years time, a greater proportion of users will get their programmes using a search engine. The balance of influence between linear and non linear service is likely to evolve. This means that the Directive will need regular examination and review, and the suggestion of the group is that it should be reviewed at least every five years.

Thus the first discussions of the Group were relatively promising and led to a concrete submission to the relevant committees of the European parliament. Time will tell if the ideas are reflected in the development of the new Directive.

The Ad hoc group has moved on to consider by correspondence other issues, and the proposals for another regulatory tool which is termed the "Review of the Telecommunications package". This potential new set of suggestions for national regulators will charter a new route to the allocation of radio spectrum. It recommends four key tools should guide the use of spectrum in the years ahead: technological neutrality, service neutrality, spectrum trading, and spectrum management at the European level. One aspect of that this is the notion of "technological neutrality", and the dilemma of whether in the long term it would help or hinder an open market and the use of common technical standards. There is more to do and discuss, inclu-

ding the question of how radio spectrum should be used in the public interest. The Ad-hoc group should hold a next meeting early in 2007, to appraise how far it can achieve its objectives, and what the key objectives and deliverable should be in the near future.

Harnessing the power of the NEMs knowledge of technologies future to promote more useful and more long lasting regulation should in principle be valuable asset for Europe.

If you would like to join the mailing list for the NEM Regulation group, contact us: wood@ebu.ch ...

**DAVID WOOD**, EBU

## CELTIC Opportunity for NEM related projects

**After a very successful first event in Dublin, with about 200 high-level attendees from industry, politics and research, the CELTIC Initiative is organising its second annual conference, called "CELTIC Event 2007", which will take place in Berlin, Germany, on 22 and 23 February 2007**

... The objective of the event is to show the current status, the available achievements, and the impact of the running CELTIC projects. Furthermore, the event provides an excellent opportunity to show the state-of-the art of the telecommunications development towards integrated next-generation telecommu-

nications and multimedia systems for seamless use across mobile and fixed networks.

The scope of the conference is to bring together key players from industry, research, public authorities, and politics to present and discuss the current evolution of the CELTIC Initiative and its running projects. In several high-level presentations future evolution scenarios for next generation telecommunications networks, services and systems will be presented and the role of CELTIC in the European research community for these scenarios will be discussed. Also the coordination with the European Technology Platforms (NEM, eMobility, NESSI, and ISI) of the coming FP7 will be discussed with ETP representatives, Commission and public authorities. The Event will be complemented by an exhibition of project results from a selected number of important CELTIC projects ...

### Further information

[www.celtic-initiative.org/Events/Celtic-Event07-Berlin/welcome.asp](http://www.celtic-initiative.org/Events/Celtic-Event07-Berlin/welcome.asp).

Participation requires a personal invitation.

On 21st February the CELTIC Call 5 Information Day takes place at the same location. This Information Day is intended to present new project proposals and to discuss them with experts and potential new consortium partners. Call 5 will particularly be focusing also on the SRA of the technology platforms NEM, eMobility, NESSI and ISI. In the advent of the launch of FP7 a good coordination of proposal submissions will be essential to cover SRA topics to a high degree.

Call 5 will be launched early January 2007. The first submission phase

(proposal outlines) will end around May 2007. Details will be communicated soon at the Celtic website: [www.celtic-initiative.org](http://www.celtic-initiative.org) ...

**HEINZ BRUEGGEMANN**, CELTIC

## Roadmap of NEM in the IST Event

**The IST Event 2006 is the most important European event in the field of Information Society Technologies. In addition this year it coincides with the launch of the Seventh Framework Programme for Research and Development**

... Because of that, this 21-23 November 2006 will be one of the most important moments to discuss about R&D issues and NEM will profit to explain its future initiatives. The NEM platform has organised one Networking Session in order to create a brainstorming of ideas, of where the NEM sector has to work.

The high expectation of this IST NEM networking session is that NEM big challenges will be openly discussed and feedback about their priorities and relevance for each constituency will be got. Therefore, the results of the IST NEM networking session will be crucial to further validate the currently identified big challenges, or to modify them or to re-formulate them as consequence of views expressed during the workshop and later discussions, which will be promoted as a follow on process after the IST event.



The NEM Networking Session at the IST 2006 provides an open forum for exchanging views and ideas on how to address these challenges. The NEM Networking Session provides a meeting place for communities that possibly never worked together before. The Networking Session brings toge-

ther people interested in the new sector NEM. The session is less formal discussion group than the official conference sessions, encouraging active participation and lateral thinking ●●●

**JULIÁN SESEÑA**, ROSE VISION

## NEM Structure

### STEERING BOARD

- › Alcatel
- › Barco
- › BBC
- › British Telecom
- › Catalan Broadcasting Corporation
- › European Broadcasting Union
- › Endemol
- › France Télécom
- › Fraunhofer IMK
- › INRIA
- › Intel
- › IRT

- › Lucent
- › Micronas
- › Nokia
- › Philips
- › Portugal Telecom Inovacao
- › Siemens
- › Telecom Italia
- › Telefónica
- › TeliaSonera
- › Thomson
- › Universidad Politécnica de Madrid (UPM)
- › CELTIC

### EXECUTIVE BOARD

- › Alcatel
- › European Broadcasting Union
- › France Télécom
- › Intel
- › Nokia
- › Philips
- › Siemens
- › Thomson
- › Telefónica
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