



**“Networked and Electronic Media”
NEM – the birth of new sector
Euro-ICT concertation meeting**

Brussels, June 26th, 2008

Dr. Julián Seseña, jsesena@rose.es

NEM Mission



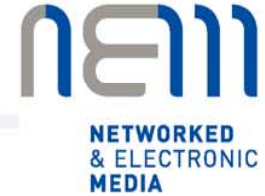
“The NEM Technology Platform is an industry-led initiative aiming at accelerating the pace of innovation to make the convergence between the audiovisual sector and the telecom sector happen and to place the European industry at the forefront of the information era.”

NEM 2015 Vision



- **A leading European networked and electronic media industry**
 - competitive with other business regions in the world
- **A regulatory environment favouring the deployment of NEM technologies**
 - to improve the quality of life and maximize economic growth and skilled employment in Europe
- **Open business models across the value network**
 - novel revenue generating models

Leading & Competitive Industry



- **Public and private partnerships**
 - coordinated at European level
 - to ensure the optimum use of investment efforts by individual Member States
- **Consistent research teams**
 - working in cooperation and in competition
 - achieving visionary and challenging goals
- **Partnership on a win-win basis with other regions of the world**

Regulatory Environment

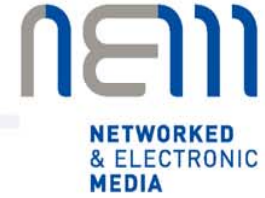
- **Effective public policies in**
 - different domains, e.g., health, culture, education, government, E-inclusion
- **Open standards and interoperability**
 - enablers for growing and emerging horizontal markets
 - avoiding locking-in of consumers

Open Business Models



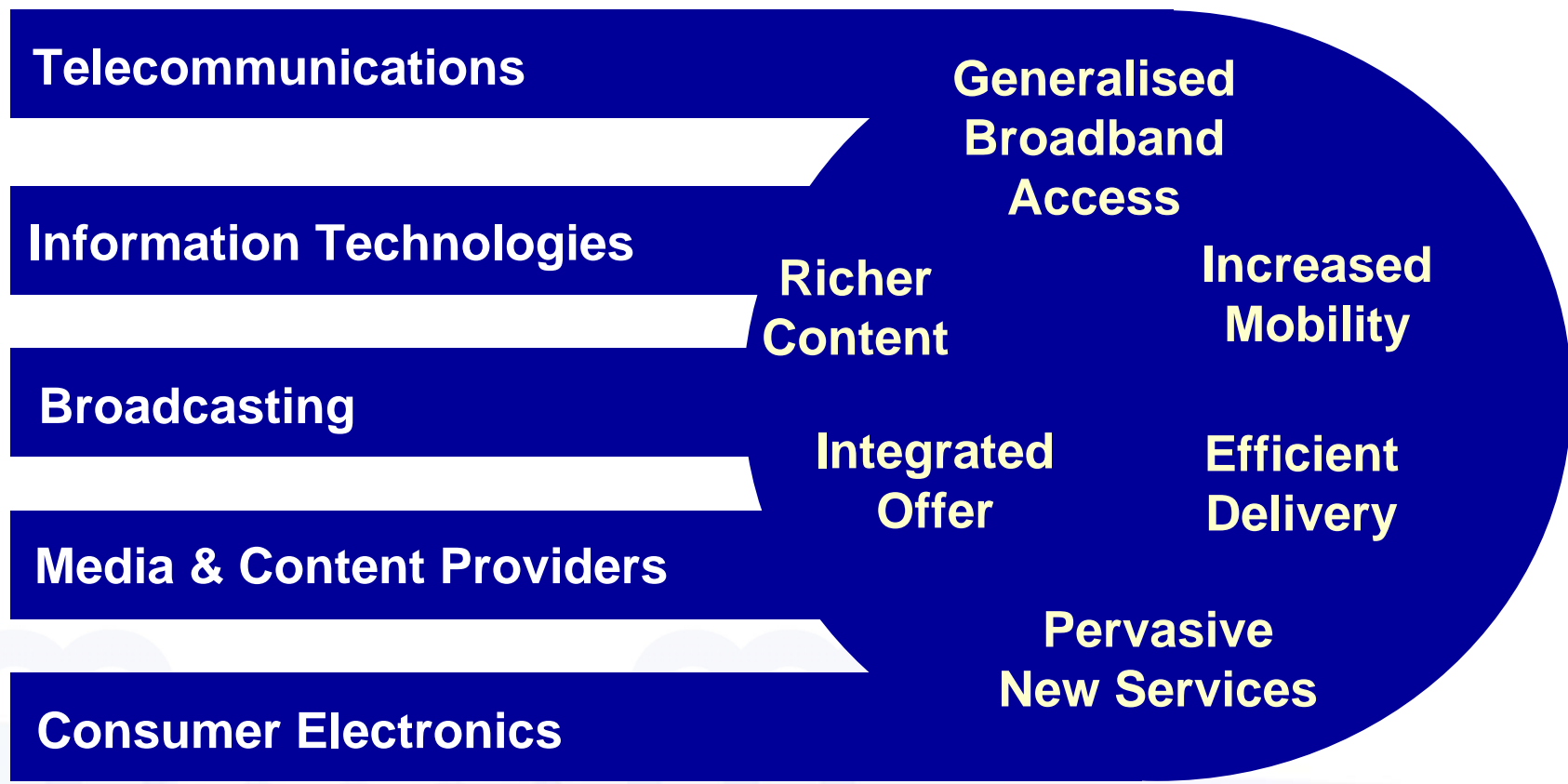
- **Enlarged European market for**
 - content creation, management, distribution, presentation and consumption by and for users
- **Empowered end-users accessing**
 - any content, anytime, anywhere
 - from trusted services and applications
 - In simple, secure, fast and reliable fashion

Driving Innovation and Standards



- **Technologies**
 - MPEG, MHP, DVB, MP3, DAB, DMB
- **Services and applications**
 - Cable-based systems
 - Terrestrial wireless broadcasting
 - Satellite broadcasting – broadcast, fixed, mobile
 - Fibre & wireless access systems (LMDS, MMDS, FTTx,..)
 - PSTN networks using xDSL technologies
 - Cellular & telecommunication networks (GSM, GPRS< UMTS, 3G Mobile)

Positive Effects of Convergence



Now



The NEM Future

NEM European Technology Platform

Who are we?

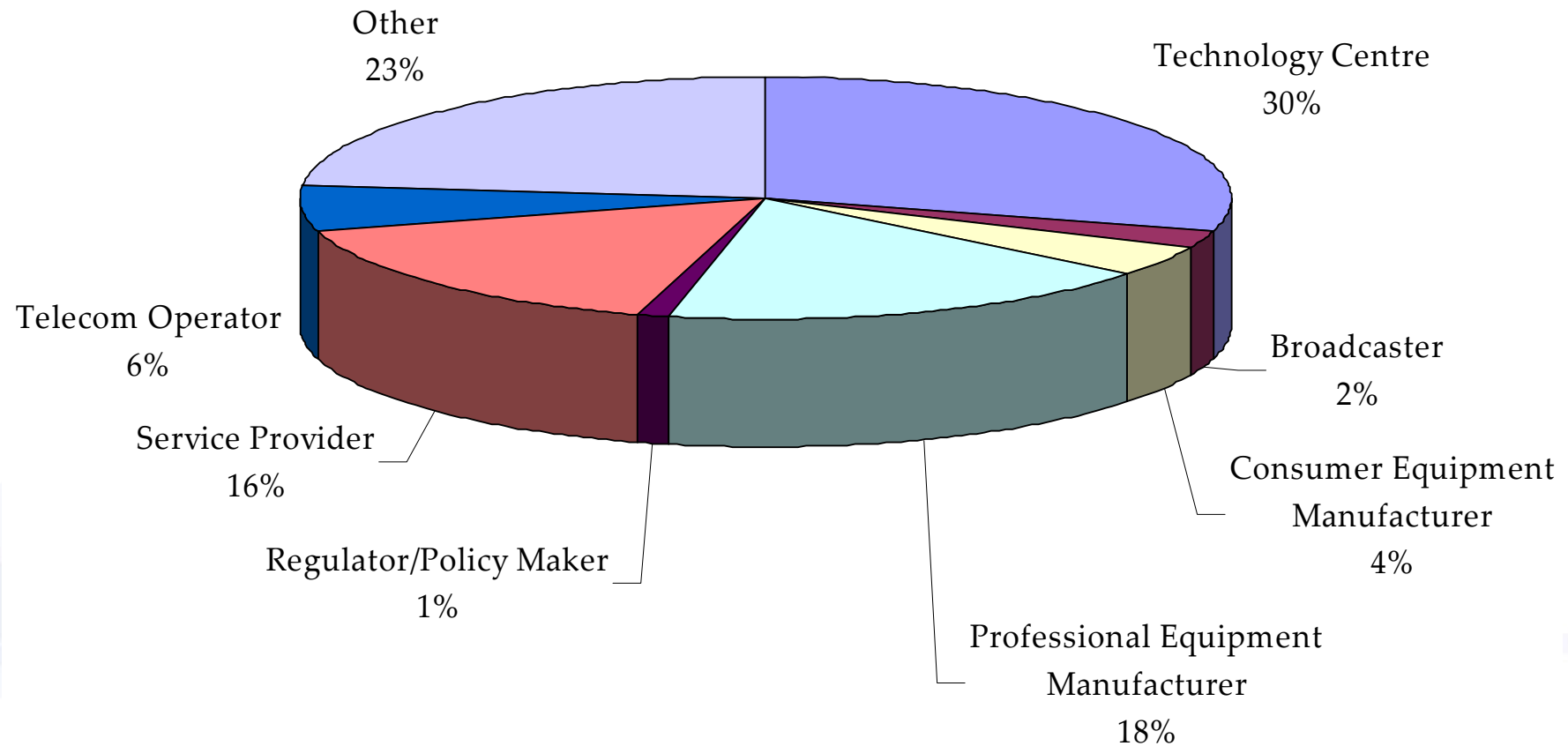


Who are the NEM members ?



- **500 organisations,**
from **30 countries** committed to 5 key challenges:
 - To create interoperable network infrastructures for seamless multimedia networking
 - To empower end-users by putting the user first
 - To promote “Electronic content from all to all”
 - To converge the various media and content formats
 - To develop new middleware for media applications

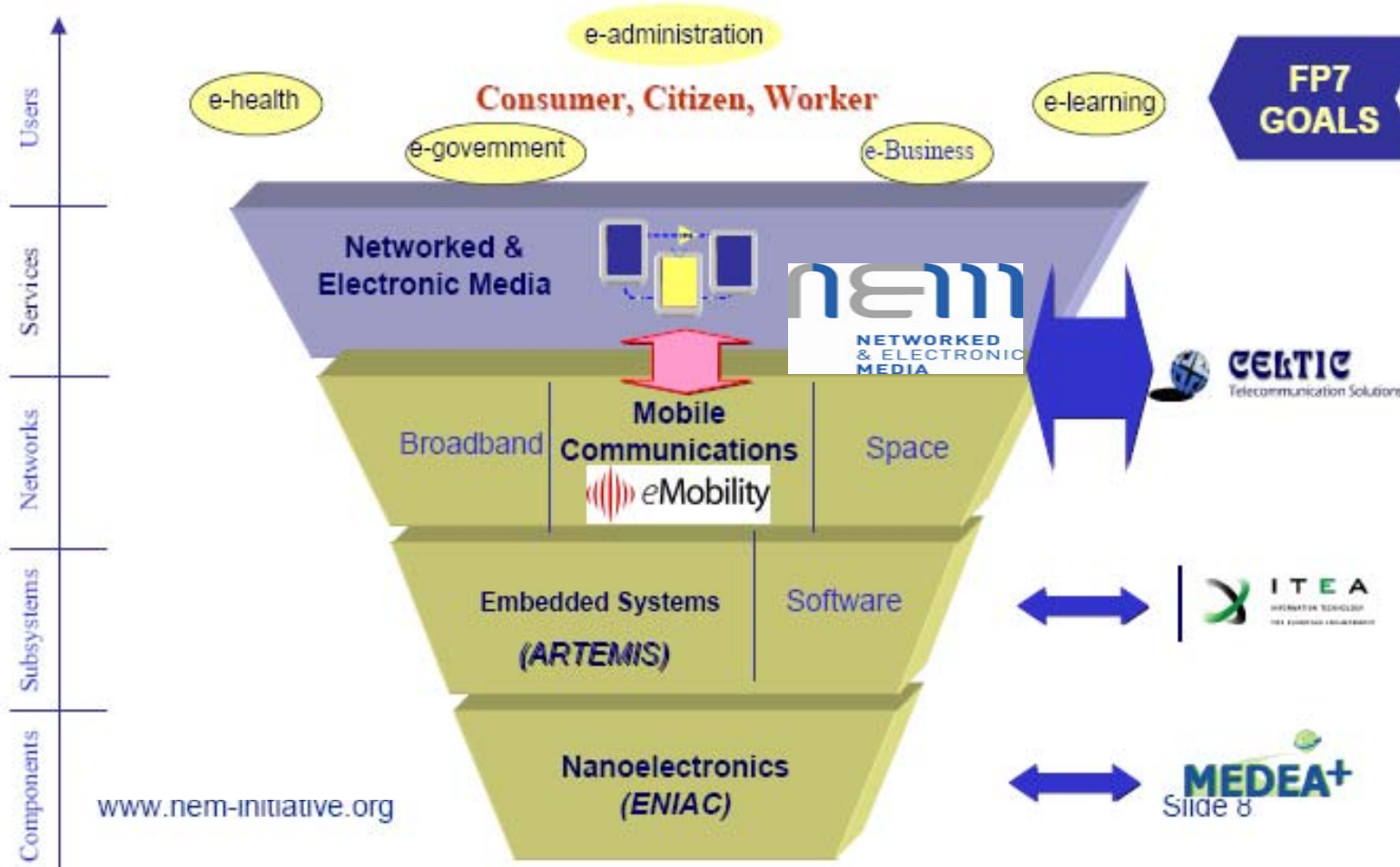
Profile of NEM members



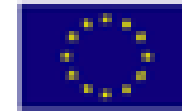
NEM European Technology Platform

How we work together?

NEM "Position & Liaisons"



Challenges and Opportunities: Relationships between Programs



CELTIC
Telecommunication Solutions

*Revised CELTIC
Purple Book*

*NEM SRA
NEM Vision*

*NEM SRA
NEM Vision*

*FP7/ICT
Work Programme*



**NETWORKED
& ELECTRONIC
MEDIA**

*Mirror group
Exchange research priorities*

*Joint Mirror Group
Inter-platforms actions*

Other Technology Platforms

eMobility ARTEMIS
ISI
NESSI niac

National R&D Programmes

media & networks NEM
AI bmb+f IWI

NEM European Technology Platform

What do we do?

**NEM
Vision**

**NEM
Strategic
Research
Agenda**

**NEM
Label**

**NEM
Future
Internet**

**NEM
International
Cooperation**

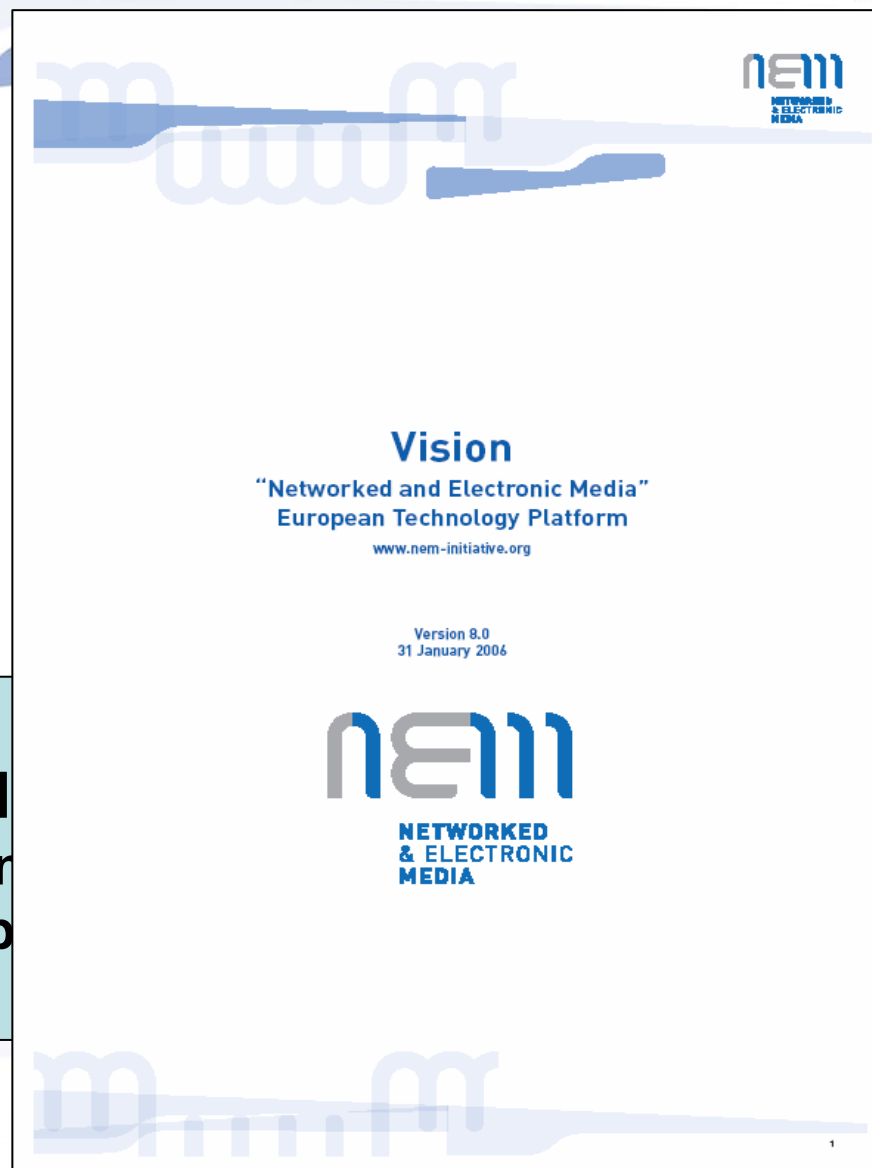
**NEM
Regulatory**


**NEM
Academia**

**NEM
Vision**

**NEM
Future
Internet**


**N
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Coop**




NETWORKED
& ELECTRONIC
MEDIA

Vision
"Networked and Electronic Media"
European Technology Platform
www.nem-initiative.org

Version 8.0
31 January 2006


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MEDIA

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**NEM
Vision**

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Strategic Research Agenda

“Networked and Electronic Media”
European Technology Platform

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Version 4.0
August 2006

**NEM
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**NETWORKED
& ELECTRONIC
MEDIA**

Global NEM



Global NEM work plan:

- ❖ Dissemination of NEM vision and NEM Strategic Research Agenda.
 - Common research agendas?
- ❖ Identification of activities, projects and initiatives being worked or launched elsewhere
- ❖ Promotion of European cooperation in the RTD
- ❖ Identification of barriers against a Global NEM:
 - regulation
 - standardization
 - policy
- ❖ Identification of international committees, fora, events of interest to NEM

Networked Media Open discussion Forum



Networked Media Open discussion Forum: Description.

A forum made up by volunteer experts, independent, not constrained by strategic industrial interests.

Extension of the participation to NEM to

- Individual experts, who conduct R&D from isolated positions,
- Users of NEM R&D results
- Consumer Associations
- Academia in general
- Experts from other technology platforms, clusters, technology poles, ...

Permanent think tank, cooperating with NEM: comment NEM SRA, NEM projects plans, make opinions on issues regarding regulation, financing, competition, priorities, accessibility, inclusion, etc., etc.

The Forum is open to NEM stakeholders in addition to the individual experts.

Networked Media Open discussion Forum



Networked Media Open discussion Forum

- One meeting per year.
- **First meeting in connection with NEM Summit 2008: October 13th 2008**
- Several audio conferences on thematic topics per year
- List of members to be invited among 100 candidates
- Strong participation wished from Users and exploitation companies of NEM technologies
- Outcome: comments, advice, suggestions and recommendations, as appropriate, to NEM, European Commission, Member States, Eureka as applicable, mainly on strategic orientation and trends in the NEM field, actions and technologies required to match the needs of Users and Society, etc
- Chairman: Prof. Dr. Guillermo Cisneros
- Supported by 4NEM

Open Networked Media discussion Forum is OPEN for your participation, contributions and suggestions!!!



NEMletter



Networked and Electronic Media
NEM NEWSLETTER - No 1 - FEBRUARY 2006

Take note in your diary

- NEM Mirror Group**
22nd February, Dublin, Ireland
- Mobile broadcast**
23rd February, Brussels
- CESTIC Event 2006**
23rd-24th February, Dublin
- ICT4C Congress**
27 February - 1 March
- APRIL - European Tech Platforms**
1st-2nd of March 2006
- Symposium - Mobile Industry**
3rd of March 2006, Brussels

Future research directions in the area of digital media II
2-3 March, Luxembourg

Fortifying the European Content Industry
2-3 March, Vienna

Future research directions in the area of digital content II
6th and 7th March, Luxembourg

Workshop: pervasive, networked systems, from RFID to the Internet of things
8th and 7th March, Brussels

NEM General Assembly
7th and 8th March, Brussels
Registration:
www.nem-initiative.org

CESTIC 2006
7th-9th March, Dubai, Emirates

European Business Summit 2006
16-17 March, Brussels

Congressus India 2006
21st-23rd March, New Delhi

NEM points towards...

The Networked and Electronic Media (NEM) Initiative focuses on an innovative mix of various forms, delivered seamlessly over technologically transparent networks, to improve the quality, enjoyment and value of services. NEM represents a new paradigm in the way we think about and create content and services. NEM is an industry initiative to promote and improve the quality of services available to the European industry at the forefront of the technology and give users superior choice of services. All these efforts bear in mind the evolutionary framework from home and office environments towards broadband extended home and office environments.

You are invited to join this important European Initiative and participate actively in the work of NEM, ensuring that your interests and new points are well considered. We welcome all those interested in the research and development of new services and technologies. You are invited to report your views on the specific issues raised by the European Network and Electronic Media (NEM) Initiative. You are invited to join the Steering Committee and the Steering Board. Contact: **Jean Michel Dupont**, Director Cooperative Programmes Thomson



By the European Union...

The IST Priority of the 6th Framework Programme has published the last Call for Proposals with a deadline of April 25th. It encourages research and development in digital TV will help in bridging the digital divide in Latin America by providing access to the Information Society to the whole population. Information days were held in Brussels, Sao Paulo and Shanghai.

Another theme of key interest in this Call is the Audio-Visual Search Engines, as it addresses a new model of a high potential value and impact, as it will enable to move from a model of traditional broadcast developments and trials leading to the deployment of future systems and applications adapted to the local needs of both regions. In this context the Olympic Games in Beijing provide an excellent opportunity to test new systems at the convergence of mobile and broadcasting.

Luis Rodriguez-Rosillo, Networked Audiovisual Systems Head of Unit
Jean Michel Dupont, Director Cooperative Programmes Thomson
More information on page 3



Jean Michel Dupont, Director Cooperative Programmes Thomson

Identifies key strategic challenges

The objective of the Networked and Electronic Media (NEM) Initiative is to foster the development and introduction of novel services and applications in digital environments. NEM represents a new paradigm in the way we think about and create content and services. NEM is an industry initiative to promote and improve the quality of services available to the European industry at the forefront of the technology and give users superior choice of services. All these efforts bear in mind the evolutionary framework from home and office environments towards broadband extended home and office environments.

The Council of the EU has understood the importance of the convergence of existing and new technologies, including broadband, mobile and new media across all ICT sectors, to create a new and exciting era of advanced personalised services. The NEM Strategic Research Agenda (SRA), identifies the key technologies and research domains that need to be addressed to achieve this vision. The SRA identifies five big challenges on which NEM should focus investments and commit R&D efforts in the coming years:

- > To create interoperable network infrastructures that enable seamless multimedia networking.
- > To empower end-users by putting the user first.
- > To promote "Electronic content from all to all".
- > To converge the various media and content formats.
- > To develop new middleware for media applications.

In the coming sections, more detailed information is provided about the scope of each challenge and related activities. Investment levels are estimated as 3.5 billion € for the period 2007-2013.

enrich culture, education, health services and assisted living. The European media and related industries are significant economic players in their respective regions. The convergence of the different media and related industries is essential to develop a new and exciting era of advanced personalised services. The NEM Strategic Research Agenda (SRA), identifies the key technologies and research domains that need to be addressed to achieve this vision. The SRA identifies five big challenges on which NEM should focus investments and commit R&D efforts in the coming years:

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Jean-Michel Dupont, Director Cooperative Programmes Thomson



NEMletter



Networked and Electronic Media
NEM NEWSLETTER - No 2 - APRIL 2006

Take note in your diary

- NEM Executive Group**
13th June 2006, Kingwood Warren, UK
- NEM project meeting**
13th June 2006, Kingwood Warren, UK
- Steering Board**
13th June 2006, Kingwood Warren, UK
- IST 2006 Conference**
27th April 2006, Brussels
- Austrian EU Presidency Conference on European Technology Platforms**
4-5 May, Vienna
- NEM challenge meeting: Heads of Units European Commission**
11th May, Brussels
- EIF PROGRAMME 2006**
7th June, Brussels
- The IST 2006 Conference**
21-23 November, Helsinki

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21-23 November, Helsinki

IST events
NAB 2006
22-27 April, Las Vegas, USA

NEM INTER
Workshop FP7 Project mODN (Multimedia Content Discovery and Delivery)
27th April, Milano

NEM STRAT
Collaborative
23-29 April, Barcelona

NEM AN S
The NEM S
2-5 May, Berlin, Brazil

THE EC IS A FRAMWORK
PerGames 2006 - 3rd International Workshop on Pervasive Gaming Applications
3rd May, Dublin

NEM held its General Assembly and Executive Group meetings

The Networked and Electronic Media (NEM) Initiative held its General Assembly and Executive Group meetings in Brussels on 7 and 8th March 2006. The Assembly was opened to participation by any NEM participant officially registered. All those attending the Assembly representing their Entities coming in the fields of manufacturing, broadcasters, telecom operators, service providers, universities, technological centres, etc. The NEM GA confirmed its vision on focusing on an innovative mix of various media forms, delivered seamlessly over technologically transparent networks, to improve the quality, enjoyment and value of services. The NEM GA also confirmed its vision on focusing on an innovative mix of various media forms, delivered seamlessly over technologically transparent networks, to improve the quality, enjoyment and value of services. The NEM GA also confirmed its vision on focusing on an innovative mix of various media forms, delivered seamlessly over technologically transparent networks, to improve the quality, enjoyment and value of services.

Jean Michel Dupont, Director Cooperative Programmes Thomson

Europe progresses towards the Seventh Framework Programme

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It is broadly acknowledged that European Technology Platforms (ETPs) are certainly a very important instrument to build up critical mass and coordinate R&D in order to reach common objectives of industrial and societal relevance. The Strategic Research Agenda developed by the NEM Technology Platform is a good step in the right direction as it matches well with the above general trends of ICT and it is very much in line with the goals to create a shared vision, 10 years into the future, of the FP7 programme as proposed by the Commission. The NEM Strategic Research Agenda is a good step in the right direction as it matches well with the above general trends of ICT and it is very much in line with the goals to create a shared vision, 10 years into the future, of the FP7 programme as proposed by the Commission.

Luis Rodriguez-Rosillo, Head of Unit "Networked Audio Visual Systems" Thomson
Jean Michel Dupont, Director Cooperative Programmes Thomson

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 Körting
- > 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

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The new research period is open: FP7, Celtic, ... Time to work and implement NEM vision

During the coming months Research will live an exciting time. After a rather long preparation period in which our organizations have been working together to elaborate a vision and a strategy around Media and Networks, the time is coming to foster the implementation of that vision through actual projects. 2007 will become Year 1 of many collaboration initiatives proposed to the European Commission and to the Member states research programmes. Already identified, a strong contribution of the NEM community can be expected in Challenges 1 and 4 of the FP7 ICT programme, but also in the CELTIC Eureka cluster, and to the many other national initiatives.

The NEM ETP is proud to have contributed to the elaboration of the work programmes of those instruments. Now the time of implementation is coming and our organizations are already committed to produce together the best research projects

JEAN-MICHEL DUPONT,
 Director Cooperative Programmes Thomson

Challenge 1: Pervasive and Trusted Network and Service infrastructures

With almost 3Bn mobile users worldwide and more than 1Bn Internet users, current network and service technologies have enabled a first wave of pervasive communication systems to emerge.

Fuelled by convergence, networked applications and services contribute to a significant growth of the on-line economy. Voice -and media content- over internet are typical examples of convergence. Others, like mobile broadcasting or IPTV are taking off fast.

Beyond user terminal networking, a trend for device connectivity, towards the "Internet of things", is emerging. Increased interconnection of devices like RFID/sensors will likely alter existing value chains and lead to the creation of new economic opportunities. Such environments are expected to be supported with dynamic and smart software based service platforms, enabling the emergence of context aware services, with varieties of networked applications, also complementing the sophisticated media delivery scenarios of the extended home environment.

In parallel, the drive towards user controlled environments, service and content management is quickly accelerating, as illustrated with the Web 2.0 rapid take up.

The ever growing variety of connected devices, service features, application scenarios, environments, context adaptability requirements are in turn putting severe constraints on the underlying network service and content delivery platforms.

is consequently to eliminate the technological roadblocks still hampering the full development of a networked economy based on the widest possible pervasiveness of networked services and content, and to open new "user controlled" business scenarios. A companion objective is to optimally position Europe on the global race which is already started on these issues in various regions of the world.

- Consequently, Challenge 1 will focus on:
- > New generations of pervasive, large capacity and mobile network infrastructures.
 - > Future Internet architecture and technologies overcoming today's limitations of usages.
 - > New generations of service platforms gracefully adapting to complexity, with the ability to be dynamically composed of ad-hoc coalition of resources.
 - > Architectures and solutions for integrated and interoperable organisations and enterprises.
 - > Security and Trust of network and service platforms.
 - > End to end, personalised media delivery and collaborative usage.

This Challenge has received the highest budget share under the Work Programme 2007-2008, thus materialising the high priority and importance of its objectives for the future competitiveness of European industry and on line economies.

The NEM community is well positioned to provide a substantial contribution to Challenge 1 by addressing, in an integrated manner, key R&D issues and providing interoperable

diary

- > NEMEvents
 - > NEM CLUSTER ON "NEXT MULTIMEDIA CONTENT DELIVERY"
 15 February, Brussels
 - > NEM CLUSTER ON "FUTURE INTERNET"
 16 February, Brussels
 - > NEM GENERAL ASSEMBLY
 6 March 2007, Brussels
<http://www.nem-initiative.org>
 - > NEM INTERNATIONAL COOPERATION-CHILE
 April 2007, Santiago (Chile)
 - > NEM STEERING BOARD
 9-10 May 2007, Dublin
<http://www.nem-initiative.org>
 - > NEM EXECUTIVE GROUP,
 20-21 June 2007, Paris
<http://www.nem-initiative.org>

POLICYevents

- > ITU EVENT STRATEGIC ISSUES - CONVERGENCE,
 19-20 March 2007, Geneva
- > EUROPEAN STANDARDIZATION CONFERENCE
 24-27 March 2007, Berlin
<http://www.bmwi.de>
- > EUROPEAN COMMISSION SESSION DURING CEBIT 2007,
 15-21 March 2007, Hannover
<http://www.bmwi.de>
- > LAUNCH EVENT FOR THE EU STRUCTURAL FUNDS PROGRAMME,
 09 May 2007, Hof (Germany)
<http://www.bmwi.de>
- > 4TH EUROPEAN CHARTER CONFERENCE FOR SMES,
 4-5 June 2007, Berlin
- > EUROPEAN DIGITISATION CONFERENCE,
 13 June 2007, Berlin
<http://www.bmwi.de>
- > IST MOBILE SUMMIT 2007,
 1-7 July 2007, Budapest
<http://www.mobitesummit2007.org>

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Thank you very much for your attention

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