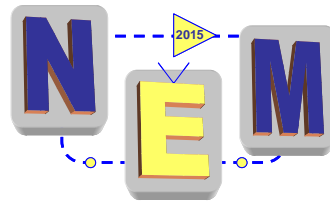


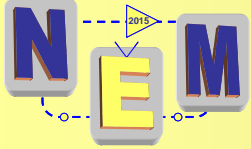
The overall Networked and Electronic Media equation

Launching workshop of the NEM Technology Platform

Dr. Julián Seseña

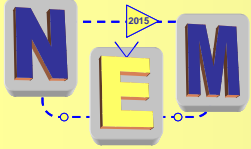
jsesena@rose.es





Rose

- ✓ **Consulting SME firm, based in Toledo (Spain)**
- ✓ **Project Coordination AVISTA (SSA project)**
- ✓ **Experience on R+D since RACE, ACTS, ...**
- ✓ **Built an electronic commerce site**
- ✓ **Current working areas: digital interactive television, content protection (DRM, CA), Satellite and Terrestrial wireless Broadband systems, Regulation, Satellite Sound Broadcasting, Standardization**



What is Networked & Electronic Media (NEM)?

Networked & Electronic Media (NEM) represents the convergence of existing and new technologies, including broadband & mobile, across several ICT sectors, to create new and exciting personalised services



NEM services will be an innovative mix of various media forms, delivered seamlessly over unified networks, to satisfy the highest user expectations



The **NEM Technology Platform** is an industry-led initiative to promote and direct the large-scale initiative needed to accelerate the pace of innovation & technology evolution to position the European Industry at the forefront of competitiveness and give users a wide choice of services. Bottom-Up approach

The NAVSHP High Level Committee *Towards a Technology Platform*



OBJECTIVES:

- ◆ To assist the effectiveness of the FP6 activities in multimedia tools and technologies
- ◆ To increase the influence of the projects
- ◆ To obtain the maximum added value from the work

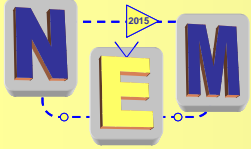


Creation of a High Level Committee with expertise on Networked Audiovisual and Home Platform area:

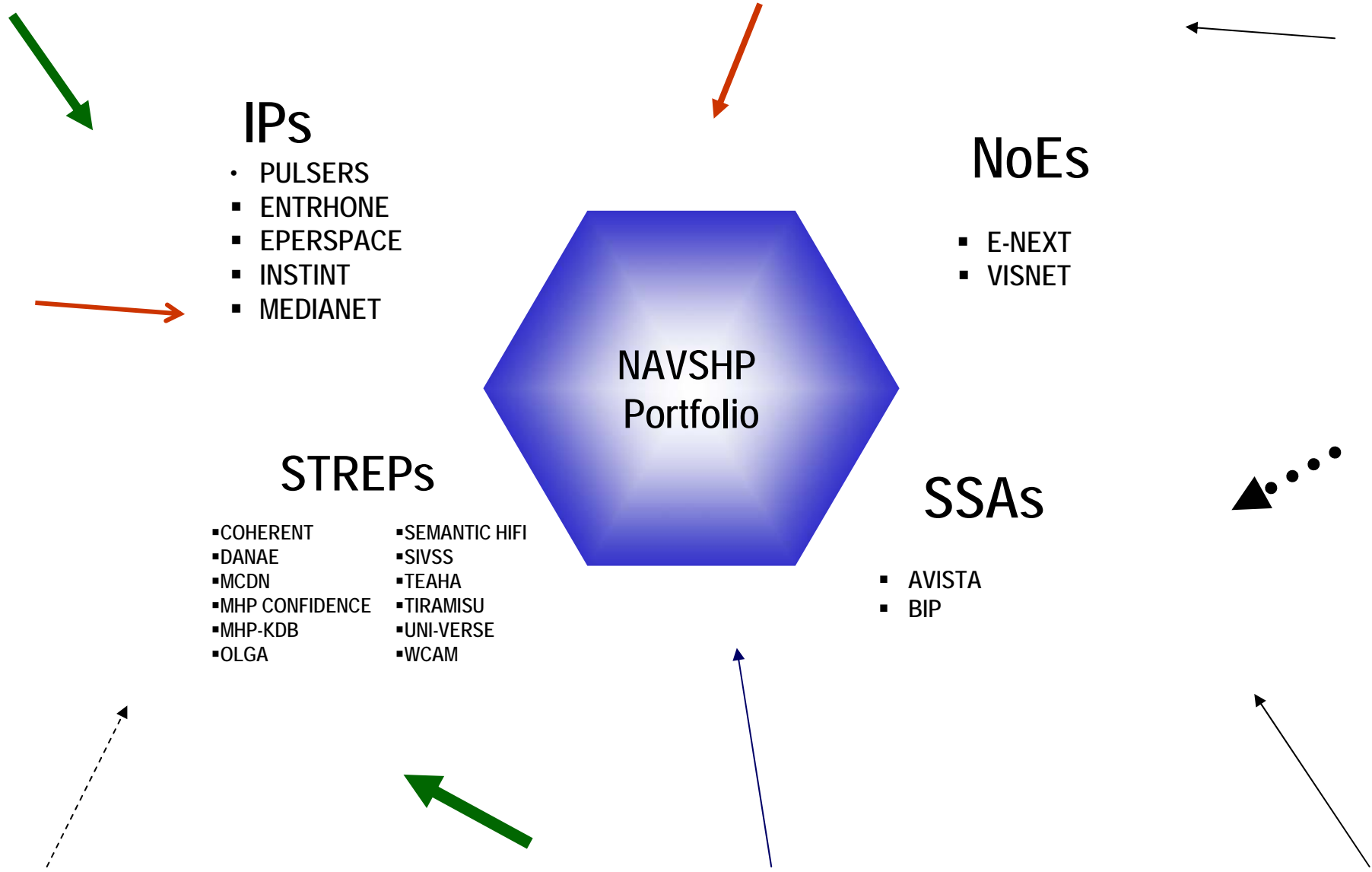
- ◆ Chaired and animated by David Wood
- ◆ A group of opinion formers who interact with the Concertation process
- ◆ A group of highly qualified experts as a permanent consulting and advice body in the field of NAVSHP strategic objective.



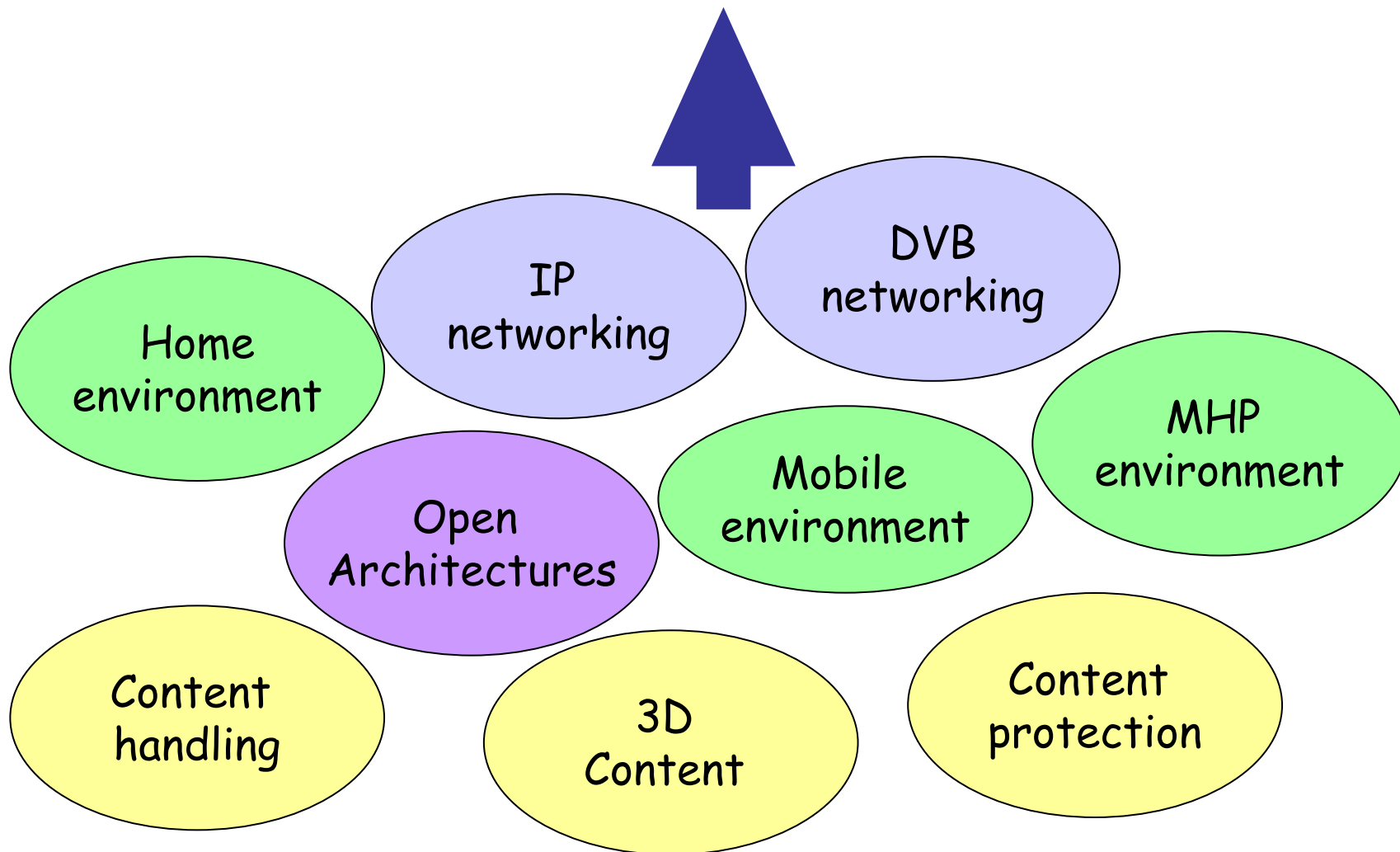
NEM Technology Platform

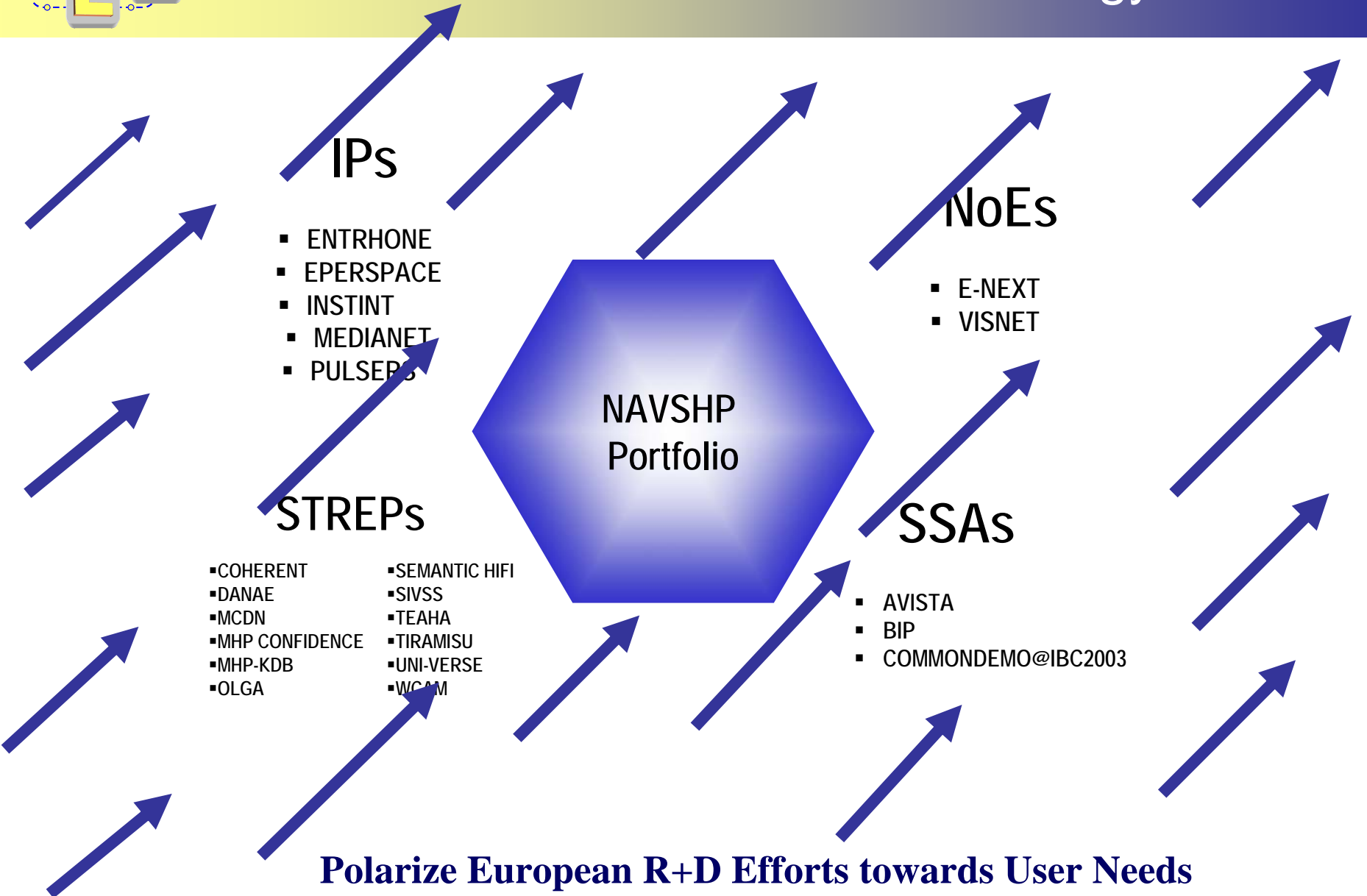


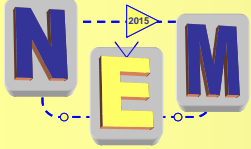
NEM Technology Platform



Where do we go from here ?







The NEM TP 2015

- ✓ Public-Private Partnership (strategy-driven)
- ✓ Guiding Principles
- ✓ Focus (a few crucial themes)
- ✓ Connection to on-going initiatives
- ✓ Research topics towards defined goals

- ✓ Users / Customers/ Supply chain on board
- ✓ Metrics
- ✓ Identification missing components
- ✓ Mobilization of stakeholders

Strategic Research Agenda

IPs

- PULSERS
- ENTRHONE
- EPERSPACE
- INSTINCT
- MEDIANET
- PULSERS



STREPs

- COHERENT
- DANAE
- MCDN
- MHP CONFIDENCE
- MHP-KDB
- OLGA
- SEMANTIC HIFI
- SIVSS
- TEAHA
- TIRAMISU
- UNI-VERSE
- WCAM

NoEs

- E-NEXT
- VISNET

SSAs

- AVISTA
- BIP
- COMMONDEMO@IBC2003

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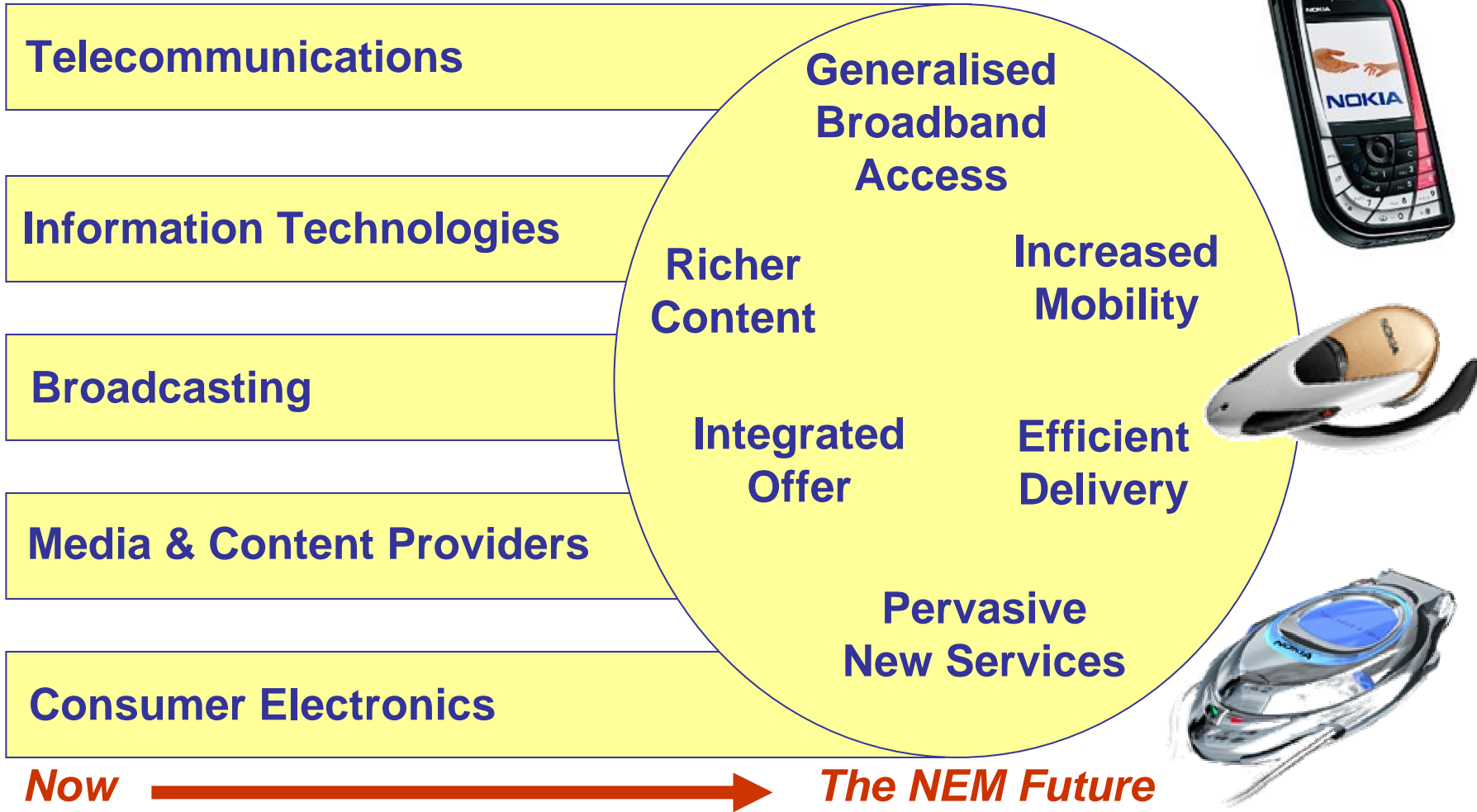
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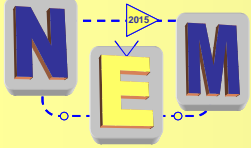
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Positive Effects of « Convergence »

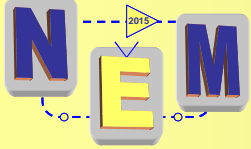




Span of the NEM Technology Platform [1]

Technology Coverage

- The **integrated interoperable e-media chain** from content creation to the home network and to personal devices. This includes:
 - ❖ Professional TV “broadbandcasting” & on-demand delivery
 - ❖ Digital cinema
 - ❖ Personal contents
 - ❖ Digital Rights Management (DRM) & content protection
 - ❖ Multi-format & multi-purpose content packaging
 - ❖ Network service delivery platforms
 - ❖ Compression technologies for each segment of the chain
 - ❖ Cross media communications
 - ❖ Personal devices
 - ❖
- ❖ The **broadband access infrastructure** suited for NEM, with Quality of Service and security requirements
- ❖ The **3 C Convergence**: Home, Office, On the Move

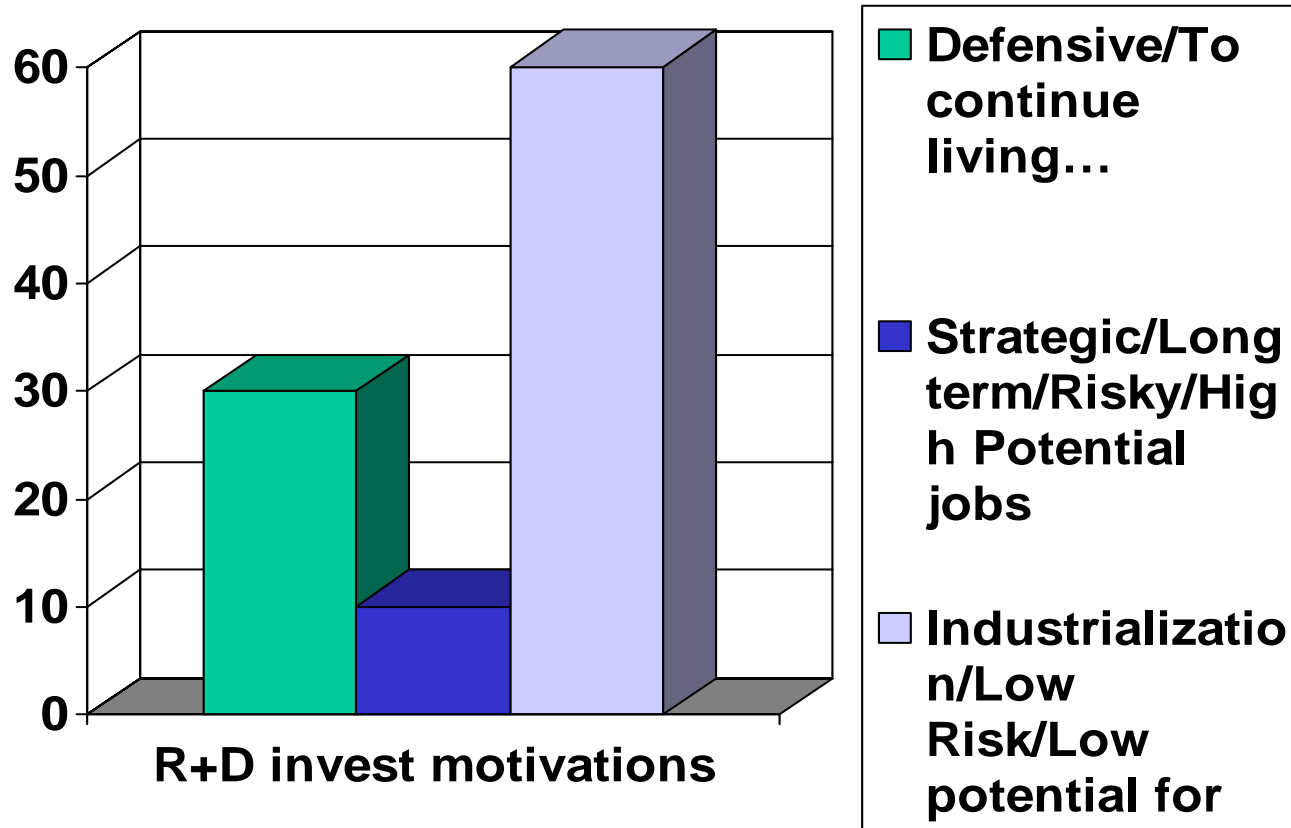


Span of the NEM Technology Platform [2]

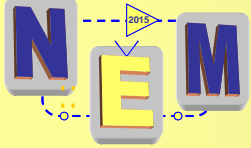
Interoperability = Understanding

- Between easy to use & integrated **services** provided by several service providers
 - ❖ Multi-terminal user interface
 - ❖ Multi-service user interface
- Between easy to install **devices** provided by several manufacturers
 - ❖ Service discovery
 - ❖ Pervasive communication
 - ❖ Multi-service devices

NAVSHP R+D Investments

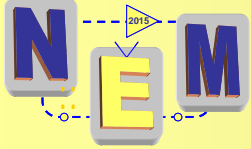


Where the potential to create jobs is?



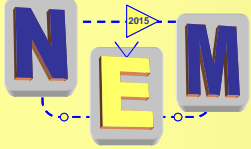
Building Process within the current FP6 concertation

- **Key topics. Mission definition**
- **Comments on key topics for the NMC TP (areas that are more sensitive, high potential to create jobs directly and indirectly, European leadership, etc.)**
- **First draft of the NEM Terms of Reference**
- **Comments on the draft Terms of Reference document of the NEM Technology Platform**
- **Discussion on the Mission objectives/Terms of Reference and setting up the workplan (including working groups) towards the NEM TP**
- **Draft NEM vision document**

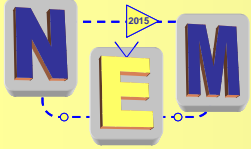


Building Process within the current FP6 concertation

- **NEM is built as a bottom-up approach, as opposed to other Industrial Initiatives that have been initiated as a top-down approach.**
 - **Singularities of the NEM sector**
 - **Fragmentation of the NEM businesses**
 - **National influence in the NEM sector**
 - **Multiplicity of industrial, national, pan-European initiatives and projects**
 - **NEM as the necessary interface with users.**

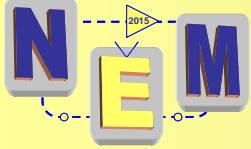


- **NEM Industrial Initiative**
 - The NEM sector is of strategic importance
 - R&D is crucial for reaching/maintaining leadership (DVB, ...)
- **NEM aims at fostering effective public-private partnerships with critical mass effect**
 - between the research community, industry, policy makers, financial institutions..
 - to mobilise research and innovation efforts for achieving common goals
 - to accelerate innovation and eliminate the barriers to deployment
- **NEM provides a framework to bring together all interested stakeholders**
 - to develop a long-term vision,
 - create a coherent, dynamic strategy to achieve it
 - steer the implementation
- **NEM addresses the complete value chain, from R&D to deployment**
- **NEM TP can also empower the regional dimension bearing in mind the enlargement**
- **Address both the technical and non-technical barriers to develop technologies and improve research impact**
 - regulations, standards, safety, financial aspects, incentive measures, social acceptance, skills and training needs, networks and associations etc
 - at European but also national and regional level etc



Who will benefit from NEM TP?

- **Overall (EU + MS + private) RTD investment**, ensuring the consistency of European efforts with a common vision and a strategic framework at EU level for both RTD funding and deployment initiatives;
- **Development and networking of regional clusters** in the field and help regions identify and address challenges and opportunities;
- **Removal of obstacles at EU, national and regional levels**, for deployment and accelerate the market penetration of new technologies. The technology demonstration process will be an important element to facilitate the removal of these obstacles;
- **Contribute to achieving a coherent and consistent policy and regulatory framework** in the EU, taking account of both risks and benefits;
- **Make the EU more attractive both for researchers and industrial investment.** The TP will also act as an early warning system to alert policy makers and competitiveness fora to the changing needs of the sector
- **Increase public awareness, understanding and acceptance of the technologies** concerned and the policy choices necessary to maximise the benefits for all stakeholders.



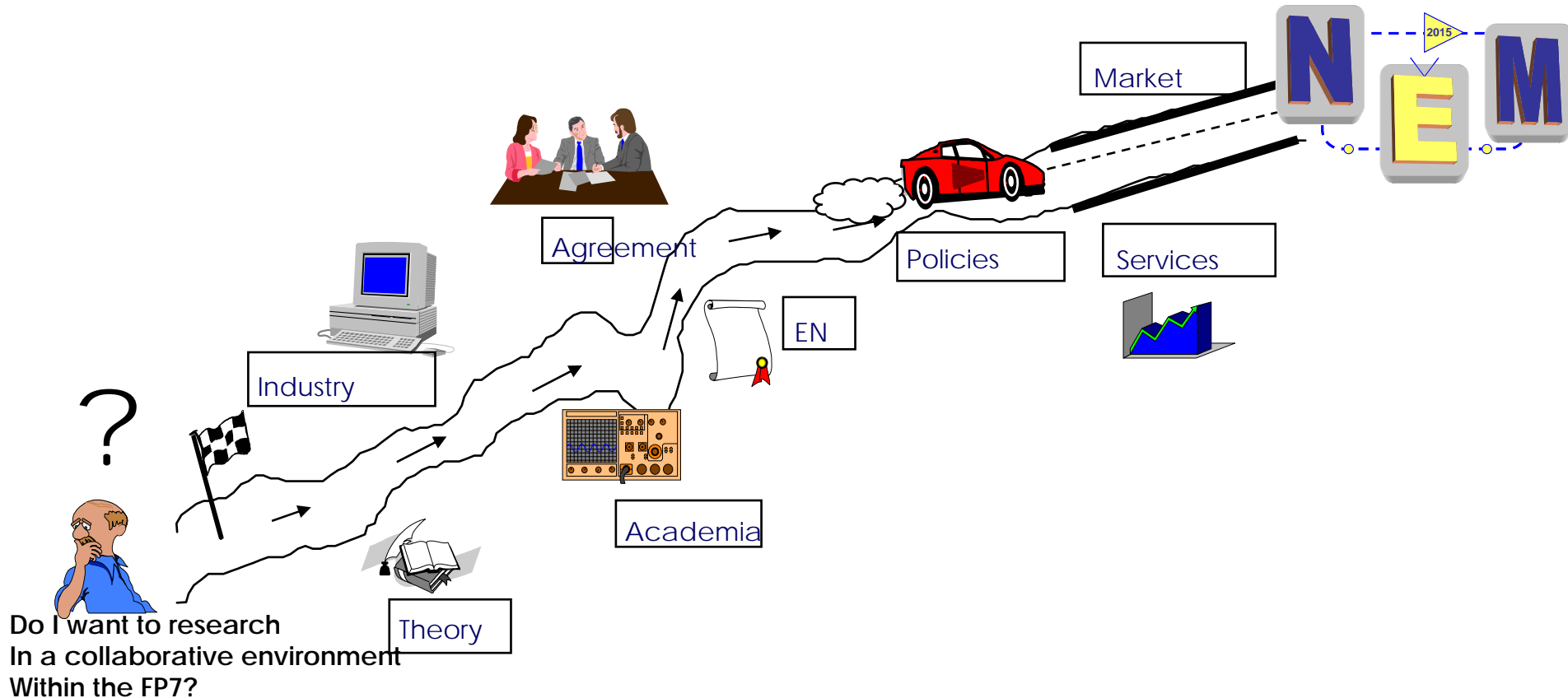
Who will benefit from NEM TP?

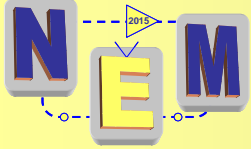
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....and ultimately

Mr/Mrs. USER
(Consumer, Citizen, Worker)

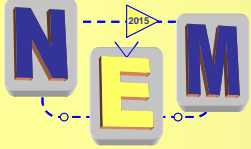
The Overall equation of the NEM in FP7





The players in the NEM TP

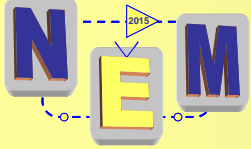
- Content producers (Audiovisual, gaming, ...)
- Broadcasters
- Telecom Operators (telecom, cable, satellite, terrestrial, wireless, ...)
- Service providers
- Equipment manufacturers
- Consumer Equipment manufacturers
- Universities, Technology Centres, Technology Parks
- Users and Consumers, including less favoured citizens, consumers and workers
- Financial Institutions, Joint Venture capital Entities, Insurance Organizations
- Other organisations and NGOs



The players in the NEM TP

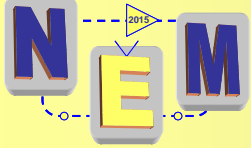
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You !



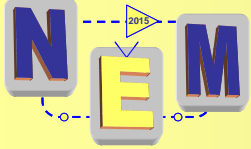
NEM promotes:

- **Strategic Research Agenda** - including ways to leverage private and public R&D investment.
- **Deployment strategy** - including recommended policy measures, lighthouse demonstration and deployment projects.
- **European Roadmap**, including an analysis of transition strategies.
- **Public-private partnerships.**
- **Policy Interface / Framework** - for interaction with political institutions.
- **International co-operation strategy**
- **Progress monitoring system**



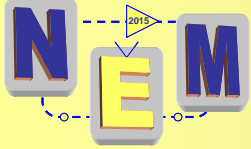
NEM Vision

- **Executive Summary**
- **The Networked and Electronic Media Sector: a Strategic Asset of Europe.**
- **The Networked and Electronic Media Sector: 2015 horizon**
- **Evolutionary Framework**
- **Implications at EU level**
- **The ways forward: The NEM Initiative**
- **Methodology**
- **Governance of the Technology Platform**
- **Conclusions and Recommendations**
- **Annex 1: Towards the definition of the Strategic Research Agenda**
- **Annex 2: Next milestones**



Draft of a Strategic Research Agenda for NEM

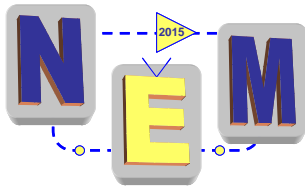
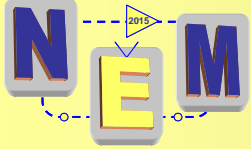
- Reference « architecture » supporting many devices & services
- From an end-to-end system viewpoint, focus on
 - ❖ Requirements & solutions for multimedia-intensive broadband networks
 - ❖ A framework for Digital Rights Management
 - ❖ A framework to address the multiplicity of media formats
 - ❖ Improvement to technology building blocks (e.g., data compression)
 - ❖ End-to-end Quality of Service
- Implementation of a small number of technology & market pilots
- Analysis of the value chain encompassing the networked media area
- Identification of longer term research into core technologies that will drive the sector beyond 2010
- Establishment of truly pan-European virtual labs
- Proposal of complete plug & play solutions based on standards



Span of the NEM Technology Platform

Product & Service Coverage

- **Peer-to-Peer & advanced personal communications**, including videophony
- All types of **handheld devices** with wireless connectivity for media content storage, display and exchange on the move
- Consumer **home environment** including the home gateway, home storage, and content protection
- **Machine-to-machine** services related to communicating devices and pervasive communication
- The whole gamut of **e-services**, including e-payment and DRM
- On-line **gaming** and interactive entertainment in general
- **On-demand** content access (live sports, movie libraries, etc.)



NEM Initiative. Matching the personalized profiles

Businesses



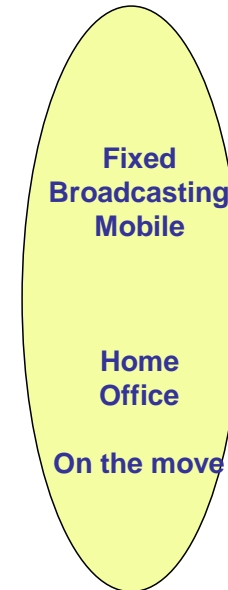
Content Technologies

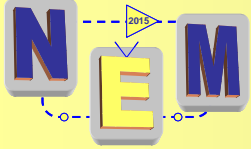


Delivery Networks

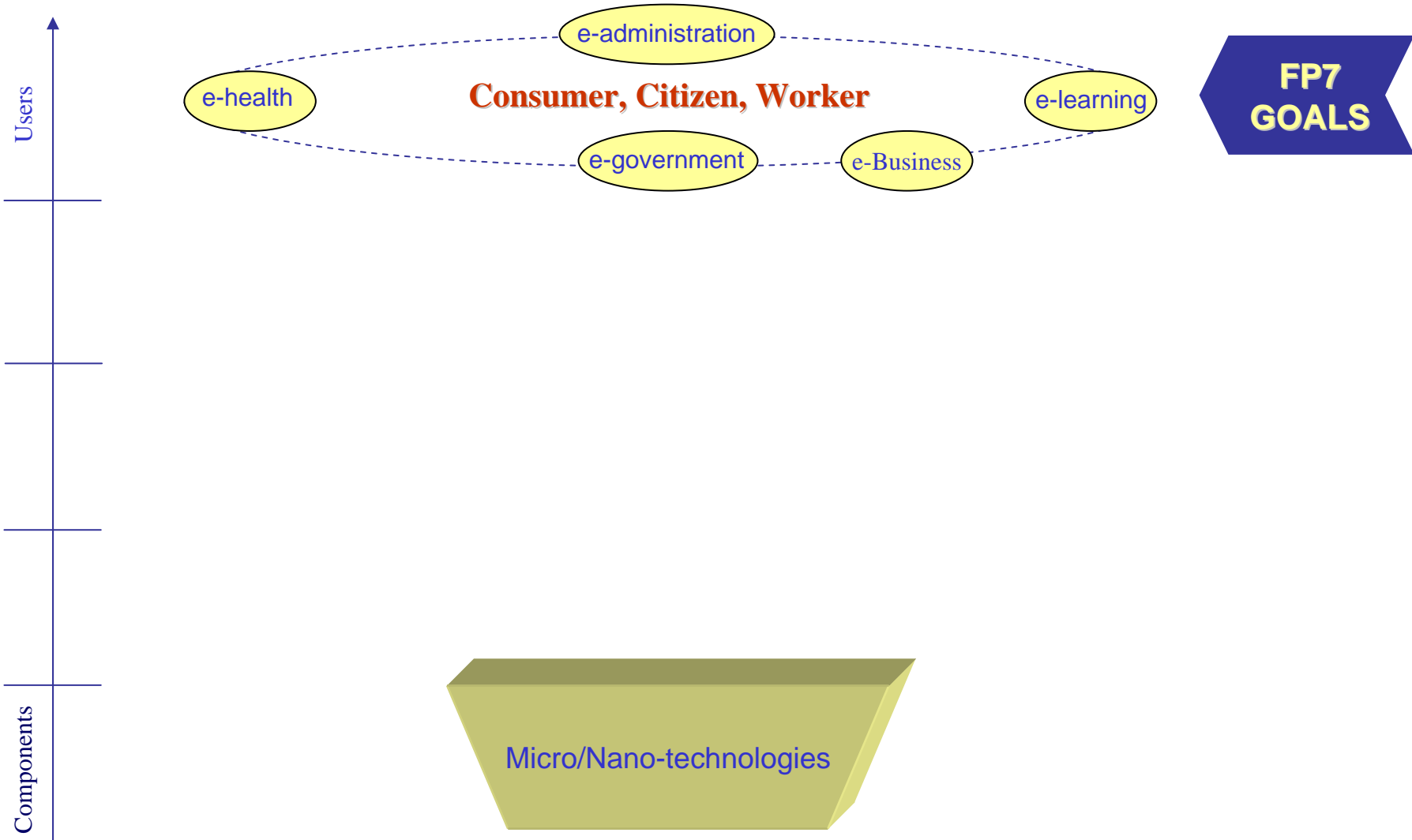


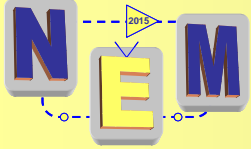
Professional And residential Users, consumers And prosumers



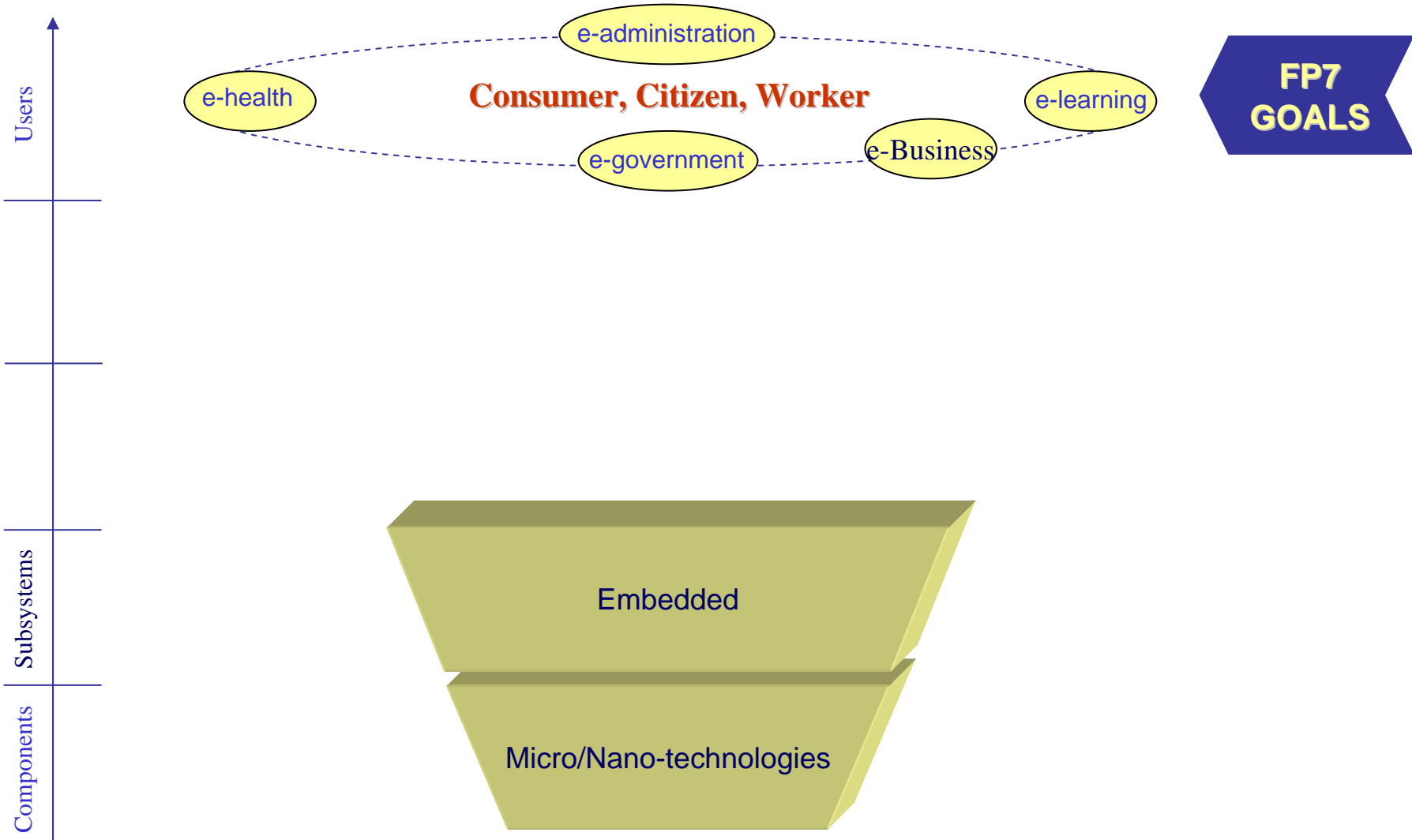


The overall TP equation in the FP7

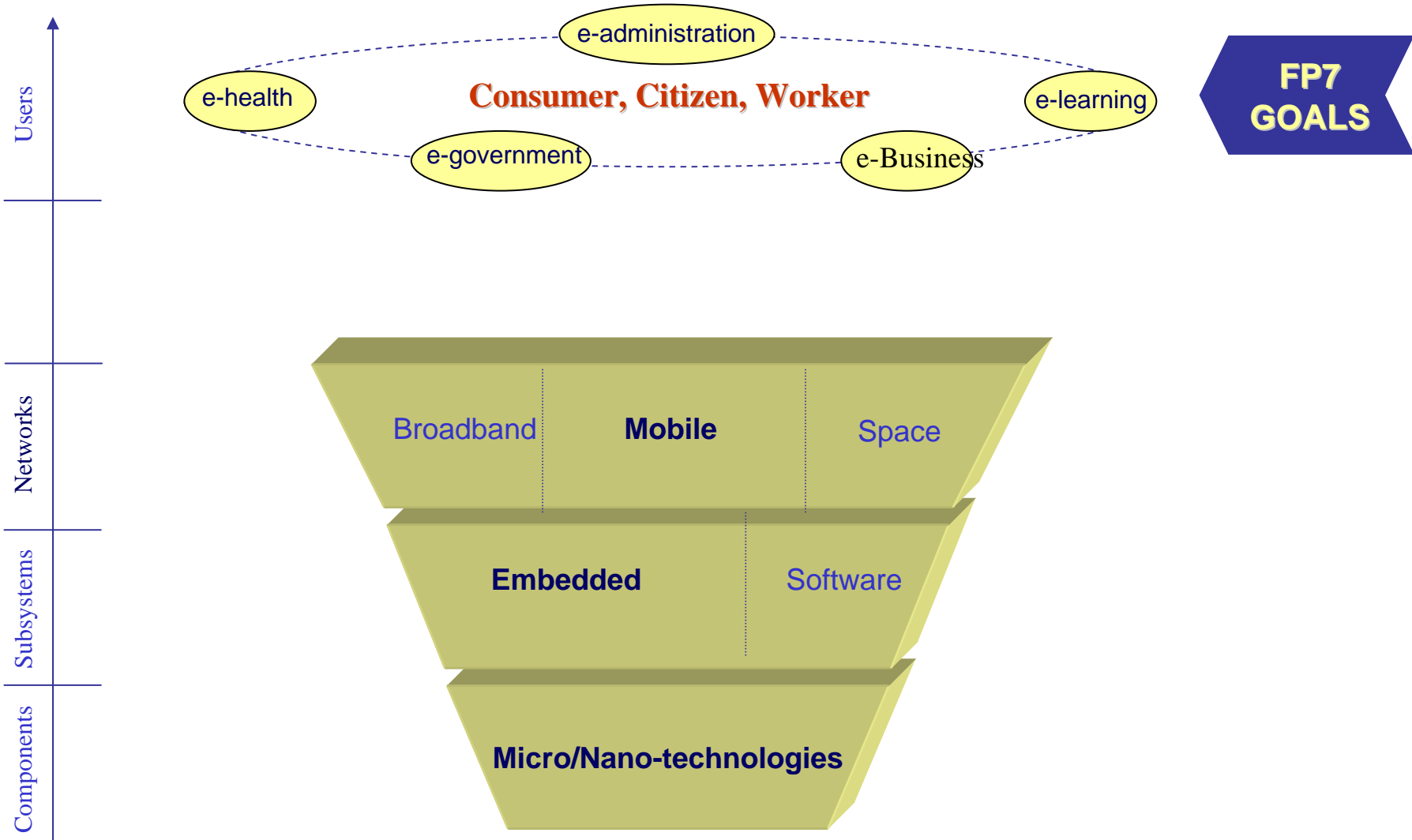


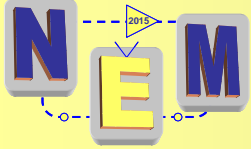


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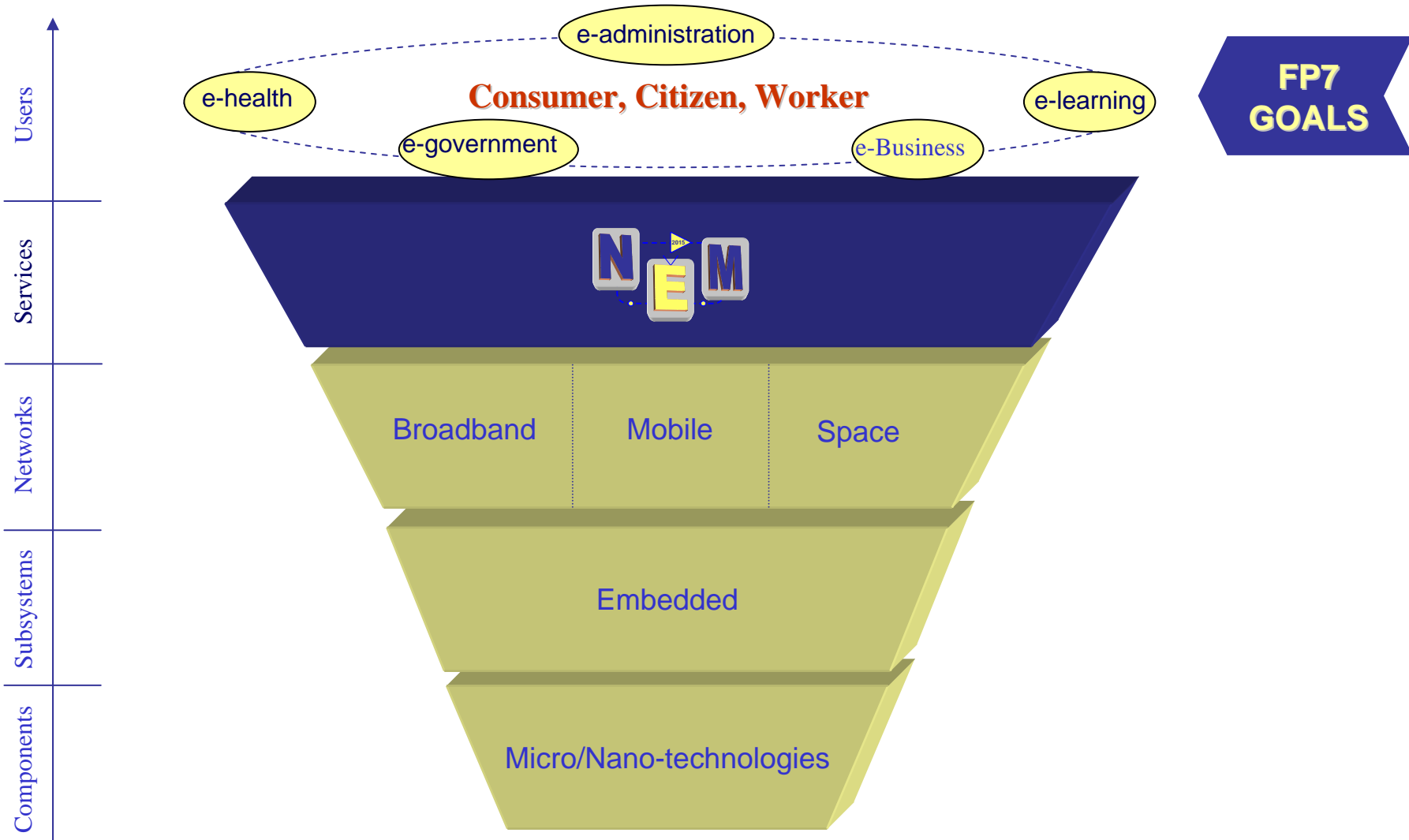


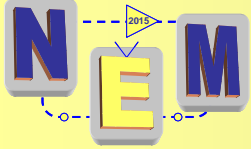
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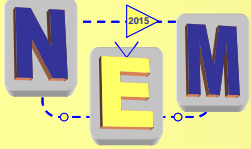
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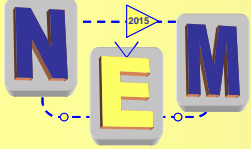
NEM Next Steps

- **Registry** of all interested Entities to support NEM
- Further review of the **NEM Vision**. Comments are welcome
- Core group to meet with **Commissioner Viviane Reading**
- Core group to meet with key **Parliament** representatives
- **European Commission and Member States** to position on NEM
- **General Assembly** of the NEM
- Development of the **Strategic Research Agenda**
- Implementation of **Framework Programme 7**



Expression of Interest

- Please, fill in the [paper](#) sheet on Expression of Interest
 - Your Company data (contact coordinates)
 - Your stakeholders group
 - Your Research areas of interest
 - Your willingness to support NEM
- Visit regularly the NEM website
 - <http://www.nem-initiative.org>
 - <http://www.rose.es/navshp>
 - <http://www.rose.es/newmediacouncil>
- Contact:
info@nem-initiative.org



Rose

Thanks to...

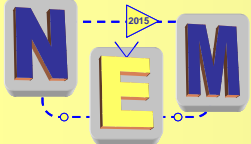
European Broadcasting Union

Thomson

Telefónica

...and the NEM core group

- ✓ **65 % of the European GDP is produced by SMEs.**
- 👍 **NEM TP will be crucial to fostering businesses by huge number of SMEs**



NEM Technology Platform

