



FutureNEM

Contract no.: 213696

FutureNEM D2.3.2-Report defining NEM2.0

Editor:	Yves-Marie Le Pannérer (Technicolor)
Deliverable nature:	R
Dissemination level: (Confidentiality)	Public (PU)
Contractual delivery date:	30 November 2011
Actual delivery date:	9 December 2011
Suggested readers:	NEM participants, European Commission staff
Version:	1.0
Total number of pages:	27
Keywords:	NEM

Abstract

At the beginning of the NEM the perspective of transforming the European Technology Platforms into Joint Technology Initiatives (JTI) was strong. However, later on, the JTI concept has evolved, new members addressing more content oriented businesses have joined the platform, new instruments like the PPP-FI have been launched. Finally new objectives were set to enlarge the activities of the NEM.

This document addresses the vision of the NEM platform for its future within that renewed ecosystem.

Document Number: FutureNEM-028

Disclaimer

This document contains material, which is the copyright of certain FutureNEM consortium parties, and may not be reproduced or copied without permission.

All FutureNEM consortium parties have agreed to full publication of this document.

The commercial use of any information contained in this document may require a license from the proprietor of that information.

Neither the FutureNEM consortium as a whole, nor a certain party of the FutureNEM consortium, warrant that the information contained in this document is capable of use or that use of the information is free from risk, and accept no liability for loss or damage suffered by any person using this information.

Impressum

[Full project title]: Supporting the future of the NEM European Technology Platform

[Short project title]: FutureNEM

[Number and title of work-package]: WP2 NEM Strategy

[Document title]: D2.3.2-Report defining NEM2.0

[Editor: Name, company]: Yves-Marie Le Pannérer (Technicolor))

[Work-package leader: Name, company]: Yves-Marie Le Pannérer (Technicolor)

[Estimation of PM spent on the Deliverable]: 2.5 P-M [FutureNEM Document Number]: FutureNEM-028

Copyright notice

© 2011 Participants in project FutureNEM

Executive summary

The NEM ETP has been founded at the beginning of FP6. We are now close to the end of FP7.

Since its beginning, the objectives of the NEM platform have changed (those objectives where set at the very beginning of the European Technology Platforms concept, later on bearing in mind the perspective of a JTI -Joint technology Initiative). The NEM actors and their businesses have also changed. New instruments such as the Future Internet PPP have been launched. Finally the whole research ecosystem has been renewed. A large number of new members come from SMEs, totalling now more than 1/3 of the NEM Community.

This document reports the work carried out by the NEM ETP (supported by FutureNEM) to prepare its future. It includes several issues like the evolution of the NEM objectives and of the NEM constituency, its position concerning the PPP-FI, the need for sustainable governance. Finally the present vision of NEM 2.0 is presented.

List of authors

Company	Author
Technicolor	Yves-Marie Le Pannérer

Table of Contents

Executive summary	
ist of authors	
Table of Contents	5
Introduction	6
Evolution of the NEM objectives since its creation	7
2.1 Create the NEM instrument	7
2.2 Consolidate the platform around new objectives	7
2.3 Develop a new ETP concept	8
Evolution of NEM constituency	
3.1 Profile of the NEM constituency	9
3.2 Attendance to the NEM GAs	
Approach to the future of NEM	13
4.1 Position of NEM regarding the new instruments	13
4.2 The new NEM challenges	
4.3 What is the value of NEM for the stake-holders?	16
4.4 Should NEM merge with the other ICT platforms of the Future Internet community?	16
4.5 What are the possible solutions to fund NEM activities?	
Current vision of the future of NEM	
Conclusion	21
Annex 1: What is the value of NEM for the stake-holders?	22

1 Introduction

This documents reports the work carried out by the NEM ETP (supported by FutureNEM) to prepare its future (NEM 2.0).

The NEM ETP has been founded at the beginning of FP6. We are now close to the end of FP7. The basic idea of the ETP to support the convergence from the analogue world to the digital era, the migration from stand alone pieces of equipment to the *always and everywhere connected* concept has been confirmed by the technological and business reality. And in consequence the similar convergence of the sectors of media and communication is now present. Their collaboration within a single platform has been beneficial for the creation of a synergetic approach of that convergence.

However, since the NEM beginning, the objectives of the platform have changed. The objectives associated to the concept of a community of actors with common interests do prevail; however, over other objectives targeting a possible a JTI (Joint technology Initiative).

The NEM constituency has also been reinforced. Actors have joined the initiative that may have new technical and business concerns.

Finally the whole research ecosystem has been renewed. New instruments such as the Future Internet PPP have been launched, which are, for a part, a successful result of the ETPs.

In those conditions, at the dawn of Horizon 2020, it is relevant for the NEM ETP to ask itself the question to reconsider its objective and organisation to address new challenges where needed.

The document will address the following issues:

- -the evolution of the NEM objectives since its creation
- -the evolution of the NEM constituency,

and then the approach to the future of NEM and the current vision of NEM2.0.

Evolution of the NEM objectives since its creation

The creation of the NEM European technology Platform has been the consequence of a significant effort performed during 2004 by a group of entities including broadcasters, telecom operators, manufacturers, standardization bodies, policy makers as an implementation activity of a **NEM vision** ("where Europe should be in 2015?"). Meetings with European Commissioner staff (under the auspices of the Networked Audiovisual Systems and Home Platforms Unit) held in October 2004 and March 2005 to explain the wide interest from the European NEM industries to commit on public-private R+D partnership within the FP7 framework. A preliminary forum, called New Media Council, was set up to foster debate by the networked media constituency, about mechanisms to create critical masses. The participants in those debates during 2004 and 2005, made a proposal to the European Commission towards the creation of the Networked and Electronic Media technology platform.

The sections below report of the evolution of the NEM objectives since that time. Three phases can be identified.

2.1 Create the NEM instrument

The founding documents (NEM Vision and NEM SRA) were the central point of the ETP activities in the first two years (2006-2007) and were aiming at assisting the Commission for the definition of FP7 as well as the creation of a community.

The first objectives assigned to the NEM at that time (as can be read from the General Assembly presentations) were consequently:

- to enable a new integrated community of different key players in the wider networked and electronic media context to develop their vision of the future services and networks that will add value to European citizens and businesses and create growth and employment in the European industry.
- To share the widest and general agreement of the NEM vision, incorporating views from a wide variety of NEM stakeholders, to produce a widely supported NEM Strategic Research Agenda (SRA), which would set up the basis for the Seventh Framework Programme, and to disseminate the NEM research strategy.

And of course:

- To support the development of the NEM business domains, fostering new opportunities, to include of many communications and media business models within the NEM community
- To support the co-ordination of research in the NEM domain within the ERA and to facilitate liaison with other R+D communities overseas

Since the early community of 50+ members at the very preliminary debates with the New Media Council by 2005, at the end of 2007 a community of 575+ members was established and several issues of the NEM Vision and NEM SRA were published.

2.2 Consolidate the platform around new objectives

During the next two years (2008-2009) the role of NEM was confirmed on the same basic objectives (Vision and SRA) that remained the core documents delivered by the platform. The other goals (international , coordination of research, promotion of new projects, standardization and regulation policy) were also confirmed

but new objectives, aiming at **enlarging the role of the platform** were created: among which the NEM Summit (1^{st} edition in autumn 2008) was the most visible.

At the same time, new initiatives were considered by the Commission such as the PPP for which the NEM Platform played a key role promoting the idea of the Future Media internet and taking a central place in the preparation of that instrument.

With an increased constituency (750 members in summer 2009) NEM was **recognized as a relevant partner of the Commission in several policy domains** and had gathered a significant momentum in several key topics interesting the connected media community.

2.3 Develop a new ETP concept

2009 started a new phase of NEM. The NEM instrument was now well established (permanent participation to the events organized by the ETP) and significantly publicized (NEMSummit, NEMletter) with relevant publications (SRA, Vision, position papers), but the members realized that another EC-platform relation scheme was replacing the initial plans.

At the beginning of FP6 the ETPs were considered (and presented) as a possible first stage towards the creation of a JTI, and probably many ETP members had in mind to take a more active part not only in the preparation of the EC programmes but also in the operational management of those programmes (some kind of co-management). This scenario did not materialize with the ETP instrument.

The JTI scenario which was another way for the ETP to take an active part in the management of calls was also examined carefully by the NEM in several occasions (refer to section 4.1). Finally the NEM took the decision to promote an alternative approach based on a simplified Private public partnership between industry and the Commission only (and not with the Member States). That opinion was shared by the Commission. The PPP-FI initiative was launched. That can be considered as a big success of the ICT ETPs.

At the same time that PPP did not match any of the ICT ETP domains nor cover all the terms of references of any ETP. This started the redefinition of the NEM doctrine around new objectives: besides the PPP initiative, the NEM continued to have a role to play. That role had to be **defined** and developed.

So **new initiatives were launched** towards specific communities (content producers, SMEs or academia) in order to improve the links of the NEM with those stakeholders, to understand how the platform could better answer to their needs and also what they could bring to the overall community. Another initiative was launched towards academic partners to develop training courses at the service of the NEM industry and also towards the national/local organizations (regional clusters) in order to involve more SME actors in its works.

This is the recent situation. However, new challenges are now appearing (section 4.2.) that will drive the NEM activities in the perspective of Horizon 2020

3 Evolution of NEM constituency

The NEM members are known through various tools:

-Registration forms: when applying to become a NEM member, each organisation has to fill a questionnaire, identifying its industry sector. The same form has been used until 2010. Then the NEM considered that, in order to better identify the NEM constituency a more precise questionnaire was needed. A new form was created and used for new applications. Older members were also requested to fill that new questionnaire, in April 2011, 334 members (40%, probably the most motivated) provided an answer.

-Attendance to the GA is registered (to date 12 GAs have been held). It can be considered that the attendees to the general assemblies are the most dynamic members of the NEM.

3.1 Profile of the NEM constituency

As mentioned above, when registering onto the NEM site to become NEM members, the organisation declare their nationality and their "business sector".

Table 1, Table 2, Table 3, Table 4 are built from those registered data. Information from 2007 to 2009 is consistent (same form) and cumulative (members of 2009 were already present in 2007), whilst those of 2010 and 2011 are based on more limited statistics.

Table 1 shows the nationalities of the NEM members. For the clarity of the presentation only countries representing more than 3 members in 2011 are shown.

Country of origin	2007	2008	2009	2010	2011
Spain	25%	18%	18%	19%	19%
Germany	5%	6%	7%	13%	12%
U.K.	7%	7%	7%	10%	9%
France	7%	6%	7%	9%	8%
Greece	3%	6%	5%	8%	7%
Italy	11%	10%	9%	8%	7%
Belgium	8%	6%	6%	6%	5%
Austria	2%	4%	4%	4%	4%
Finland	5%	5%	4%	2%	3%
Portugal	3%	4%	3%	3%	3%
Turkey	1%	3%	3%	1%	3%
Norway	2%	2%	1%	3%	2%
The Netherlands	3%	2%	2%	3%	2%
Luxembourg	1%	1%	1%	1%	2%
Brazil	0%	0%	0%	1%	1%
Hungary	0%	0%	1%	1%	1%
Israel	2%	2%	3%	1%	1%
Lithuania	1%	1%	1%	1%	1%
Macedonia	0%	0%	0%	0%	1%

Table 1

What can be concluded from those data?

First that after 6-7 years of existence, the NEM constituency is <u>rather stable with a strong interest</u> <u>within the "big" countries</u>. Relative interest is still high in Spain, Germany, Italy, UK, France and Greece. Most of the constituency can be found in Western Europe but interest is still there in Turkey, Israel (that were present already at the early times of the ETP. "New" European countries are joining (Lithuania, Hungary). But the most interesting (not shown on the table) is that among the recent members, Chile, Guatemala, Peru organisations joined in 2009 and Congo, Macedonia, Morocco, New Zealand, Taiwan organisations in 2010. Of course they do not represent many

members but the existence and the activities of NEM are, at least, known in those countries. Mention is to be made to the fact that some countries, like Spain, do have a national technology platform focusing NEM, thus, raising awareness of NEM at national level.

Table 2 shows the distribution between Industry, Academia and Research and others from 2006 to 2011.

That table demonstrates a relatively stable involvement of Academia and Research institutions. In 2011 Industry is more represented (at least among the organisation that provided details on their status). Clearly the "other" category has decreased in proportion (this category regroups financial institutions, associations, public authorities, Regulation / standardisation bodies, etc.).

In 2010 the NEM is a balanced community of Industry and Academic organisations.

	200)6	2008		2010		2011	
Organisation type	Number of members	%						
Industry	121	37%	213	33%	93	42%	139	42%
Academic/Research	145	44%	300	46%	98	44%	140	42%
Others	64	19%	133	21%	31	14%	55	16%
Total	330	100%	646	100%	222	100%	334	100%

Table 2

In order to identify more precisely the profiles of the industry members Table 3 shows the business domains of the NEM members in 2006 and 2008, and Table 4 those of 2011 (several entries per organisation).

	2006		2008		
Broadcaster	6	2%	10	2%	
Consumer Equipment Manufacturer	11	3%	24	4%	
Professional Equipment Manufacturer	46	14%	70	11%	
Telecom Operator	16	5%	25	4%	
Service Provider	42	13%	84	13%	

Table 3

It is interesting to note that although the shares of broadcasting and of telecom operations keep stable, consumer and professional equipment electronic manufacturing decreases significantly to the benefit of new expertises such as Digital content creation and provision and Application/ service development and provision

In 2011, the NEM has become a content and service oriented platform.

Area	Number of entries	%
Broadcasting	36	3%
Digital content creation	100	9%
Content provision	70	7%
Consumer electronic manufacturing	25	2%
Professional Equipment manufacturing	28	3%
System integration	50	5%
Component provision	27	3%
Network operation	57	5%
Application/service provision	85	8%
Application/service development	132	13%
Education	98	9%
Research	172	16%
Other	30	3%
Consultancy	111	11%
End users / user view	32	3%
Total	1053	100%

Table 4

3.2 Attendance to the NEM GAs

An instrument to evaluate the dynamism of the NEM is to consider the attendance to the General assemblies.

Of course many factors can influence the number of participants to the GAs, such as the location or the proximity of a Call. NEM is also a community of researchers that take benefit from meetings to exchange project ideas. The platform supports the networking aspect of the General Assemblies with specific sessions dedicated to project ideas.

Figure 1 shows the number of delegates to the General Assemblies organized since the beginning of the platform (the figures for the 1st GA are not known). This figure is approximately slightly below 100 delegates until 2010, more in specific circumstances (October 2006 was the launch of FP7) and before calls. It decreased to 75 in March 2008 (Luxemburg), February 2010 (Brussels--calls 4 and 5 were over) and to 54 in March 2011 (after Call 7); at the end of the period the figures are lower (no calls in view, probable impact of travel restrictions).

The attendance to the NEM GAs demonstrates a rather stable interest of the stakeholders, however strongly influenced by the proximity of calls.

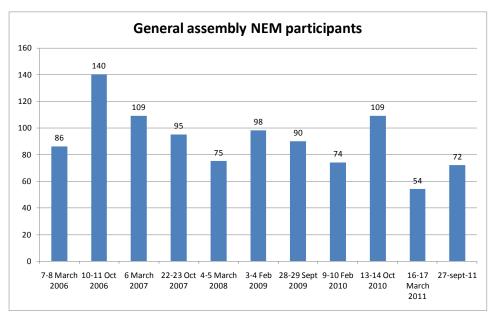


Figure 1

4 Approach to the future of NEM

The NEM being first a community, the definition of the NEM future has been approached through a large consultation process, during NEM Steering Board meetings and General assemblies.

In fact, that process needed to answer successively to several questions:

- -What is the position of NEM vis à vis the new instruments?
- -if the JTI is no longer the NEM goal, what are the new NEM challenges?
- -and what is the value of NEM for its stake-holders?

Then there were 2 other questions more or less linked with financial aspects:

- -Should NEM merge with the other ICT platforms of the Future Internet community?
- -What are the possible solutions to fund NEM activities?

4.1 Position of NEM regarding the new instruments

The JTI issue was the first question addressed to the NEM community. As mentioned above, the conversion into a JTI was at the beginning considered as the expected medium to longer term objective of an ETP.

That question was addressed several times by the Steering Board and Executive Group. That section intends to explain how NEM was led to **position itself vis à vis the new FP7 instruments**.

The Executive Group (EG) addressed the JTI topic already on 13 February 2007 and estimated that the ETP's would not be reorganized into JTI very quickly. At that time, new JTIs (ARTEMIS, ENIAC) had just been created to start their activities en 2008, and there was a general consensus of the EC, the member states and industry to wait until the results of that first experience before proceeding to new JTI creations.

In the Steering Board (SB) meeting of 4 December 2007, the perspectives of NEM to become a JTI were presented by partners that had a strong experience in the ARTEMIS construction. It was concluded that an eventual NEM conversion to a JTI had to be considered together with EC, and National public authorities but also **with the other ETP's** (eMobility, ISI, eventually NESSI), and Celtic (the idea of Cross platform activities was already present). And of course, all activities had to be considered in the context of the future of the ETP's. However the SB decided that NEM should reconsider its position, which was to observe JTI activities, and now **declare the NEM position to be "Actively evaluating the JTI concept" with a view to implementing an ICT area JTI (other approaches were also considered as to create ERA-NET initiatives focusing on NEM objectives, defined in the SRA document). Positioning on NEM as a JTI was set on the objectives of 2008.**

In June 2008 the evaluation of JTI opportunities for NEM were presented to the SB. That work had been carried out in close cooperation with other ICT ETP's and clearly focused the **Future Internet** as the subject of the JTI. The estimated time-scale for the creation (mainly lobbying actions) of the JTI was one year. The NEM SB provided the guidelines for that approach:

- Topics (short-medium-long term) related to "future internet" to be defined, from NEM point
 of view based on NEM SRA. A Vision for the Future Internet would be created, in order to
 justify creation of the JTI from technological point of view;
- Tools/means for future JTI to be defined in accordance with industry needs; e.g. expressed through industry representatives in NEM;
- Discussion related to the Future Internet JTI should be carried out on the inter-ETP level, until the creation of the JTI will be done by interested industry representatives;

• National initiatives on Future Internet and national public authorities (including their feedback on support for the future JTI) had to be involved in the discussion.

To meet this roadmap NEM participated very actively to the inter ETP initiative and a Vision and SRA documents were created by the inter-ETP working groups. However there were various opinions on the instruments which should ensure the implementation of the Future Internet Initiative. Severe doubts were expressed at the EG and SB meetings of late 2008 whether recently adopted JTI structures was appropriate or should be improved. Industry stated that it would support an initiative dedicated on Future of Internet, based on a CleanSky approach (European funding). The inter-ETP group called on the large industry players to take up the PPP discussion from this group as the inter-ETP group does not have the mandate to take the negotiations on the structure, content and industrial commitment. In the discussions that followed with the Commission the word PPP (Public Private Partnership) was therefore substituted to the word JTI to identify that initiative.

The roadmap towards the Future Internet PPP being clarified, the question arose within the NEM ETP on the strategy to adopt concerning its own existence:

- Has the ETP reached its goal with the creation a PPP? And consequently be terminated?
- Should the various ICT ETPs (eMobility, NESSI, ISI, etc.) merge to found the future Internet PPP?

Those questions were largely debated. However, it appears clearly that the scope of the PPP being now well identified, it will not cover the whole scope of the NEM,

- -neither in technical terms (the PPP is FI centered, the NEM is media centered)
- -nor in terms of activities (The PPP is a technical programme. More and more activities of the NEM, as mentioned in section 2.2, aim at policy management).

Therefore the creation of the FI PPP, whilst it can be considered as a significant achievement of the inter-platform cooperation, does not represent the final accomplishment of the NEM ETP initiative. As a consequence the NEM ETP considered **it had still a role to play besides** (and in coordination with) **the PPP and the other ICT platforms**. It decided to continue its mission and to redirect it to take into account the new situation. This outcome and findings from NEM ETP has later been confirmed by the revised FP7 ICT work programme which maintains several objectives within challenge 1, continuing objective 1.5 on networked media an search systems one very important research priority in the work programme, in addition to the new introduced priorities associated to Future Internet.

At the SB meeting of 18 Nov 2009, the Executive director presented a plan to move from a Technology platform into a Technology and Innovation platform. This included the introduction of new challenges amongst which to consider the contribution of the NEM community:

- to the Grand Societal Challenges
- to the definition of a Smart Content approach,
- and of course to the Future Internet.

4.2 The new NEM challenges

As a first step to prepare NEM's future the NEM SB meeting of Nice, 17-18 November 2009 decided of a workshop on "**Moving from Technology to Innovation**" That workshop took place early February 2010 with the following agenda:

- What innovation means for NEM members ? (-> different meaning for different people)
- What does it mean for NEM platform? (-> link between Technology and Innovation).

The goal was to identify the signification of innovation for NEM and the concrete actions that NEM could set up to assist that innovation (the idea being that such actions could be the basis of a future activity).

Innovation is a long process including the birth of an idea, its development and then turning it into a product or a service. At the centre of this process are the customers and the users. Whilst some expertise is recognised to Europe to address the beginning of that process (in particular through collaborative projects), this is not the case for transforming research into concrete products. In other words, Europe produces knowledge and technology, being these elements just a part of the overall innovation process. There is general consensus that Europe is not yet fully capable to terminate the innovation process, existing a significant gap between RTD activities and final stages of the innovation process. What can be the solutions?

In order to bridge the gap between technology and innovation a partnership between all actors of the value chain should be built. Foster relations between the academic and industry, services and institutions is another path. The role that SMEs, as crucial players in the final stages of the innovation chain should be further explored and encouraged for a more active involvement of SMEs in this holistic approach.

Some initiatives already exist in Europe such as CITT project an EAI platform but there is a need to coordinate and to share best practices between these groups. The following concrete proposals have been put forward during the workshop:

- 1. to facilitate partnership building;
- 2. to engage more pro-actively SMEs around innovation;
- 3. to create and lobby for technology platforms that are open and easy for SMEs and startups to build applications (Apple apps-store type) and services on;
- 4. to help bridging the gap from prototype to product/service by facilitating sharing of resources between established players and start-ups;
- 5. to facilitate incubator type relationships between established players, SMEs and startups;
- 6. to run a 'research questions' forum to identify people trying to solve similar problems, then encourage these people to collaborate in a flexible framework, without rigid and heavyweight contract relationships and project overheads;
- 7. to encourage interdisciplinary work with teams of technologists, human sciences and user experience experts;
- 8. to build up open platform or framework in different fields, aggregating SMEs around and try to do this in partnership with national initiative or cluster.

Following that **workshop**, an ICT 2010 Networking session proposal was applied on the same topic as well as another proposal on "NEM and Grand societal challenges". As a result of the evaluation by the Commission, it was requested to reduce the number of sessions and to merge those two topics. A new session description was therefore submitted and accepted, linking Innovation and Grand societal Challenges. This makes senses since, obviously innovation will be successful only if it is a response to human needs and to society in general. The list of grand societal challenges, as identified in the documents of the Union (*Global warming ,Tightening supplies of energy, Water and food, Ageing societies, Public health, Pandemics, Security*) are certainly major topics on which innovation should focus. **The future of NEM will only be relevant if it contributes to those challenges**. That networking session was rather successful and encouraged NEM to progress into that direction.

4.3 What is the value of NEM for the stake-holders?

Moving towards NEM2.0 embarks the whole community into a new phase of collaborative work. At that stage consulting the community was desirable since a critical input is obviously the **opinion of the stake-holders.**

During the General Assembly of 16-17 March 2011 a slot was devoted to assess the added value that NEM members have found within the platform during the 6 years of its existence and to induce where the NEM should go.

So, to get some inputs to that discussion, an exercise was proposed to the GA attendees, which consisted of an interactive session during which they were invited to answer to two questions and then to participate to the analysis of the answers.

The questions were the following ones:

Question 1: What NEM does now that is of high(est) value to you?

Question 2: What else NEM should do in future that is high value to you?

Some 50 answers were collected. In front of each line, the type of NEM stake-holder was indicated (Academia etc). Commonalities among the answers were then analyzed and the answers were reordered to reflect those commonalities (refer to Section 7).

At the first question the answers were clearly attracted by 3 poles: "Commission", "Community", "Projects", with sometimes different concerns for industry, SMEs, academics. At the second question, the classification was more difficult. However one could detect 3 main trends: "Influence the Commission", "Develop new initiatives", "Improve the instrument".

4.4 Should NEM merge with the other ICT platforms of the Future Internet community?

Another question to be addressed for the future activities of the NEM is "In which kind of structure should that community continue?"

In fact the question of inter-platform collaboration was already addressed in the past (refer to section 4.1). Now that question came again, but rather from the standpoint of limiting the cost overheads to run the platforms. That topic was on the agenda of the Steering Board on 25-26 May 2011 (Geneva). Various options were presented, taking into account that the funding of the future activities (the FutureNEM CSA will end in November 2011) was an important parameter to take into account:

- 1. Continue NEM as it is: set-up registration fees to ensure a minimum secretariat and governance to pursue the NEM initiative activities. A similar option was to transform NEM in a professional association (ie on image industry and digital creation, social networking, media sharing, true 3D, holographic, augmented reality, automatic rich metadata extraction, representation of content)
- 2. Embed NEM (and other ICT ETPs) in the Industry EFIA initiative;
- 3. Formalize an ICT X-ETP coordination (with defined agenda) and mutualize what it can be mutualized.
- 4. Others options?

Options 2 and 3 implied a strong modification of the overall architecture of the ETPs in the general context of the Future Internet and of its supporting structure. In fact NEM was invited to consider to join efforts in creation of an organization (under working EFIA title) covering a wider ICT scope and including other relevant ETP's and further related communities.

This led to an animated discussion. The concept was considered as interesting for NEM, with the interest of sharing the structure costs within a larger community. However this would have probably led to lose influence of the NEM whilst this objective was considered as important for the stakeholders. Therefore the conclusion was as follows:

- to **keep NEM identity** within such organization (e.g. in accordance to **federation** principles—not a merge)
- To ensure interaction and cooperation at all levels; high policy impact on the high level as unique ICT organization and close cooperation of ETP members on specific issues (this is a principle that reveals fruitful in NEM)
- The title of the future organization should be reconsidered ("Future Internet" does not seem to be appropriate any more, especially to reflect the NEM topics).

4.5 What are the possible solutions to fund NEM activities?

As already evoked, funding of the NEM ETP was an underlying issue of the discussion about its future.

The immediate source of funding for the NEM ETP beyond public resources is "fees" from the NEM members.

Those fees can be (flat or depending on the organisation status) contributions of the NEM members or might be obtained also from running projects (IPs, STREPs, NoEs) which would have got the label of NEM projects. However that solution seems difficult to implement.

- The payment of fees requires that a legal structure be built, with necessary accounting and audit, is subject to taxes, and needs fee management (billing, reminders).
- Fees (if any) are only applicable to fund a central secretariat and some related activities provided that they are realized by one organization. One cannot imagine that some big organization be funded by fees from the other members to implement some NEM support functions. Therefore this limits what fees can fund (see below)
- It must be stressed here that some organizations, namely SMEs, have strongly stated that in the present economical context, they are not in position to ensure necessary financial contribution to a permanent NEM structure.

In fact all NEM activities are not equal with regards to funding. Some of them can be carried out for free by the NEM partners, provided that those partners continue to show interest in those activities, which has been the case until now. However this cannot be the solution for the "central functions" (all support given to the NEM community in terms of secretariat) and the NEM Summit.

Without **central functions**, obviously the NEM community and collaboration would disappear. As that role does not bring any value to the organization that performs it, it must be funded by some means.

Another significant activity of the NEM is the **NEM Summit**. Up to now the NEM Summit has been supported by the CSA (FutureNEM does not subsidies the NEM Summit but provides some support to the organization of the event).

For which concerns the **NEM Summit**, Sigma Orionis presented a business model for 2012 and beyond. This one is based on a total Summit budget of 120 to 170 K \in . A prominent role is given to the hosting organization which becomes the main event (privilege) sponsor, buys (and resells) a package of registrations, facilitates contacts with local sponsors (including the one expected to sponsor the social event), proposes a set of possible venues and commits to local promotion. Early bird registration fees are set to $490 \in (610 \in \text{within the last 2 months})$ and the number of invited participants is then limited. Sponsorship fees remain at the present level. Based on those figures the business model is considered as sound and sustainable without EC funding.

Eurescom presented a plan to fund the central function at least during a couple of years until the new Horizon 2020 programme is launched. This plan is based on a (flat) fee paid by the stakeholders to attend the General assemblies.

For the other NEM activities, the participants will have to contribute freely to the common work or, on specific topics to be funded by dedicated projects.

Those provisions were prepared during summer 2011, starting by a specific NEM EG meeting (Paris, 30 June 2011). During that meeting, a brain storming session was also carried out, in order to identify the necessary activities of the future NEM, its objectives, and perimeter. A document was prepared and approved by the SB in July. Then the plan was proposed to the General Assembly of 27 September 2011 (Turin) for final approval by the NEM community.

5 Current vision of the future of NEM

As introduction in the open discussion on Future of NEM during the last General Assembly (Turin, 27 Sept 2011), the chairman presented recent activities of the NEM Initiative and possible focus of the Initiative in the next period. He also mentioned that from December 2011 the NEM will be not supported by a respective support project.

Therefore for the period 2012 –2013 the plan is the keep the community active through leadership and participation on a **voluntary basis from committed members** (among them the Steering Board members) and to secure the minimum funding necessary to maintain the NEM infrastructure. The NEM executive will seek to attract further funding for the NEM activities to enhance the NEM actions and to facilitate the further expansion of the NEM activities.

So, if we consider the NEM activity areas as sketched in Figure 2:

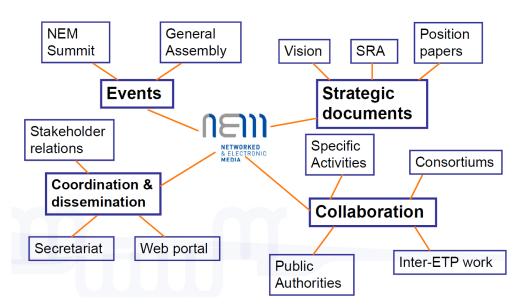


Figure 2 NEM activity areas

- The NEM central functions (**coordination & dissemination**) will be maintained through the (flat) fees collected for participation in the **General Assembly** events. The primary activity of the NEM community will be the development of shared opinions through open inclusive discussion. The main structure for this to work will be the General assembly meetings, supported by a community infrastructure consisting of a website, e-mail exploders and other facilities like WIKIs and FTP servers as required.
- The **NEM Summit** will have an independent business model where it should be financed through the sponsorship support it can attract and the fees paid for attendance.

The formal NEM bodies will have lean operation models: e.g. an Annual Steering Board meeting can be collocated with Spring GA and the executive Group meetings can be organised alongside other relevant meetings and events. For the rest of the year the Steering Board and the NEM Executive Group can work by using audio conferences and web based tools. Working groups will also have the opportunity to use email exploders and conferencing tools.

The new Steering Board, elected in September 2011, met in Istanbul on 23-24 November 2011 and elaborated an activity plan (which concerns the right part of the drawing), based on commitment of its members to the following challenges on R&D areas (leaderships and SB members' participation indicated):

- The Content Value Chain including long term Content and Media developments (Vsonic, Intel, Arçelik, EGDF, BBC)
- New Educational Programs (<u>UPM</u>, Intel, Sigma Orionis, Turk Telekom)
- Collective awareness and Social Networks (<u>Sigma Orionis</u>, Technicolor, Eurescom, Telecom Italia, BT, Arçelik)
- Content storage and personalization (<u>France Telecom</u>, UPM, Telecom Italia, IN2, Alcatel-Lucent)
- Smart Search challenges (Arcelik, IN2, Engineering).

Furthermore, the following horizontal challenges have been defined:

- Bridging NEM with content industries (and users) (Holkenconsultants, Vsonix, SINTEF, EGDF)
- **International cooperation** (<u>Rose</u>, Sigma Orionis, France Telecom, Technicolor (clusters), TurkTelekom)
- **SME involvement and innovation** (Rose, Engineering, Holkenconsultants).

The SB members have decided to define a workplan for the next period, planned outputs including time plan for the realisation, eventual topics/discussions to be included in programme of the next GA by 31 January 2012.

In terms of governance, the SB decided to continue the Executive Group, in charge of the day per day organization, communication and logistics of the platform. This EG is composed of permanent members (Chair and Vice-chairs, NEM secretariat, NEM summit coordinator and NEM office manager) and members with assigned roles (Mirror group and Celtic, Education and Academia, NEM Summit programme and NEM Summit organization, Smart Search Challenge, Content Value Chain, Bridging NEM with content industry and users and NEM Strategic documents).

6 Conclusion

Work has started in spring and summer 2010 to draft out the future of the NEM platform. Several questions have been answered concerning the position of the NEM concerning the new instruments, its contribution to the Inter-platform activities and its evolution towards an technology and Innovation platform enlarging its scope to include societal challenges that are now part of the Horizon 2020 concerns.

An important input to the discussion has been the responses to the enquiry on the Value of NEM for the stake-holders.

Finally the decision has been made to focus NEM on two events, the NEM Summit and the NEM General assemblies and to fund the NEM central function by a flat fee collected from the stakeholders attending the GA. The recently elected NEM steering board has agreed an activity plan to which they committed themselves to contribute on a voluntary basis.

7 Annex 1: What is the value of NEM for the stake-holders?

During the NEM GA of 16-17 March 2011 the delegates were invited to answer 2 questions (below) in drafting one line per question. The results were collected and are copied in this document. In front of each line, the type of NEM stake-holder is indicated (Academia etc).

Commonalities among the answers have then been analysed and the answers were re-ordered to reflect those commonalities, resulting into the sections provided below.

For each question a graphical representation is also proposed, although, obviously, that illustration can but reduce the quality of the information that appears in the complete answers.

Question 1: What NEM does now that is of high(est) value to you?

Academia:

Influence/inform the Commission ..; on roadmap definition

- Applied Research Center : Be proactive in **roadmap definitions** that **influence the commission**
- Academic: **Research directions** in networked media;
- Academics : Foster **feedback to EC**
- Academic : **SRA**

_

Networking ... for project preparation

- R&D org: Dissemination of most relevant information necessary for successful project proposal preparation;
- R&D org : **networking** to relevant players of the NEM field
- R&D: Progress on identity, on co-production, on networking
- Academic: Provides **networking**, possibilities, keeping in touch
- Academia : supporting especially call preparation activities
- Research institute : Meeting and **networking** with industry players to propose for **new projects**
- Academic : Providing a **network** with other NEM members and **getting involved in EU projects**
- Academic: Foster collaboration

Create, support and inform the NEM community

- Academics : **organization profile** at European level
- Academics: Provide **information** about what is happening at the EU level in terms of **funding opportunities** for digital media
- Research center: NEM shows the **current focus** of R&D topics and **strategy** that is referent in Europe
- Research: The NEM, at this time, **gives me the opportunity** to judge more clearly what is relevant in multimedia domain
- Research center: Support our interests and provide feedback on EU policy

Industry:

Networking...to create positions

- Industry: Networking, share views;
- Industry: detect innovative ideas; push common position; share outside Europe in order to push European techno world wide
- Industry: Allowing us to add our strategic research items to NEM SRA & Networking with other members
- Industry: Providing networking, capability
- Industry : Share views with relevant actors ; networking
- Industry: R&D Contact across Europe

Influence the Commission on strategic directions

- Industry: Future research direction paper influencing the FP7 work program
- Industry: Influence the strategic direction of EU agendas
- Industry+ Academia+ Research : Make NEM visible to the Commission and outside in a consolidated way ; importance of NEM globally
- Industry: NEM has successfully promoted the creation of the FI-PPP

SME:

Networking ... to benchmark research

- Very several Company: networking
- SME: NEM discussions &projects together with contacts with others members, are good check for own agenda
- SME : NEM is a valuable network of media experts
- Contacts and networking to begin projects
- SME : **Networking**
- SME : Possibility of **networking** in our domain : network media
- SME : **Networking**

-

Information exchange to ...create projects

- SME :Roadmapping of new subjects and facilitate creation of consortiums

Create a NEM community to get informed and promote our position

- SME : Orientation point to Europe : Funding/sector industry; **info exchange** about EU activity
- SME : Group SME's views and **make stronger our needs** and **requests**

Others

Networking

- Brings the **community** together
- Provide a forum for meeting industry and academic technologists
- Networking, exchange of view to facilitate construction of international projects
- Different point of view on the same subject

Influence the Commission

- Networking & dissemination
- Contribution to the FP objectives definition
- SRA

Commission

A: Roadmap definition, SRA

I: Influence the Commission.. on strategic directions

I : Networking.. to create positions

A: **Create**, support and **inform** the NEM community

A : Networking for **project preparation**

Community

S: Networking ... to benchmark research

Projects

What NEM does now that is of high(-est) value to you?

Question 2: What else NEM should do in future that is high value to you?

Academia:

Influence the Commission in view of FP8

- Academia: Provide instruments for **better collaboration**;
- Academia: instruments for defining research agenda for FP8
- Academia: Lead new lines of activity in the Future SRA
- R&D org : Strategic input to the EC to influence the FP8 work programs more actively

Get more involved in programme implementation

- Research center: NEM should provide internal mechanism for **consortium coordination to get more involved in proposals** and funded projects
- Research center : Facilitate member profiles for finding the right partners and act as an intermediate on members' interaction

Address...new topics (Usage)

- Academia: **Fostering the user centeredness in the NEM strategies** (user centered design, user experience, etc...) build e.g. a working group on this particular topic.
- Academia: **Think more about the social impact** of the development of future media
- Academia : **Engage** end user communities
- Research : More networking; more focus on **user research**
- Academia : **More focus on user research** e;g. by creating a task force/working group on user experience / user satisfaction / quality of experience
- Research: I think that in the future the NEM could focus or pay more attention to the **economic implication** of multimedia projects

Develop the instrument towards...SMEs

- Research center : Facilitate mechanisms to **benefit SMEs** in a much greater proportion

Industry:

Improve operational efficiency of the instrument (innovation, programme management)

- Industry: Help deliver and **speed up innovation** in Europe
- Industry: We need to develop new instruments to **fasten the "Idea to project"** process
- Industry: More **close to the projects**, take advantage of the results and try to build on
- Industry : **Green industry information**
- Industry + academia : Join active NEM members in **successful projects** / applications to give a clear incentive for engagement

Improve ETP influence

- Industry: Strive to **merge the ICT ETPs** to have more closed and improve efficiency
- Industry: Keep active integration of NEM community already **inter-sector** (Network & Media)
- Industry: To act as a **relevant industry representative** vis-à-vis the EC
- Industry: High **influence on WP priorities**, instruments, structures, budgets, tools...

SME:

Develop services/business to members

- SME : Provide **concrete features to members**, such as promotion opportunities etc... (presentation of new members...)
- SME : answer **content and societal** issues ; develop business with content industries (large sense) ;
- SME : allow **SME to participle in EC calls** via big company members ; be aware, prepare large scale with trials with corresponding business models.
- SME : Access to media industry Europe ; info exchange EU funds ; matchmaking partners (cooperation broker) ; technology matchmaking ; help writing proposals ; international center for media
- SME : Allow real access to **Frame work program for SMEs**
- SME : Better **representation of SMEs interests** and more concrete actions
- Provide more specific collaboration & technical discussion support

Develop inter sector approach

- SME : Cross meetings with **other EU initiatives**
- SME : Develop **cross industry challenges** ;
- SME : Directly **involve more end users** from key sectors (health, education, security, transport...)

Influence the Commission in view of FP8

- SME : NEM shall influence FP8 and create more programs such as FI-PPP
- SME : Responding and discussing subjects beyond XXX concerning Regulation+ policy

Others

- Keep & increase our influence in Digital Europe World
- Be more in the driving seat and **influence digital agenda** of the European Commission and the evolution of the Future calls
- **SRA**; simplify participation; get rid of joint instruments
- Identification of **cross-sector topics** for research (compare : power industry / telecoms = smart grids)
- **Increase the information** about projects and users cases
- Expands the **community**

Influence the Commission

A: Influence the Commission in view of FP8

I: Influence on budgets, WP, tools

Act as relevant industry representative

S:Better representation of SMEs

S: influence EC

I : Develop A : get more involved in programme

inter sector approach implementation : consortium

S : Develop coordination

cross sector challenges S: Give SME access to FP

A: address user S: Develop services/ I: Speed up innovation, business to members fasten idea to project

Develop new initiatives Improve the instrument

What else NEM should do in future that is high value to you?