

# The National Technology Platforms

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**Abstract—** Several European countries have launched initiatives on National Technology Platforms, as mechanisms to enhance the national Research and Development programmes and channel the contributions from multitude of SMEs, which may not be motivated to be active in the whole European dimension of the R+D. In Spain, during 2005 a number of national technology platforms have been launched and some of them have already produced a national strategic research agenda. This activity has been conducted in close coordination with European Technology Platforms, when such European platforms exist.

## I. INTRODUCTION

THIS paper will present a model of organization of National Technology Platforms presenting the way they are envisioned, the working procedures and the main results achieved so far. In particular, emphasis will be made on the closer related platforms to the ASMS field:

- Wireless Communications Spanish technology platform, eMOV.
- Networked Electronic Media Spanish technology platform, eNEM.
- Spanish technology platform for security, eSEC.
- Spanish technology platform on Integral SatCom, eISI (under launching at the time of writing this abstract).

During the last year, stronger industrial movement has been changing the way of think on the organization of the strategic goals for research and development activities.

The grouping of a big part of the industry makes possible an industrial consensus to define which the new business lines are and where the industry has to be a group in order to research in the same way. This cluster is a good tool to support the Ministries of Industry and Education defining the strategic objectives and is the start point to make a more competitive European industry.

***The need of empowering this kind of mechanisms has done and important movement around Europe, where several clusters of different industries have been also structured with an exceptional objective: to be organized and to define the strategic research agenda (SRA).***

Up to now, around twenty seven technological platforms have been launched in different areas. Some of them with an important industrial mass, that will finally decide in terms of volume, what are the stronger and more representative

technological platforms and how many of them will succumb in the way of join the major part of its sector industries.

## II. THE CASE OF THE SPANISH PLATFORM

In order to exploit the idea of be structured and with the objective of define the main Spanish strategic objectives in research and development, there have created some technological platforms in Spain. One of the main objectives followed by the creation of these national clusters has been to be more competitive in the European domain. This could be possible with the easier change of information between the cluster of companies and with the previous organization in the national perspective. There have been four special Spanish technological platforms that have to be mentioned: eMOV, eNEM, eSEC and eSAT. The first in be launched was eNEM, which acts in Spain as NEM<sup>1</sup> in Europe. This platform was launched in June 2005 and up to now, more than 80 companies have been registered into this initiative.

In the same way, the eMOV platform was launched on July 2005, acting as the European eMobility platform<sup>2</sup>. This platform acts as a cluster of companies in the mobile and wireless communications domain. Up to now more than 90 organizations have been registered into this platform.

Regarding to the eSEC platform, which is the Spanish platform for security and safety, the procedure has been quite different. In spite of eNEM and eMOV have been Spanish inspired on European platforms, eSEC have been an own body itself because of the lack in the European domain. In this sense, Spain has been pioneer in the launch of a platform in the Security and Safety domain. This is a horizontal initiative because of these priorities includes several areas, also in the eNEM and eMOV domain.

This initiative is the result of the need to organize all the companies that work in this domain in order to support the citizen and the government. Topics like terrorism, network

<sup>1</sup> The Networked and Electronic Media (NEM) Initiative is an industry-led Initiative to promote and direct the large-scale initiative needed to accelerate the pace of innovation and rate of technology evolution to the level that will place European Industry at the forefront of the technology and give users an incredible choice of services. More information on NEM webpage: [www.nem-initiative.org](http://www.nem-initiative.org).

<sup>2</sup> The main objective of eMobility is to reinforce Europe's leadership in mobile and wireless communications and services and to master the future development of this technology, so that it best serves Europe's citizens and the European economy. More information on: [www.emobility.eu.org](http://www.emobility.eu.org).

security, DRM are included in the eSEC Strategic Research Agenda. eSEC has got more than 70 companies and it was launched on July 2005 after eNEM and eMOV platforms.

Finally, eISI will be launched on February 2006 as the Spanish mirror of the European ISI platform<sup>3</sup>. This platform is the cluster of all the companies that works in the satellite communications field.

All these platforms have got the support of AETIC as the platform secretariat, the Spanish Ministries of Industry and Education and the Centre for the Development of Industrial Technology (CDTI).

### III. THE STRUCTURE

Some of the most important issues of these Spanish initiatives and the success of these platforms have been the transparency and openness of the working practices. All these platforms are open for everyone and everybody have been accessible to contribute in the definition of the SRA. In order to demonstrate the transparency of this platform, AETIC has developed a code of good practices in order to show which the rules in all these platforms are. AETIC is a non profit organization that represents several organizations, which expend the 40% of the Spanish private R&D. That means that is the most important Spanish organization in this sector.

The structure of this platform is showed in the following picture:

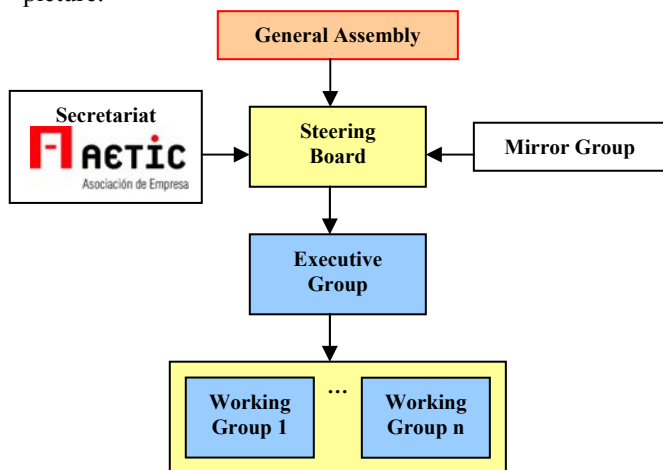


Fig. 1. Platform structure.

The Steering board has got around fifteen members,

<sup>3</sup> The Integral Satcom Initiative (ISI) is an industry-led action forum designed to bring together all aspects related to satellite communications. ISI addresses broadcasting, broadband, and mobile satellite communications, as well as their convergence, in integration within the global telecommunication network infrastructure. ISI supports all forms of space communication and space exploitation. More information on [www.isi-initiative.eu.org](http://www.isi-initiative.eu.org).

representing the industry, research centers and universities. This steering board has got one president, two vice presidents and from ten to fifteen board members. This committee is responsible of manage the main part of the previewed work. In this sense, the Executive Group is the board constituted from Steering Board members that leads the work to do within the platform. All thee members were elected during the launch of the initiative.

As an example of the openness platform, the next picture shows the structure of these platforms, that have around the 80% of Industry, 12% of Universities and Research centers and the 8% of another kind of organizations.

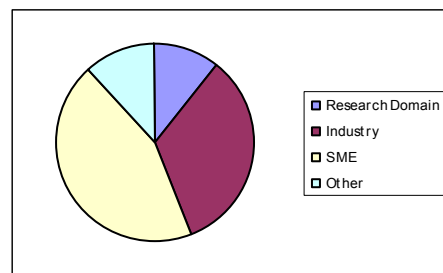


Fig. 2. The Spanish platforms members structure. This chart shows the relevance of SMEs in Spain.

According to this is clear to know the Spanish industrial structure that has got around the 40% of SMEs in these platforms. This is significant because it means that the Spanish needs, to be better organised, is really important and is justified the need to set up these initiatives.

Since the launch of each platform, to divide the platform area into different topics has been one of the fist objectives to do. According to this, all these platforms made a division into different working groups in order to do the main document, the Strategic Research Agenda.

### IV. THE STRATEGIC RESEARCH AGENDA

**The main objective to do is to create the SRA. This documents has to show clearly in which are the stronger areas of the platform organizations and where, in this case Spain, is competitive.**

Five groups where created that represented the national eMOV sector. The following picture shows this structure:

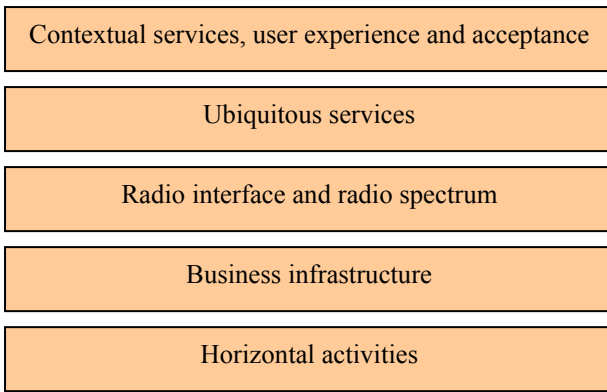


Fig. 4. eMOV Strategic Research Agenda main topics.

The eNEM platforms made six working groups as is showed in the next picture:

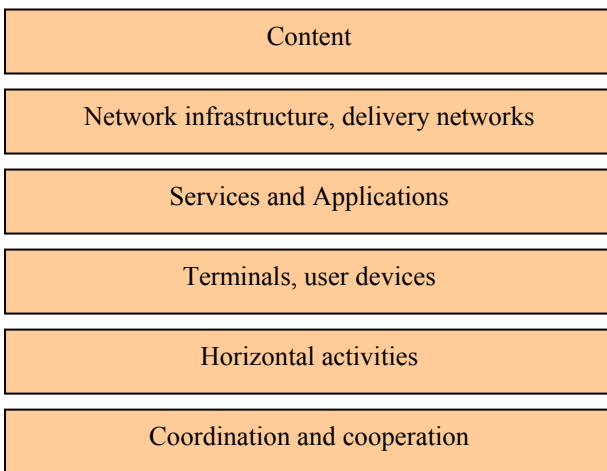


Fig. 5. eNEM Strategic Research Agenda main topics.

In the eNEM platform a group of coordination and cooperation was open in order to create links between the European NEM platforms and other international clusters.

Regarding the security platform, eSEC, the following picture shows which are the main topics of the Spanish sector in this field:

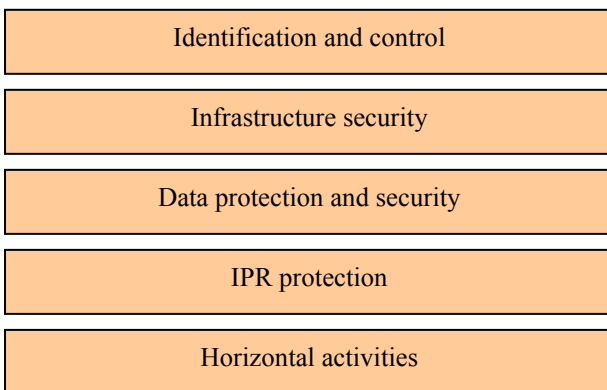


Fig. 6. eSEC Strategic Research Agenda main topics.

Finally, eSAT is in current development but the working groups have been created. The following picture shows the current working groups:

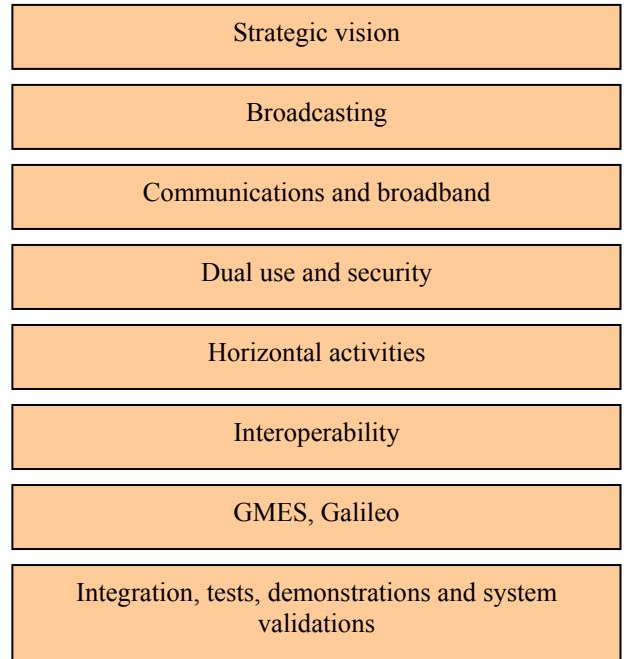


Fig. 7. eSAT Strategic Research Agenda main topics.

## V. CONCLUSION

This work has been carried out during the last six months, which demonstrates again the stronger work and implication of more than 500 persons to define this work.

Although could be thought that this work is concluded, this is only the start point to work together into a compact organization and to be more worldwide competitive. The synergies between different clusters are obvious but **there is a big work to achieve in order to generate important projects, important consortiums and important challenges to create an important European sector.**

The first step has been done in Spain: to be organised.

## REFERENCES

- [1] eMOV Strategic Research Agenda, AETIC. (December 2005). First edition.
- [2] eMobility Strategic Research Agenda. (December 2005). Revision 4. Available: [http://www.emobility.eu.org/documents/SRA4\\_051123\\_Final.pdf](http://www.emobility.eu.org/documents/SRA4_051123_Final.pdf)
- [3] The European Technological Platforms status. National plan of Scientific research, develop and innovation (2004.2007). (December 2005). Available: [http://www.aetic.es/optima/CLI\\_AETIC/ftpportalweb/documentos/PT\\_Informe\\_final\\_CE\\_marzo\\_2005.pdf](http://www.aetic.es/optima/CLI_AETIC/ftpportalweb/documentos/PT_Informe_final_CE_marzo_2005.pdf)
- [4] Technology Platforms from Definition to Implementation of a Common Research Agenda. (December 2005). Available:

[http://www.aetic.es/optima/CLI\\_AETIC/ftpportalweb/documentos/Technology\\_Platforms\\_Working\\_Paper.zip](http://www.aetic.es/optima/CLI_AETIC/ftpportalweb/documentos/Technology_Platforms_Working_Paper.zip)

- [5] Strengthening Competitiveness through Co-operation, European Research in Information and Communication Technologies. (December 2005).
- [6] Rethinking the European ICT Agenda. (August 2004).
- [7] Mobile Radio". Research News. IEEE Vehicular Technology Society News. February 1995, pp. 21-30
- [8] THE DIGITAL FUTURE REPORT Surveying the Digital Future YEAR FOUR Jeffrey I. Cole, Ph.D. Director, USC Annenberg School Center for the Digital Future Founder and Organizer, World Internet Project (September 2004). <http://digitalcenter.org/>
- [9] The Mobile Communication Society: A cross-cultural analysis of available evidence on the social uses of wireless communication technology. Manuel Castells et al Annenberg School for Communication, University of Southern California, Los Angeles, (October, 2004). [http://annenberg.usc.edu/international\\_communication/WirelessWorkshop/MCS.pdf](http://annenberg.usc.edu/international_communication/WirelessWorkshop/MCS.pdf)
- [10] The IP TV Revolution. Professor Jonathan Taplin. Annenberg School for Communication. University of Southern California.
- [11] Commission staff working document. Study on a community initiative on the cross-border collective management of copyright. Brussels, 7 July 2005.
- [12] eNEM Strategic Research Agenda, AETIC. (December 2005). First edition.
- [13] eSEC Strategic Research Agenda, AETIC. (December 2005). First edition.