

September 2010

# First to know

FIRST is an ICT project supported under the EU's 7th R&D Framework Programme (FP7)

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**First is a Support Action funded by the European Commission Seventh Framework Programme in order to foster International Cooperation in the areas of Future Internet and ICT Components and systems between Europe and Latin America.**

**First**



**European Commission**  
Information Society and Media

## Measuring Innovation: A new role of Technology Platforms?



Julián Seseña

### **What is a Technology Platform?**

A Technology Platform is basically a framework created to host stakeholders from

Industry or Research Centers like universities or R&D institutes to perform innovation projects, commonly of strategic importance or industrial relevance.

### **What is expected from Technology Platforms?**

The objective of a Technology Platform is a two directional one. At one side, for sponsoring institutions like public authorities holding the Platform, revenue for the whole Society is expected: This means a measurable profit. At the other side, stakeholders involved in the Platform expect a tangible return of its own investment on researching and innovation. Therefore Measuring Innovation is revealed as a key factor on results evaluation.

### **What is the current state of Technology Platforms?**

European Technology Platforms are currently involved in the creation of Knowledge for Growth. The main goal is to promote European competitiveness on R&D sector. This kind of platforms has proved to be a key policy factor on innovation development in our environment and on the deployment of new industry fields as well.

### **Technology Platforms Influence on Exploitation of Innovation**

Exploitation involves an efficient use of existing resources, but it also needs a renewal of competencies. If exploitation is required on the short term, Innovation is the key to extend exploitation to the future. Therefore, Innovation Organizations are always seeking new capabilities.

Exploitation of Innovation is not only about taking an innovative product to market, but also to convince relevant stakeholders to support and adopt new services or techniques available. Anyway, at this point, marketing capabilities emerge and become as important as technical capabilities.

Return on investment in R&D must not be considered only at the end of the project. It must be taken into account even before the beginning of it, considering the opportunity cost of selecting

an issue to develop rather than other.

### **Exploitation Alternatives:**

#### **Dissemination**

One of the main goals on innovation is to disseminate the results of the projects. Dissemination is almost Exploitation itself, since spreading the obtained results is the first step of Return on Investment. The only difference between them is that Dissemination can start at the same time of the project and Exploitation use to begin at the end. Anyway it must not be an arbitrary or spontaneous process, but a well-planned one, providing information on effectiveness and relevance of the project.

#### **Mainstreaming**

Mainstreaming is followed up through a planned process to transfer successful results of the project to appropriate decision-makers. The transfer may be fol-



*Impulse to Research and Development ...*

lowed at all levels. Decision-makers are able to customize or adapt the obtained results. Mainstreaming is therefore a process which enables activities to impact on policy and practice.

### **Multiplication**

Multiplication is instantiated following a planned process to convince end-users to integrate or adopt produced services or goods.

### **Measuring Exploitation of Innovation**

Measurement in innovation is a critical factor on the evaluation of the Return on Investment on R&D. Quantifying the process of innovation is a complex but important issue affecting both industrial and academics partners in Technology Platforms.

In dissemination, measures used to be restricted to numbers or quantities of products launched. This approach can be explained by the fact that "marketing" has traditionally been seen as separate from "innovation". Therefore, innovation on measuring exploitation is still an unexplored field.

### **Technology Platforms Influence on Exploitation of Innovation**

#### **Main exploitation mechanisms enabled by Technology Platforms:**

- Joint Venture: A new entity composed by several companies to obtain and share the revenues of the exploitation of an innovative product or service.
- Consortium: An association formed by few organizations



... has to be converted into business implementation

to add their resources to reach a common goal.

- Institute: A permanent organization created by one or more Impulse to Research and Development stakeholders to promote or disseminate innovative processes.
- Patent: An exclusive and often transitory right granted by a public authority on the Exploitation of innovative products or processes.

#### **New Technologies on Dissemination of Results:**

- Web Site: The main tool to 'spread the word' in Innovation Results is still the traditional web. A well-structured and interesting -even enjoyable- site allows a company to provide access to its innovative products to third-party organizations.
- Social Networks: Commonly used social networks like Twitter or LinkedIn may be crucial on making the difference between one product and another. Markets are conversations and potential customers de-

serve a good communication.

- Surveys: Mainly employed as an evaluation activity held by public institutions to monitor Technology Platforms projects, surveys have revealed to be a good tool to improve the harvest of Innovation results. Platforms partners are already using them while seeking out best practices for Exploitation and/or Dissemination.

#### **Advantages of Technology Platforms for SMEs**

The participation in Technological Platforms allows SMEs:

- To have access to strategic information regarding the key success factors for the Exploitation of R&D projects.
- To share views and ideas with other top-notch European entities involved in the field.
- To minimize both the financial and technological risks associated to performing R&D activities.

Julián Seseña, Tonny Velin, Diego Expósito (ROSE Vision Team)

## Towards the launch of the Latin American Technology Platforms

Five Latin-American Technology Platforms are in the process of being established as a first concrete result of the FIRST project. After a six months preliminary research investigating the areas with the highest potential for EU-LA cooperation in ICT research, the choice has been made in the five Latin American countries directly taking part in the project (Argentina, Brazil, Chile, Colombia and Mexico) and the new TPs are bound to become operational realistically in the first half of 2011.

Whereas there will be one Technology Platform per country globally addressing themes that are relevant to the broad area of the Future Internet, each TP will be organised internally into Working Groups corresponding to research areas on which fully fledged Technology Platforms operate in Europe (eg. Embedded Systems, Nanoelectronics, Software and Services, etc.). This will allow the creation of specialised teams within each platform, who will be able to foster the dialogue with the European TPs and

efficiently represent the interests of their countries scientific community in the area of their competence.

The basic concept was of course the creation of “mirror” platforms modelled after the European experience, but the Latin American platforms will of course evolve in their own way. Aside from the convergence of several thematic working groups in one “centralised” platform per country, the main difference at the moment stands in the memberships composition.

Unlike Europe, where the TPs were created to stimulate the large industry input to the EU research programmes, the LA TPs should act primarily as a bridge between the scientific communities of Europe and Latin America, irrespective of whether input comes from industry or academia. Moreover, in countries where the private sector is generally weaker than in Europe, the role of public programmes and institutions tends to be stronger. In this respect

one of the criteria followed in the identification of research areas on which, via their working groups, the Latin American TPs should concentrate, was the existence of clear public policies for research and development. Others were the emergence of a critical mass of researchers in the areas analysed or the existence of current research cooperation relationships with Europe.

### *5 Platforms, 25 Working Groups, 373 members to start with...*

The initial proposed membership of LATPs accounts for roughly 373 members in five different countries. Each platform will feature a Steering Council (a combination of private and public, academia and companies) and between 3 and 6 Working Groups. The LATPs will have a strong autonomy in their own governance rules though in their initial phase they will be provided with standardised procedures, so as to facilitate mutual cooperation and interaction with the European TPs and with the

	Embedded Systems	Mobile and Wireless	Nanoelectr.	Networked Electronic Media	Photonics	Satellite Commun.	Smart Systems	Software and Services
AR	X	X	X	X			X	X
BR	X	X		X	X			X
CL	X	X		X			X	X
CO		X		X				X
MX	X	X		X	X		X	X



EU. The table below illustrates the thematic coverage of ICT research areas in each country.

### *Some general trends*

Quite in line with early indications emerging from the preliminary analysis coordinated by TESEO Consulting, some areas, like Mobile and Wireless Communication, NEM and Software and Services seem to have everywhere a critical mass of research organisations willing to pursue R&D efforts in cooperation with Europe; in all those areas the regulatory framework appears suf-

ficiently defined in all countries and the commercial maturity of applications delivered is quite advanced. Other (often correlated) areas such as embedded systems and smart systems are of interest to most of the countries considered, Colombia being the only one where none of the two sectors appears to generate enough research activities to generate working groups within the local LATP. In Brazil, interest concentrates more in the side of embedded systems, where previous experiences of cooperation with Europe have been carried out in the framework of previous FP6

projects. Photonics is right now of high interest in Brazil and Mexico. Expressions of interest towards the theme have been gathered also in Argentina, but for the time being it has been felt that the creation of working groups should focus on more "mature" areas. Argentina is also the only country indicating the intention to form a Nanoelectronics working group.

Although at least three out of five countries have a well defined development policy related to Satellite technologies and applications, in none of the countries under exam Satellite Communications have been proposed for the creation of ad hoc working groups for R&D promotion. This has probably to do with the fact that due to the tight links with governmental policies and very often with state owned enterprises, the area is very promising in terms of R&D activities, but these tend to be concentrated in the hands of a relatively small group of stakeholders, which may not justify the creation of dedicated working groups. However, since Satellite Communication is a relevant area for Argentina, Brazil and Mexico, the project has committed to promote also cooperation in the SatCom field even if no Working Groups are created at this initial stage.

### *The basics of LATP, country by country*

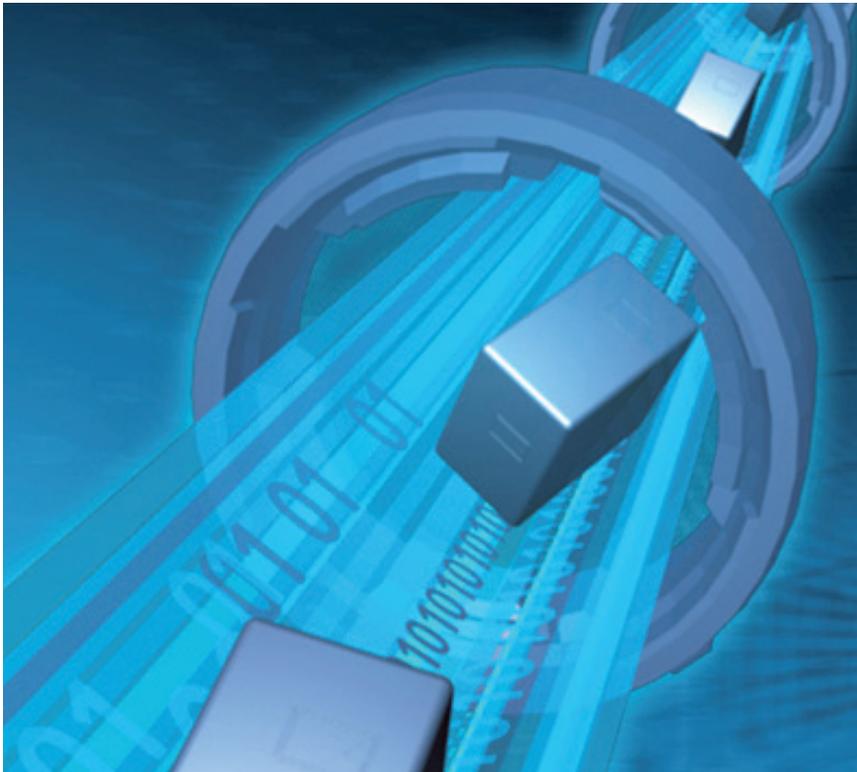
Argentina will start with a crowd of little more than 60 organisations, with a high density of public research centres and SMEs (especially in the software and services area). LIFIA, the Research and Training Lab for Advanced Informatics should take the lead

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of two working groups on Embedded Systems and Networked Electronic Media. Another public entity, the CNEA (National Commission for Atomic Energy) is designed to coordinate work in the nanoelectronics area whereas private companies will be in charge

Photonics department of the Institute for Advanced Studies in Sao José dos Campos. It is interesting to note that several multinational companies with large research centres in the country should be involved in different working groups and take part in

Focus seems to have been the guiding principle in the setting up of the LATPs in Colombia, where attention is concentrated on three areas, Mobile and Wireless, Software and Services and Networked Electronic Media, all areas ripe for highly customised applications in which SMEs could play a leading role. Networked Electronic Media has a relatively large community (though the smallest in Colombia) with 19 proposed members, probably an effect of the work done in the last years by the SALA MAS project that has already developed the concept of Strategic Research Agenda related to the NEM sector. Its working group will be coordinated by Telmex. The Mobile Communication working group will be led by Comcel, whereas a strong private company operating in several Latin American countries, Aranda Software will guide the WG on Software and Services.



of working groups related to Embedded Systems (Grupo Tekné), Smart Systems (Open Sol) and Software and Services (G&L).

Brazil accounts right now for 54 initial members distributed into five working groups. The most populated ones are the Software and Services (where the density of SMEs is higher), with 24 members, led by the University of Brasilia, and the Mobile Communication, under coordination of the University of Sao Paulo with 17 members. Brazil is so far the only country to have chosen to set up a working group on Photonics, coordinated by the

the platform Steering Council, Telefonica, Thales, IBM and Motorola among others.

The overall membership in Chile starts from a core of 42 organisations, an excellent result taking into account the size of the country. As in most other cases, the area that has gained more interest from the research community is Software and Services, with 29 proposed members, to be coordinated by the University of Santiago. The steering council is at the moment still in its definition phase with attention to balance the presence of academia, SMEs and the large industry.

With four proposed working groups, Mexico is the country that will initially involve in its TP the highest number of organisations. The Software and Services WG, led by Softtek counts 69 members, the smallest one, with 31 members is the one on Embedded Systems led by the Universidad Autonoma de Queretaro. The establishment of the national TP in Mexico has been strongly pushed at the level of different states and this also explains why so many members are already on-board. At least 3 Mexican owned large companies are also involved at Steering Council level.

Activities in the future weeks and months will provide each LATP with internal governance rules and bodies, a step ahead toward the transition to a full operations regime.

# Cooperation in Chile and Argentina

## *FIRST contributes to the team building in Argentina and Chile*

Argentina and Chile are experiencing different ways of contribution for setting up the National Technology Platforms. From a general point of view, both countries are aware of the great potential that a Technology Platform Structure may have in the development of ICT R&D and in the cooperation with European Union. This "awareness" is not casual since last May, in the context of the EU-LAC Madrid Summit, it was agreed an "EU-LAC Knowledge Area", where fostering cooperation in research was a main issue ([http://www.latin-american-technology-platforms.eu/uploads/First\\_To\\_know\\_02.pdf](http://www.latin-american-technology-platforms.eu/uploads/First_To_know_02.pdf)).

In Chile, beyond the engagement of the government in FIRST, the three FP7 projects that are running in the country are working very closely. The projects are:

FORESTA (ProteinLab UTEM) and Pro Ideal Plus (ADI CHILE). This is reflected in monthly meetings that gather representatives of the three projects and representatives of CONICYT. This initiative was proposed by CONICYT (Comisión Nacional de Investigación Científica y Tecnológica) specifically, by the Liaison Office in Chile ([www.chiep.cl](http://www.chiep.cl)), which aims at promoting the opportunities of cooperation between Chile and the European Union.

The first time the four organizations (CONICYT, ALETI, ProteinLab UTEM and ADI Chile) met was in the FIRST project launching event held at CORFO premises on April 22nd. Since then, Chilean FP7 projects and CONICYT are working together in order to avoid overlapping and to increase the impact

and efficiency of the projects. From a general perspective, this shows great commitment, not only from the Chilean Partners, but also the government.

The case of Argentina is different. The National Ministry of Science, Technology and Productive Innovation was highly interested in participating and learning about the Technology Platform concept, its benefits and how to implement it in the country. As a matter of fact, the National Agency will actively participate in one of the work packages of the FIRST project.

Members of the Argentinean and Chilean Platforms will attend ICT 2010. Organizations that have interest in setting meetings for networking please contact Mrs. Silvia Bidart ([silviabidart@aleti.org](mailto:silviabidart@aleti.org)).



**Foresta and First:** Hector Torres (FORESTA), Silvia Bidart (ALETI), Andrea Ordenes (FORESTA), Luz Ledesma (ALETI), Hugo Durney (FORESTA) and Luis Stein (ALETI). Meeting in Chile.

## Opportunities for ICT projects in Brazil

In the very beginning of the FIRST project, it was already clear that Brazil would present one specific difficulty where Technology Platforms were concerned: the concept simply does not exist in the country. However, it was possible to conduct all the necessary research by relating each European Technology Platforms to the specific research fields, and the collection and analysis of data allowed for the identification of the most promising areas: Software and Services (NESSI), Wireless Communications (eMobility), Photonics (Photonics 21), Embedded Intelligence and Systems (ARTEMIS) and Networked and Electronic Media (NEM).

### Software and Services

The first two areas are the most developed in Brazil. The Software and Services market in the country is growing up, and is mainly formed by SMEs. Also, the quality of the product could be equated with those in India and China. However, the Brazilian software is mostly aimed at the internal market, and only about 0.002% of the total is generated by exports. These numbers show an incredible potential for development, especially considering that the national ICT policy specifically foresees investments in SMEs related to the area. The objective of the current ICT policy is to increase exports to US\$ 3.5 billion in Software and Services (Source: [www.itweb.com.br/noticias/index.asp?cod=47865](http://www.itweb.com.br/noticias/index.asp?cod=47865) accessed on Aug 27, 2010).

This interest on exports of Brazilian software shows that this is a prime time to begin and support ICT cooperation projects in the area. Companies concerned with marketing their software in other countries have a higher chance of welcoming in-

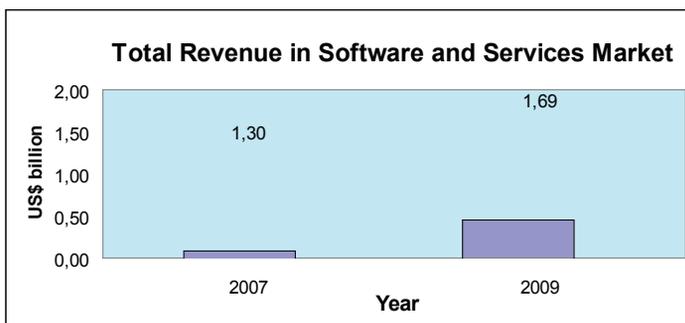
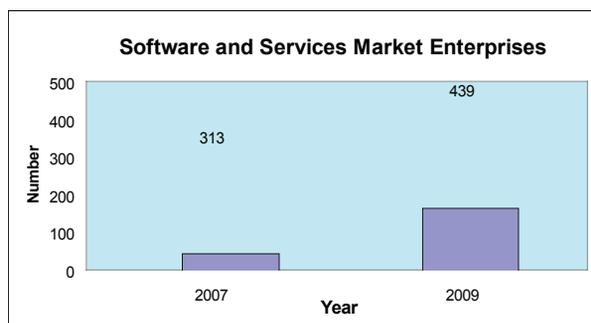
ternational cooperation, which provides them with a great place to begin exporting and also an international perspective. The emphasis on exports also make research facilities more inclined to adhere to international cooperation.

From the graphics, it can be observed that, even in a short period, the number of enterprises in the software and services market have had a significant growth of 40.3% and that the revenue increase was 29.6%. These figures show the great potential that software and services market in Brazil presents.

### Wireless Communications

On the Wireless Communication and Telecom sector, the scenario is not much different. Telecommunications in Brazil is a US\$ 75 billion (EUR 58 billion) market, while the sales of Telecom equipment accounts for US\$ 4 billion (EUR 3 billion) alone, according to the Ministry of Science and Technology. The Institute of Applied Economic Research (IPEA) points out that investments should reach US\$ 38.3 billion (EUR 29.8 billion) in the next four years, most of which is expected to be invested in the expansion of the 3G mobile network and broadband. This projection only considers the private sector, leaving out the US\$ 7.4 billion (EUR 5.7 billion) that the federal government intends to spend until 2014 with the implementation of the National Broadband Plan (PNBL) and other smaller, but still significant, investments in the area, such as digital inclusion programs.

What the above-mentioned data shows is that this particular sector is growing a lot faster than others and has a tendency to continue on the same path,



Source: Reports 2007 and 2009 of the Secretary of Informatics Policy of the Ministry of Science and Technology

given how much room there is to expand. Therefore, international cooperation projects should find fertile ground to prosper in this scenario.

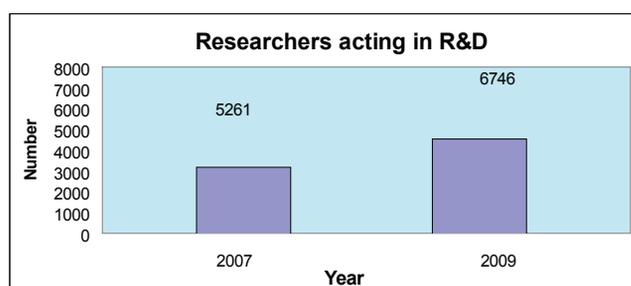
While the other three areas mentioned are much smaller than Telecommunications and Software and Services, they still have a large potential for ICT cooperation projects.

### Photonics

Brazil can be considered one of the advanced research centers on Photonic Crystal Fiber, a growing field in Photonics. A cooperation project in this field would mean that Brazil can help disseminate this state-of-the-art technology while keeping itself as competitive as possible in the area. There are also many research facilities and initiatives in the area, both government and privately funded, indicating various possibilities for international cooperation projects. Despite the market for Photonics technology in Brazil being still very small, the amount and state of research indicates that the country would greatly benefit from international cooperation in Photonics.

### Embedded Intelligence

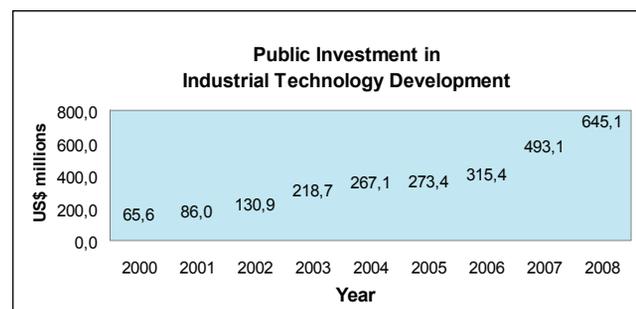
The Embedded Intelligence and Systems is a research theme present in most universities and research facilities. The area is still developing in Brazil, but in spite of that, or even because of it, the potential for joint research efforts is enormous. R&D institutions have developed partnerships with industries looking not only to develop new technology but also commercialize it. In the industry segment, there are many companies that provide equipments for important sectors, such as the automobile and aeronautics industries.



Source: Reports 2007 and 2009 of the Secretary of Informatics Policy of the Ministry of Science and Technology

### Networked Electronic Media

The last area to be mentioned is Networked and Electronic Media. The Digital TV standard is based on the Japanese standards, but uses different audio and video compression, making it more modern and involving the development of the system in Brazil, with the help from Universities. The Brazilian DTV standard also allows for HD transmission of audio and video, and mobile devices for watching DTV are already available. The open source middleware allows any company, that interested in research and develop new interactive content, to participate in this growing market.



Source: <http://www.mct.gov.br/index.php/content/view/9134.html>

From the graphic above, it can be observed that the number of researchers dedicated to R&D in ICT has grown by 28.2%, in a just a few years. It indicates that the investments dedicated to prepare researchers in ICT area is crescent, what means that the sector is expanding and creating many opportunities for partnerships.

The public investment in industrial technology development, beyond the private investments, grew up ten times from 2000 to 2008, as show in the graphic below, pointing out the growing importance of R&D in the country.

Both the government and the private sector have the perception that R&D is the best way to expand knowledge and markets. This acknowledgment, combined with the fact that technology is a field which greatly propitiates the international cooperation, causes the ICT cooperation projects to be encouraged to flourish in the country.

## **Innovation: One of Colombia's engines for economic growth**

On August 7th 2010, Colombia's President Juan Manuel Santos restated during his Inaugural Address the five "engines" that will pull forward Colombia's industry, commerce and services and that will boost Colombia's economic growth: Infrastructure, Housing, Mining, Agriculture and **Innovation**.

**Innovation** is Colombia's key strategy for promoting scientific and technological research and innovation. President Santos outlined the need to increase Colombia's investment in science and technology through reforms such as allocating 10% of royalties among others to science and technology projects.

Innovation would be supported by strengthening the alliance between Industry - Government and Academia and the development of a National Innovation Plan.

However, Innovation is not a new term in Colombia's lexicon. Colombia continues innovating with successful initiatives.

### **Cartagena grows through innovation - La Boquilla Living Lab**

La Boquilla is a town located in northern Colombia, on the coast of the Caribbean Sea, with very low level of income and poor living conditions. La Boquilla's estimated population of 16,500 inhabitants is principally engaged in activities such as fishing, handcrafts and tourism.

Since 2005 Foundation Proboquilla and CINETEL are leading a project to foster innovation for community building through the use of Information Technology and Communications Technologies to improve the quality of life in health, education, and productivity of the population of *La Boquilla*.

During 5 years, this community has been able to access technology thanks to donations and contributions of important national and international telecom companies, computer manufacturers, universities, Colombian Government, non-profit organisations, among others.

The activities developed by the project have resulted in a decrease of 2% in poverty level, and have led to 48% of Internet users in the community and 65% of PC users in 2009. These figures reflect a wide impact provided where there was nearly no technological access or ICT related activity in the community before the project started.

In 2010, this Living Lab was successfully accepted to be part of the European Network of Living Lab



CINETEL

(EnoLL). It was also awarded with Colombian ICT Innovation Award by the ICT Ministry and Colombia's Caribbean Observatory. *La Boquilla* Living Lab is currently expanding its area of influence by linking more communities of similar conditions in other areas of the city of Cartagena, contributing to Cartagena's growth through innovation.

### **ANKLA**

On September 1st 2010, Colombia opened its Advanced Knowledge Networks Lab (ANKLA), an open laboratory for R&D&I in technology and new generation services (NGN), aimed at generating synergy among different ICT actors as operators, technology providers and academia.



CINETEL

ANKLA is aimed at providing a suitable space for research groups to test their applications and services in the area of NGN, for developing new products and services and providing training in new technologies and technical assistance to projects involving these technologies.

ANKLA will also provide the technical conditions for generating

recommendations for the adoption of international and national guidelines that may provide technical input to policy-making bodies in the country.

ANKLA focuses on Technology Management and Deployment, Update of technological and regulatory framework, Training, R&D&I, and Entrepreneurship. It is aimed to benefit Academia, Service Providers, Government and Citizens through the promotion and development of critical mass of knowledge in next-generation technologies, the promotion of competitiveness, improvement of access to ICT, as well as business opportunities in order to achieve Colombia's ICT sector leadership in Latin America.

### **Tecnoparque Colombia**

*Tecnoparque Colombia* is a network led by SENA – Colombian National Learning Service for the promotion of human talent, with commitment to technological development, innovation and entrepreneurship in Colombia.

This network offers free tools, infrastructure, advice, expertise and support for the development of new products and services that can be consolidated into new businesses or business lines, enhancing productivity and competitiveness through the development of joint activities and projects.

*Tecnoparque* currently links seven technological nodes in different cities throughout the country: Neiva, Bogotá, Manizales, Medellín, Pereira, Rionegro and Bucaramanga,



The technological areas in which the network focuses are virtual technologies, electronics, product design, biotechnology, agribusiness and corporate support.

In 2009, Tecnoparque counted with nearly 4134 registered projects, 440 active projects by the end of the year and helped with the establishment of 72 new enterprises.

### **COLOMBIA: A land of R&D&I initiatives and results**

Beyond these initiatives, Colombia has many other successful examples to tell. Colombia is seeking for R&D&I projects and opportunities to undertake projects nationally and internationally.

Special efforts will be made in order to establish Colombia's first Future Internet Community. Such a network community will focus initially on the fields identified by Cinte: Mobile and Wireless Communications, Networked Electronic Media and Software and services as a way to implement and foster cooperation between Colombia and the world.

### **About CINTEL:**

The Telecommunications Research Centre – CINTEL - is the Technology Development Centre of the industry of Information and Communication Technologies in Colombia, with wide experience and recognition nationally and in Latin America. CINTEL objectives include: the study and analysis of emerging technology trends and their dissemination and implementation; providing spaces open to all sector actors for discussion and analysis of economic, market, social, political and technology issues affecting the industry development; promoting projects of the sector's interest; promoting the use of specialized technical assistance; and providing information on ICT development in the country and the world.

### **Sources:**

- [1] President Santos' Inaugural Speech. August 7th 2010. Source: El Tiempo. URL: <http://bit.ly/aFkO2S>
- [2] INTERACTIC. URL: [www.interactic.org.co](http://www.interactic.org.co)
- [3] SENA – Management Report 2009. URL: <http://bit.ly/9npXdv>

# eMobility

## *The European Technology Platform for future networks*

eMobility is the European Technology Platform for future networks including mobile and wireless communications as well as fixed networks. The mission of eMobility is to strengthen Europe's leadership in networking technology and services so that it best serves Europe's citizens and the European economy.



Werner Mohr Herzog Uwe

eMobility was formed in 2004 by a group of leading industrial players, including mobile operators, equipment and component manufacturers, and content providers. The major goal was to bring together European organisations to address, as a community, the challenges of future networks, building on Europe's success in mobile communications.

Since its foundation, eMobility has received high interest, and the number of members has been growing to nearly 670 currently, of which 129 are from industry, 252 from the research domain, 257 are small and medium-sized enterprises (SMEs), and 28 are Cooperation members. eMobility supports activities and efficient collaboration aimed at enabling the network community to turn visions into innovations.

### *Evolution of networking technologies*

According to recent predictions, there will be 50 billion mobile devices in the world by 2020. This development offers an unprecedented opportunity for creating new services and applications. Fixed broadband networks provide the backbone of mobile broadband communications. Both types of networks are

complementing each other. Sensor type networks and machine-to-machine communications will get increasing importance, which will require new networking paradigms. Information and communication technology (ICT) will increasingly be applied to solve societal challenges. Energy consumption in communication networks is becoming a major concern. eMobility is undertaking a number of activities in order to support European citizens and companies to benefit from these trends. All eMobility members are invited to participate in the various activities, and many of them use the opportunity to do so.

### *Activities of eMobility*

#### *Setting out a Strategic Research Agenda (SRA)*

The eMobility expert group has defined a Strategic Research Agenda which addresses the future of mobile and wireless communications. This is done both from the technological perspective and from the view of the end user. It shows how the push from technologies can meet the requirements of the applications desired by the end user. This work involves stakeholders from the various application domains in the discussion, e.g. from the health sector, transport, or energy.

### *Organisation of workshops and other events*

eMobility organises a number of events. The main event for eMobility is the annual General Assembly at which members meet and discuss about activities and which also gives a good opportunity for networking among members. Moreover, various workshops are organised, e.g., in the scope of developing the Strategic Research Agenda, or for the coordination of research project proposal preparation. Once a year eMobility organises events in an EU country, often in conjunction with the local eMobility platform as e.g. in Hungary in 2008 and Macedonia in 2009.

### *Influencing European and national research policies*

Another important task is to provide input and feedback to documents and surveys issued by the European Commission, and to organise meetings with EU and national authorities. This is done in order to promote research directions and a positive environment for the mobile communications and networking sector in Europe.

### *Involving eMobility members and supporting their interests*

This is a horizontal activity which goes across the various activities of eMobility. Mem-



bers elect the eMobility Steering Board and, thus, can decide upon who should best represent the community. Members are also invited to participate in surveys, e.g. on their priorities for the SRA and future research topics, or in surveys regarding the specific needs of SMEs. Active contributions from members in the eMobility working groups are always welcome.

### **Organisation and support of the platform work**

The charter of eMobility is defined in a Governance Model. This foundational document defines the major bodies of the platform and its working methods and processes, including the rules for election of the

Steering Board. The various activities of the platform require a substantial amount of administrative support.

In order to provide it, an eMobility secretariat has been set up, which is in charge of membership administration, organising events, producing newsletters, maintenance of the eMobility web, mailing lists, and other tools. The EU financially supports these activities partly through a Coordination Action project.

### **Participate in the activities**

The eMobility platform is open to all stakeholders who are interested in actively participating in the platform activities and to

those who just want to follow activities and get latest information from the sector. Full membership is limited to European organisations, but any organisation worldwide can apply for a Cooperation membership which includes all members' rights except voting and candidature for the Steering Board.

eMobility membership is free. Applications can be submitted through the eMobility website at [www.emobility.eu.org](http://www.emobility.eu.org).

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## Multidisciplinary networking of research community FIRE

On the 1st of July, the 8 organisations from Europe, Brazil, Russian Federation, India and China kicked-off the project MyFIRE in Barcelona. The project was launched on June 1st, 2010 through the 7th framework Programme, under the ICT thematic priority "Future Internet experimental facility and experimentally-driven research". It will last two years and has a total budget of 800.000 Euros. The goal of the project is to increase the benefits of Experimentation in the field of Future Internet Research by: improving the functionality of experimentation, stimulating the use of experimentation and understanding the expected outcomes.

The Internet is much more than a communication system. New and unexpected Internet-enabled applications and services make tremendous use of emerging technologies and at the same time shape new requirements for future ones. New proposals for Internet architectures, protocols and services should not be limited to paperwork, as they need early experimentation and testing in large-scale environments, even though some of these ideas might only be implemented in the long-term.

The FIRE - Future Internet Research and Experimentation -

Project partners	Country
Inno TSD	FR
European Telecommunications Standards Institute	EU
University Edinburgh	UK
Fraunhofer - FOKUS	DE
BII	CN
ERNET	IN
ITMO	RU
Instituto de Pesquisas Technologicas	BR

Initiative is addressing this need, gearing itself towards creating and investigating a multidisciplinary research environment, as well as experimentally validating highly innovative and revolutionary ideas for new networking and service paradigms.

A challenge for FIRE is promoting the concept of experimentally-driven research and joining the two ends of academic-driven visionary research and industry-driven testing and experimentation together.

To make this approach a reality, FIRE aims to create a dynamic, sustainable, large scale European Experimental Facility, which is built by gradually connecting and federating existing and new testbeds for emerging or future internet technologies. MyFIRE aims at optimizing the related processes to increase the overall produced value.

The project will particularly look at three main topics:

- **Research and technology**, by identifying the real needs for testbeds from the researchers and industry communities to use experimental facilities in the future

- **Standardisation**, by identifying standardised methodology and approaches to the use of testbeds, to promote innovation and leverage the research results

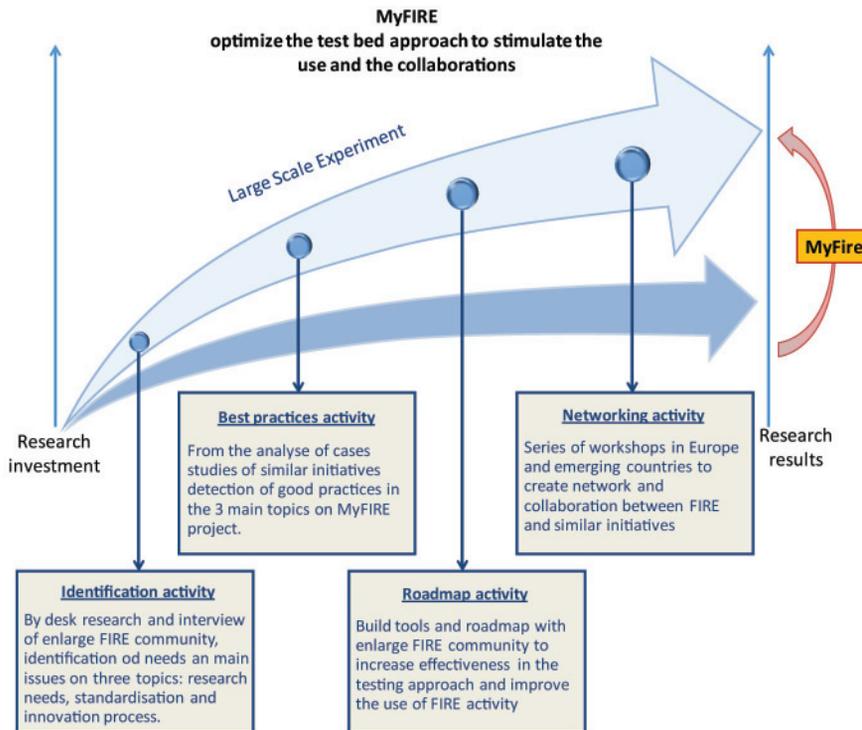
- **Innovation process and social and economic impacts**, by identifying economic costs and benefits and results of using the testbeds for validating research results, and requirements of the business model.

While 2010 will mostly be the data collection phase, preliminary results will be issued from 2011 and publicly disseminated during workshops to be organised in Europe and abroad.

The project MyFIRE will pay a special attention to the development of international cooperation with other initiatives similar to FIRE, especially in the four BRIC partner countries of the MyFIRE consortium.

### FIRE in Brazil

The Future of the Internet has attracted increasing interest in Brazil, a fact verified by the increasing number of initiatives related to the subject. Several initiatives are happening on networking



groups, it is interesting comment about some important networks relation with FIRE scopes.

The SIBRATEC (Brazilian System of technology) is organized in 3 areas: Extension Technological (ET), Innovation Centers (IC), Technological services (TS). It is eight States networks involved directly with Extension technological, it is 53 institutes working on Technological services (TS), and it is more 100 institutions working on 10 thematic networks of Innovation centers area.

The big subject on those networks is the "ICT applied in new digital medias: INTERNET, wireless, and digital TV", into this thematic the future of internet is important discuss.

Other important initiative of Brazilian Government is "Brazilian Funding for Technological Development of the Telecommuni-

cations", FUNTEL. This Funding has the objective: Promote R&D projects aiming at socioeconomic development; National development using convergence technologies; Incentives to develop new technologies to access telecommunication services.

The big network to interconnect several institutes in Sao Paulo, called KYATERA, born with a mission to bring together the expertise and laboratory resources necessary to develop science, technology and Internet applications of the future.

More than 600 researchers from the state of Sao Paulo in various areas of knowledge are working on this challenge together by an optical network with high capacity. Built for research, this network streamlines interactions and serves as a platform for the technology. University of Sao Paulo is involved in one

of the FIRE projects called TEFIS where it provides access to the KYATERA facility.

The 2010 Brazilian Symposium on Computer Networks and Distributed Systems, the most important scientific event in this area, created a workshop dedicated to the Future Internet. In its discussion, one thing was quite clear: there is considerable interest in the interoperability of these different testbeds, allowing the collaboration of partners around the globe. Brazilians institutes receive invitations to participate in testbed projects.

Therefore, in the planning of a Brazilian Future Internet experimental facility, future interoperability with foreign partners is of great importance. It should be mentioned that a couple of Brazilian Future Internet R&D projects are already underway: Horizon and WebScience. Lastly, interest has been expressed at government level in coordinating officially funded projects in the Future Internet area between Brazil and the EU, with a first call expected to be published in 2010.

### About the MyFIRE project

MyFIRE is a project co-financed by the European Commission under the 7th framework program for RTD. Started in June 2010 it will last 2 years. Gathering 8 organisations from Europe, Brazil, Russian Federation, India and China, the project MyFIRE addresses the optimisation of the Future Internet experimentation and the international collaboration. Further information on the MyFIRE project is available at [www.my-fire.eu](http://www.my-fire.eu).

## EU-Latin America ICT Research Cooperation Projects' Common Entry Page



FIRST aims to further improve cooperation between Europe and Latin America focusing on the field of Future Internet, ICT components and systems. The central goal of the project is to adapt the successful concept of European Technology Platforms (ETPs) to the Latin American Region, and launch 5 Technology Platforms focused on Future Internet, in Argentina, Brazil, Chile, Colombia and Mexico, bringing cooperation between Europe and Latin America in the ICT R&D field to a new level.



PRO-IDEAL and PRO-IDEAL PLUS promote the ICT dialogue and support the ICT R&D cooperation between Europe and Latin America through on-line tools (ICT Wiki, training modules, partner search) and face-to-face events (ICT Days and ICT Fora). Furthermore, local "Project Angels" are trained to create a sustainable support network in Latin American countries..



FORESTA The project aims to promote research cooperation between the European Community and Latin America (EU-LA) in terms of Information Technology to identify research opportunities between communities and examine the IT policies in each country to identify the main future complications for researchers (and how to make best use of instruments of support among the communities to avoid such complications).

<http://www.lac-ictgateway.eu/>



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