

MED 7

**Thematic Workshops
for the definition of the S&T Euro-Mediterranean Policy
within the Seventh Framework Programme**

**INNOVATIVE PRODUCTION SYSTEMS AND PROCESSES
A NEW PRIORITY FOR INCO-MED**

Towards a Euro-Mediterranean Innovation Space (EMIS)

Conclusions of the Workshop on Innovative Production Systems and Processes held in
Casablanca, Morocco, 6-7 May 2005

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1. INCO-Med and the Setting up of the EMISUUPP

Up to now, the action of the European Union through its INCO-MED Programmes intended to develop collaborative research capacity addressing the needs of the societies and economies of MPCs in order to foster competitiveness and to exploit the results of scientific research and development. Concrete action plans and projects have led the way for the policies for innovation and competitiveness in MPC and in relation to Europe. The main stakeholders of this policy are the scientific and technological institutions, the enterprises and the regional and local intermediate organizations that promote, enhance and foster innovation and technological development.

The MPCs have actively promoted the transformation of their scientific and technological research structure, strengthen the insertion of the research potential in the international scientific community and intensively promoted RTD activities. Building the national system of innovation in each MPC will be an objective for the near future. The integration of the national systems of innovation into a Euro-Mediterranean Innovation Space appears as a necessary way to reinforce competitiveness and promote sustainable growth in both sides of the Mediterranean basin. It is also necessary to address the issue before the Free Trade Area with the European Union is implemented, forthcoming in 2010. The setting up of a **Euro-Mediterranean Innovation Space (EMIS)** is not only crucial for Mediterranean countries development perspectives, but also for the European Union sustainable growth and development.

In the view of the Free Trade Area with the European Union and of the growing phenomenon of globalization, the Mediterranean Partner Countries are urged to clearly establish a strategy for competition in this new, challenging and probably irreversible framework.

There is a need to identify the key issues related to the improvement of industrial sectors, their scientific and technological capabilities and the institutional set-up that will be the building blocks of the **Euro-Mediterranean Innovation Space (EMIS)**.

The Euro-Mediterranean Innovation Space (EMIS) will be part of the larger policy of the EU in developing an Innovation Policy for Europe and the 7th Framework Programme for research, technological development and demonstration activities. It will also relate to the efforts deployed by the European Union in enhancing its neighbourhood policy with Mediterranean Partner Countries, following the recommendations of the Lisbon process¹.

PT¹ - The Common Strategy of the European Council of 19 June 2000 on the Mediterranean Region (2000/458/CFSP) - Art 1, Art 2, Art 3.

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Proposal for a DECISION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL concerning the seventh framework programme of the European Community for research, technological development and demonstration activities (2007 to 2013) Brussels, 6.4.2005 - (Page 15); (Page 41); (Page 44)

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2. The need for a Euro-Mediterranean Innovation Space

The Mediterranean Partner Countries and the European Union are engaged in a common economic and political future. Innovation as a strategic priority for development and sustainable growth is at the core of the forthcoming public policies, in developed as well as developing countries. It will be a priority in the EU, and it is an urgent need for Mediterranean Countries. The establishment of a coherent, coordinated and long term oriented Innovation strategy can be a powerful engine for catching up for Med Countries. The development of Med Countries is a necessary condition for the EU sustainable growth and development.

The EU and the Mediterranean countries share a common destiny and common competitive challenges: the promotion of an innovative capacity to compete at the global scale, the development of a long-term capacity to create new and better jobs, the setting up of a socio-economic environment providing citizens with better quality of life. In this context, the building up of a **Euro-Mediterranean Innovation Space** is the necessary step to be done, in the view of the achievement of those objectives. Only through the development of an effective and durable innovative capacity, based on local strengths and assets, which will certainly be specific for each country, a system of innovation can be built up. And only through the interaction, the coordination and the integration of these systems into a **Euro-Mediterranean Innovation Space** the EU and the Mediterranean countries will be able to implement a common strategy addressing common interests.

Policy actions are needed in order to:

- create pre-conditions for the development of Innovation Systems, paying special attention to the role and quality of the Intermediaries, acting as catalysts for all the other stakeholders;
- provide “intelligence” and timely recognition of emerging opportunities;
- exchange knowledge in form of shared experiences, research and technological development cooperation, human capital mobility;
- improve the quality of governance;
- help building an environment conducive to Innovation;
- create conditions for networking, public-private partnerships and international cooperation;
- help improve the absorptive capacity of research and industry in mature sectors;
- promote the development of common standards and regulatory norms to meet international standards.

In this period, when the Mediterranean Countries are showing a growing interest and better understanding of the opportunities offered by cooperation with the EU, and when Med Countries Governments are stressing the importance of their relationships with the EU, it is the moment to strengthen the participation of their industrial sectors in the programs and priorities defined by the FP7 and to implement well targeted, specific and decisive actions that in the near future will generate the benefits pursued by both parties during all the latest years.

3. Characterisation of the current situation

In the EU we have 25,3 million non-primary private enterprises, 99.8% of whom are craft and SMEs. Crafts and SMEs employ more than 53% of Europe's workforce and are responsible for half of Europe's total turnover. SMEs and craft enterprises are therefore the rule in Europe and not the exception, being a key source of jobs and a breeding ground for business ideas. They are the main driver for innovation and employment creation, as well as for social integration. This situation is similar, in some respects, to the one that prevails in Mediterranean Countries, since SMEs are the “backbone” of local economies and the potential for the creation of an innovation system.

The focus of public policies for innovation and competitiveness must be, on the one hand, the creation of the best possible environment for SMEs that want to compete in a global view with world standards, on the other hand, the provision of the right instruments to access to EU knowledge, EU-Med cooperation and funding. This is why instruments specifically dedicated to SMEs may represent very useful tools, for these economies in the future INCO-Med activity in FP7.

The most relevant problems that Med Countries face with, in view of the setting up of an innovation system, are:

- Poor “culture of Innovation” among SMEs.
- Lack of entrepreneurship and innovation in the education system and curricula. Most of the SMEs staff is still composed by semi or unskilled part-time personnel. Need for continuous education and training.
- Lack of partnership between R&D centres and SMEs (interface industry/research). Research is performed, but not “absorbed” by the local economies. Insufficient awareness among experts of the actual and potential needs of SMEs. Lack of interest in R&D from the private sector and especially SMEs due to scarce awareness of the impacts and potential benefits of research results in respect to the challenges, legal, technological and societal that they face with.
- Lack of common standards and regulatory norms. Insufficient quality control systems.
- Lack of cooperation between R&D activities of North and South MED
- Value is not added in many South-MED countries industrial sectors. The paradox of using high quality raw materials for low quality products. Insufficient design and testing capabilities.
- Lack of forecasting (analysis of future trends and opportunities). Lack of appropriate programs concerning prospects for innovative processes and novel products.
- Most of production systems and management are traditional ; Continued reliance on the traditional technological schemes and local market
- Redundancy of research topics in the academia;
- Lack of a well developed IPR system.
- Lack of research infrastructure; insufficient access to ICTs; low technology capacity within SME's.
- Dependence on imported technology ;

4. Proposals for an Action Plan

The proposed methodology for an action plan to foster Innovation and Competitiveness in Mediterranean Countries consists of four ensembles:

- Actions for the building of national innovation systems, in view of the establishment of a Euro-Mediterranean Innovation Space
- Key industrial and economic sectors identification
- Financial and cooperation instruments
- Technological and innovation awareness and dissemination of information

4.1 Building the system

Main actions to be implemented at a National level, preferably with the support of EU knowledge and expertise, have been identified:

- Develop a culture of Innovation. Invest in education, development of education programs to promote entrepreneurship and innovation. Train human resources within SMEs to a better dialogue with research centers.
- Incentive SMEs to hire educated young experts. Continuous education of technical personnel.
- Introduce and diffuse an entrepreneurial spirit into education.
- Training of experts able to deal with international (and EU in particular) opportunities for innovation. Development of management capabilities.
- Shift from a traditional view of the innovation process as a linear one, with R&D activities like only input, to a systemic approach, considering all the relevant functions and activities as potential generators of innovation, and knowledge as the main object of the interactions. Better understand the links between Research and Technological Development and Innovation.
- Favour access to knowledge sources and database relevant to particular industrial sectors.
- Promote quality control systems to meet international standards.
- Strengthen the linkages between R&D centers of North and South MED and also South-South. Promote cooperation and exchange of best practices between intermediaries (both North-South and South-South). The role and methods of intermediation could be itself an issue of research to be supported by the EU.
- Invest in ICTs in order to embed them in the production system; and create, develop and use IST tools and infrastructures for communication and interaction among SMEs (e-business) and opt for open sources (software and hardware) and platform development tools.
- Share the successful technology incubators experiences across countries in order to develop innovative enterprises; develop more incubators; establish networking between regional researchers and industry and make use of the existing organisations (i.e: R&D Maroc and LIRA : Lebanese Industrial Research Association).
- Create high quality research centres and promote collaboration through sharing of these resources; Regional Mediterranean centres/networks of quality including universities, research centres, SMEs, and industry.

- Mobility of scientists, especially SMEs/industry to universities and research centres; Dissemination of expertise and know-how. Marie Curie grants for priority issues of the Mediterranean countries.
- Taxation policies designed considering their potential effects in stimulating innovation
- Establish and support national offices for innovation and develop a Mediterranean strategy for research/development/innovation through coordination of national initiatives.
- Follow up these measures by means of a EUROMED INNOVATION OBSERVATORY.
- Provide more information about trends and perspectives: benchmarking (also with other countries), technological roadmaps, company diagnostics and surveys, technology forecasting.

4.2 Key sectors identification

The nine themes identified for the Cooperation by FP7 are to be considered for specific cooperation actions with the Med Partner Countries (pag15) in coordination with the provisions of the “People” and “Capacities” part of the Framework Programme covering the needs of SMEs of these Countries.

Moreover some specific sectors not explicitly covered by the FP7, but extremely relevant and strategic for Med Countries sustainable development should be considered (i.e: Textile and Leather industry; Extended concept of Cultural Heritage to new sectors such as traditional food; Mineral resources management).

In analysing the field, it will be important to: know and analyse the key sectors with the best potential for job creation and for competing at least at a European scale. Identify key actors, establish relationships with them, understand them and their heterogeneity, identify and organise their common needs and interests in the view of innovation and broad competitiveness. Such an action will determine the priorities for economic public policies, in a bottom-up approach. The common and relevant interests of the actors of the system will act as glue keeping together the critical mass of actors involved in the process.

Innovation will be important in all industries, from high to low tech. Policy makers must not be seduced by the *glamorous* industries. A big effort should be oriented towards the building up of the most durable and value-adder asset with the objective of strengthening the attractiveness of the local activity sector and of the local economy to foreign knowledge and investments.

4.3 Instruments of action

Co-operative and Collective Research Projects, funded by the EU Framework Programme for RTD, are the best example of this strategy, trying to involve in the same project SMEs and research institutes, universities, research laboratories, research companies, etc..., which should finally generate new and economically useful knowledge, at disposal of the SMEs and research institutes.

Actions to be implemented could be:

- Defining instruments for actions: SSA to support the building of the Euro-Med Innovation Space; grants, projects funded by bilateral and multilateral international cooperation, networks, FP CRAFT projects, to perform the research activities linked to the industrial exploitation by SMEs.
- Providing financial and fiscal instruments. In a first stage, being aware that an effective innovation-friendly fiscal environment cannot be created easily, taxation policies should be designed considering their potential effects in stimulating innovation.
- Benchmarking with foreign competitors will help develop that global view which allows local actors to learn from best practices, tend to excellence, and compete at an international level.
- Enhancing and making the most of International Cooperation with specialised organisations from EU Member States supporting Innovation and Competitiveness of SMEs.

4.4 Increasing Awareness and dissemination

The last, general, crosscutting ensemble of policy measures to be realised towards the creation of a valid and solid innovation system, is constituted by the following actions:

- Develop a local “culture of innovation”. Develop slowly but firmly a vibrant environment and common awareness of the importance of innovation and competitiveness for the human wellbeing of population.
- Develop organisations able to act as Intermediaries. Improve the quality of the existing Intermediaries. Promote their action by engaging all the relevant stakeholders in a dialogue aimed at creating framework conditions conducive to entrepreneurship.
- Show the opportunities that economic dynamism can offer to improve life conditions.
- Foster emulation and imitation of best practices, as a way for strengthening positive values in the society.
- Encourage networking and cooperation among firms and research institutes, mostly using as a reference and a practical tool, in a first stage, European Programmes.

5. The Normative Frame

The Common Strategy of the European Council of 19 June 2000 on the Mediterranean Region (2000/458/CFSP):

Art 1. The Mediterranean region is of strategic importance to the EU. A prosperous, democratic, stable and secure region, with an open perspective towards Europe, is in the best interests of (...) Europe.

Art 2. The Mediterranean region continues to be faced with political, economic, judicial, ecological and social challenges. (...) the EU and the Mediterranean partners must work together with a common vision, sensitivity and mutual respect.

Art 3. The EU's Mediterranean policy is guided by the principle of partnership (...) actively supported by both sides. The EU will work with its Mediterranean partners to: develop good neighbourly relations; improve prosperity; eliminate poverty; promote and protect all human rights and fundamental freedoms, democracy, good governance and the rule of law; promote cultural and religious tolerance, and develop cooperation with civil society (...). It will do so by (...) using its bilateral relations to pursue these objectives, and by contributing to the creation of a peaceful environment in the Middle East.

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International co-operation

International cooperation actions under this part of the Framework Programme will be:

- The opening of all activities carried out in the thematic areas to researchers and research institutions from all third countries, with a strong effort to encourage them to seize this opportunity.
- Specific co-operation actions in each thematic area dedicated to third countries in the case of mutual interest in co-operating on particular topics. Closely associated with the bilateral co-operation agreements or multilateral dialogues between the EU and these countries or groups of countries, these actions will serve as privileged tools for implementing the co-operation between the EU and these countries. Such actions are, in particular: actions aiming at reinforcing the research capacities of candidate countries as well as neighbourhood countries; cooperative activities targeted at developing and emerging countries, focusing on their particular needs in fields such as health, agriculture, fisheries and environment, and implemented in financial conditions adapted to their capacities.

This part of the Framework Programme covers the international co-operation actions in each thematic area and across themes. They will be implemented in coordination with those under the “People” and the “Capacities” part of the Framework Programme.

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RESEARCH FOR THE BENEFIT OF SMEs

Objectives

Strengthening the innovation capacity of European SMEs and their contribution to the development of new technology based products and markets by helping them outsource research, increase their research efforts, extend their networks, better exploit research results and acquire technological know how.

Rationale

SMEs are at the core of European industry. They should be a key component of the innovation system and in the chain of transformation of knowledge into new products, processes and services. Faced with an increasing competition in the internal market and globally, European SMEs need to increase their knowledge and research intensity, expand their business activities on larger markets and internationalize their knowledge networks.

Most Member states actions relevant to SMEs do not encourage and support trans-national research cooperation and technology transfer. Actions at EU level are necessary to complement and enhance the impact of actions undertaken at national and regional level. In addition to the actions listed below, the participation of SMEs will be encouraged and facilitated, and their needs taken into account, across the Framework Programme.

Activities

Specific actions in support to SMEs are conceived to support SMEs or SME associations in need of outsourcing research to universities and research centres: mainly low to medium tech SMEs with little or no research capability. Research intensive SMEs who need to outsource research to complement their core research capability may also participate. Actions will be carried out in the entire field of science and technology. Financial means will be allocated through two schemes:

- Research for SMEs: To support small groups of innovative SMEs to solve common or complementary technological problems
- Research for SME associations: To support SME associations and SME groupings to develop technical solutions to problems common to large numbers of SMEs in specific industrial sectors or segments of the value chain.

The Competitiveness and Innovation Programme will provide support to networks of intermediaries and national schemes for actions to encourage and facilitate the participation of SMEs in the Framework Programme.

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ACTIVITIES OF INTERNATIONAL CO-OPERATION

To become competitive and play a leading role at world level, the European Community needs a strong and coherent international science and technology policy.

This international policy has two interdependent objectives:

- To support European competitiveness through strategic partnerships with third countries in selected fields of science and by engaging the best third country scientists to work in and with Europe;
- To address specific problems that third countries face or that have a global character, on the basis of mutual interest and mutual benefit.

Cooperation with third countries in the Framework Programme will be targeted in particular at the following groups of countries:

- Candidate countries;
- Countries neighbouring the EU, Mediterranean partner countries, Western Balkans and the Newly Independent States;

- Developing countries, focusing on their particular needs;
- Emerging economies.

The theme-oriented international cooperation actions are carried out under the “Cooperation” programme. The international actions in the area of human potential are carried under the “People” programme.

Under the “Capacities” programme, horizontal support actions and measures with a focus other than a specific thematic or interdisciplinary area will be implemented. Efforts will be undertaken to improve the coherence of national activities by supporting the co-ordination of national programmes on international scientific co-operation. The overall coordination of the international cooperation actions under the different programmes of the Framework Programme will be ensured.

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The Competitiveness and Innovation Framework Programme (CIP) will bring together into a common framework specific Community support programmes and relevant parts of other Community programmes in fields critical to boosting European productivity, innovation capacity and sustainable growth, whilst simultaneously addressing complementary environmental concerns.

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The CIP will be open for participation to the members of the EEA, candidate countries and countries of the Western Balkans. Other third countries, in particular neighbouring countries or countries interested in co-operating with the Community in relation to innovation activities can participate in the framework programme if bilateral agreements with them provide for this.