

Thematic Workshops for the definition of the Science and Technology Euro-Mediterranean Policy within FP7 – MED 7

FP6 INCO-MED Funded Project

Extension Workshops – Brussels, 15 September 2005

Introduction

The main objective of the MED 7 Project “Thematic Workshops for the definition of the Science and Technology Euro-Mediterranean Policy within FP7” is to provide the European Commission and the Monitoring Committee for the Euro-Mediterranean co-operation in Science and Technology (MoCo) with elements to identify and select in a concerted manner, the most relevant topics and instruments to be tackled within the Euro-Mediterranean S&T co-operation perspectives of the next Framework Programme, as well as the best defined approaches to address these issues.

A set of 5 workshops, and a final synthesis one, were already held, to define main topics of common interest for EU as well as Mediterranean Partner Countries (MPC) in strategic areas:

- Innovative Production Systems and Processes
- Water Risk Management and Renewable Energies
- Public Health
- Agro-Food and Industrial Agriculture
- Preservation of Cultural Heritage

However, the new structure of the 7th Framework Programme forces to identify the remaining topics of common interest EU-MPC that fit the priorities of this FP.

Then, on the basis of MoCo and Commission’s suggestion, an extension of the MED7 project was organised in order to cover most of the thematic priorities presented in the Commission Proposal for FP7.

On September 15 2005 a set of three thematic workshops was held in Brussels, with the aim to complete MED 7 Project and to integrate its conclusions in the remaining priority areas presented in the Commission’s Proposal for FP7:

- Information and Communication Technologies;
- Transport (including Aeronautics);
- Socio-economic research and the Humanities.

The Spanish Council for Scientific Research – CSIC, coordinator of the MED 7 Project, was in charge of the organisation of these three workshops with the collaboration of the MoCo members

Overview of the three workshops

The three thematic workshops highlighted some important suggestions and common indications:

The role of Europe in the world: it seems necessary and useful to promote studies and develop knowledge about third countries, taking into account that what is happening in the EU is affected by what happens outside the EU. Europe must look at neighbour countries. A lot of research emphasises the role of Europe in the world and how Europe influences the rest of the world. But

there is also a need for research on how Europe is influenced by the rest of the world and to fully understand the cultural, social, political, and environmental features of third countries.

Foresight activities appear to be more and more important. Statistics should be harmonised on a regional basis, at least. We need regional indicators, able to explain the real situation. Indicators, consequently, should be built on a context specific base, with a special attention to developing countries, in particular MPC.

In order to support participation of MPC to Standardisation Bodies and support political decision, it seems necessary the establishment of some problem oriented infrastructures, for instance: a Mediterranean Open-Source Platform in order to provide appropriate OSS (Open Source Solutions) to the EU-MPC Researchers' Community. A special case is the establishment of open e-learning platforms (Digital Literacy, Virtual campuses, School eTwinning and different Transversal Actions: eLearning "Designing Tomorrow's Education", DG EAC/BH D(2004)). Another important infrastructure should be the creation of a Mediterranean Transport and Mobility Research Institute, to deal with the important common issues related to transport by all means in both sides of the Mediterranean sea, including the specific Mediterranean climate, cities, transport behaviour and social relations.

An important synergy between ICT and Transport research arises: Information and Communication Technologies (ICT) applied to vehicles and transport infrastructure (Intelligent Transport Systems, or ITS) make possible to increase the productivity, sustainability and safety of the entire transport infrastructure. And vice versa transport infrastructures (as road or railways) offer wide possibility for broadband network, particularly, to reduce the digital divide and the inclusion of the Galileo initiative to transport applications and the opening-up to the Mediterranean Partner Countries.

Social aspects of freight transport, transport workers' rights and commuters were presented as relevant to the two priorities. Improving safety and security were also presented as priorities.

Funded research project in the EU-MPC RTD cooperation within these areas should be focused on what is really relevant, and what is having an increasing relevance. Energy, in its diverse aspects of production, transport and management, should be considered a cross-cutting issue.

A general trend in all European countries is that the State, the Regions, the local authorities are re-focussing now on their basic missions: organise, give incentives, guarantee privacy and security of citizens. As transport sector cannot rely only on market forces there is room for developing Public Private Partnership. Private sector is therefore interested in a range of activities. They can be traditional activities such as infrastructure building and operation or new types of services such as demand responsive transports, traveller information. So Mediterranean Partners Countries have to strengthen such partnership.

The so-called *European Paradox* should be further studied: good science and poor exploitation, which is also, and in a higher degree, a common problem with MPC. How can we approach the fundamental problem, by using social sciences' aid and tools? Social science research should focus on this issue, especially by analysing innovation policies. Main factors affecting innovation and the impact of each of them in different contexts and conditions should be the object of research projects in social sciences. The new focus could be linking science to innovation and specific cultural settings.

In order to avoid brain drain, it seems to be necessary to set up a Euro-Mediterranean Doctorate Schools Network for EU-MPC Research and Innovation, involving the productive sectors for supervising students' careers during their researches and encourage their mobility between education and economic activity.

Information and Communication Technologies

1. Introduction

1.1. General objectives

Opening up the European Research Area to other countries and specifically to Mediterranean Countries according to Barcelona Declaration (1995) in order to build the Information Society from both sides of Mediterranean Sea.

To enable MPC to help drive and stimulate innovation through ICT use and ensure that ICT progress is rapidly transformed into benefits for MPC's citizens, businesses, agriculture, education, industry and governments.

The main goal is share and disseminate knowledge through a wide EU-MPC Network in order to improve co-operation. This should help bridge the gap of the digital divide that exists between the MPC and European countries, and inside MPCs.

The establishment of an Euro-Mediterranean Innovation and Research Space. The use of ICT as development enabler and as a tool to meet these objectives development.

1.2. Targets

- Eliminating of illiteracy and poverty
- Achieve the sustainable development and innovation
- Ensure open and equal access to information and knowledge (e-health, e-learning,...) to all the citizens by guaranteeing an affordable access to the Internet
- Definition of a common open standards policy in order to enhance co-operation and interoperability through ICT networks. At this point, one of the main objectives should be to ensure participation of MPCs to standardisation bodies (W3C, CEN/ISSS, etc.), especially the gap referred to non-Latin languages (Arabic, Hebrew, Greek, etc.)
- Raising awareness about the ICT tools employment
- E-Governance: efficiency, openness and accountability, for a world-class public administration and links to citizens and businesses, supporting democracy.
- Promoting mutual exchange to Mediterranean Cultural Heritage in order to enhance the dialogue and comprehensiveness between cultures
- Building Research and valorisation structures (middleware) linked to the economical sectors

2. Background

2.1. Existing policies: The MPC background and current regional ICT policy development

The 2005 eReadiness rankings published by the Economist Intelligence Unit (http://www.eiu.com/site_info.asp?info_name=eiu_2005_e_readiness_rankings) and the Middle East Internet Usage and Population Statistics (see: <http://www.ictdar.org/>) show that the MPC have diverse characteristics regarding their ICT development and consequently their RTD interests.

Priorities for EU-MPC cooperation in ICT RTD should take in consideration the policy planning work being carried out by regional agencies for economic development. It should seek to establish synergies with the programmes implementing such policies. A partial list of such documents follows:

The UN Economic and Social Commission for Western Asia issued lately the following documents:

- Regional Plan of Action for Building the Information Society
- Regional Profile of the Information Society in Western Asia (180 pages)
<http://www.escwa.org.lb/wsis/reports/main.html>
- Higher Education: Enhancement of Quality Assurance and Institutional Planning in Arab Universities + Arab Human Development Report
<http://www.ictdar.org/newsletter/index.htm>
- Workshop on Novel Telecommunication Technologies for Socio-Economic Development - Beirut, 11-13 July 2005
<http://www.escwa.org.lb/wsis/meetings/11-13july/main.html>
- The ICTDAR – UNDP ICT for Development in the Arab Region work plan (<http://www.ictdar.org/workplan2005.htm>) include the following services: ICT Awareness raising; Pro-poor growth and employment generation; Capacity development and strategy implementation, and Dynamic Poverty Reduction Interventions
- The ICTDAR – UNDP is implementing the following projects (**see:** http://www.ictdar.org/ICTDAR_projects.htm):

ICT for Small and Medium Enterprises (SMEs) ; Community Access Centers; Regional e-Government institute; WRCATI - Promoting the rights of women and children through the use of ICT
- EUMEDIS connection (<http://www.eumedis.net>)

2.2. Current situation

The first question we have to ask is: where MPC stand on with regard to Information society criteria. Many experts stress on the ICT “leapfrogging” effect. From an analysis of MPC needs through the last 15 years, we find, despite the great efforts done by some of them, that there are still many obstacles in different MPC countries that hamper the integration to the Information Society; these include:

1. a lack of measurement of ICT indicators telling where each MPC stands with regard to Information Society and Knowledge Society targets,
2. a lack of an enabling environment having adequate communication access and Broad Band connectivity for ICT services at affordable prices,
3. a lack of a regulatory framework environment that is supportive of ICT entrepreneurship and that promotes the mobilization of domestic resources;
4. a public sector suffering from weak human resource capacity (knowledge) in using ICT that hampers the modernization of public services and administrations,
5. a lack of supporting "scaling-up" of ICT-based pilot programmes,
6. a lack of supporting local producers, programmers (creativity actors) and small businesses in the applications and content fields. The definition of an EU-MPC common open-source resources (open software tools, open standards and interoperability) policy and strategy by the implementation of a technological platform will help to this point.
7. a lack of supporting ICT small business incubators,
8. the inexistence of ICT applications and content aimed at customers, communities and local institutions in MPC.
9. a lack of sustainable digital Arabic content industry that produces content and applications suited to local needs. To augment research and development in Digital Arabic Content (DAC). The definition of a EU-MPC common policy and

strategy by establishing a network of research centers/institutions to adopt and set Arabic digital linguistic standards and technical specifications will help to this point and will promote research and development in automatic Arab language processing and collaboration.

10. In some MPC, the constraining regulatory context does not ease the introduction of new actors in ICT, especially SMEs.
11. In addition, public structures and bodies have relatively poor means and expertise to manage big European projects in some MPC.

3. Expected impact of this report in the EU and MPC (corresponding to European Research Policy -FP7)

Due to the main above issues related to ICT and MPC it should be necessary to keep the Mediterranean presence into the Framework Programme in the same proportion both in projects as well in budget.

Increasing the MPC participation into FP7 taking into account the following expected impacts:

- Enhance the MPC capacity to face the challenge especially with support for administrative, management and organisation tasks
- Effectively create an EU-MPC Network in both Research and Innovation Areas
- Stimulate an active participation of new MPC actors (Universities, SMEs,...) in the FP7. The establishment of the new Information National Points of Contact must be directly from these involved actors.
- To create the appropriate tools for evaluating the actions engage (level of participation, etc.) to guarantee their effectiveness

4. Scientific topics and priorities

Key concepts about technology and development referred to MPC include the following:

To establish the appropriate Technological Platform based on ICT tools in order to build an EU-MPC Excellence Centers Network in order to provide solutions to:

- ICT Internationalisation – Semitic Languages (Arabic and Hebrew):
RTD for Internationalisation of ICT, with a particular emphasis on Semitic languages, should be a priority for EU-MPC International Cooperation in the FP7. The common interest of the MPC in this matter creates an unique opportunity for EU-MPC cooperation (Natural Language Processing with speech input/output command functionalities, optical character recognition (OCR) and full indexing techniques).
- Contents creation and delivery taking into account the above referred language specificities especially that it is directly related to e-content development which is the driver for the Information Society development.
- Semitic languages written from right to left pose challenges in Characters, Fonts, Language, Text formatting, Bidirectional text, Resource identifiers, Locale specific data, Forms, Structure & metadata, Display issues. The Internationalisation of the Speech Sintesis to include these languages will have an strategic long term role due to the rates of illiteracy in the region. Arabic Natural Language Processing with speech input/output command functionalities, Arabic optical character recognition (OCR) and Arabic full indexing techniques are other priority areas.

- Multi-purpose community tele-centers in order to stimulate the internal development and participation of MPCs
 - Open, InterOperable and market driven standards; Open Source Solutions (OSS) Applications for private sector and commercial use in SMEs, Research and Education Institutions. Establishment of a Mediterranean Open-Source Platform.
 - Connection with other sectors (business and industry) applications
 - ICT meeting societal challenges (health, inclusion, mobility, government...). Special attention should be paid here referred to e-health initiatives (telemedicine, virtual hospitals,...) as well the inclusion of the disease prevention (TB,HIV), early diagnosis (gender issues: mammography, ...) and personalization (consanguinity)
 - Development of ergonomic and human interface devices and systems
 - Manufacturing: rapid and adaptable design to provide competitiveness into the global market
 - To create the open Knowledge Bases based on GIS (databases, timetables, connection, map) in order to enhance EU-MPC cooperation
 - Low cost devices and systems for dissemination
 - Development of remote sensing applications for mine-field removal and environmental monitoring
5. Modalities and Instruments for participation for INCO MED countries in International Co-operation actions:

5.1.Cooperation

In Page 3 of the “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) COM(2005) 119 final it is written:

“Cooperation: Support will be given to the whole range of research activities carried out in transnational co-operation, from collaborative projects and networks to the coordination of research programmes. International co-operation between the EU and third countries is an integral part of this action”

In this way, Information and Communication Technologies (ICT) will be the enabler to drive such cooperation specially oriented to MPC. Also, this is reflected into the budget assignation in FP7 “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) COM(2005) 119

5.2.Ideas

At this point, it should be considered the relationship between the future European Research Council (ERC) and the MPC Researchers’ Community. MPC should be an active actor in this future institution in order to support investigator-driven “frontier-research” carried out by individual teams competing at the EU-MPC level in multidisciplinary thematic.

5.3. People

- In order to avoid brain drain, it seems to be necessary to set up a Euro-Mediterranean Doctorate Schools Network for EU-MPC Research and Innovation, involving the productive sectors for supervising students' careers during their researches and encourage their mobility between education and economic activity.
- To provide stability in the sense of their further insertion in their original local economical tissue, involving researchers in policy making within national systems.
- Training and expertise for decision makers in ICT in multidisciplinary applications.
- Encourage the exchange of doctoral students through actions including "Marie Curie" and co-supervision of PhD students with financial means to ease their mobility.
- Skills and career development for the sustainable use of ICT assets.
- Deployment of e-learning platforms to support the contents dissemination and quality.

5.4. Capacities

- To guarantee the sustainability of research and education connectivity between the EU-MPC communities (through the Eumedconnect and GEANT projects) and facilitate broadband access to knowledge and digital content.
- To provide a Mediterranean Open-Source Platform in order to provide appropriate OSS (Open Source Solutions) to the EU-MPC Researchers' Community. A special case is the establishment of open e-learning platforms (Digital Literacy, Virtual campuses, School eTwinning and different Transversal Actions: *eLearning "Designing Tomorrow's Education", DG EAC/BH D(2004)*)
- To support participation of MPC to Standardisation Bodies. For example the CEN and CEN/ISSS activities; ICAN; the W3C ; the IETF , IAB and Internet Society; IEEE; mPEG and more. It's necessary to have performant search engine as well. This will call of course on normalization as well as domain naming policy]
- To integrate the MPC actors (Research, Education, Vocational Institutions, SMEs...) of multiple disciplines into the pan-European Grid initiative (EGEE and EGEE-II www.eu-egee.org), by encouraging / adopting appropriate national and regional efforts (such as the EumedGrid project)

6. Increasing Awareness and Knowledge Sharing and Dissemination: Building Knowledge

- Development is based mainly on "knowledge." Science and technology are the main pillars upon which any form of development is based.
- To increase the world availability of scientific knowledge through all possible means is a challenge as well as a new frontier for progress.
- The world's population needs education for a systemic world development to prepare for the new millennium that has practically begun. We need this education now and on a worldwide scale.
- The ICT could be accessed very easily from Mediterranean Partners Countries if the technology is developed to meet this end.

- All this could be a unique occasion to make real progress in many of our communities. In the very near future, the world of electronic communication could become the center of a social revolution for world development if open and equal access continues to be a priority in the formation of the information highway.
- Amplify the place of ICT in the “Science in Society” programme through the main stakeholders participation (not only researchers, but citizens)
- Employment of ICT tools to improve accessibility to knowledge sharing and dissemination through projects of varied group sizes and geographic clusters thus leading to “Communities of Practice”
- Encourage the establishment of “e-learning” and virtual communities in ICT domains for capacity building

**Special Recommendations to the Commissions (if any)*

- Information and Communication Technologies (ICT) applied to vehicles and transport infrastructure (Intelligent Transport Systems, or ITS) make possible to increase the productivity, sustainability and safety of the entire transport infrastructure. And vice versa transport infrastructures (as road or railways) offer wide possibility for broadband network, particularly, to reduce the digital divide and the inclusion of the Galileo initiative to transport applications and the opening-up to the Mediterranean Partner Countries
- E-learning to develop an e-learning industry. Promote research and development with the aim of triggering innovative modalities and teaching and pedagogical methods with a greater impact on learning and MPC society.
- To provide a Mediterranean Open-Source Platform in order to provide appropriate OSS (Open Source Solutions) to the EU-MPC Researchers’ Community. A special case is the establishment of open e-learning platforms (Digital Literacy, Virtual campuses, School eTwinning and different Transversal Actions: eLearning “Designing Tomorrow’s Education”, DG EAC/BH D(2004)), as well to promote the Open, Interoperable and market driven standards; Open Source Solutions (OSS) Applications for use in SMEs, Research, Training and Education Institutions
- Existing initiatives for International Co-operation in S&T in Mediterranean Area should continue to be supported in FP7

Transport (including Aeronautics)

Objective

Based on technological advances, develop integrated, “greener” and “smarter” pan-European transport systems for the benefit of the citizen and society, respecting the environment and natural resources; and securing and further developing the leading role attained by the European industries in the global market.

Rationale

Transport is one of Europe’s strengths - the air transport sector contributes to 2.6% of the EU GDP (with 3.1 million jobs) and the surface transport field generates 11% of the EU GDP (employing some 16 million persons). However, transport is responsible for 25% of all the EU emissions of CO₂, hence the absolute need for a “greening” of the system to ensure more sustainable transport patterns and compatibility with growth rates, as developed in the White Paper on “European Transport Policy for 2010: time to decide”. The enlargement (increasing land surface by 25% and population by 20%) and economic development of the EU present new challenges for transporting people and goods efficiently, cost-effectively and in a sustainable manner. Transport also has direct relevance on other major policies such as trade, competition, employment, cohesion, energy, security and the internal market. Investment in RTD in EU transport industries is a prerequisite to ensure technological competitive advantage in global markets.¹⁹ Activities at European level will also stimulate the restructuring of the industry, including the integration of the supply chain and in particular SMEs.

The research agendas of these European Technology Platforms will be taken into account in the different activities.COM (2001) 370. The European aeronautics industry invests 14% of its turnover in research, the European car industry almost 5% of its turnover; and the EU shipbuilding industry competitive advantage relies exclusively on RTD.

The research agendas developed by European Technology platforms support the need to take a new “transport systems” perspective that considers the interactions of vehicles, transport networks and the use of transport services, which can only be developed at European level. RTD costs in all these fields are rising substantially, and collaborative activity at EU level is essential to enable a “critical mass” of diverse RTD providers to address the scale and multi-disciplinary challenges in a cost-effective way, as well as meeting the political, technological and socio-economic challenges on issues such as the “clean and safe vehicle” of the future, interoperability and intermodality with particular reference to rail transport, affordability, safety, capacity, security and environmental impacts in an enlarged Union. Also, developing technologies in support of the Galileo system and its applications will be essential in implementing European policies.

As well as the strong industry relevance of the themes and activities set out below, the needs of policy makers will be addressed in an integrated way covering economic, social and environmental aspects of transport policy. In addition, support will be provided to respond to existing as well as new policy needs, for example relating to developments in maritime policy.

Introduction: Background

The Mediterranean area has thousands of years of tradition on culture and urban functionality. Also human, social relations and trade, as well as behaviour are specific. The cities, with major mix of activities and a high degree of compactness create an environment that must be studied in a research program, basis to transport system decisions.

Recommended Activities:

COOPERATION PROGRAMME

- *The greening of transport*: reduction of environmental and noise pollution; Development of clean and efficient engines, including hybrid technology and the use of alternative energies and routes/modes for transport applications; end of life strategies for vehicles and vessels; Special attention to rapid rail connections through the north-south natural barriers is required.
- *Increasing time efficiency*: improvement of the efficiency of operating schedules focusing on innovative traffic management systems in line with the effective implementation of transport policy; Research on Airport Operation and Management, as well on Air Transport Improvement; Land and Water Transport Research.
- *Improving safety and security*: as inherent to the transport system, in transport operations related to drivers, passengers, crew, cyclists and pedestrians, in the design of vehicles, vessels, and within the total transport system;
- *Encouraging modal shift and decongesting transport corridors*: development of innovative, inter-modal and interoperable regional and national transport networks, infrastructures and systems in Europe; cost internalisation; information exchange between vehicle/vessel and transport infrastructure; optimisation of infrastructure capacity: In special, growing Infrastructures in Euro-Mediterranean Area : The Euro-Mediterranean traffic should benefit from the increase in transport long distance and the effects of concentrations of flows on axes, where is envisaged significant adjustments of the railway infrastructures such masterly Luxembourg-Spain eco-freight or the new connection Lyon-Turin. So, to ensure the continuity of long distance transport (road, railway, sea and air) towards the Mediterranean Partners Countries the new multimode platforms must be implemented.
- *Ensuring sustainable and safe Mediterranean urban mobility*: innovative organisation schemes, including clean and safe vehicles and non-polluting means of transport, new public transport modes and rationalisation of private transport, communication infrastructure, integrated town planning and transport. Special attention to pedestrians;
- Maintenance, safety and security issues for passengers and freight transport in peripheral locations;
- Establishment of a Mediterranean transport network (road, railway, maritime, aeronautic) and interconnection with the Trans-European Networks, especially on long distances and the natural barriers;
- *Identification of the transport networks* in the Mediterranean basin and interoperability (special attention to the rail mode);
- *Road user behaviour*, especially in relation with road standards;
- *Social aspects* of freight transport and commuting;
- *Social costs perception* (externalities) in the Mediterranean countries;
- *Impact of tourism* on the transport systems;
- ICT solutions adapted to MED conditions;
- *Collection and analysing comprehensive transport statistics* in the Mediterranean countries, in line with the Eurostat standards;

CAPACITIES PROGRAMME

- *Support to the European global satellite navigation system (Galileo): precise navigation and timing services for use in a range of sectors; efficient use of satellite navigation and support to the definition of second generation technologies.*
- *Mediterranean Transport and Mobility Research Institute: research on specific common problems including the connectivity between networks from the two sides of the Mediterranean, cultural behaviour of transport users, etc, and training activities, including the specific Mediterranean climate, cities, transport behaviour and social relations.*

Priority 8: Socio-Economic research and Humanities

In Social Science there should be a stimulus to give up all the universal and standardised approaches and shift to region specific, context specific approaches, in order to really find the factors that favour development. There is a need to develop and produce appropriate approaches for research in social sciences.

COOPERATION PROGRAMME

Social Sciences Indicators should be built on a context specific base, namely the MPC characteristic and cultural context. We find no harmonisation of statistical data in many developing countries, particularly MPC. Statistical offices do not offer a sufficiently organised set of reliable data. On the other side, many specific factors relevant for economic development of third countries, are not captured by global institutions statistics built on standard economic models and approaches for the analysis. Statistics should be harmonised on a regional basis at least. We need regional indicators, able to explain the real situation, and global indicators to check comparable data.

There is a need to conduct further research about the IPR, and ethical issues in the S&T Cooperation.

Foresight activities should be focused on what is really relevant, and what is really relevant now is energy. The Information Society development depends on energy.

Europe in the world: develop studies and knowledge about third countries, taking into account that what is happening in the EU is affected by what happened and what is happening outside the EU. We must look at our neighbour countries. A lot of research emphasises the role of Europe in the world and how Europe influences the rest of the world. But there is also a need for research on how Europe is influenced by the rest of the world and to fully understand the cultural, social, political, environmental and territorial features of third countries.

A lot of research has been about EU role and influence in the world, but most of EU trends are affected by outside: shift and complement the point of view.

How coherent is Europe's role in the world, in terms of development, environmental, and economic policies?

The current energy situation is a good opportunity to connect with citizens because it is having a negative impact on their budget. Energy has a symbolic importance in the history of European integration – the Schuman plan was based on energy. A sort of new Schuman Plan for energy is needed today.

European Paradox: good science, poor exploitation. How can we approach the fundamental problem, by using social sciences' aid and tools? The problem is not only a European one; it is common to most of developing countries. Social science research should focus on this issue, especially by analysing innovation policies. Main factors affecting innovation and the impact of each of them in different contexts and conditions should be the object of research projects in social sciences. Linking science to innovation and specific cultural settings.

In this sense, some topics should be considered in the Mediterranean Area:

- Challenges Facing Knowledge Society: human development Cultural modernization – life long learning – scientific knowledge and scientific culture- professionalization and competitiveness.
- Technology and Society in a Mediterranean environment: problems of technology transfer – technology and development – cultural aspects of technology.

- Environment: environmental ethics – misuse of environment – water issues – environmental and social problems in overpopulated urban areas. Environment and tourism.

CAPACITIES PROGRAMME (Science in Society)

Insist on the capacity of civil society to influence and have impact on politics and research (wto negotiations). New structures for research. There is a need to perform more political research by considering civil society, not only academy.

Role of citizens in the EU: what citizens want from the EU is that it should link its policies more to concrete problems. Conduct research on the role of the EU, to increase citizens' perception of what the EU does well.

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