

Conclusions from the Conference

Towards an Open and Competitive Economy: Examining the Roots of Innovation Budapest, 5th April 2011

The Hungarian Presidency and the Joint Research Centre (JRC) of the European Commission organized a Conference entitled "*Towards an Open and Competitive Economy Examining the Roots of Innovation: Examining the Roots of Innovation*". The objective was to contribute to the EU2020 Strategy by analysing how science can provide socio-economic and policy support to the macroeconomic policies, the structural reform agenda and the employment, education & skills agenda.

Over 120 participants attended the Conference at which decision makers from the National Governments and the European Commission shared experiences on how to define better policy options aiming at promoting innovation and competitiveness at Member State and European level. Member State representatives included past (Belgium), current (Hungary), and upcoming presidencies (Poland, Denmark) in order to assure the continuity of progress resulting from this event.

Minister of State Z. Cséfalvay gave the opening speech to the conference. He started by recalling that the gap in R&D expenditure, particularly by industry, between the EU on one side and Japan and USA on the other is not closing. He pinpointed that such R&D investment gaps are visible not only between the big economic blocks, but more notably also between the EU Member States and their regions. Therefore, in order for Europe to become more competitive, the innovation policies of the EU, the Member States and the regions need to be coherent. Objectives must be realistic and checked against key factors, such as the available knowledge structure, the capacity to attract new and maintain existing capital or the region's absorption capacity.

JRC director general D. Ristori stressed the close link between science and competitiveness, as well underlined in the Lisbon Treaty (Article 179) which calls for strengthening Europe's scientific and technological base. In this context the JRC will encourage all key actors (including undertakings, science academies and universities) in their scientific activities. The objective is to facilitate cross border cooperation in order to exploit fully the potential of the European Internal Market. Scientific activities are often too fragmented. National policies and Union policies should be more mutually consistent and focus on priority areas responding to today's

key challenges, such as energy, transport, environment, ICT, agriculture (including food security) and safety and security.

Governmental representatives from participating Member States (Belgium, Hungary, Poland, and Denmark) described their national innovation system and their experiences. They presented the strengths and weaknesses, as well as some examples of best practice, in the innovation systems in their countries. The view was expressed that the communication channel between the EU institutions and the Member States should be strengthened and that two-directional information and intelligence systems should be in place for the EC to work best with the Member States and to help Member States to contribute to the Flagships.

The Conference focused on understanding different facets of innovation that would lead to a smart, sustainable and inclusive economy. The Commission Services presented elements of the theoretical framework describing the nature of innovation, scientific options to capture and monitor progress towards innovation, and analysis in particular fields.

The role of ICT as an enabler of competitiveness was analysed. Although it represents only 4.8% of the EU economy, it is responsible for 25% of total business R&D and 50% of productivity growth. ICT contributes directly and indirectly to labour productivity and competitiveness providing productivity-enhancing technology. Discussants agreed that the Digital Agenda merits the highest priority. Without a rapid implementation of its Digital Agenda, Europe risks missing the opportunity to play an important role in this strategic sector.

The role of innovation at the regional level was another conference theme. Europe has to ensure that the "innovation gap" between the strongest and weaker regions widens. Policies have to maximise regional and social benefits and the Commission will need to assist and encourage Member States to use better the remaining part of the €86 billion of structural funds programmed for 2007-2013 for research and innovation projects. One measure of assistance would be to provide Member States with a service platform on "smart specialization", i.e. a platform that offers information, methodologies, expertise, advice and techniques. Member States have plenty of experience of successful innovation initiatives, yet still further basic analytical work is still needed to understand better the dynamics. One example of this would be the need to develop access to reliable data and robust indicators to measure progress of innovation at regional scale. Another one would be a tool to model the impact of EU cohesion policy at regional level.

The major conclusions of this Conference can be summarized as follows:

- The key importance of fully implementing the EU2020 Strategy: The presentations of the Member States and the Commission services confirmed the need to pursue actively the strategy towards an Innovation Union.
- Priorities in Innovation Policies. Conference participants confirmed that the action plans adequately cover the most urgent challenges for European Innovation policy. This applies for the EU2020 strategy, in general, as well as

the Innovation Union Commitments,¹ or the Action Points of the Digital Agenda,² in particular.

- Science for Policy Support: The scientific and the analytical work of the JRC have been recognized as important contributions for implementing the EU2020 strategy in key sectors such as energy, transport, environment, ICT, agriculture and food security.
- Learning from Member States Innovation Systems: EU Member States have developed a variety of national innovation systems. It would be appropriate to examine best practices to be found in the Member States and third countries that could be applied to enhance the implementation of the Innovation Union. More generally speaking, there is a need to analyse and quantify the socio-economic drivers and barriers of public and private research and innovation activities in order to improve framework conditions and avoid the fragmentation of efforts in Europe.
- Evidence-based policies to improve the innovation system. Successful policy making needs reliable scientific facts upon which to design, to monitor and to measure the impact of policies. Science contributes to the development and analysis of indicators and scoreboards to measure and to monitor the status of the implementation of the Innovation Union and the ERA. The research work contributes to the assessment and validation of composite and single indicators, the analysis of factors determining the growth of companies or the proper analysis of country rankings, to check the robustness of country (and other) rankings, amongst others.
- Grasping the Digital Dimension of Economy: The Digital Agenda will update EU Single Market rules for the digital era, with the aim of allowing a free flow of online services and entertainment across national borders. In the digital realm the definition of key targets to benchmarking policy achievements are particularly tricky. This is due to the nature of the IT sector which makes it highly difficult to capture the key indicators of digital economy and the IT sector. Nevertheless the ICT remains amongst the most innovative of all sectors and the difference in IT landscape between EU and the US explains part of the innovation deficit of the European industry. Therefore, there is genuine interest to monitor and analyse the emerging digital economy and the socio-economic impact of ICT. One approach towards a comprehensive analysis of Digital Economy is to build step by step upon micro-economic / sectoral views, starting with particular industries (e.g. media & content), then services sectors (e.g. cloud computing) and finally to understand intensity & pervasive economic effects of ICT.
- Anticipating Policy Impact: Decision makers would ideally base their decisions on policies taking into account the expected socio-economic impact of the different options. The conference examples demonstrated that economic

¹ http://ec.europa.eu/research/innovation-union/pdf/innovation-union-communication_en.pdf

² http://ec.europa.eu/information_society/digital-agenda/index_en.htm

modelling is a useful tool for comparative policy assessments especially when dealing with cross-cutting issues [models are less reliable when run in a predictive mode]. Models offer a quantitative insight into the consequences of a given policy option(s), e.g. what is likely to happen if policy X is adopted compared to the lack of any action at all. The MS and Commission Services should therefore consider strengthening their modelling capacity for more evidence-based policy making. The employment of modelling tools, however, comes with an associated responsibility, which calls for the highest research standards and scientific rigour.

- Developing the right measures: As the experience of the cooperation between the World Economic Forum and the Joint Research Centre shows, developing good measurements of competitiveness is a key ingredient of a healthy open method of coordination. The development of a regional competitiveness index shows how an internationally developed methodology can be applied to the EU level. Like the regional innovation index, this measure brings the possibility for benchmarking at the level of the regional authorities.
- Capturing the Regional Dimension of Innovation: Successful innovation patterns do appear at local level and much about innovation policy can be learnt at the regional level. In fact, cohesion policies aim at fostering more innovation in the regions. The Commission Services are already providing (and still work upon the development of) a reliable Regional Competitive Index (RCI), but further work is necessary to understand innovation effects, such as analysing regional spill-overs.
A further major step in this direction is modelling the impact of EU cohesion policy at regional level. Such a model, RHOMOLO, is being developed to integrate the economic, environmental, and social dimensions in a unique framework. RHOMOLO would be used for ex-ante European Cohesion Policy (ECP) impact assessment, ex-post impact assessment, other policy simulations and comparison between the policy scenarios. Such a model would enable the analysis of innovation policy through links between R&D expenditure, TFP growth and spill-over effects.
- From Mass to Quality: The Communication "Regional Policy contributing to smart growth in Europe 2020" sets out the role of EU regional policy in implementing the Europe 2020 strategy, namely in the area of smart growth. A major purpose of the Communication is to provide assistance to managing authorities in Member States and regions on how to optimise the impact of regional policy funding (2007-2013). It recommends starting the design of "smart specialisation strategies" by using the technical assistance money available from the European Regional Development Fund (ERDF). In view of this strategy, it is key to set-up and make use of a platform that offers information, methodologies, expertise, advice and techniques at the disposals of the Regions and MS.