



# Report on the EARMA event "Research from ideas to Products"

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The recent flagship program for an Innovation Union emphasises the need for European research to improve the innovation process. But what are the means and instruments to achieve this goal and which implications will this have for European research support professionals? These were topics debated between EARMA members, European Commission and OECD staff, and business representatives at the EARMA event in Paris on Feb 29, 2012.

In the current time of economic crisis EC policy strongly focuses on job and product creation. Small and medium enterprises (SMEs) are in the focus of attention since they account for more than 67 % of private sector jobs, providing more than 58 % of total turnover in the EU, and have been creating 85% of new jobs since 2002. Furthermore, it was observed that internationally acting SMEs create more jobs than those acting locally. Consequently, support for SMEs has an important share in the EC proposal for Horizon 2020 – which was reflected in the programme of this EARMA event by the fact that the first two keynote presentations were dedicated to different approaches towards supporting SMEs. Both aim at creating jobs and growth, in a complementary way: while Horizon 2020 by the DG Research & Innovation provides direct financial assistance to innovative projects, DG Enterprise & Industry's CoSME programme comprises policy support and horizontal actions aimed at simplifying the life of SMEs in European bureaucracy and transnational activities.

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A summary of the day's presentations:

**Bernd Reichert, DG Research and Innovation: Commission Perspectives on SME support**

The Horizon 2020 SME programme is to focus on highly innovative SMEs (which represent 22% of SME participants in FP7) and to improve their access to customers, markets, and finance. The new SME instrument will be thematically open (bottom-up) and applicable throughout the "Societal Challenges" programme. It builds on good practice examples, mainly the US Small Business Innovation Research award programme (SBIR).

Like the SBIR, SME projects will consist of three phases:

1. Feasibility / risk assessment (max. 6 months, 50-75,000 ⇔)
2. Research & development (max. 2 yrs, 1 to 3 Mio ⇔)

3. Commercialisation of a product, process or service (providing simple access to finance)

In this instrument, the SMEs will be in the driving seat, Research Institutions may contribute as subcontractors only. The EC acknowledges that support for SMEs will be required to tackle this leading role. The Enterprise Europe Network (EEN) is set to be involved in partnering and similar activities. In addition, a new mentoring and coaching scheme is under discussion which should cover all three project phases. Open issues here include organisation of the mentoring scheme (which will need to be local), quality control, and selection of players. An advisory board for the SME instrument is considered, similar to the ERC Council. Members of the board should represent the business field, and also here it remains open who would be suitable representatives for SMEs.

**Christian Weinberger, DG Enterprise and Industry: SME Support and COSME**

COSME is the "Programme for the Competitiveness of Enterprises and SMEs", which targets all kinds of SMEs. One example mentioned was tourism, which has a critical economic role in some EU countries and is dominated by very small enterprises (with high need to collaborate and develop new offers and attractive services). Activities supported by the DG include the EEN (currently 600 businesses with 6,000 people) supporting SMEs. A new scheme, ERAMSUS4 Entrepreneurs, launched as a pilot in FP7, so far supported 1,000 exchanges of junior entrepreneurs to senior collaborators (1 to 6 months visits). The presentation concluded with a number of specific suggestions for academic institutions to improve interactions with the private sector:

- Do better in industry collaborations by devising a "Business partnering department".
- Cultivate links with alumni that become entrepreneurs.
- Get engaged or at least build relations with Knowledge and Innovation Communities (KICs).
- Use the Marie Curie Industry-Academia Partnerships and Pathways (IAPP) scheme.

**Marco Marchese, OECD: Innovation and the economy**

The economist illustrated the impact of the crisis on innovation, reflected in a progressive decline in the venture capital market. Due to the crisis, venture capital moved to later-stage lower-risk investments, leaving seed funding and early-stage financing to business angels. Also, foreign investment has changed target countries and is increasingly directed into the BRICS countries (Brazil, Russia, India, China, South Africa).



Novel trends observed in the international economy and innovation include an:

- Increasing importance of "intangible assets" which include:
  - i) computerised information (e.g. software);
  - ii) innovative property (copyrights, trademarks, etc.);
  - iii) economic competences (firm-specific HC, marketing, org. know-how).
- Increasing multidisciplinary: Successful patents rely heavily on research results from other fields. By way of example, the clean energy field heavily relies on materials science (measured by an Innovation-science indicator, which is based on citations of scientific literature in patents).
- Increasing specialisation of businesses in the western world, accompanied by a concentration in regional hotspots that exhibit a strong collaboration between top academic institutions, industry and finance.

Suggestions to enhance innovation included cooperative research and education programmes, a joint supervision of graduate students, increased mobility of labour (e.g. secondments) and faculty consulting.

**Gregory Kotsikaris, iKnowhow:  
Pioneering Towards Achievements**

The CEO of a successful SME producing software stressed that ideas alone are not sufficient for successful innovation; their execution and a profit obtained from the implementation are equally essential factors of innovation. Various reasons suggest that an SME should participate in EC programmes; these include too small size to cover a larger development, the need for relations to partners and customers, a risk-sharing in product development, and a requirement for finances. So far his SME iKnowhow was involved in 22 EC projects which helped them to place six products in the market. Drawing from ten years of experience with EC funding, he had a variety of recommendations directed towards the EC and the details of SME programmes (including bottom-up calls, simple electronic procedures, and availability of guidelines) as well as the following recommendations to improve relations between Universities and business: Universities should map their competences, since SMEs need external knowledge but cannot easily find out if anyone has it. Therefore, technology brokerage events are important and should be extended. Furthermore, an emphasis on student internships would create a win-win scenario for both sides.

**Steve Bradley, SME UK NCP:  
The role of National Contact Points**

The advisor summarised roles of NCPs with special regard of SMEs. He highlighted TransCoSME, the Transnational Cooperation of the European Network of SME NCPs, which mainly supports the participation of SMEs in FP7 proposals. One very practical action launched by this network is the production of model proposals for SMEs which contain comments and explanations by an experienced EC evaluator. Currently 3 models are available online for the instruments Research for SMEs, Research for SME Associations, and Demonstration activity  
<http://www.ncp-sme.net/publications/model-proposal>

**Frederico Miranda, People Programme / Marie Curie  
Actions: Marie Curie and Innovation**

The presentation reviewed the success of the Marie Curie programme over the last years and the instruments currently available, with particular regard to those funding schemes fostering academia-industry collaboration, mainly the Industry Academia Scheme IAPP and two novel instruments.

Innovative Doctoral Programmes are launched as Monocontractor projects, which send students out for secondments of at least 6 months to a secondary host in another country, sector or discipline.

European Industrial Doctorates are a tool to promote industry exposure of doctoral students. Participants need to be enrolled in a doctoral programme but to spend at least 50% of their time in the private sector. This scheme is not planned to result in a new title, but rather a standard doctorate to be awarded through the academic partner. Conditions for the award need to be determined in the [compulsory] Consortium Agreement concluded between the two (one academic plus one industry) project partners.

Looking towards Horizon 2020, four funding lines will be retained:

- Training networks for early-stage researchers
- Individual fellowships for experienced researchers
- International and inter-sectoral exchange of research staff
- Cofunding of programmes (including doctoral programmes)

**Michel Judkiewicz, EIRMA:  
Industrial Innovation and R&D: a co-creation process?**

The Secretary General of European Industrial Research Management Association (EIRMA) introduced his organisation and gave an overview on the Responsible Partnering Guidelines which were produced in a collaboration of EIRMA, EUA, EARTO, and ProTon Europe for business, universities, and research organisations. He stressed that Responsible Partnering asks for a change of mindset, resulting in a number of principles and policies to be adhered to by the management of interest partners to facilitate more effective collaborations. The guide also contains recommendations for practical issues as identifying good partners and negotiating Collaborative Research Agreements.

**Outlook**

Taken together, the presentations of the day revealed a consistent picture of emerging challenges for universities, research institutions and small businesses to achieve an innovative setting in the years to come. Increased academia/industry collaboration, a clearer view on the proprietary knowledge portfolio, participation in brokerage events, inter-sectoral exchange of personnel are key aspects highlighted by various speakers, as they really appear to be of high relevance. Good to see them so well reflected in the approach to Horizon 2020! All presentations are available for download on the EARMA website  
<http://www.earma.org/page/paris-feb-2012>

In the Annual Conference of EARMA in Dublin, the ERA-Working group session will address another aspect of academia/industry collaboration, and discuss the role of and progress in the establishment of the Knowledge and Innovation Communities (KIC).