INNO-Views Policy Workshop

Open Innovation in a Globalised World

Implications for innovation policies in Europe

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Workshop Output Paper
Conclusions

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Content

Introduction

The 7th PRO INNO Europe INNO-Views workshop "Open Innovation in a Globalised World" focused on the relevance of open innovation concepts for the European innovation system and their role for European competitiveness. The overall question was whether and how existing innovation policies need to be adapted and/or complemented in response to the shift towards open innovation business models in a globalised world.

The introductory workshop scoping paper describes the open innovation model, whereas the workshop summary paper gives an overview on the workshop content summarising presentations and discussions. The scoping paper, workshop presentations and the summary paper are available through the PRO INNO Europe Portal.[1] This conclusion paper summarises the conclusions and recommendations gathered during the workshop and a follow-up consultation with all participants.

"Open innovation" is a business innovation strategy related to specific innovation processes of companies connecting internal RTD with external (global) sources of knowledge and market entries beyond a firm's core commercialisation channels. It requires a new perception of global competition between regions all over the world as sources for knowledge resulting in global "knowledge markets" and new opportunities for both, enterprises and knowledge providers like universities and research centres.

Open innovation strategies offer companies, research institutions and regions to grasp additional opportunities increasing competitiveness and sales. Nevertheless, implementation of open innovation needs to pay attention of challenges related with this strategy shift: In particular, the implementation of open innovation strategies implies a cultural change within organizations and regions, but also in the general public and among policy makers. During its implementation this long-term process causes high efforts of time and costs and thus requires commitment not only from business leaders, but also from policy.

Key dimensions of open innovation to be addressed by innovation policy include:

- Understanding the relevance and impact of open innovation
- Adjusting innovation policy in an era of open innovation
- Networking and collaboration
- Human capital and entrepreneurship culture
- IP management and technology markets
- Access to finance
- Knowledge and S&T base

[1] http://www.proinno-europe.eu/index.cfm?fuseaction=workshops.ws_paper&ID=26

Understanding the relevance and impact of open innovation

The importance and potential impact of open innovation is broadly discussed in literature based on case studies and macroeconomic data analysis. Nevertheless knowledge about open innovation and its contribution to the overall economy is still limited. Before developing strategic objectives for open innovation and concrete plans and measures for a more holistic European policy with view of open innovation, more detailed analysis is needed.

More detailed analysis is needed to study the relevance and impact of open innovation for the European innovation system with view of threats and opportunities as well as challenges and benefits of open innovation, context dependency and good practices at company and at policy level. This includes also statistical analysis based on micro-data in order to measure the impact of open innovation approaches. The analysis could be based on CIS data, but the need for new micro-data should be assessed, too.

Recommendations:

- Organise regular exchange between experts in innovation metrics to collect appropriate data and develop specific indicators to measure open innovation.
- Identify and disseminate good practices in application of open innovation concepts at firm strategy level and at policy level.
- Provide benchmarks and specific indicators[2] through well established instruments like the European Innovation Scoreboard and PRO INNO Europe TrendChart.

Adjusting innovation policy in an era of open innovation

The rational for traditional innovation policy development builds on market failures. Improved understanding of mechanisms of open innovation calls for turning the views from market failure to system failure, policy interventions from company or market support to systemic development and focus on interactions. A more systemic approach to innovation policies is needed taking into account the whole business environment instead of solely market issues. An appropriate mix of regional policies, S&T policies and industrial policies is needed to support open innovation. This calls for improved coordination of these different policy areas.

Potential policy measures to support open innovation should aim to remove existing barriers for collaboration, to enable the development of open innovation structures and to ensure the creation and diffusion of knowledge flows within the innovation system. Of particular importance are the removal of barriers for co-operation across Europe and the availability of skilled work force with view of open innovation needs.

[2] Analysis of benefits, challenges and impact of open innovation needs to based on micro-data and company cases.

Networking and collaboration

Networking and collaboration are core elements of open innovation, but competition remains core driver of innovation. The main policy challenge in support of collaboration would be to find the right balance of competition and collaboration between partners. Well structured processes and networks to connect and find partners for innovation and appropriate knowledge flows between actors are needed.

Recommendations:

- Build strong networks including smart people ("sector champions"), building on excellence and involving strong drivers; develop public-private partnership models with multinational enterprises (MNEs).
- Support intermediaries and platforms[3] for open innovation by setting up open innovation agencies or involving cluster management units and support sharing of facilities.[4] Provide quality checks or standards to ease access to these tools and platforms.
- Encourage and support transnational innovation activities of SMEs.[5]
- Enable transnational collaboration, in particular between organisations in border regions by synchronising national resources.
- Facilitate collaboration with partners outside Europe e.g. by simplifying rules and regulations for employing personnel from outside EU for limited periods.

Human Capital and Entrepreneurship Culture

Co-operation in open innovation systems requires new skills with view of e.g. innovation and knowledge management, co-operation management across different cultures and sectors, financial and networking skills along the entire value chain as well as specific business skills for (new ways of) commercialization. Furthermore, increased awareness of benefits of open innovation and more entrepreneurial spirit are needed (including the right for failures and experimentation).

Recommendations:

- Modify or adapt existing curricula at schools and universities in co-operation with companies, taking into account the specific requirements of open innovation.
- Extend and simplify mobility schemes[6] to ensure the availability of skills and to support multi-cultural co-operation. Open up existing European mobility schemes to other parts of the world.

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[3] Build on existing successful network approaches to connect innovation partners, like NineSigma, YourEncore, Innocentive, Yet2Come, Fellowforce etc., user-driven approaches like LivingLabs or other co-creation environments and on experienced intermediaries.

[4] Collocation and „virtually linked" networks have already proven to foster collaboration.

[5] Support to overcome cultural barriers, language barriers, etc.

- Reduce regulation, harmonise tax systems across Europe and increase flexibility of employment contracts.
- Set up innovation communities[7] in order to increase awareness of a new "European approach" to open innovation across the world and promote Europe as preferred place to innovate. For this existing communities like clusters etc. should be supported to become globally acting open innovation communities.

IP management and technology markets

Open and collaborative innovation asks for easy access to the patent system, timely, simple procedures and a high presumption of validity of granted patents. The new commercialization processes might demand alternative forms of protection of intellectual property and technology transfer as well as an enlarged public domain.

Recommendations:

- Ensure the quality of granted patents (rigorous application of search and examination standards).
- Improve efficiency by closing procedural loopholes, reducing pendency times and utilising work done by other patent offices.
- Adapt fee structures in order to optimise innovation support.
- Support patent insight and knowledge by patent training and support for SMEs and universities (e.g. European Patent Academy, European Patent Network).
- Provide easy-to-use patent information as well as patent landscapes for critical market sectors (e.g. ICT standards, drugs).
- Reduce complexity and costs and increase legal certainty by a harmonization of patent policy which should be fostered by the EU (common European patent litigation, European Community patent).
- Optimise IP policies of grant authorities (academic research) for collaboration.
- Raise awareness and knowledge of alternative forms and strategies to protect intellectual property including strategies based on sharing information.
- Support the development of technology markets e.g. by a trading platform or stock exchange for IPs.

[6] Mobility schemes for employees **and** for the younger generation.

[7] An innovation community is a group of self-motivated people with a collective innovative vision, to cooperate in achieving a common goal by sharing ideas, information and work. This people work together as a virtual team, to realize a shared goal and make their shared vision come true.

Access to finance

The availability of risk capital and of exit possibilities is crucial for a functional open innovation system.

Recommendations:

- Foster access to risk capital, in particular encourage business angels and VC across Europe (e.g. tax incentives).
- Facilitate cross-border investment by business angels and venture capital in Europe.
- Provide better exit opportunities within Europe e.g. by establishing a specific stock market offering fast growing (young) companies to raise equity by going public (similar to NASDAQ in US or the former “Neuer Markt” in Germany).
- Raise awareness and openness of companies (in particular SMEs) towards risk capital.

Knowledge and S&T base

Fostering Europe’s excellence in science and technology and contributing effectively to sustainable development worldwide need more international cooperation and more political coordination to overcome the fragmented European research landscape. Whereas Europe is leading in many high-tech R&D fields like nanotechnology or bio-technology, it is often lagging behind US and Asian countries with view of commercialisation in particular with regards to low-tech and adaptive technologies. In general a balanced set of measures is needed targeting both external (also international) collaboration and internal R&D of companies.

Recommendations:

- Concentrate more on world class poles (research centers of excellence and clusters) and strive for excellence (strengthen the “high potentials”) in order to increase visibility and ensure competitiveness.
- Simplify processes and delivery mechanisms in order to foster R&D collaboration and business R&D across Europe (e.g. through innovation vouchers instead of classical subsidies or tax incentives).
- Support and build commercial networks with industry in order to accelerate the technology commercialisation activities and to foster technology transfer.
- Focus policy support not only on R&D high tech fields, but also target low-tech and services as important fields for commercialisation at global markets. Nevertheless, public spending in R&D and knowledge creation remains of high importance for Europe.
- Foster international collaboration by opening up government programmes and ERA to foreign affiliates or partners.

Governance and role of EC

Innovation activities at regional level are important due to the proximity of partners, but more co-ordination across Europe would be important. With view of open innovation it would be essential to find the right balance between regionalism and globalization. EC should take a co-ordinating role of policy and support measures with view of

- vertical coordination across Europe, i.e. from European level, to Member State level and regional level
- horizontal coordination, i.e. between regions, Member States and policy instruments

Recommendations:

1) "Fight fragmentation": Europe's fragmented markets are the most important barrier for cross-border collaboration and innovation:

- Fight fragmentation of markets[8] and reduce regulations and red tape to foster transnational activities across Europe in particular for SMEs.[9]
- Integrate EU, national and regional policy programmes[10] to ensure complementarity instead of competition.

2) Focus innovation policies on global competitive advantage

- Develop 12 to 15 world class clusters (instead of 300 local networks).
- Invest in world class research poles and don't invest in followers.

3) Strategic policy commitment for open innovation

- A strategic policy commitment of the European Commission and European Member States would help to raise awareness of open innovation as complementary business approach in Europe and lower barriers for the implementation of open innovation structures.
- European innovation and economic policies should prepare for a well-balanced competition between companies practicing closed and open innovation business models.[11]

4) Face global competition with self confidence

[8] Interoperability of standards are needed for the development of a functioning single market.

[9] As an example the European VAT system has been mentioned, discouraging the mobility of business services, but also cross border innovation and other policy support measures.

[10] Integration of different policy fields e.g. competition or labour policy with innovation policy is needed to increase efficiency of the overall innovation system.

[11] Closed and open innovation RTD and business models are both competing and complementing each other on global markets.

- Attract high level company research instead of protecting European markets
- Open the Lead Market initiative to global competition

5) Reinforce the role of public authorities and policy in the innovation system

- Create supportive general framework conditions by e.g. creating attractive conditions to attract global firms and partners, stimulating innovation by demand side policy and raising awareness of the opportunities offered by open innovation strategies.
- Provide framework conditions enabling and fostering trans-national co-operation across Europe and between the business world and knowledge providers.
- Accept to be a partner of the innovation system: Make use of the power of a main customer[12] bringing forward innovation through competition (instead of safeguarding well established solutions).

6) Improve co-ordination, integration and harmonisation of policy and support measures

- EC should take a co-ordinating role of policy and support measures and initiatives (i.e. vertical and horizontal).
- More effective co-ordination of EU, national and regional policies: Need for clear differences and complementarities concerning the focus of policies at the various levels. Improve allocation of different resources at various levels.
- Establish a "European Innovation Council" assigned to a European Innovation Commissioner.[13]
- Develop recommendations and strategies for an improved co-operation and a more harmonized European approach e.g. with view of regulation, taxation, standards, IPR etc.
- Improve integration of different policy fields e.g. competition or labour policy with innovation policy in order increase efficiency of the overall innovation system.

[12] Foster innovation as partners of open innovation systems by the huge market power of public authorities as main customers in lead market areas via public procurement in order to stimulate the use of innovative products e.g. with view of health or climate change related technologies (Lead Market Initiative, thematic networks of public procurers).

[13] Member States and a limited number of key innovation experts should be represented in this council. The council could be assigned to a European Innovation Commissioner responsible to ensure coherence of innovation related policies and to raise awareness of innovation within Europe and globally.

INNO-Views

INNO-Views policy workshops establish a dialogue between public authorities, analysts, industry and academia to explore new or better innovation policy instruments for Europe. The workshops have the objective to explore innovation themes related to actual and forthcoming needs of European innovation policies. On average, 4 workshops are organised per year. The workshops bring together 30-40 relevant professionals and are organised on the basis of personal invitations only. Workshop results are published on the PRO INNO Europe website (http://www.proinno-europe.eu).

Any requests, recommendations and suggestions of themes, experts and locations for further workshops are welcome and should be directly addressed to INNO-Views:

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