

Recommendations on the European Innovation Council

During its meeting on 23 May 2017 in Stuttgart, at the Fraunhofer Institute, the tripartite, independent High Level Group on Innovation Policy Management, set up following an initiative of the Competitive-ness Council¹, continued to ‘think outside-the-box’ on how to improve innovation policy making. The HLG on IPM is an open innovation approach by governments, in collaboration with business and academia, to inject innovative policy ideas into the EU system.

In the view of the HLG on IPM², the Horizon 2020 program has been a real step forward which should be used now for an even more ambitious approach, before and after 2020. Budget increases are needed but should be accompanied by more fundamental reforms.

Key recommendations

The HLG on IPM recommends that the EIC becomes the starting point of a more ambitious process connecting Commission and governments more closely and more widely to the complex, multi-disciplinary and multi-sector, inter-active innovation developments in the European economy and society.

Therefore, the mission of the EIC should be clearly identified, with a precise understanding between its short and long term roles and its organisation should be in line with realities of the digital age. In fact, it should be a platform of platform (a first star in a milky way).

In the short term, the EIC should:

- Advise how to ensure maximum opportunities for start-ups and scale-ups;
- Help to overcome silo approaches in (European and national) governance institutions;
- Stimulate regulatory innovations additional to current reforms;

In the medium term, the EIC should also:

- Develop outside-the-box thought leadership on how to turn research and creativity into market opportunities which can bring prosperity and reduce inequalities;
- Become a change-agent to create more innovation friendly contextual conditions, bridging the two parallel universes of public governance and business operating in markets;
- Stimulate the implementation of the innovation principle throughout the multi-layered EU governance system;
- Improve the interface between the Commission and national administrations or agencies responsible for innovation policy, via an ecosystem approach;

¹ Council of the EU, 5-6 December 2011, Presidency Note.

² Members participate in their personal capacity. All recommendations for action and all ideas for further consideration have not always been agreed on by all members, but this advice is based on a very wide consensus.

- Stimulate joint initiatives in top sectors and ensure a market driven approach;
- Advise where the public interest and high commercial risk make public research funding needed;
- Develop proposals to rapidly reduce the innovation fault lines in the Single Market and help Member States with a low score to leapfrog.

Therefore the EIC itself should become a truly innovative steward for multi-directional consultations and feedbacks, based on the quadruple helix concept. The EIC should be a new experiment on how to organise bottom-up and multi-stakeholder advice in the digital age, and not copy previous models.

This can be achieved by conceiving the EIC as an open digital milky way of inter-connected platforms involving multiple stakeholders and focussing on a variety of innovation developments. Each platform linked to the overarching EIC platform itself should have a quadruple core composition but with open access. The platform conveners should ensure open and fair exchanges.

Additional considerations.

1. Objectives

The question of which problems the EIC aims to solve will ultimately determine its usefulness, its organisation and operations. Despite its formal launch, there remain many aspects to be defined. The embryonic structure can serve to experiment with and to permanently adapt it to the rapid dynamics of innovations. Effective policy-making depends to a large extent on an organisational structure appropriate for the objectives to be attained and on a culture open to permanent learning and regular adjustment on the basis of feedback. In a digital age this must be a digitally driven process.

Innovation policy often tends to focus too much on what to do (funding etc.) and too little on implementation, evaluation and policy adjustment. This is difficult enough in a national policy framework, and even more so in a complex multi-layered one, such as the EU. The HLG on IPM considers the ongoing evaluation of Horizon 2020 a welcome step in the right direction which should be pursued rigorously. Horizon 2020 merits overall support and strengthening, with some adjustments.

More radical measures should be considered in order to achieve a game-change. It is particularly important to move away from project micro-management and to focus on a more macro-managerial approach, based on multi-disciplinary evidence, on social and economic impact studies, including on innovation.³ This will require a reset in the auditing culture by the Court of Auditors and the political oversight of the European Parliament, both of which need adaptation to the realities of the digital age. Without this, the Commission will find it nearly impossible to find the necessary agility and experimental capacity, two key conditions for innovation processes to succeed.

³ See HLG Blueprint 2014, chapter I

In the opinion of the HLG on IPM, the focus of the EIC should primarily be on stimulating innovation in public policy and the framework conditions for innovation ecosystems, and on advising all the important funding programs of the Commission with an effect on innovation.

But every Member State must make its own innovation policy choices to bring about incremental or radical innovations in its key economic sectors as well as in the supporting policies in research, education, labour markets or other areas, depending on its comparative advantages and its diverse capabilities (or the lack thereof). This diversification and flexibility in interdependent national ecosystems is a collective strength, because in a Single Market ultimately everyone can benefit from innovative products or services. It is all the more important in the Eurozone in order to achieve better convergence. Therefore the HLG on IPM has advocated before to move away from traditional legalistic towards collaborative governance methods as the optimal ones for innovation management.⁴

a) The problem of coherence

The mixture of shared and own competences in a Single Market requires a determined effort in convergence and coherence (even more so in the Eurozone). The EIC can be an overarching body, an umbrella under which actors in the innovation policy chain in the Single Market come together in a context of trust and equality, openness and supportiveness, allowing critical feedbacks and creative proposals. Such a meeting point function can reduce or hopefully eliminate waste of public resources and bring better complementarity and cohesion. It can open up the EU discourse on innovation, policy programming and funding, which, despite improvements, does insufficiently apply the bottom-up, open innovation principles and methods (as in the quadruple-helix approach).

Europe's manufacturing industries, based on fundamental research done elsewhere are outcome driven and they need therefore rapid solutions to eventual blockages. The EIC can play a role in proposing framework conditions to ensure maximum outcomes for research investment, in rapid cycles, cross-fertilising between industries, so that a sort of waterfall of innovation appears. This kind of agility sits uneasily with governance methods inherited from the industrial age whose own reform should be part of the creative thinking in the EIC.

A meeting point function can be even more useful in a future EU where uniformity needs to give way to geographic flexibility, while maintaining sufficient coherence in a fragmented Single Market. This becomes all the more important at a time when regional and large city authorities are adding all sorts of rules without impact assessment or evidence. Such a patchwork increases the costs to industry and brings memories of the Middle Ages.

b) The problem of barriers

⁴ See HLG Blueprint 2014, chapter III

A prime objective of an EIC is to identify everything that stimulates innovation and that hinders it, in economy and society. Its outside-the-box advisory role must go beyond the legal division of competences and look at what is needed in a Single Market for economic competitiveness and optimal citizen welfare.

This also includes tasks such as exploring how to encourage spin-offs from universities and large corporations; reducing formality demands of universities and the resulting long term constraints; facilitating commercialisation for private investors of publicly funded research; identifying gaps in the level-playing field because of uneven application of EU legislation. The political mantra about SMEs should become evidence-based: most of them are operating in the supply or distribution chains of large corporations, or working on supplying local services to citizens; very few are innovative start-ups, even fewer are scaling-up. Only the last two categories require special nurturing.

The promotion of competitiveness through enhanced innovation can best be done by a national innovation administration or agency. In particular, agencies can play a strong role as they can more easily assemble the required managerial capabilities, create the space for experimentation and form efficient public-private partnerships than traditional administrations. National administrations or agencies can play a useful role, provided strong leadership (preferably the (deputy) prime minister) helps to overcome the often existing dichotomies in many countries between the research Ministry and other Ministries, between universities and businesses. An innovation agency or administration should have a role to ensure the horizontal spread throughout a governance system of innovation thinking and practice.

The EIC could become as councillor of last resort to EU and national policy makers on how to develop an innovation ecosystem approach in the EU's multi-layered system. Maybe the EIC could even be the seed for the development of a European equivalent of DARPA in the USA? In any case, the EIC should consider how to enhance the collaboration between publicly funded, high risk and long term fundamental research, and industry funded research aimed at more short term outcomes. Collaboration can be the basis of innovation deals and grand European projects.

The EIC should not overlook the need to modernise national education and research systems (and other non-EU competency areas) to facilitate socio-economic transitions. This is particularly important in order to reduce the innovation gaps in the Single Market/Eurozone and the emerging skills gap in many countries, a principal cause of unemployment.

Feedbacks are a powerful tool for policy improvement and for delivery of desired outcomes; they complement the formal set-up with a relational one. They also help to overcome performance measurement based on procedures by one based on outcome substance. The EIC should play a role in evaluating return on all research investments by the EU.

It is impossible to develop a policy of smart regulation without basing it solidly on the innovation principle and without giving an EIC a conceptual role. The EU regulatory frameworks focuses excessively on the existing order and on concepts being made redundant by technological and economic shifts. They have often an imbalanced weighing of innovation chances, of risks and opportunities, while procedures are rigid and slow, depriving it of strategic agility.

Therefore, an EIC should work closely with institutions responsible for better regulation, such as the Regulatory Scrutiny Board (RSB) and REFIT, the JRC and the new Scientific Advisory Mechanism (SAM) in order to help ensure a game change in policy and rule making and to implement a coherent and persistent application of the innovation principle. The organisation of streamlined inter-actions, as different from hierarchical and procedural ones (which should serve only as a fall-back) between the various actors in the policy-making chain is a key element for stimulating public policy innovation. This may require also change in the organisational set-up.

c) The problem of fragmentation

The proposed emphasis for the EIC on innovation in public policy should not exclude the EU to focus on a selected few top sectors relevant for the entire Union and with the potential to create or enhance new global competitiveness. In these top sectors, it could have a role in funding fundamental research and risks in the research – development chain.

At a time when more and more corporations are re-designing their long term strategies and are upping their social engagement in line with the World Council on Sustainable Development, the EU should leave its shyness and move towards more pro-active collaboration in designing long term strategic goals, such as on climate change or inequality. Start-ups do play an important role in the objective of achieving radical innovation, provided they do not meet the multiple regulatory barriers and end up exhausted. Nonetheless, it must be recognised that it is also the large corporations which act as a locomotive and that can implement incremental and radical innovations in their existing value chains. It is time to start thinking more about convergent roles for economic and social innovation rather than in antagonistic terms dating from the pre-digital age.

In fact, this is the time for co-creation of competitiveness and welfare. This demands new forms of consultation at European level, in a far more inter-active and regular manner. It could be a great boost for innovation if, once the political objectives have been determined, the regulatory architectures would be designed in common, based on evidence and citizens' interest. This would fulfil a major requirement, namely the timely dynamization of regulation in parallel with technological developments. Research shows priority areas include reducing 'red tape' (60%); tax reduction/tax relief (49%); support in raising capital (33%); understanding SME needs (30%); support for venture capital (26%); and local support and advice structures (23%).

In such a new context, Member States might find a new incentive to consider a much needed reform on taxation of research investments. The EU is clearly at a disadvantage with the American system which may be a partial cause of brain drain and loss in research and investment. The application of reciprocity in trade agreements could also be useful to ensure a level playing field for start- and scale up companies or to avoid sudden disruptions. In order to really help start-ups, the EIC should advise how to simplify existing funding programs and procedures, using an evaluation based and bottom-up approach and could give a real boost to innovation in order to achieve a resource efficient economy.

d) The problem of divergence

Innovation gaps are caused by an interplay of many elements, including the existence of regulatory, tax and other barriers in the value chain from research to market, lack of public governance capacities (no dedicated administration or agency), confusion between research funding and innovation promotion, inadequate education and training systems for the digital age ('algorithms are the new Latin'), or lack of incentives for consumers to take up new opportunities. Each of them has specific causes which can be identified and remedied through comprehensive evidence based policy making, collaboration and co-creation. In the EU, the use of Structural Funds or of Agricultural funding (pillar II) may require more focus on fundamental innovation and leap-frogging, an area in which the EIC could provide innovative thinking.

At a global level, gaps emerge through inadequate governance of data ('the fuel of the digital economy'). While data ownership is a matter for negotiation between companies, data storage is a key issue of economic competitiveness and therefore of national and European interest. The EIC could be the place to explore options for solution(s), an urgent matter, which could then be further elaborated as joint initiative. Radical innovations require long-term investments and these demand regulatory stability. The question should be examined by the EIC if and to what extent regulatory change can retroactively impact upon certain types of investments. Since Roman times it has been a well en-sconced principle that laws cannot have retroactive effects.

One should also consider the risk of an innovation belt arising in Europe, leaving aside countries unable to follow the pace. More than a few Member States lag behind in public R&I investments and in developing innovation ecosystems, the EIC could propose specific policy measures to bridge such gaps which ultimately could pose a risk to the Single Market and the Eurozone.

Conclusion

The effectiveness of the EIC will ultimately not be determined by its formal context, but by its dynamic daily operations within the Commission and with the multitude of other innovation actors (including unconstrained free thinkers), by experimenting and building trust with all stakeholders and creating a vision of a European Common Good with appropriate national implementation.

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