



The European Innovation Council – Refocusing EU Innovation Policy

EARTO recommendations to the European Commission to initiate an EIC Pilot under Horizon2020

19 April 2016

Summary of EARTO Recommendations for an EIC Pilot under Horizon2020	2
Introduction: an EIC Pilot to Support Open Innovation and its Underlying Collaborations	3
1. The EIC Pilot Priority 1: Streamlining Existing Instruments & Organising Complementary Support	4
2. The EIC Pilot Priority 2: Taking Stock of Research & Innovation Infrastructures.....	5
3. The EIC Pilot Priority 3: Supporting the Growth of Innovative Research-Driven Entrepreneurship	6
Conclusion	7

SUMMARY OF EARTO RECOMMENDATIONS FOR AN EIC PILOT UNDER HORIZON2020

There is a strong and urgent need for Europe to improve its innovation efficiency, by which we mean effective transformation of scientific knowledge into new and advanced products and services for successful commercialization. EARTO, therefore, very much welcomes the announcement made to launch a European Innovation Council (EIC) as a vehicle to further develop an integrated framework for EU innovation in order to fully exploit Europe's innovation capacity.

Innovation is key for Europe's sustainable economy. We need to build on the strong and vast research competence, in which Europe has invested heavily over the last decades. This research foundation can give Europe a sustainable competitive advantage in the coming decades, if we succeed in exploiting it now.

Successful innovation has multiple facets and has to be achieved in a complex landscape. There needs to be effective collaboration and cooperation between the actors in the innovation chain to achieve the journey to commercial success. Europe has used many initiatives to support innovators, which have addressed some of the most pressing obstacles and have shown good results. However, even the best can find navigating the innovation journey confusing and difficult. EARTO believes that the setting up of the EIC would help to provide the necessary structure and coordination to boost innovation.

In our first paper¹ we draw recommendations on the EIC itself. In this second paper, we suggest setting an EIC Pilot that could be launched with the Horizon2020 mid-term review in order to prepare the full launch of the EIC under the next EU Framework Programme.

Accordingly, EARTO believes that the EIC Pilot should focus on the following key priorities:

EIC Pilot Priority 1 - Streamlining Existing Instruments & Organising Complementary Support

The EIC Pilot should be set-up to clarify the innovation targets of some of the existing instruments while also identifying possible gaps in existing actions and filling them. The EIC Pilot should be looking at improving linkages between the various EU instruments to amend their value-chains orientation.

EIC Pilot Priority 2 – Taking Stock of Existing Research & Innovation Infrastructures

The issue at stake today is not only to map existing research and innovation infrastructures but also to better understand how to efficiently network those infrastructures to further support innovation across Europe, especially by SMEs. This need is already recognised and being partly addressed at EU level. The current limited initiatives running could gain great momentum and impact if further coordinated and scaled up.

EIC Pilot Priority 3 – Supporting the Growth of Innovative Research-Driven Entrepreneurship

The EIC should aim to increase the number of innovation projects deemed worthy to obtain private capital i.e. research and innovation projects that have reached investment readiness. The EIC should support the ground work done by RTOs and other actors involved in the launch of innovative research-driven companies and provide a set of support instruments all along the innovation chain. The EIC Pilot should further explore collaboration models with the EIB to bring complementary support to actors in the entire innovation system using the work done by the EIB-EC InnovFin Advisory Services.

¹ EARTO Paper - The European Innovation Council – A New Framework for EU Innovation Policy - 9 October 2015 - [link](#)

INTRODUCTION: AN EIC PILOT TO SUPPORT OPEN INNOVATION AND ITS UNDERLYING COLLABORATIONS

The EIC should be taken as the opportunity to further set up the EU's strategy to tackle the challenges of keeping our innovation performance afloat and strengthening it compared to our competitors, driving it to global leadership. We risk losing sight of the fact that our innovation battle is not an intra-European one but one we play on a global scene. **While our global competitors are addressing their own innovation challenges at a fast speed, we are lagging behind in Europe looking at innovation in an uncoordinated and ad hoc fashion, not able to use the full potential of Europe's strong research base.** Today, innovation happens in a complex system comprised of innovation value-chains which have regional, national and international ramifications linked to how businesses act globally.

Successful innovation requires collaboration: the majority of all innovations, incremental or disruptive/market-creating, happen through different forms of collaboration. In such context, European RTOs are voicing their support to an EIC as a means to further support open innovation in Europe. Open Innovation is about collaborative risk-sharing aiming at reducing the development processes' costs: companies can advance faster towards commercialization with less risk-taking and often, their final products, being goods or services or a combination of both, have a higher degree of invention. Experiences from many world's largest companies as well as from academic & applied research actors shows many advantages to Open Innovation and the various forms of collaboration it implies.

EARTO believes that the EIC should focus on how to bring research results to the market and how to ensure a full deployment of new innovation opportunities by European industry to generate impact, to safeguard and create jobs and to catalyze sustainable growth in Europe.

The ERC is successfully supporting excellent science in Europe creating a globally recognized brand. Similarly, the EIC should support and give an international recognition of excellence to European innovation: **the ERC supports excellent research, the EIC should support excellent innovation.** When setting up the EIC, strong links between ERC and EIC are needed to ensure collaboration (possibly via the proof of concept programme and promoting the engagement of the ERC grantee with a variety of stakeholders).

EARTO believes that the Horizon2020 mid-term review brings opportunities for the European Commission to take stock of the current innovation framework². **The Horizon2020 mid-term evaluation allows the European Commission to set-up an EIC Pilot aiming at dealing with priority issues related to open innovation, its underlying collaborations and their tools. The European Commission could use such pilot phase in order to refine its vision for the EIC.** We present in the next chapters three priority areas, which the pilot can address:

EIC Pilot Priority 1: Streamlining Existing Instruments & Organizing Complementary Support

EIC Pilot Priority 2: Taking stock of Existing Research & Innovation Infrastructures

EIC Pilot Priority 3: Supporting the growth of innovative research-driven entrepreneurship

The planning of the EIC Pilot will have to include provisions for the assessment of its performance, judged against key performance indicators (KPIs) set at the start of the pilot. These KPIs should be related to the overall objectives and the pilot's priorities. This assessment should be incorporated into the time planning, in order that its results can be reviewed before the full launch of the EIC under the next EU Framework Programme.

² EARTO Recommendations for Future EU Innovation Policy - 15 October 2014 - [link](#)

1. THE EIC PILOT PRIORITY 1: STREAMLINING EXISTING INSTRUMENTS & ORGANISING COMPLEMENTARY SUPPORT

1.1. Create an Integrated Framework of Existing Instruments

An integrated approach is needed that will realise synergies from already existing instruments and financial tools, complemented by carefully designed new ones. In that regard, the EIC Pilot should focus on supporting excellence in technological/industrial research as a key building block of the innovation process and on providing support all along the innovation system. More importantly, EARTO would like to point out that an effective innovation initiative cannot support only the success of individual players and single performances, since open innovation is based on collaborations. Innovation is an integrated process that relies on synergies, collaborations and risk-sharing between different actors in a spirit of added value and complementarity creating value chains. This ecosystem of players has to be effectively supported to create the condition of success and facilitate the innovation pathway that accelerates time to market.

Today the EU R&D funding system is well elaborated using three decades of experience. One should not be looking at the EIC as a revolution but as the possibility to place key issues higher on the EU R&I agenda and the opportunity to shift the focus from R&D funding to RD&I funding. In this context, **the EIC Pilot should be set-up to clarify the innovation targets of some of the existing instruments while also identifying possible gaps in the existing actions.** The EIC Pilot should be looking at improving linkages between the various EU instruments to amend their value-chains orientation.

The EIC pilot should consider to start with the following three elements:

- **Make use of the investments made within the EIT and the knowledge created by its KICs:** Three KICs have now been operational for seven years addressing the challenge to bridge the valley of death. The approach has been to let a partner consortium of leading institutions from academia, research and industry form networked innovation communities within specific domains to further improve the entrepreneurial and innovation capacities of that sector. Capabilities of the EIT KICs to develop innovation infrastructures, to support creation of spin-offs and to boost the growth of SMEs, all while promoting inter-regional collaboration should be exploited to its full potential. European RTOs have been very active and have invested heavily in the EIT KICs, we believe there is much to be exploited within both established KICs and the emerging ones. Leveraging on the existing and planned EIT efforts, the EIC could enable investment into pre-validated commercialisation projects with high-gain potential, irrespective of the institution or the domain it comes from.
- **Increasing the use of FET Open Instrument results by other H2020 funding instruments (for e.g. LEIT):** EARTO recommends exploring methodologies and procedures that allow the use of the results generated under the FET Open programme, which we see as very valuable. Instruments on NMBP, ICT, etc. should be able to further use the work done under the FETs through the implementation of dedicated calls. Such dedicated calls, targeting at higher TRLs, should promote the enlargement of the consortium with innovation actors located further in the value chain and who can bring in innovation expertise. A first effort has already been done by the introduction of the FET Innovation Launchpad. Although it is a step in the right direction, the foreseen funding is very modest and expected to be insufficient to reach significant impact on the market.
- **Ensuring further coherence between the various SME-specific instruments and ensuring a seamless set of support instruments for the European innovation system:** The EIC should look at how to achieve better synergies between the SME Instrument, Fast Track to Innovation (FTI) Instrument and EUREKA-EUROSTARS using the experience of EUROSTARS and ensuring that the instruments fully support cooperation between SMEs, their RD&I partners and the potential users of the results.

Along the development of the EIC pilot, the European Commission could also look at the growing JTIs and cPPPs experience as well as the various small scale actions that have been undertaken to foster entrepreneurship and innovation. There are efficiently running entities capable of managing consequent budget and capable of organising cumulative funding between private entities, EU, Member States and regions.

1.2. While Organising Complementary Support by Other Policies

The EIC could be the tool to support consolidation of innovation investments at EU level targeting such funds to Europe's key innovation ecosystems and value-chains. Long-term sustainability of the innovation infrastructures, with a balanced portfolio of activities and sources of operational income must be ensured: this is where RTOs will be of great support. The EIC should manage smart and efficient use of EU funds for innovation. Surely, links with national initiatives (and JPIs) will be a topic on the longer run for the EIC to stimulate innovation in partnership with the different national programmes to reach the optimum result. The EIC has a clear role in terms of improving the current innovation framework in Europe by linking EU's innovation strategy to regional policy with its European Structural and Investment Funds (ESIF) as well as the European Fund for Strategic Investments (EFSI).

The EIC should also contribute to ensure that EU state-aid framework would not impair innovation actors compared to their global competitors (using Important Projects of Common European Interest -IPCEIs but not only).

Discussions may be linked to the new EU agenda on better regulation, including the innovation principle and the development of innovation deals.

2. THE EIC PILOT PRIORITY 2: TAKING STOCK OF RESEARCH & INNOVATION INFRASTRUCTURES

European innovation infrastructures - both virtual and physical - are the backbone of dynamic research and innovation ecosystems and stable innovation-driven value chains. Innovation is a complex process allowing the transformation of knowledge from basic science and research, into new product and services commercialized in the market. Indeed, to innovate, industry, including SMEs, need to validate early stage prototypes and other solutions to end-user clients and investors. To do so, industry (especially true for SMEs) partly rely on research actors, and essentially on RTOs, to provide access to the necessary technology infrastructures for upscaling, prototyping and validation of new solutions before they can enter the market.

In this context, the EIC is a unique opportunity to stimulate the development and utilisation of European technology infrastructures, providing an easier access for SMEs to these facilities. **The EIC pilot should aim to enhance Europe's strategy on technology infrastructures. In particular, the EIC should undertake specific actions to develop appropriate framework conditions in order to accelerate the establishment of a pan European network of technology infrastructures.**

Further developing such strategic view would allow the European Commission as well as Members States to have a better understanding of opportunities and bottlenecks of sharing these technology infrastructures. The strategy would allow to find gaps, look for ways to address them as well as support further collaboration between existing infrastructures, avoiding unnecessary overlaps and increasing capacities.

Today, the issue at stake is not to only map research and innovation infrastructures but rather to better understand how to efficiently network those infrastructures to further support innovation across Europe, especially by SMEs.

This need is already recognized and being partly worked on at EU level. The current limited initiatives running could gain great momentum and impact if further coordinated and scaled up. Here are some of the initiatives, the EIC Pilot could be aiming at further scaling up:

- DG R&I: InnovFin Advisory Services & study running on research infrastructures
- DG CONNECT: activities around I4MS, Smart Anything Everywhere and Innovation/Knowledge Hubs/Competence Centres
- DG GROW: Clusters policy & KETs Observatory

3. THE EIC PILOT PRIORITY 3: SUPPORTING THE GROWTH OF INNOVATIVE RESEARCH-DRIVEN ENTREPRENEURSHIP

As noted by the EU Council, *"The EU as a whole, and all individual Member States, continue lagging behind the USA in the amount of available venture capital (VC), an important precondition for innovative companies to grow and scale-up. While the **persistent lack of financing for innovation in the EU may be a result of a combination of both supply (i.e. a lack of available funding) and demand (i.e. a lack of robust innovation projects deemed worthwhile to obtain funding)**, it seems that the crisis has also deteriorated the overall situation."*³

The EIC could tackle part of the demand side issues, meaning a lack of robust innovation projects deemed worthwhile to obtain funding by developing support for the generation and growth of future industrial companies that are research-driven, resource-intensive, and capable to grow in the market. It will be critical for Europe to refocus its strengths on a strong industrial base, with many SMEs and midcap companies, which often are "the hidden champions" with sustainable company management and sound corporate social responsibility. Specific policy interventions are needed here to support this type of industrial and resource intensive entrepreneurship. To start-up and spin-off, these companies have very different needs than – as very often taken as example – digital companies (app making, ICT services oriented, etc.). An entrepreneur who wants to employ people by running his industrial and resource intensive own company after the scaling-up phase requires very different support compared with an entrepreneur aiming at a fast exit or buy-out. Europe needs to develop a more organised approach to creating new businesses and making them grow – an approach that will serve Europe better.

As a part of the EIC pilot the European Commission should launch a new initiative to support the initiation and growth of high-tech research-driven companies. This support should include both the technological aspects and the business strategy for securing the necessary investment.

Two elements are important being the support at the very start (from proven scientific and economic feasibility of the idea to a VC worthy concept) and support at the scaling up phase of the small company. Many RTOs have their own policy regarding spin-offs and have developed in-house capacity to support the launch of innovative research-driven start-ups. RTO's specific in-house support to their spin-offs can range from giving access to in-house financial and legal support to staff detachment, etc. to support in launching and implementing these companies' business plan. These specific RTOs' in-house services to help the creation of their own spin-offs, often called "tech start-up accelerators", are also managing investment funds. These are often subsidiaries or "daughter companies" of the RTOs. They have strict spin-offs policies that leverage the inherent risk of these operations and are oriented at producing investable opportunities for "smart capital" (Corporate Funds; Companies; Family Offices; VCs; BAs) to invest in.

Looking at their impact on job creation, EARTO Economic Footprint Study⁴ showed the 257 spin-offs created by 7 of the largest EU RTOs and active in 2013-2014 represent:

- 13.800 jobs in 2014: 6500 direct jobs (5600 FTE), over 7300 indirect or induced jobs (6300 FTE)
- €1.8 bn turnover in 2014
- €0,9 bn value-added in 2014
- €0,35 bn fiscal and parafiscal return to governments in 2014

Based on this, EARTO suggests that the EIC should be looking at supporting the ground work done by the RTOs and other actors involved in the launch of and the work with such innovative research-driven companies. The EIC Pilot should set up an initiative to support the launch and scaling up of innovative research-driven start-ups, developed within RTOs and other innovation actors, or which would typically seek the support of such research and innovation providers.

In addition, the EIC could tackle part of the supply side issues, meaning a lack of available funding aimed at supporting the upscaling of small companies. In this context, **the EIC Pilot should further explore collaboration models with EIB to support actors in the entire innovation system using the work done by the EIB-EC InnovFin Advisory Services.** Based on the discussions at the joint EIB-EARTO Working Group and the various EIB-RTOs bilateral meetings, the EIB will issue recommendations in June 2016 on how to facilitate access to finance for RTOs. Those recommendations should be further discussed with RTOs and used for the setting-up of the EIC pilot.

³ Maximising opportunities for Research, Development and Innovation (RDI) under the European Fund for Strategic Investments (EFSI), Non-paper to Ministers for 1 December 2015 Competitiveness Council

⁴ Economic Footprint Study: Impact of 9 European RTOs in 2014 - 14 January 2016 - [full report](#) & [summary brochure](#)

CONCLUSION

Based on the first EARTO paper on the EIC as well as on the EARTO Recommendation for EU Innovation Policy⁵, we believe that the mid-term review of Horizon2020 gives an opportunity to the European Commission to consider initiating a concrete EIC Pilot. The European Commission could use such piloting phase to refine its vision for a strong research and innovation ecosystem in Europe. The piloting phase would allow to set detailed objectives and KPIs for the EIC to be fully up and running as a key component of the next framework programme post 2020. With their longstanding experience and proven collaboration track record with industry, academia and regions, EARTO members are ready to contribute to a successful implementation of the EIC.

EARTO Contact: Muriel Attané, Secretary General attane@earto.eu Tel: +32 2 502 86 98 www.earto.eu

⁵ EARTO Recommendations for Future EU Innovation Policy - 15 October 2014 - [link](#)