



# **The European Innovation Council – A New Framework for EU Innovation Policy**

**EARTO recommendations to the European Commission to  
initiate further discussion**

**9 October 2015**

Introduction: EIC as a Key Action towards a Strong EU Innovation Policy.....	2
Summary of EARTO Recommendations .....	2
1. The EIC as a New Strategic Framework for EU Innovation Policy.....	3
2. The EIC to Boost EU Innovation Performance .....	4
2.1. By Enhancing the Impact, Coherence and Visibility of Existing EU Instruments .....	4
2.2. By Identifying Missing Gaps in Innovation Infrastructures .....	4
2.3. By Improving EU’s Innovation Framework .....	5
3. The EIC Governance .....	6

## INTRODUCTION: EIC AS A KEY ACTION TOWARDS A STRONG EU INNOVATION POLICY

In its recommendations published in autumn 2014, EARTO made a clear plea for stronger action regarding innovation policy at EU level. These recommendations highlighted Europe's need for strong innovation value chains and innovation eco-systems and for a clear demonstration of the impact in terms of growth and jobs delivered from the much needed national and international R&D&I investments. Short term thinking risks impairing Europe's economic future and economic resistance to shocks: how will Europe be able to absorb current challenges and resist future ones unless European leaders take stock of what needs to be done in terms of innovation policy and investments to ensure Europe's economic future?

Today, our competitors are clearly increasing their own innovation capacity: Canada, US, Japan, South Korea, China, India, all are currently strongly building up their applied research capacity by investing heavily. The EIC should be taken as the opportunity to further set up 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. While our global competitors are addressing their own innovation challenges at a fast speed, we are lagging behind in Europe looking at innovation in a scattered fashion. 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, in a complex system comprised of innovation value-chains which have regional, national and international ramifications linked to how businesses act globally.

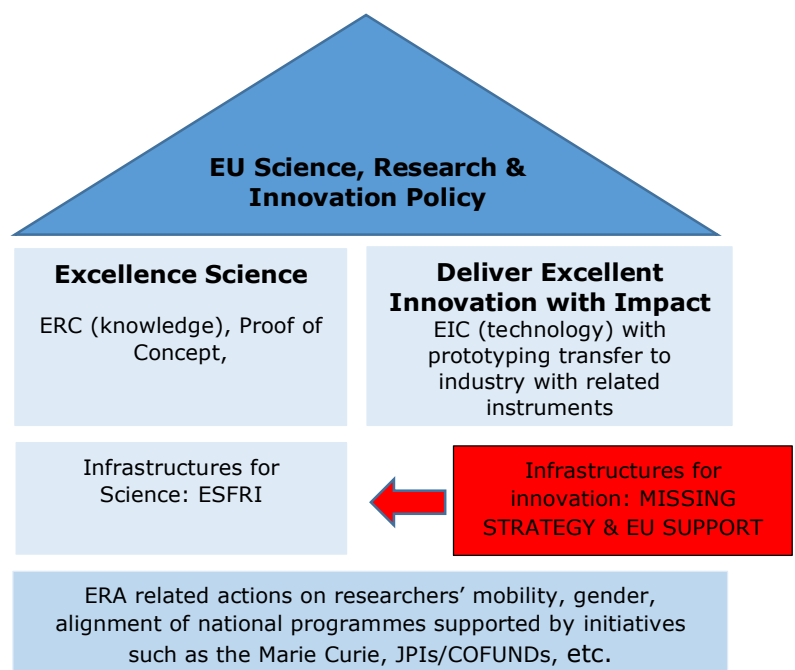
The EU High Level Group Key Enabling Technology's final report clearly brings such issues forward as a "Time to Act" which demonstrates that our global competitors have been linking their industrial policies together, investing heavily in the innovation capacity of their strategic industrial value chains. This has allowed them to reinforce their competitive advantage by supporting value-chains' productivity and related employment. EARTO supports the idea of creating a new European Innovation Council (EIC) as it sees such EIC as a possible answer to this "Time to Act" call and a new European "Way to Act" on industrial and innovation policies.

## SUMMARY OF EARTO RECOMMENDATIONS

EARTO strongly supports the European Commission in setting up a European Innovation Council (EIC) as a new encompassing and strong framework for EU innovation policy, the same way that the ERC turned out to be one of the most effective frameworks of Europe's science policy. **The ERC supports excellent research, the EIC should support excellent innovation.**

The EIC should be focused on how to bring research results to the market (i.e. crossing the valley of death) and how to ensure a full deployment of new technological opportunities by European industry to generate impact, keep and create jobs and economic growth in Europe.

The EIC should bring real added-value to EU's current innovation policy by:



1. **Implementing a strong European innovation strategy, partly by identifying specific areas to focus actions which will improve coherence of EU policy,**
2. **Co-ordinating the range of EU actions supporting innovation and undertaking new specific actions:**
  - a) **Aligning of cross European innovation networks on strategic topics of common European interest (solutions for grand societal challenges, open platforms, etc.),**
  - b) **Providing the grounds and the financial means for orchestrated EU activities addressing applied research and innovation for European industry and society,**

- c) **Setting up dedicated tools for technology infrastructures, for example with specific calls within existing instruments and establishing a pan European network of innovation infrastructures (mapping of existing infrastructures, for e.g. within EU RTOs as already initiated in the KETs context, identifying most pressing technologies, defining needs for pilot plants, avoiding duplication, etc.) aiming at improving awareness on those infrastructures and allowing an easy access to industries, especially SMEs.**

Understanding the challenges linked to those infrastructures will be key for the EIC. Without a clear policy on innovation infrastructures in Europe and programming, EU's strategy on innovation will fail to sustain EU stakeholders to compete with global players.

## 1. THE EIC AS A NEW STRATEGIC FRAMEWORK FOR EU INNOVATION POLICY

During the June 2015 ERA of Innovation Conference, R&I Commissioner Moedas launched the debate of setting up a new European Innovation Council (EIC). EARTO strongly supported this initiative at the occasion and will continue to do so as it believes that the EIC is a necessary vehicle to answer Europe's challenge of improving innovation performance, compared to our global competitors.

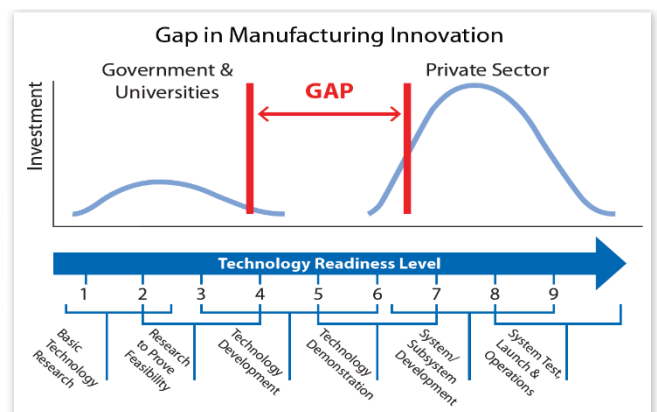
The EIC should be focused on two key missions, i.e. to:

1. **Build a Strong Integrated Innovation Strategy to Bring Research Results to the Market**
2. **Unleash EU's Potential by Integrating EU's Innovation Strategy across the numerous Initiatives.**

### EIC Mission 1 - Build a Strong Integrated Innovation Strategy to Bring Research Results to the Market

There is a need for Europe to improve its innovation efficiency by accelerating innovation through the transformation of scientific knowledge into successful commercial goods and services. Europe's science policy co-managed by the national governments and DG R&I has been successful. Indeed, European Nobel Prizes and the success of the European Research Council are ample proof of this. Science policy now needs to be coupled to an equally strong innovation strategy aiming at the full deployment of new technologies by EU industries.

The EIC is a suitable instrument for Europe to define its innovation strategy based on an integrated approach that will provide increased and adequate support to the various innovation stakeholders presently aiming to cross the valley of death in key European industrial value-chains. This innovation strategy should bring together the logic from the Excellent Science, Industrial Leadership and Societal Challenges pillars of the bridge to cross the valley of death:



The objective of EIC is well in line with EARTO's previous recommendations concerning impact & value creation as it will put in place a better framework for innovation stakeholders to support Europe's industrial value-chains and innovation ecosystems. The EIC needs to be much more than just a vehicle for handling existing Horizon 2020 and future framework programmes. **The EIC represents the perfect opportunity for Europe to re-think its innovation strategy linked to its industrial policy, our European innovation eco-systems and to set high ambitions for Europe in terms of performance of our innovation value-chains.**

## **EIC Mission 2 - Unleash EU's Potential by Integrating EU's Innovation Strategy across the numerous Initiatives**

Horizon 2020 represents significant coordination of EU research and innovation initiatives compared to FP7. Compared to previous programmes, Horizon 2020 make improvements in the organisation of programmes and towards the creation of further sectorial communities. Despite the much appreciated and already running efforts, EU innovation activities still remain scattered and without focus throughout the various pillars of Horizon 2020, e.g. Industrial Leadership or Societal Challenges or instruments such as the Fast Track to Innovation and Innovation Actions. The EIC should define a framework to address the currently scattered EU innovation actions, the non-level playing field of national innovation instruments and the existing hurdle of cumulative funding mechanisms aiming to investment in Europe.

The model should be similar to the one adopted by the ERC but be more distributed to foster transdisciplinary activities in support of innovation. **While the ERC supports excellent science, the EIC should support excellent innovation.** This framework approach will ensure that the EIC not only develops a well-defined EU strategy on innovation but also integrates this strategy into key European policies and research activities. It is clear that EU's innovation strategy to be set by the EIC cannot be detached from EU's industrial policies, regional development policy, competition policy, digital single market policy, climate and energy policy, science policy, REFIT strategy. In addition, EU's innovation policy will have an impact on our position under international trade agreements in preparation. Therefore, ultimately, **key EU priorities and EIC innovation priorities will have to be coupled.**

## **2. THE EIC TO BOOST EU INNOVATION PERFORMANCE**

The EIC 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 should, therefore, increase innovation performance by enhancing the coherence and visibility of existing EU instruments and by improving our EU innovation framework.

### **2.1. By Enhancing the Impact, Coherence and Visibility of Existing EU Instruments**

Today, we clearly see a reduction of the budgets aiming at funding research and innovation at national level. Those decreasing resources are far from being compensated at EU level, including by private investments. In the current situation, innovations actors are facing the challenge that is clearly to do more with less. In this context, the multiplication of programmes and instruments with diminishing funding and with increasing objectives is increasing complexity of the landscape. There is a clear call for further streamlining and consolidation to do more with the existing resources on better targeted issues: the resources needed to tackle today's complex needs are increasing and the tendency to spread all funds on a large array of topics is undermining our capacity to answer those challenges.

At EU level, framework programmes started by funding projects using a bottom-up approach, such as in FP4 and FP5. During FP6 and FP7, top-down management via programmes was further developed, asking key sectors to organize themselves in networks and platforms, while in parallel requesting national programmes to further collaborate together and develop joint programmes. Today the EU system is well elaborated using two decades of experience. **The key issues are now complexity versus impact, coherence and visibility of our EU R&D&I funding system. The EIC should be set-up to streamline what already exists and answer those key issues building on past experiences.** The EIC should use the already efficiently running system capable of managing consequent budget and capable of organizing cumulative funding between private entities, Europe, Member States and regions. For example, ENIAC, and now ECSEL, have already paved the way.

### **2.2. By Identifying Missing Gaps in Innovation Infrastructures**

European innovation infrastructures (both virtual and physical) are the backbone of dynamic innovation ecosystems and stable innovation value-chains. Europe can build on the strength of its innovation infrastructures to advance its global competitiveness. Today EU instruments are very well covering excellence science infrastructures such as the ones labelled under ESFRI. However, nothing is done when looking at innovation infrastructures in a structured way. **The EIC could become the pendant of the ERC to form a coherent EU innovation policy based on a well-defined strategy towards innovation infrastructures. The EIC should also evaluate the current**

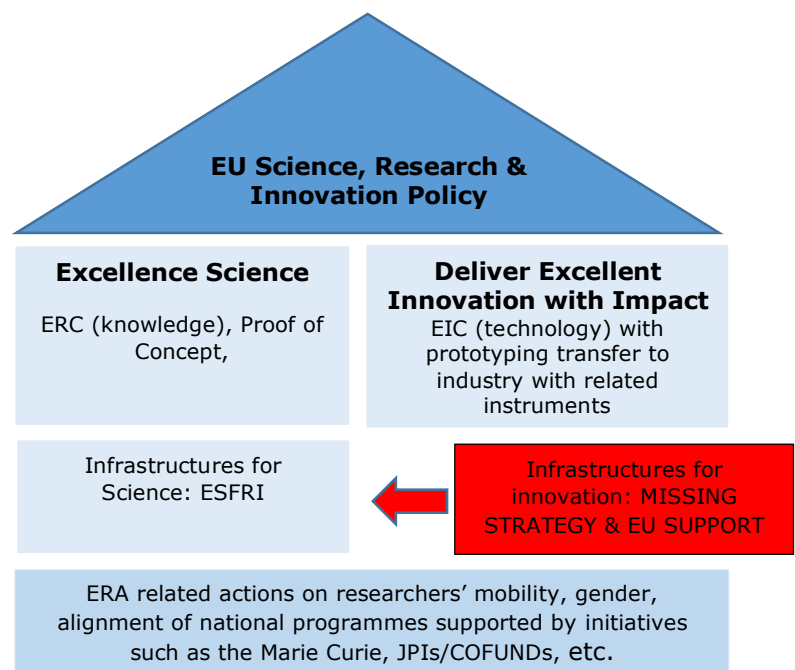
## **status in Europe on our innovation infrastructures and networked innovation eco-systems as well as set a specific strategy for those.**

Indeed, innovation infrastructures have a clear role in translating research across the entire TRL scale in co-operation with existing and emerging industries and academia:

- From TRL 1 to 3, innovation infrastructures plays a key role in the formulation of the technology scale as well as in the experimental proof of concept for RD&I.
- From TRL 4 to TRL 7, innovation infrastructures support crossing the valley of death in RD&I by providing different technological infrastructures, expertise and their unique multidisciplinary approach to existing industries, start-ups, spin-offs, SMEs, and large enterprises seeking growth and/or renewal.
- From TRL 8 to 9, technological/innovation infrastructures allow the development of specific products or systems proven in an operational environment. Moreover, they fill the gap when industrial research capabilities in house have declined or are not available, providing an objective and specialized RD&I partner.
- For (continuously evolving) services as platforms, other models are needed in which architectures and generations are more useful and where the evolution is less science driven and more customer driven, with more interaction with societal demands.

Today, even if the number of available instruments at EU level increased in the last years, there is no dedicated instrument to support technology infrastructures at EU level. The existing tools pay back (a part of) the depreciation of the infrastructures used to carry on EU projects, but none of the existing tools target the initial investments needed to establish new infrastructures or (public/open) platforms or to re-invest to heavily rejuvenate existing ones. In parallel, the erosion of the budgets devoted to the support of public innovation infrastructures is notable in a majority of Member States and such investments are not compensated by private investments, especially when the industries using such facilities are mainly composed of SMEs.

EARTO strongly recommends to fill this gap by setting up dedicated tools for technology infrastructures, for example by launching specific calls within existing instruments. **The EIC should overtake specific actions to establish a pan European network of innovation infrastructures** (mapping of existing infrastructures, for e.g. within EU RTOs as already initiated in the KETs context, identifying most pressing technologies, defining needs for pilot plants, avoiding duplication, etc.) **aiming at improving awareness on those infrastructures and allowing an easy access to industries, especially SMEs.**



**Without a clear policy on innovation infrastructures in Europe and needed programming, EU's strategy on innovation will fail to sustain large industries and especially SMEs' competitiveness against their global players. This is a policy gap that the EIC will have to fill by identifying missing innovation infrastructures and the necessary support to already existing infrastructures as backbone to its strategic priorities.**

### 2.3. By Improving our EU Innovation Framework

In addition to setting up a strong EU innovation policy and defining a new EU strategy towards innovation infrastructures in Europe, the EIC could be acting to set-up a better innovation framework for innovation actors and to streamline current EU policies.

#### **EIC as a tool to reconcile EU Regional Development Policy and EU Innovation Policy supporting Synergies of Funds**

Having clearly announced its intention to further support the development of new and existing regional innovation ecosystems thanks to the introduction of the RIS3 conditionality, EU's regional development instruments can contribute to the EIC's innovation strategy. The funds available under ESIF and the related innovation sub-programmes should be linked to any new EU innovation strategy.

Today there is a clear need to reconcile EU's innovation strategy based on industrial competitiveness targets with the EU's regional development policy based on cohesion targets. Currently, those non-converging targets are creating a situation where new innovation infrastructures are being built where structural funds are available without the proper environment for them to fully use their potential. In addition of missing the opportunity to fully use the ecosystems and innovation value-chains around, often those infrastructures do not have at hand the large kills-set allowing operational budgets to run successfully. This brings us today in the situation of having part of our innovation investments made in new innovation infrastructures which are disconnected to the needs of existing innovation ecosystems and value-chains. **The EIC should 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 also ensure smart and efficient use of EU funds for innovation.**

#### **EIC as a tool to link EU Innovation Strategy to EFSI Strategic Investments by the EIB**

EARTO is currently working with the EIB via the EIB InnovFin Advisory Services to look at what kind of access to finances RTOs need today to support their investment in their innovation infrastructures. Current models of cooperation between the various innovations actors into value-chains and ecosystems are becoming increasingly complex requiring a combination of various financing sources, including the very necessary regional, national and EU grants, but also bringing in additional private investments. **In addition of directly supporting investments in innovation infrastructures, the EIC should support the further thinking on new business models for innovation infrastructures in partnership with the EIB.** Further thinking on those new business models is necessary to ensure that economically viable innovation projects with real added value (and so real impact) would be further supported by the EFSI fund.

#### **EIC as a tool to create a global playing field for Innovation (linked to IPCEIs)**

Linked to the IPCEIs (important projects of common European interest), the EIC could clearly be setting new grounds for EU innovation actors to be able to compete on a global scale. **Especially when funds are available for innovation infrastructures at regional or national level, the EIC should setup a specific framework for innovation under EU competition law framework.** Innovation infrastructures require proper level of public and private investments to ensure that EU industries (large companies & SMEs) have access to them. By further enhancing the use of the IPCEIs, the EIC could reconcile EU's innovation strategy aiming at allowing EU to compete globally with the EU competition law framework aiming at creating and controlling EU's single market.

The EIC has a clear role in terms of improving the current innovation framework in Europe by linking EU's innovation strategy to regional and EFSI funds and key EU priorities as well as ensuring that EU state-aid framework would not impair innovation actors compared to their global competitors.

### **3. THE EIC GOVERNANCE**

**The EIC governance could very well be based on the model of the ERC governance, only it will include other type of actors linked to innovation policy.** Accordingly, one could envision such governance with an EIC Innovation Council as governing body, developing the European Innovation strategy and its funding mechanism and methodologies/practices/procedures/criteria. The Innovation Council would represent the innovation community in Europe to promote innovation and the creation of a true European innovation strategy based on the recognition that key industrial value chains require strong innovation ecosystems to flourish.

**The EIC Innovation Council should be composed of key RTOs and top industrial executives (both large companies and SMEs), all with an excellent track record of delivering impact and innovation.** The President of the ERC should be invited as a guest to the EIC meeting and vice-versa, the President of the EIC should be invited as guest in the ERC Council, to ensure appropriate integration of science and innovation.