

The Competitiveness Repository European Innovation Partnerships (EIP)

Competitiveness is widely accepted as the key driver for sustaining prosperity and raising the well-being of the citizens of a country. Enhancing competitiveness is a long-term process that requires improvements across many areas and long-lasting commitments from relevant stakeholders to mobilize resources, time and effort. Accordingly, to make the right decisions, these stakeholders need information and data.

For more than 30 years, the World Economic Forum has studied and benchmarked competitiveness. From the outset, our goal has been to provide insight and stimulate discussion among all stakeholders on the best strategies, policies and activities to overcome the obstacles to improved competitiveness.

Against this backdrop, the Forum is taking the next step to inform the discussion on competitiveness practices among stakeholders by embarking on a project to build a **Competitiveness Repository** that compiles relevant information about practices that have aimed or are intended to build competitiveness. It will be complemented by a series of private events that provide a safe space for countries to better understand approaches that have worked elsewhere.

The platform will be built around a collection of practices collected through the completion of the template below. With this exercise, we seek to identify practices that:

- Had or are expected to have **system-wide impact**
- Are **scalable and potentially replicable** in other countries
- Have a **strong multistakeholder** component (they should rely on public-private collaboration and could include, for example, programmes and activities led or facilitated by government, but implemented or funded completely or partially by the private sector or civil society such as foundations, trust funds, etc.)

The practices collected will ideally follow the 12-pillar structure of the Global Competitiveness Index (GCI) Framework (www.weforum.org/gci). They will include a variety of factors critical for competitiveness and offer a comprehensive tool to inform stakeholders about the different approaches for enhancing competitiveness in specific areas, as well as the key barriers to their implementation and factors that enabled change.

As well as reflecting the 12-pillar GCI structure, each of the practices will be structured along the following dimensions:

- A) **Background information about the practice**
- B) **Context and need for action**
- C) **Actions/activities adopted**
- D) **Role of the different stakeholders**
- E) **Results, lessons learned and additional information**

A) Background information about the practice

Title of the practice: European Innovation Partnerships

Country of practice: European Union

Status (implemented, ongoing, planned): Ongoing

Public-private collaboration is/was key for success? Yes

A systematic evaluation was undertaken:

An independent group of experts has performed an evaluation of the overall performance of the European Innovation Partnership (EIP). The evaluation is available at: http://ec.europa.eu/research/innovation-union/pdf/outriders_for_european_competitiveness_eip.pdf#view=fit&pagemode=none

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Related area of competitiveness: Innovation

B) Context and need for action

What was the situation/challenge that resulted in a need for this competitiveness practice?

In Europe, many factors prevent innovation from being rapidly implemented in the market: unfavourable framework conditions such as poor availability of finance and expensive patenting, market fragmentation, slow standard-setting and skills shortage, as well as fragmentation of efforts, among others.¹ To overcome these issues, the European Union has launched several initiatives to address each of these specific bottlenecks.

In the beginning of 2010, the European Commission launched an updated growth strategy for the coming decade: Europe 2020.² Seven flagship initiatives were identified as key engines to boost growth and jobs creation.³

One of these flagships is the Innovation Union, which was launched in October 2010. It aims to overcome the crisis, improve conditions and finance for research and innovation, raise productivity through innovation, and ensure that innovative ideas can be turned into products and services that create growth and jobs.

The European Innovation Partnerships (EIPs) are one of 34 commitments that compose the Innovation Union. EIPs seek to accelerate R&D and market deployment of innovations by better coupling demand and supply in the innovation process. The EIPs aim to develop, deploy and diffuse innovative solutions to societal challenges and, at the same time, enhance the competitiveness of EU industry.

In the process of delivering innovation to the market, the EIPs try to accelerate the process and **bridge the gap between breakthroughs (R&D results, prototypes, etc.) and their commercialization and use**. Therefore, the EIPs are a tool to influence the process of innovation and to reduce the length from idea to prototype to product to market. At the same time, the EIPs aim to address large-scale societal challenges such as ageing, resource availability and transport congestion.⁴

In summary, the focus of the EIPs is to drive the uptake of innovation through synchronization and matching of demand and supply side actions: revision of regulation, standard-

setting, public procurement, incentives for adoption, demonstration and pilot projects, etc. In this way, the public sector as regulator, customer and facilitator should stimulate high-growth potential markets for innovative products and services in which the private sector can develop competitive advantage.⁵

C) Actions/activities adopted

What were/are the main activities/actions of the competitiveness practice?

The main activity of EIPs is to create a new ecosystem of innovation that breaks down silos and acts across the research and innovation chain. The EIPs bring no new funding arrangements per se, but they drive the aligning of priorities, leveraging existing investments and forming future partnerships.⁶

The EIPs are seen as platforms that inform, advise and influence existing instruments and initiatives, and complements them with new actions where necessary. More specifically, EIPs are launched only in areas, and consist only of activities, in which government intervention is clearly justified.

The process through which new actions are defined is the opposite of a call for proposal from a public funding programme. Indeed, groups of partners within the EIPs come up with their own plans, projects and commitments and then seek synergies with other projects and partners of interest (often from the private sector). An EIP starts with a Steering Group developing priorities and a set of concrete actions. The Steering Group is chaired by one or several European Commissioners, and composed of key stakeholders such as representatives of national ministries and international organizations, CEOs from industry, academia, etc.). The Steering Group brings together different players that would not normally join forces, be it across sectors, geographical borders, or areas of competence and responsibility.

In term of action, the Steering Group of each EIP delivers its Strategic Implementation Plan (SIP). The SIP has to include several points: vision, targets and objectives; areas to prioritize, actions to undertake to reach objectives, identification of existing barriers to innovation and contribution from stakeholder consultations; rationale and added value of the EIP for the specific areas and actions; proposal for implementation measures as well as a monitoring and evaluation framework; and overall response by stakeholders with timelines.⁷

Currently, the Commission has launched five EIPs in the following areas:

- Active and healthy ageing
- Agricultural sustainability and productivity
- Smart cities and communities
- Water
- Raw materials

D) Role of the different stakeholders

Which stakeholders have been involved (public sector, private sector, civil society, etc.) in the competitiveness practice?

The type and role of individual stakeholders depend on the societal challenge addressed by each EIP. The public-private partnership can take different specific forms depending on the priority actions identified by each EIP.

The objectives of accelerating development and deployment of innovations to tackle societal challenges, pool resources and boost competitiveness are common to all EIPs. They are all challenge-driven; they all act across the whole research and innovation chain, and they all seek to streamline existing initiatives. However, the focus and priorities chosen for each EIP need to be different to ensure that the specific challenge is tackled in the most effective way.

The role of the Commission

The Commission plays an active and important role in promoting the success of EIPs. The role is mainly an initiator, catalyst and facilitator. The Commission brings the different parties together, provides support and possible solutions, and deploys funding, instruments and policies under its responsibility to contribute to the success of the partnership. Once the project is implemented, the Commission ensures effective monitoring.

The Steering Groups of the five EIPs are chaired by European Commissioners (up to three) and have the capacity to choose the members of the Steering Group. The public funding is allocated on the basis of the existing procedures for decision-making by EU institutions or by national, regional or local authorities. It is important to note that the EIP and the Strategic Implementation Plans are neither a new funding programme, nor instrument, nor a legal entity.

The role of the Steering Group

The members of the Steering Group are invited by the Commissioner(s) for the partnership (e.g. for the Active and Healthy Ageing EIP, 33 members composed the Steering Group; the number varies depending on the complexity of the partnership). Steering Group members are key stakeholders and can come from government (ministries), organizations (OECD, NGOs, etc.), the private sector (CEOs from industries, venture capitalists, etc.) and academia (research institutions, universities, etc.). The main mission of the Steering Group is to develop and to endorse the Strategic Implementation Plan. Once the SIP is delivered, the main role of the Steering Group is to advocate and monitor progress.

The role of the private sector

Private actors take part both in the governance (Steering Groups, etc.) and in the implementation, contributing to the work of the partnership by employing their own resources. The partnership is attractive for the private sector notably because it is an opportunity to influence future demand side action (legislation, standards, procurements), to have primary information about solutions that could be developed, copied and scaled-up, to work with partners outside their

usual domain of operation and break down silos, and to get access to bigger markets.

Interaction between the different sectors:

The public sector acts as regular, customer and facilitator to stimulate high-growth potential markets for innovative products and services in which the private sector can develop competitive advantage.⁸

E) Results, lessons learned and additional information

Implementation date of the competitiveness practice (start date, end date/estimated end date)

As part of the Innovation Union, the European Commission presented a proposal to launch the EIP in October 2010.

The EIP on **Active and Healthy Ageing** was launched in May 2011, and in November 2011 its Steering Group presented its Strategic Implementation Plan (SIP). Six EIP AHA Action Groups were launched in 2012 in the subset of those priority areas where stakeholders had demonstrated significant readiness and commitment to engage. After the endorsement of the AHA SIP, the Commission put forward proposals for additional EIPs, drawing lessons from the pilot. In February 2012, the Commission proposed EIPs on Agricultural Productivity and Sustainability and on Raw Materials. In May 2012, it added a proposal for an EIP on Water and in July 2012 it proposed a Smart Cities and Communities EIP.

The EIP on **Water** delivered its SIP in December 2012 and issued a first Invitation for Commitments for Action Groups. This resulted in the setting up of nine Action Groups. A second invitation launched in November 2013 resulted in another 16 Action Groups.

The EIP on **Agricultural Productivity and Sustainability** reached an agreement on its SIP in July 2013. An EIP Service Point was set up in April 2013 to collect and disseminate the results of the work and to animate discussion on innovation in priority areas via Focus Groups. So far, 10 Focus Groups have started.

The EIP on **Raw Materials** adopted its SIP in September 2013. The Commission launched an Invitation for Commitments in October 2013, resulting in 90 commitments, and Action Groups are now being organized for implementation. The High-Level Group of the EIP on **Smart Cities and Communities** adopted its SIP in October 2013. An Invitation for Commitments was issued in February 2014, and a number of Action Clusters are now being set up.

What were/are the resource requirements (human and financial resources) of the activity?

Financing

EIPs are not a new instrument. Their aim is to optimize the use of existing instruments to fill the gaps. They do not receive financial support nor do they manage funds. However, the EIPs can establish particular public funding needs (from EU funding source, but also from Member

States).⁹ Total financial resources designated to cover the operational costs of all the EIPs (organizing Steering Group and Action Group meetings, EIP secretariats, staffing and running the websites, for example) can be estimated to around €2-3 million (an extremely small fraction compared to funds available for R&D and innovation). These financial resources do not include R&D and innovation investments, grants and other financial support for the implementation of the actions.

Human Resources/Process

The main human resource requirements for the governance and operations of the partnerships relate to stakeholders participating in the Steering Groups and the Action Groups. Within the Commission's Directorate-Generals around 20 FTE deal with EIPs.

What were the outcomes/results (expected or achieved) of the competitiveness practice both in terms of quantitative (metrics) and qualitative results?

All EIPs aim to respond to major social challenges. For instance, the EIP AHA aims to add an average of two years of healthy life for everyone in Europe by 2020. To achieve such an ambitious objective, innovation needs to take place.

The challenges of each EIP are set in a way that to be fulfilled, innovation needs to rapidly reach the market. Each of the EIPs is working under an evaluating and monitoring framework to collect evidence and deliverables before 2020.

By defining challenges that are specific in scope and time, the EIP works to step up developments and experimentation with users, to anticipate and fast-track legislation, and to mobilize demand notably through improved public procurement. It is via those actions that the lead time for innovation in Europe will be significantly cut. Therefore, by creating a framework to achieve specific goals, each EIP can achieve the objectives of addressing societal challenges while enhancing Europe's competitiveness.

In a short period of time, the EIPs have established themselves in the European research and innovation landscape and mobilized a wide range of partners. With more than 700 commitments from new stakeholder groupings so far, EIPs have proved a considerable outreach, and first results are emerging: mapping of good practices, practical toolkits for replication, collections of evidenced impact, and implementation of integrated services.

For example, the AHA EIP Reference Sites represent a rich collection of real life examples of ICT-enabled innovation for active and healthy ageing. They are committed to working with others to replicate transferable elements while sharing lessons learned and conditions for success. So more regions will be able to benefit from their successes and avoid making expensive mistakes along the way.

Some examples: a shared IT system in Denmark collects and shares information on citizens with chronic illness, allowing them to stay at home. The Andalusian e-health strategy is increasing e-prescriptions and reducing hospital admissions through prevention, bringing savings of €200 million. The Circles of Care service in the province of Noord-Brabant has

brought savings of €1.5 million per year for night staff care. The Scottish risk prediction tool helps identify patients with a risk of emergency admission to hospital, leading to less hospital admission, reduced hospital stay and savings of €250 per patient.

What were the main barriers/challenges to implementing the practice and their effect on implementation? How were these barriers overcome?

The independent expert group evaluation of the overall performance of the EIPs has identified the following main challenges in implementing EIPs:

Complex operational mode¹⁰

The EIP process has been hampered by a complex operational mode (Steering Groups, Operational Groups, Action Groups, etc.), which have discouraged some stakeholders from remaining actively engaged as EIPs have progressed. In addition, some EIPs have attempted to cover too much ground, without any strategy of prioritization and broad objectives, measurable with difficulties. On the other hand, the evaluation also recognizes that the EIP model overall has been seen as effective and sufficiently flexible. In particular, the bottom-up dynamic with extensive participation of all relevant stakeholders and a reverse commitment chain has been judged by the expert group as a valuable aspect to be preserved.

Leadership, governance and implementation¹¹

The Commission has sometimes been seen as being too implicated in the drafting of the SIPs. The selection process of the members of the Steering Group has also been criticized for lack of transparency. The SIP has been criticized for not being clear enough about "how" to implement actions due to limited guidance. On the other hand, the evaluation also acknowledges that the engagement of the Commission, both at the political and supportive level, has been crucial for the effective launch of the EIPs. One of the novel features of the EIPs is that they were led by Commissioners with lead responsibility for the policy area, and, therefore, a relatively large number of Commissioners and Commission services were involved.

Participation¹²

The evaluation has highlighted that it is easier for actors knowing the European system to integrate in an EIP. As a result, the number of representatives at national level and the participation of small and medium enterprises are limited in some areas. However, the evaluation also says that EIPs have generally been good in ensuring extensive participation of relevant stakeholders. SIPs have been drawn up based on a range of inputs, and there have been effective channels to become active in the EIPs, including through Invitations for Commitments, applications to participate in Action Groups, marketplaces, conferences and workshops.

Please describe the areas, if any, where the projects fell short of its objectives.

The overall objectives are broadly defined and measurement of progress is difficult. Three years on there has been preparatory progress, but none of the EIPs have advanced far in meeting their initial objectives (set for 2020).¹³

The EIP evaluation Expert Group¹⁴ recommends five areas where corrections and improvement are needed to help EIPs achieve their objectives:

- *Selection criteria:* Define first-level criteria that connect closely to needs for systemic change in areas with great innovation potential, societal need, business opportunity and need for partnering across Europe
- *Stronger focus on innovation demand and diffusion:* More emphasis on measures such as procurement, standards, regulations, replication and scaling-up of innovations
- *Governance model:* Imperfections to be addressed at the level of overall guidance and leadership, and stakeholder engagement.
- *Clear targets and indicators to monitor and evaluate success:* Objectives need to be specific enough to drive action and results.
- *Stakeholder partnerships:* The partnerships need to be more proactive in bringing in new actors who may have significant relevance for the development of future ecosystems and markets.

What have been the main enablers and their importance/relevance for the success of the practice implementation?

Defining a common and realistic vision has enabled actors to mobilize resources and achieve breakthroughs more rapidly. Partnerships have been organized to achieve common European targets, which resonate with citizens and enthuse and obtain commitment from stakeholders (widespread support). The partnerships have also promoted new ways of working, using modern means of communication and breaking down silos, which too often prevent key players in innovation to work together across policy areas and disciplines. Commitments have allowed pooling efforts, aligning instruments, removing obstacles and achieving critical mass. By clearly defining intermediate steps and deliverables, it has allowed for a more coordinated efforts and for initial goals to be achieved.¹⁵

What were the lessons learned from this activity?

EIPs present a new approach to EU research and innovation.

EIPs present a new approach to shorten the time between innovation and the market by being challenge-driven, acting across the whole research and innovation chain, and streamlining existing instruments and initiatives. By bringing together stakeholders that would otherwise not naturally collaborate, the EIPs have deepened the dialogue between policy-maker and innovator.

To be fully efficient, the EIPs have to set clear and measurable objectives. In addition, the system of governance and the priority actions should be open and accessible to broader types of stakeholders. The primary aim should be systemic change, and there should be a stronger focus on innovation demand and diffusion.

Endnotes

- ¹ http://ec.europa.eu/research/innovation-union/index_en.cfm?pg=intro
- ² For more information, visit: http://ec.europa.eu/europe2020/index_en.htm.
- ³ The seven flagship initiatives are: Digital Agenda for Europe, Innovation Union, Youth on the Move, Resource Efficient Europe, An Industrial Policy for the Globalization Era, An Agenda for New Skills and Jobs, and European Platform Against Poverty. Available at: http://ec.europa.eu/europe2020/europe-2020-in-a-nutshell/flagship-initiatives/index_en.htm
- ⁴ European Commission 2014.
- ⁵ European Commission 2014.
- ⁶ European Commission 2014.
- ⁷ Frequently Asked Questions regarding EIPs (2012).
- ⁸ Ibid.
- ⁹ Frequently Asked Questions regarding European Innovation Partnerships under Europe 2020 (2010), question 8 and 9.
- ¹⁰ European Commission 2014.
- ¹¹ Ibid.
- ¹² Ibid.
- ¹³ Ibid.
- ¹⁴ Ibid.
- ¹⁵ http://ec.europa.eu/research/innovation-union/pdf/eip_faq_december_2010.pdf

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Innovation Union

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European Innovation Partnerships

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EIP on Raw Materials: <https://ec.europa.eu/eip/raw-materials/en>

EIP on Active and Healthy Ageing: http://ec.europa.eu/research/innovation-union/index_en.cfm?section=active-healthy-ageing&pg=home; <http://i3s.ec.europa.eu/commitment/44.html;i3sid=vRNSSn1c2Qv4w827Xv2mFKN8h1nGdD8G6IVTS9ZcgvIZMQ95YB9f!1800689303>; http://ec.europa.eu/research/innovation-union/index_en.cfm?section=active-healthy-ageing&pg=home; <https://webgate.ec.europa.eu/eipaha/initiative>

EIP on Water: http://ec.europa.eu/environment/water/innovationpartnership/index_en.htm

EIP on Agricultural Productivity and Sustainability: http://ec.europa.eu/agriculture/eip/index_en.htm

EIP on Smart Cities and Communities: <http://wbc-inco.net/object/project/10476>; http://ec.europa.eu/eip/smartcities/index_en.htm