



EUROPEAN COMMISSION

Brussels, 30.11.2011
SEC(2011) 1434 final

COMMISSION STAFF WORKING PAPER
EXECUTIVE SUMMARY OF THE IMPACT ASSESSMENT
Integrating ex-ante evaluation requirements

Accompanying the document

Proposal for an amended Regulation of the European Parliament and of the Council
on the European Institute of Innovation and Technology

{COM(2011) 817 final}
{COM(2011) 822 final}
{SEC(2011) 1433 final}

1. Background

The EIT was set up to fill a gap in the European landscape and with a clear objective: promote innovation via the full integration of the knowledge triangle (research, innovation and education). The EIT is a novel initiative at EU level that explicitly links the full innovation cycle from education and knowledge creation to new market opportunities and business creation. The EIT is characterized by two main principles: **an independent EIT organisation**, (neither the Commission nor representatives from the Member States are members of the EIT Governing Board) which organizes the selection process of KICs, coordinates them with a flexible framework and disseminates best governance and funding models from the KICs; **and autonomous KICs**, which define their internal organisation, composition, agendas and working methods.

As an agency and in contrast to programs, the EIT does not have actions but implements its activities notably via the KICs which are integrated, long-term partnerships, set for a period between 7-15 years, spanning over various financial frameworks. KIC have legal status. The first three KICs have been selected in the fields of climate change adaptation and mitigation (ClimateKIC), future information and communication society (ICT Labs) and sustainable energy (InnoEnergy). The KICs are presented in more detail in the Annexes.

The EIT has a EU budgetary contribution of €309m for the period 2008-13. The EIT has fully absorbed the amounts allocated in 2009 and 2010 (5,6 million and 26 million respectively) and is expected to fully commit the 55 millions allocated in 2011. This is an important milestone, considering the large volume of carry-overs and cancellations of operational appropriations of EU agencies especially in during their first years of existence (cf. Report of the Court of Auditors).

The EIT is reflected in the EU2020 and in key flagships and initiatives such as:

- The Innovation Union Communication
- The Youth on the Move Communication
- Modernisation of the Higher Education Agenda
- The Commission's Regional Policy communication on smart growth

2. Problem definition

Innovation has been put at the top of the EU policy agenda for a good reason. A number of challenges and barriers continue to inhibit the innovation capacity in Europe and its ability to tackle complex societal challenges in a sustainable way. This has implications for the continued competitiveness of firms, Higher Education Institutions and Research Institutes across the EU and, ultimately for the employment, social, environmental and economic well-being of citizens of the EU. The EIT has been set up to support addressing these challenges. Building on the Horizon 2020 challenges, the first EIT Impact Assessment and the positioning of the EIT within the innovation landscape, the following underlying drivers have been identified:

- a poor record of developing, attracting and retaining talented individuals;

- a fragmented innovation system;
- the underutilisation of existing research strengths in terms of realising economic or social value;
- a low level of entrepreneurial activity, particularly in establishing potential high-growth businesses and capturing the value of research and innovation outputs.

The **talent challenge** is characterised by the fact that Europe faces serious problems in attracting, retaining and developing qualified human resources. This is aggravated by the fact that global competition for postgraduate student and researchers is increasing since the emerging economies play an ever more important role.

The European Commission's Innovation Union highlights the need to get more value for money and tackle **fragmentation**. EU and national research & innovation systems need to be better linked up with each other and their performance improved.

There is excellent potential within the European research and innovation structure, provided by a series of centres of excellence that have emerged. There is, however, scope for **improving the utilisation of this excellence**.

Europe **lacks the generally entrepreneurial culture** that characterises the US or the emerging Asian economies. A major reason for this might be the different attitudes to risk, seen as a defining factor of entrepreneurship. Also, in Europe the concept of entrepreneurial thinking is largely confined to business schools and economics courses.

The EIT's independent evaluation confirmed the EIT concept and general objectives but referred to some issues related to the implementation of the EIT following its launch. In assessing how far the EIT achieved its overall objective of increasing the innovation capacity of Member States, the evaluation found that the impact of EIT in structuring innovation across Europe is limited due to factors such as lack of critical mass, administrative inefficiencies and limited economies of scale related to a limited scope of activities. It is important to underline that all of these issues are related to the implementation of the EIT.

3. Synergies, complementarities and EU Added Value

In its Common Strategic Framework for Research and Innovation (Horizon 2020), the Commission identified three complementary and interlinked pillars: Excellence in the science; Tackling societal challenges; Creating industrial leadership and Competitive frameworks. The promotion of innovative education and entrepreneurial mindsets is a particularly unique dimension and the main contribution of the EIT across the three pillars of Horizon 2020. As part of Horizon 2020, the EIT has been framed within the pillar "Tackling societal challenges", through its innovation activities and knowledge triangle integration. However, given its integrated, cross-cutting nature, synergies should also be sought with other pillars, in particular the "competitiveness" pillar. Linkages are being developed at KIC level with other initiatives, which materialise in a variety of ways, from KIC to KIC and challenge to challenge.

As Horizon 2020 does not cover education activities beyond the EIT, the EIT has a particular contribution to make to the objectives of Horizon 2020 via innovative, entrepreneurial education, playing an important bridging role between the Research and Innovation Framework and

education policies and programmes. In this context, the EIT will contribute to achievements of the European Higher Education Area. In particular, through new, trans/interdisciplinary EIT-labelled degrees, the EIT is leading a collaborative effort towards education for innovation with clear spill over effects on the broader European agenda for the modernisation of higher education institutions.

Moreover, the EIT can contribute to the Cohesion Framework by addressing the linkages between the local and global aspects of innovation. Co-location centres provide for cross-border collaboration within and outside of the KIC networks and are well positioned to capitalise and benefit from various funding schemes from their respective regions. Via the co-location centres, the EIT and KICs have a strong territorial impact and offer an important element of European added value next to the development of smart specialisation and clusters.

The European nature of the EIT offers a strong element of EU added value. At present, the EIT is the only EU initiative that explicitly links the full innovation cycle from education and knowledge creation to new market opportunities and business creation. This is beginning to demonstrate a number of potential efficiency gains, as has been suggested by the external evaluation of the EIT.¹ Other EU initiatives also do not have the same institutional dimension.

The EIT specifically aims to bring added value at EU level by:

- Building up new innovation models via world-class long-term integrated partnerships;
- Overcoming fragmentation and connecting excellence across the EU;
- Fostering entrepreneurship through knowledge triangle integration;
- Nurturing talent across borders;
- Operating according to a results-oriented approach;
- Experimental character;
- Leverage on private investment.

4. Objectives

The external evaluation of the EIT validated the concept of the EIT and its goals of contributing to improving the innovation capacity of the EU by involving partner organisations in integrated innovation, research and education activities at the highest standards. EIT's ambition of becoming a model for the integrated European Innovation Research and Education area by generating innovations in areas of key economic or societal interest remains appropriate. Since the introduction of the EIT, the importance of EU support for tackling societal challenges has increased in significance. The rationale for public intervention is strong given the levels of market failure present and the missing incentives for firms to engage in innovation addressing societal challenges.

In full alignment with other EU initiatives the general objectives of the EIT are to

¹ http://ec.europa.eu/dgs/education_culture/evalreports/index_en.htm#educationHeader

- Contribute to reinforcing the innovation capacity of Member States and the EU by promoting the formation of integrated and co-located partnerships which combine innovation, research and education activities and act as globally recognized flagships for new models of innovation;
- Deliver actions which tackle key societal challenges through developing new products, processes and services of the highest international standards.

Some more specific objectives underpin the general objectives outlined above:

- Integration of the knowledge triangle (of research, innovation and education) to create economic and social value and to enhance the returns from greater levels of collaboration and co-operation.
- Enhancement of the attractiveness and commercial relevance of post-graduate education; opportunities to attract, develop and retain appropriate skills;
- Exploitation of the underutilised potential of the EU's research strengths to deliver greater returns in the product and labour markets;
- Development of effective collaborative linkages between centres of excellence to create a critical mass for advanced innovation and education;
- Promotion of the development of innovative products and processes where market failures lead to a sub-optimal provision;
- Strengthening the capacity for entrepreneurship across the EU to create new business activity and increased realisation of the potential value of research and educational outputs;
- Strengthening existing and potential centres of research, innovation and educational excellence in the EU to produce globally competitive centres of activity with global reputations for excellence;
- Addressing disparities in innovation capacity across the EU by developing and sharing the knowledge of the returns to the new models of innovation practices and governance.

While addressing its specific objectives, the EIT operational objectives are guided by the need to achieve critical mass of KICs through consolidation and expansion; enhance administrative efficiency and capacity through providing support functions for the KIC, simplification measures, targeted services and outreach strategy including internationalisation; improve and extend the EIT activities including dissemination with view of achieving economies of scale.

5. Policy options

A number of options for the development of the EIT were considered prior to its launch in 2009 and were subject to an impact assessment². There has been no significant change in the context to warrant the reinstatement of those options which were rejected and so the current IA does not

² http://eit.europa.eu/fileadmin/Content/Downloads/PDF/Official_documents/impact_en.pdf

consider those rejected options further³. Instead the Options presented build upon the experience gained in the first two years of the EIT's activities. The Options are guided by the objectives outlined above.

Three Options have been analysed:

Option 1. Closure

One Option for the EIT would be to wind up its activities. This forms the 'stop option' and all activities of the EIT are assumed to cease. Any prolongation of the activities of the KICs would be dependent upon their ability to secure funds to replace those lost from the winding-up of the EIT. It is considered unlikely that the three KICs would be able to continue activities as the evaluation of the EIT found that they were not yet financially self-sufficient. Some residual activity might be maintained and assumptions to this effect are built into the assessment exercise. No other existing initiative at EU level can support the long-term integration of excellent research, education and innovation to address specific societal challenges. Moreover, the role to be played by the EIT in dissemination of good practices of innovation would remain unfulfilled.

Option 2. Baseline

Continuing with the existing 3 KICs would enable the EIT to consolidate its activities and focus upon a limited number of priority fields. Under this baseline scenario, the existing pattern of activity of EIT and the KICs is assumed to continue on a similar pattern and scale. The Option would not involve any expansion of funds to the EIT but would continue its existing budget. Any expansion of activity by the KICs would be as a result of their ability to secure additional funding.

Activities of the EIT would continue at the present (planned) level. This includes activities related to entrepreneurship and workshops bringing together KIC participants. Under this Option new KICs could only be established once an existing KIC had ceased to receive funding from the EIT. This would maintain a constant budget and retain the operation of three EU-supported KICs. The EIT's and KICs imprint on European innovation will be limited due to lack of critical mass to make a noticeable impact (cf. although there is no consensus as to what constitutes critical mass, most respondents believed that somewhere between 6 and 10 KICs would be an appropriate scale for the future) .

Option 3. Progressive Growth and extended activities

³ Five options were debated: 1) the Centralized EIT being a centrally governed institution performing directly research, education and innovation activities and directly responsible for the KIC management ; 2) the Distributed EIT where the EIT is a funding body but KIC are autonomous and perform directly education, research and innovation activities; 3) the Integrated EIT which is a combination of Options 1) and 2) and where the EIT Governing Board sets the overall strategy, selects, evaluates and monitors the KIC but KIC are autonomous to organise their activities; 4) the Funding-Labeling EIT where the EIT acts as a funding body and awards the EIT label based on excellence; 5) the Status-quo (a 'no EIT' option). Two options were also excluded during this first assessment process, namely; a) The single green field institution and b) The network of organizations. Policy option 3 emerged as the preferred option. The Impact Assessment exercise states that "This option aims at finding a balance between option 1 and 2 keeping the benefits of both while avoiding their drawbacks" (p.32).

Under this Option a number of new KICs would be launched by the EIT, and thus a greater number of priority fields would be covered. The budget for each newly-launched KIC would be the approximately same as that currently applied to existing KICs. Based upon the analysis of the supporting study to this impact assessment regarding economies of scale and the EIT proposals for the future it is considered that the total number of KICs could eventually rise to up to 9 by 2020. This will enable the EIT to achieve its expected impact on innovation, research and education and is based on the assumption that each KIC is composed between 5 to 6 centres of excellence (co-location centres), and that the very same centres may participate in more than one KIC, hence leading up to approximately a critical mass of 50 centres of excellence across the EU. A further expansion beyond the 9 KICs may compromise the principle of world-class excellence, which is a cornerstone of the EIT model.

Current and planned activities of the EIT would continue and expand in order to consolidate the EIT as a learning organisation in its own right. This would include developing dissemination and outreach strategies as well as the ‘internationalisation’ agenda of the EIT regarding its relationships with 3rd countries. Furthermore, this option implies that the EIT starts additional activities in order to extend the benefits gained through the KICs to audiences beyond those directly involved in the KICs. The EIT would operate additional activities which would serve to link firms, research institutes, Higher Education Institutions and public authorities located in areas where innovation capacity is weaker. The EIT would seek to promote the development of innovation capacity in these areas. This would not involve a dilution of the ‘excellence’ criteria applied to the selection of KICs but would constitute a deepening of the role of the EIT.

6. Assessment of impacts

The EIT is intended to boost the innovation capacity of the EU and Member States in order to increase the competitiveness of the EU economy and to develop innovations addressing societal challenges. The EIT has the potential to bring about strong diffusion and institutional effects by identifying and disseminating best practice governance and funding models from the KICs, making sure that knowledge from the KICs is captured, valorised and capitalised across the Union and beyond.

6.1. Most relevant economic, social and environmental impacts

Economic effects: The strongest effects are found around research and innovation activity and the influence on investment flows. The distributed model adopted for the EIT encourages cross-border flows and contributes to the development of a single European area for education, research and innovation.

Social effects: Welfare benefits accrue owing to the development of innovations addressing societal challenges. The Options will also support the modernisation of Higher Education stimulating additional social benefits.

Environmental effects: They are - at worst - neutral, at best, particular fields of activity may promote the development of innovations which provide positive environmental benefits.

6.2. Qualitative assessment of significant impacts

Innovation and research. Each Option will promote stronger levels of research and innovation, and improve the efficiency of the innovation effort. This will be done through providing

investment in innovation activity. In addition, Option 3 will provide positive benefits also indirectly through supporting the generation and dissemination of better practices in innovation promotion and innovation governance.

Education systems. Options 2 and 3 will both improve the quality of education provision, particularly with regards to business involvement, and the provision of entrepreneurial education. Option 3 will also provide some positive impacts through raising awareness of good practice in those parts of the EU which are not directly participating in the EIT.

Internal market and competition. There is a potential positive impact for the EIT, through the KICs, on the movement of workers, the flow of capital and on better consumer choices. The impacts will be stronger under Option 3 than under Option 2 owing to the greater scale of activity under this Option. Option 1 will have some positive residual impact but this is unlikely to significantly affect market conditions.

Competitiveness, trade and investment. The effect of the EIT, through the KICs, on productivity is likely to be positive under all Options. The scale of the impact will be greatest under Option 3 and least significant under Option 1. Options 2 and 3 are also likely to deliver gains in the global competitiveness of firms and institutions involved. The activity of the EIT will also provoke cross-border investment flows through the relocation of economic activity.

Consumers and households. Options 2 and 3 are likely to have positive, albeit modest, impact on consumers and households by providing new goods and services.

Specific sectors and regions. Owing to the multi- and cross-disciplinary approaches adopted in the KICs, many sectors will potentially engage with the EIT. The regional impacts of the EIT are likely to be more significant. Regions and Member States which are the site for co-location centres will have opportunities for positive benefits through economies of agglomeration and the reaping of positive externalities. This is only valid for Options 2 and 3. Moreover, Option 3, in seeking to extend the coverage of the EIT to generate new models of innovation governance across the EU has the potential to generate positive benefits in all EU regions.

Third countries/international relations. Options 2 and 3 are considered to have the potential to affect investment flows between the EU and third countries through creating a more conducive environment for that investment. Both Options may also act to attract flows of students and researchers from 3rd countries.

Macro-economic environment. All options will have a positive impact on economic growth. This will occur both through demand-side effects and positive improvements to the supply-side. The scale of the impact will be greatest under Option 3 and least significant under Option 1.

Employment and labour markets. All options facilitate new job creation and support entrepreneurship. The scale of the impact will be greatest under Option 3 and least significant under Option 1. Options 2 and 3 will also support the functioning of labour markets in the EU through encouraging the temporary mobility of labour to engage in knowledge exchange activities.

Environmental impacts. Options 2 and 3 will have positive impacts on climate; transport and energy use; air quality; renewable and non-renewable resources, and environmental consequences of firms and consumers.

6.3. Budgetary assumptions and assessment of cost effectiveness

In order to assess the impacts of the various options assumptions are made as to the possible income and expenditure of the EIT and the KICs. Overall levels of impacts will vary depending upon the budgets available and the type of expenditure. The budget estimates are based on the KIC lifecycle⁴ and on the principle that a KIC will be financed on average for up to 25% of its global expenditure for the whole life-cycle (15 years). The assumptions are as follows:

Option 1: No EU expenditure on EIT HQ or KICs. The own income and expenditure of KICs from 2014-2020 is assumed to be around one third of total KIC activity in 2013. Expenditure is thus strongest in early years and trending to zero by 2020. No income or expenditure by EIT HQ.

Option 2: EU income and expenditure by 3 KICs 2014-2020 to total €1,800m. This figure is based on assumptions of the budget required to consolidate existing KICs and a budget for the EIT for outreach and dissemination, cross-cutting support to the KICs and EIT administrative expenditures. During the 2014-2020 period, the EIT contribution to the three KICs will cover the last years of their "development phase", and "achieving sustainability phase". KICs own resource expenditure to total some €4,000m. EIT HQ to have income and expenditure in same period of some €55m.

Option 3: EU income and expenditure by 9 KICs 2014-2020 to total €2,800m. This figure is based on assumptions of the budget required to consolidate existing KICs, a gradual development towards new KICs (three new KICs by 2015 and 2018 each) and a budget for the EIT for outreach and dissemination, cross-cutting support to the KICs and EIT administrative expenditures. The budget reflects the different stages of development of the 9 KICs. Expenditure will be strongest in later years as KICs profiled to come on stream in a staggered manner. KICs own resource expenditure to total some €6,100m. EIT HQ to have income and expenditure in same period of some €100m.

7. Comparing the options

Based on the assessment of impacts (DG-internal and by an external consultant), conclusions have been made with regard to the strengths and weaknesses of the individual options and their ability to achieve the objectives outlined further above. The different options have also been compared with regard to their effectiveness, efficiency and coherence. Finally, some possible risks associated with the different options have been examined. The results are the following:

Option 1 does not deliver against the objectives of the EIT in comparison to the baseline. Its main beneficial feature is that it involves no EU expenditure, whilst still reaping the benefits of past investments in the KICs. These benefits will decay over the period of the coming

⁴ The KIC life cycle phases cover the following phases:

- a) a "setting-up" phase of 2 years: it is a time for a KIC to get organised, set up necessary financial and legal structures as well as recruit crucial staff. The implementation of the real KIC activities will start notably on the second year of implementation.
- b) "development" phase of 3 years: it is assumed that the KIC has been already established and begun implementing its core activities, however still dynamically expanding in terms of the scope of activities and the number of partners. This would lead to a substantial increase of the KIC budgets.
- c) "cruising speed" phase of 6 years: the KIC has a stable structure with clearly defined scope of activities.
- d) "achieving sustainability" phase of 4 years: the KIC activities are similar to cruising speed phase while the EIT contribution will gradually decrease requiring a KIC to assure other sources of revenues.

Multiannual Financial Framework. Were there evidence of significant government failure with respect to the EIT, such as deadweight, crowding-out of investment or misdirected investments then Option 1 would offer additional benefits. However, the external evaluation of the EIT did not find any evidence of such failures.

The administrative costs of this option will decrease significantly as the activities of the EIT are assumed to cease. The costs of administrative expenditure, covering necessary staff, administrative, infrastructure and operational expenses until the wind up of the EIT activities will not exceed 1 % of the EIT Budget.

Options 2 and 3 meet the objectives of the EIT most strongly. The impact of Option 3 is greater than that of Option 2 owing to its greater scale. The scale of Option 3 provides a further benefit in that it is less affected by the potential weakness of privileging existing networks. This weakness is relatively greater for Option 2. The cost-effectiveness of **Option 2** is stronger than Option 1 because the EIT will maintain the scale of operation. Implementation costs will also be proportionately reduced as they will be spread across the actual number of KICs. The administrative costs of the option will not increase significantly. The costs of administrative expenditure, covering necessary staff, administrative, infrastructure and operational expenses, will not exceed 2 % of the EIT Budget.

Option 3 scores positively in terms of raising the international profile of the EIT, and, most significantly, in sharing the knowledge generated within the EIT with external actors and agents. In particular, Option 3 offers a means to mitigate some of the territorial imbalances associated with Option 2. The cost-effectiveness of Option 3 is stronger than Option 2 because the EIT has reached a more efficient scale of operation. Implementation costs will also be proportionately reduced as they will be spread across a greater number of KICs. The costs of administrative expenditure, covering necessary staff, administrative, infrastructure and operational expenses, will not exceed 2.16% of the EIT Budget.

Option 3 has two weaknesses. Firstly, its very scale may begin to introduce market distortions. This will not be the case in Option 1 and is less likely under Option 2. Secondly, it strengthens existing centres of excellence and risks reinforcing prevailing disparities in relative innovation performance between regions of the EU. However, it is believed that the EIT will be able to mitigate these effects by taking appropriate action.

On the basis of the evidence available, **Option 3 is the preferred option.**

8. Monitoring and evaluation

The EIT evaluation⁵ made a number of strong recommendations regarding the monitoring and evaluation of the EIT and the Commission is to follow up on these in its Evaluation Action Plan. The recommendations stressed the importance of establishing robust monitoring procedures in association with the KICs, that the EIT should act as a challenging partner to the KICs, and that the EIT should adopt a culture of ‘openness’. The EIT should seek to develop a culture of continuous evaluation across the EIT. This should seek to evaluate the innovative practices being implemented within and across the KICs and to identify the returns being achieved from investments made. The EIT should seek to work with the KICs to continuously improve performance and should

⁵ http://ec.europa.eu/dgs/education_culture/evalreports/index_en.htm#educationHeader

seek to make available the lessons it has learnt to help improve performance elsewhere in the EU.

In response to its responsibility, the Commission is fully committed to support the EIT in establishing a sound and solid results-oriented monitoring system while fully respecting the contractual relations between the EIT and the KICs. In doing so, it is important to design and implement the monitoring system around with EIT with view of at least four key determining factors:

- The European policy level: The need for an interface between the EIT and the overarching Horizon 2020 monitoring system and the Innovation Union monitoring.
- The EIT-Institute level: A set of indicators measuring the progress of the EIT own processes and activities such as dissemination, outreach, human resources development. The indicators should correspond to the objectives of an efficient and effective institution.
- The cross-KIC-level: A common set of SMART indicators applicable across all KICs, for example via a further development of the EIT Scoreboard to be managed and applied by the EIT. The SMART indicators should correspond to the objectives of the EIT.
- The individual KIC level: KIC have different business models and markets and thus different industrial KPIs. The KIC own KPIs shall be taken into account by the EIT in measuring the progress achieved against the objectives set in the annual Business Plans. The KIC own KPI should correspond to the objectives of the KIC.