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Accompanying the

Proposal for a Regulation of the European Parliament and of the Council on the European Institute of Technology

IMPACT ASSESMENT

integrating ex ante evaluation requirements

Executive Summary

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This report commits only the Commission's services involved in its preparation.

Introduction

The proposal to establish a European Institute of Technology was first put forward by the Commission in its 2005 Spring Report. Building on a wide consultation process held in 2005, the Commission adopted a first Communication on the EIT on 22 February 2006, outlining the ambition and possible scope of this institute. The March 2006 European Council recognised that the EIT will be an important step to fill the existing gap between higher education, research and innovation, and invited the Commission to submit by mid-June 2006 a proposal on further steps to undertake.

After extensive consultations with European stakeholders and Member States, the Commission presented a second Communication on the EIT on 8 June 2006, providing further information on a number of specific issues and outlining further steps for its establishment. The June 2006 European Council reaffirmed the importance of the EIT and called on the Commission to come forward with a formal proposal, to be presented in autumn 2006. This Impact Assessment is an integral part of this proposal[1].

Problem definition

The global problem addressed by the EIT proposal is the weak level, and concentration, of investment in higher education and R&D in Europe, and the poor rate of conversion of knowledge and R&D results into economic activity and jobs, compared to key competitors, Japan and the US in particular. This 'innovation gap' between Europe and key competitor economies is identified as one of the core challenges which Europe must address in the context of its Lisbon Growth and Jobs strategy. Evidence suggests that the gap shows little sign of closing.

At least five main issues can be identified as underlying factors:

- Insufficient concentration of resources in poles of excellence able to compete on the global scene;
- Insufficient trans- and inter-disciplinary research and education focused on medium- and long-term innovation challenges;
- The poor integration of the three elements of the knowledge triangle;
- Lack of innovative governance and organizational models in European research and higher education institutions;
- An excessive number of barriers that contribute to the costs of 'non-Europe' in innovation.

Existing initiatives and European added value of the proposed initiative

Responsibility for education, research and innovation policies rests primarily with the Member States. There are marked variations between EU countries in their approaches to innovation, and many positive national initiatives and developments which should be sustained and reinforced. However, the nature and scale of the innovation challenge suggests

[1] This report commits only the Commission's services involved in its preparation, is prepared as a basis for comment and does not prejudge the final form of any decision taken by the Commission.

that action at the European level is likely to generate additional benefits which may not be achieved through the separate actions of Member States.

The Community has, in any event, been engaged in supporting the Member States in their efforts to improve innovation and the knowledge triangle. In the context of the Lisbon Strategy and the linked OMCs on Education and Training 2010 as well as on the 3% Target, the Commission facilitates policy exchanges aimed at identifying best practices and to stimulate better policy making on how to bridge the innovation gap. Several programmes pertaining to the knowledge triangle operate within the Community Lisbon Programme. These programmes offer financial support also aimed at creating a framework within which EU universities, research centres, enterprises and other actors in the knowledge triangle can maximise their contribution to the Growth and Jobs Strategy. The EU operates a number of Community programmes supporting directly or indirectly different aspects of the knowledge triangle, such as the 7th Framework Programme for Research and Technological Development, the Competitiveness and Innovation Programme, the Integrated Life long Learning Programme, and the Structural Funds.

No EU initiative has so far fully addressed all three components of the knowledge triangle in a fully integrated and mutually-reinforcing manner; existing instruments address either one section of the knowledge triangle in isolation, or at maximum integrate two, and do so, for the most part by supporting development at the national level. No EU initiative to date has stimulated the development of an European-level world-class institution with the aim of achieving the necessary research, education and innovation oriented excellence and critical mass in a specific field of intervention. This potential is still unfulfilled.

To bridge the innovation gap between the EU and its major competitors, it will be necessary to support excellence-driven strategic partnerships at the EU level between actors involved in the three parts of the knowledge triangle, on an inter and trans-disciplinary basis. The European Institute of Technology **(EIT)** will aim to be a world-class operator in its field and to serve as a flagship capable of inspiring better performance by other European actors and networks in the knowledge triangle. In this way, it can complement existing EU and national policy initiatives and financial instruments to bridge the innovation gap between the EU and its major competitors.

Objectives of the EIT

The general objectives of the EIT are:

- to contribute to improving the innovation capacity of Europe by involving partner organisations in integrated innovation, research and education activities at the highest international standards;

- to become a model and flagship for the integrated European Innovation Research and Education area by generating innovations in areas of key economic or societal interest and providing a reference model for managing innovation.

The EIT shall in particular:

- undertake and/or promote trans- and inter- disciplinary strategic research in areas of key economic or societal interest;

- act as a reference model that will promote wider beneficial changes and the 'modernisation' of higher education and research in the EU both directly through the resulting activities and indirectly;

- promote the use of the 'products' of the EIT activities to the benefit of the EU;

- achieve a 'critical mass' of human and physical resources in strategic trans- and inter-disciplinary fields of knowledge from partner organisations hence attracting and retaining high level researchers and private sector investment in R&D;

- promote new forms of collaboration among the different types of partner organisations involved in the knowledge triangle;

- strengthen synergies (and avoid duplication) with other EU policies and programmes in the field of education and R&D.

Policy Options

The Impact Assessment has considered five Policy Options for the creation of an EIT which would address these goals. The first three of these provide for new operational mechanisms for carrying out innovation, research and education but they differ in the degree of centralization and top-down / bottom up organization. The fourth option is not an operator but would seek to achieve its effects through the award of grants to existing operators and networks. The fifth (status-quo) option provides a benchmark against which to measure the others.

(1) The Centralized EIT. This option would involve the establishment of an EIT that would select and manage Knowledge and Innovation Communities (KICs) in strategic trans- and inter-disciplinary area(s) undertaking education, research and innovation activities. The KICs would be created from resources 'seconded' to and employed by the EIT. Resources are contributed by partner organizations and would become legally part of the EIT which would be configured as a single new institution. The EIT under this option would confer post graduate degrees. It would be managed by a central governing body that would have a high measure of autonomy to select the KICs, reward its staff members, co-opt through negotiation elements of existing institutions, and cooperate with other parties. This body would play a direct managing role setting the common framework and rules through which KICs' activities are organized and people evaluated and rewarded. Initial funding would be provided by the EU.

(2) The Distributed EIT. This option, like Option 1, would involve the creation of a series of Knowledge and Innovation Communities but these would be completely autonomous from both a central governance and between themselves. The EIT would be a funding body able to channel resources to these new legal entities. KICs would have the option of conferring post graduate degrees using more flexible models such as joint degrees. Existing institutions would be invited to put forward proposals and would be offered 'start up' funding from the EIT. Governance would be heavily delegated to the KIC level and constituent organizations. The central coordination would not set a priori either the areas of interest or the specific operational frameworks, both would be determined within each KIC.

(3) The Integrated EIT. This option is a mix between Options 1 and 2. Like option 2, it envisages the creation of new legal entities to which partner organizations from the education, research and business sectors contribute human and physical resources (KICs). These "joint ventures" would have a high degree of autonomy in determining how the partners come together but within a common framework of principles and guidelines set by the EIT Governing Board (GB). In fact, as in option 1, the KICs would be coordinated by another legal entity, the EIT Governing Board, which sets the overall strategy (for example, in which areas to invest), selects and evaluates candidate partnerships, assigns them the status of EIT KIC and related funding and monitors their performance. However, more as in Option 2, KICs would retain a high degree of autonomy. Within this framework KICs would autonomously organize their work and activities, including recruitment and the award of degrees.

(4) The Funding-Labelling EIT. Under to this option, the EIT as a funding body awards an EIT label and allocates resources to existing organisations meeting excellence criteria. It would select and fund existing organisations that meet excellence criteria on the basis of calls for proposals. Some of the funded organizations might involve transnational cooperation but this would be achieved through existing collaborative mechanisms. The institutions selected would adopt an EIT label.

(5) The status-quo. The 'status quo', in which there is no EIT, and instead the problems discussed above are addressed through existing programmes and policies. This option provides a benchmark against which to measure the others.

Comparison between the Policy Options

The assessment is based on the wide range of contributions produced by various stake holders through various means such as the Public Consultation, position papers, articles, and meetings. It has been assumed that the level of dedicated funding (both from EU and other sources) that would be made available for the EIT under policy options 1, 2, 3 and 4 would be the same but that the status quo (policy option 5) would not involve any dedicated EU funding. This level is assumed as 2.4 billion euro for the period 2008-2013 as elaborated in Section 8 of the Impact Assessment Report.

The analysis suggests that three Policy Options have a major overall additional impact compared to the status-quo. These are options 1, 2 and 3. This impact is related to their ability to address the need to pool resources to achieve critical mass in selected fields and also to provide new models able to integrate the three aspects of the knowledge triangle.

The three options differ mainly in the model of governance through which this integration is achieved. Option 1 stresses the need of coordination thus providing a stronger role to the governance structure in setting priorities and organizing the work of KICs. This leads to stronger synergies between KICs and creates the condition for more innovative models to involve private partners, to more clearly put on the table the need to overcome EU barriers to mobility and cooperation, and to represent a more visible flagship and symbol of the knowledge Europe. On the other hand, the strong centralization may lead to bureaucratization and a lack of flexibility that is needed to cope with new knowledge domains; further, the same centralization may hinder the willingness of partners to contribute, thus reducing the capacity to achieve critical mass by pooling what already exists.

Option 2 delegates most of the strategic and operational tasks to the KICs, which are more open to the influence and actions of the partners. This option balances the weaknesses of option 1, representing a potentially more adaptable and attractive model for participants, but nonetheless presents a series of drawbacks as compared to option 1. KICs would be less coordinated thus leading to a risk of overlapping activities; the models they would create to organize their work would be less innovative when compared to current practices; they would less clearly address the need to provide EU level solutions to overcome barriers to mobility and cooperation; lastly, they would not have the same level of visibility and symbolic impact.

Option 3, the preferred one, represents a model to address the underlying trade-off. It aims at balancing a series of opposing needs: the need for coordination to ensure synergy and strategic orientation, coupled with the autonomy needed by the KICs to be adaptable; the need to be sufficiently independent to pursue the EIT's own agenda while being sufficiently attractive to involve partner organizations; the need to experiment novel ways to integrate research, education and innovation with that of relying on existing good practices. Achieving the correct balance between these trade-offs will be heavily dependent on concrete implementation of the model.

Key challenges of the preferred Policy Option

Option 3 poses a number of challenges which derive essentially from the need to manage a set of underlying trade-offs. The Impact Assessment elaborates these challenges and trade-offs, proposing some guidelines to address them, in particular, as regards Governance, the Selection of KICs, Human Resources, Intellectual Property, Degree awarding, and Funding.

Cost Justification

The level of ambition entailed in the proposal means that the total spending of the EIT and the KICs during the period 2007–2013 could be estimated at €2,367.1 million. Most of the EU resources would be spent on funding the productive capacities of the KICs. The resources needed at the level of the KICs will reflect their overall profile of income and expenditure and should be comparable with the most cost-effective universities and research institutes in the EU. As regards resources spent in KICs productive capacity, since the EIT intents to avoid duplication of efforts and to create synergies among existing resources, these resources aim to be cost effective.

The administrative and governance costs of the EIT as a whole should represent a relatively small amount of the overall costs. These costs represent the costs of coordinating the overall process of integrating innovation, research and education. These costs need to be compared with the added value that can be derived from providing a new and strong institutional basis for collaboration at the European level and from the potential to create critical mass and excellence that will increase EU competitiveness. If the proposed EIT model is successful, then the EIT would prove to be highly cost effective.