

## **ROADMAP FOR JOINT TECHNOLOGY INITIATIVES**

### **Introduction**

In its proposal for the Co-operation Specific Programme, the Commission proposed a number of public-private partnerships in the form of 'Joint Technology Initiatives' (JTIs).

At the Competitiveness Council meeting on 30 May 2006, Commissioner Potočnik announced that a roadmap would be presented in autumn 2006, outlining the Commission's intentions for the JTIs.

The aim of the roadmap set out in this note is to bring forward proposals in relation to the most advanced JTIs as quickly as possible. The roadmap establishes the process that will lead to the presentation of JTI proposals and the "keys for success" required for the Commission to present quality proposals for the JTIs to the Council.

The Commission views JTIs as essential in order to make a step change in promoting industry-driven research and development in Europe and to establish European leadership in future strategic technologies.

### **JTIs under the Co-operation Specific Programme**

#### ***i. The Concept***

JTIs are legal entities which are proposed as a new way of realising public-private partnerships in a relevant industrial research and development field at European level.

JTIs arise primarily from the work of European Technology Platforms (ETPs). In a small number of cases, ETPs have achieved such an ambitious scale and scope that they will require the mobilisation of high public and private investments as well as substantial research resources to implement important elements of their Strategic Research Agendas. JTIs are proposed as an effective means of meeting the needs of this small number of ETPs.

#### ***ii. Article 171 of the Treaty***

Article 171 of the Treaty allows the Community to set up any structure necessary for the efficient execution of research, technological development and demonstration programmes. It allows for a wide range of possible implementation structures for Community research and development programmes, of which the most prominent is a Joint Undertaking. A Joint Undertaking offers the advantage of creating a strong and efficient coordination mechanism, able to structure and handle contributions coming from different sources. As such, a Joint Undertaking appears to be the most appropriate structure for the setting up of JTIs.

#### ***iii. Identification Criteria***

The Commission set out a number of identification criteria for JTIs in its proposal for FP7. These were elaborated in its report for the June 2005 European Council<sup>1</sup>, which specifies the identification process and the potential implementation modalities for JTIs.

In this report, the Commission services set out an identification process for JTIs involving the application of a series of criteria under the following headings:

- strategic importance of the topic and presence of a clear deliverable;
- existence of market failure;
- concrete evidence of Community value added;
- evidence of substantial, long-term industry commitment;
- inadequacy of existing Community instruments.

These criteria were further developed in the Cooperation Specific Programme and have been discussed on a number of occasions in the Research Group. JTIs have also been discussed at meetings of the Competitiveness Council.

#### *iv. Six Potential Initiatives*

In the light of the stage of development of the Strategic Research Agendas of European Technology Platforms at the time of the FP7 proposals, six areas were identified where a JTI could have particular relevance: hydrogen and fuel cells, aeronautics and air transport, innovative medicines, nano-electronics (ENIAC), embedded computing systems (ARTEMIS) and global monitoring for environment and security.

In its June 2005 report for the European Council, the Commission emphasised the need for the industries concerned in each of the six areas to build a case to demonstrate that the Strategic Research Agendas meet the detailed identification criteria for a Joint Technology Initiative and that their implementation would lead to concrete deliverables that would impact positively on Europe's industrial competitiveness.

#### **The way ahead**

##### *Progress so far*

Since June 2005, significant progress has been made in developing the proposals for JTIs, notably in elaborating the scope of their activities, in clarifying who will be the founding members, in ensuring openness and transparency in their activities, and in addressing issues concerning disputes and conflicts of interest in their internal decision-making process. The form of legal entity has also been confirmed, with JTIs favouring a joint undertaking.

The Commission reconfirms the six areas identified in its proposal for FP7 as the candidates for JTIs. However, they have not all reached the same level of preparedness.

##### *"Keys for success"*

---

<sup>1</sup> Report on European Technology Platforms and Joint Technology Initiatives: Fostering Public-Private Partnerships to Boost Europe's Industrial Competitiveness, SEC(2005) 800 of 10 June 2005

The Commission's aim is now to submit to Council, as quickly as possible, those proposals for JTIs which combine most effectively the necessary "keys for success": additionality, market failure, governance and the role of Member States.

***Additionality:*** Each JTI must be able to demonstrate how its establishment will lead to additional research being undertaken by industry. In this regard, an evaluation of the contribution of the industrial participants in the JTI is required, or, at a minimum, an agreed way to measure the additionality of the R&D investments by industrial partners during the lifetime of the JTI.

***Market failure:*** Each JTI is expected to provide details of the nature and extent of market failure in the areas it is addressing and to demonstrate how public intervention through a public-private partnership will overcome the market failure effectively and will achieve the desired economic and social effects.

***Governance:*** Each JTI must describe the decision-making and management bodies of the legal entity and how these bodies will operate to ensure achievement of the objectives.

***Role of Member States:*** For those JTIs which foresee the involvement of Member States as founding fathers, the role of Member States in the JTI decision-making process must be clarified so that national financial contributions enhance the impact of the JTI and reinforce the principles of scientific excellence and industrial relevance without regard to national financial return in relation to the FP7 financial contribution. This concerns notably the two JTIs in the field of information and communication technologies (ARTEMIS and ENIAC).

### ***The process leading to JTI proposals***

The industrial partners participating in the potential JTIs are invited to demonstrate whether and how the "keys for success" set out above will be met.

For its part, the Commission services will arrange for an objective analysis of the economic and social effects of each potential JTI. In addition, they will analyse and determine the impact of funding of the JTI on the Work Programme of the relevant research theme of the Co-operation Specific Programme.

As soon as the required evidence on these conditions is available, the Commission will present it in an appropriately validated impact assessment that will accompany the JTI proposals for discussion and decision by the Council.

### **Timetable**

The precise number of proposals to be brought forward in 2007 or in 2008 will depend on the level of preparedness of the potential JTIs assessed on the basis of the "keys for success" set out above and the analysis of the economic and social effects. The Commission aims to be able to present first proposals for JTIs to the Council early in 2007.

The Commission encourages all potential JTIs to continue to prepare their inputs so as to allow the Commission to present quality proposals. The Work Programmes under the Specific Programmes will provide a basis for supporting this process. In this way, the

Commission will work actively with the stakeholders in these initiatives to maintain momentum.

Based on the analysis to date, it appears that the JTI on Innovative Medicines and the JTI on Embedded Computing Systems are in a state of preparedness which could enable the Commission to adopt proposals for them in early Spring 2007.