Fuel Cells and Hydrogen Joint Undertaking

2007/0211(CNS) - 27/04/2012 - Follow-up document

The Commission presents its annual report on the progress achieved by the Joint Technology Initiatives Joint Undertakings in 2010. These were established as pilots in 2007-2008 under the Seventh Framework Programme in five strategic areas for a limited period up to 31 December 2017:

- Aeronautics and Air Transport (Clean Sky) JU increasing the competitiveness of the European aeronautics industry while reducing emissions and noise, established by Council Regulation (EC) 71 /2008;
- Innovative Medicines Initiative (IMI) JU fostering the development of better and safer medicines for patients, established by Council Regulation (EC) 73/2008;
- **Fuel Cells and Hydrogen (FCH) JU speeding up the development and deployment of hydrogen supply and fuel cell technologies, established by Council Regulation (EC) 521/2008;**
- Embedded Computing Systems (ARTEMIS) JU helping the European industry to consolidate and reinforce its world leadership in embedded computing technologies, established by Council Regulation (EC) 74/2008;
- Nanoelectronics Technology 2020 (ENIAC) JU targeting to achieve a very high level of miniaturisation required for the next generation of nanoelectronics components, established by Council Regulation (EC) 72/2008.

ARTEMIS, IMI and Clean Sky gained officially their autonomy in October-November 2009, followed by ENIAC in May and FCH in November 2010. Thus, 2010 was the first full year of autonomous functioning of most of the JTI JUs.

The report starts with a brief introduction of the JTI JUs, summarises their key achievements in 2010 and outlines the fields for improvement in the future.

Key achievements in 2010: after the relatively slow operational start of the JTI JUs, to a certain extent due to the limitations of the existing legal and the regulatory framework for a "Community body", in 2010 the five Joint Undertakings revealed that the new business model between public and private sectors in research promises to be successful. The JTIs' activities that have been launched and already ongoing were recognised to be overall efficient and of a high quality according to the conclusions of first interim evaluations of the Joint Undertakings performed in 2010 (April 2011 for the FCH JU).

Operational activities: in 2010, the five JTI JUs concentrated efforts on the management of their calls for proposals – finalising negotiations, signature of grant agreements and kick-off of the projects coming out from the 2008 and 2009 calls, as well as launch of the 2010 calls, evaluation and selection of the winning proposals and, for some JTIs, start of the negotiation process. The Joint Undertakings worked also on the preparation of the 2011 calls for proposals: based on the lessons learned from the previous calls and consultations with the various stakeholders, they came out with a definition of the next calls' topics.

All JTI JUs were successful in attracting a wide variety of participation in their calls from Europe and FP7-associated countries. Overall, a large number of SMEs took part in the proposals. There were, however, some obstacles which the JTIs had to deal with to further strengthen the SME involvement in their research activities.

Administrative activities: after the initial start-up and preparatory phase before autonomy, the JTI JUs had to then work on their consolidation as a pre-requisite for sustainability and a factor for success. Although the establishment of the five public-private partnerships was a considerable achievement on its

own, the Joint Undertakings needed to further develop their internal control frameworks, and introduce, if necessary, additional control mechanisms. This was also pointed out in the reports of the European Court of Auditors which found out that by the **end of 2010 none of the entities had completely implemented their internal controls** and financial information systems and/or had yet validated their underlying business processes as required by the Joint Undertakings' financial rules.

Moreover, implementation of key performance indicators in 2011 by all JTI JUs had to avoid making the output of the initiatives scattered and diffuse. Their task would be not only to assess and periodically monitor quality in order to maximise impact across research programmes, but also to be tracked by a sound monitoring and evaluation system. An important step towards this in 2011 had to be the implementation or adoption, where not done yet, of comprehensive internal audit plans and the performance of regular ex-ante verifications and ex-post audits. Moreover, as expressed by the European Court of Auditors, the JTI JUs had to clearly define the role of the Commission's IAS in their financial rules.

Concerning the IT and logistics matters, all Joint Undertakings needed to further consider the establishment of formal IT policies and procedures to ensure the proper functioning of the IT planning and monitoring cycle and provide for reliable risk management tools. Also, a host agreement had to be concluded with the Belgian authorities concerning the office accommodation, privileges and immunities, and other support provided by the State. Both comments were taken into consideration by the JTI JUs and actions are already underway.

Among the objectives of the Joint Undertakings in 2011 should have been the enhancement of their communication activities using a more proactive and target-oriented approach, especially within SMEs and the research community to increase their level of participation in the research projects. As recommended in the interim evaluation reports, the JTI JUs should develop and implement clear communication and dissemination plans, obtain a separate identity and work more on the synergy with national programmes and international cooperation with non-EU stakeholders.

Overall assessment: the first interim evaluations of the Joint Undertakings were carried out as planned by the end of 2010 (in April 2011 for the FCH JU) covering the quality and efficiency of their work and assessing the progress towards the set objectives. **The overall result of the evaluations is positive, affirming good prospects for achievement of the JTI JU's goals.**

As the Joint Undertakings are only now fully autonomous, **there needs to be a period of some years of consolidation before the real benefits can be assessed**. Nevertheless, the importance of cross-sectoral co-operation in key strategy setting is considered extremely important. In the case of the FCH JU, for example, where there are very specific market entry barriers, the industrial partners have been very effective in organising objective assessment of market potential in relation to other competing technologies. The stable allocation of funds has also underpinned the industry commitment – especially SMEs – at a time when the Framework Programme funds could easily have been diverted to competing technologies.

In 2011, the five Joint Undertakings had to follow up on the implementation of the ongoing activities and start the next waves of projects, as well as on the preparation and launch of the future calls. Calls topics needed to be defined on the grounds of the revised research agendas, considering the market forces and the quick pace of technology development in their industries.

As recommended by the European Court of Auditors and the experts in the first interim evaluation reports, the entities that experienced initial delays in starting their operations, such as Clean Sky, should have promptly recovered in order to achieve their objectives within the set timeframe. This would have also contributed to shorten the time for payments to beneficiaries and improve the implementation of the budget, which had been perceived overall as being low among all JTI JUs in 2010.

The JTI JUs had to further **encourage the wide participation of industrial and academic partners, and particularly of SMEs, in their research activities**. They needed to remove the obstacles for SMEs, where such existed. IMI had put on its agenda the development of a methodology for in-kind contribution and calculation of indirect costs, and FCH already initiated the process to adopt an increase in the funding rates, which were considerably lower than those in FP7. Clean Sky, ARTEMIS and ENIAC were challenged to keep the high interest of SMEs in the calls for proposals they were launching.

Taking into consideration that the report is looking at the JTI JUs' development in the first year of their autonomous operations, and at a point where none of their projects are completed, the prospects for the future remain to be considered. The results achieved by the five JTI JUs so far sets them as ambitious European initiatives with the potential to become a new affirmed model of a public-private partnership.