Research and technological development: setting up the ENIAC Joint Undertaking, nanoelectronics

2007/0122(CNS) - 22/06/2007 - Legislative proposal

PURPOSE: to set up a Joint Undertaking: “ENIAC”.

PROPOSED ACT: Council Regulation.

BACKGROUND: the 7th Framework Programme 2007-2013 sets up four Specific Programmes: Co-operation, Ideas, People and Capacities. This proposal relates directly to the Specific Programme Co-operation and one of its core themes: “Information and Communication”.

Joint Technology Initiatives (JTIs) were introduced for the first time under the Co-operation programme as a way of realising public-private partnership for large-scale research projects being developed at a European level. JTIs are born out of the “European Technology Platforms”, (ETPs), which already existed under the previous, 6th Framework Programme.

JTIs are being proposed in the form of Joint Undertakings that have a legal structure, allowing for the first time, national, EU and private investment to be combined within a coherent framework. They are being proposed in a limited number of sectors only, including: hydrogen and fuel cells, aeronautics and air transport, embedded computing systems, nanoelectronics, pharmaceuticals and global monitoring for environment and security.

The global market for nanoelectronics has a strong annual average growth rate of around 15% and generates a significant number of jobs. Europe has world leading capabilities but is under threat from Asia and the USA if production expansion for future nanoelectronics technologies fails to generate the necessary investment in this sector. Over the past ten years, European research programmes, together with Eureka, have helped support research into nanoelectronics in Europe on a par with Europe’s major competitors. However, if Europe is to remain at the forefront in nanoelectronics a European co-ordinated approach is needed.

CONTENT: the purpose of this proposal is to create a Joint Undertaking to be known as ENIAC the purpose of which is to concentrate public as well as private funding on nanoelectronics in the form of a public-private partnership.

The proposed objectives of ENIAC are:

- to define and implement a “Research Agenda” in the field of nanoelectronics in order to strengthen Europe’s competitiveness and to foster the emergence of new markets and social applications;
- to award funding to participants in selected projects following competitive calls for proposals;
- to encourage a public-private partnership that seeks to mobilise and pool Community, national and private efforts in order to increase overall R&D investments in nanoelectronics;
- to achieve greater synergy between European R&D efforts in the field of nanoelectronics and the progressive integration Eureka into the ENIAC Joint Undertaking.

ENIAC will be established in Brussels for an initial period lasting up to 31 December 2017, although the Community’s financial contribution will cease as from 2013 in line with the EU’s financial perspective. The members of ENIAC will be the European Commission (acting on behalf of the Community) as well as the AENEAS Association.

In terms of financing, ENIAC will be jointly funded through financial contributions paid in instalments and in-kind contributions from its Members in order to support both the running costs as well as research activities. Specifically speaking the Community will contribute EUR 440 million towards the financing of R&D projects, whilst financial contributions from AENEAS will take the form of annual commitments to be disbursed directly to R&D organisation as well as "in-kind" contributions.

The proposal provides for the simplification of administrative procedures that affect both public authorities as well as private parties. When compared to the existing framework the new Joint Undertaking has been designed to: remove budgetary overlap; remove the need to duplicate evaluation and monitoring activities (currently different procedures are applied at national level); allow for a shortened "time-to-contract" period; and remove as much red-tape for participants as possible.

Following an extensive impact assessment ENIAC is also expected to introduce the following benefits:

- the sharing of R&D costs and infrastructures in order to maintain Europe's competitiveness in the field of nanoelectronics;
- to build on Europe's current expertise in semiconductor technologies and to apply them to alternative markets;
- to manage breakthroughs in electronic design in order to fill the ever-widening gap between what is achievable in technologies and what can economically be designed and tested;
- to provide European SME's with effective and efficient tools in order to help support them in their innovation process. A further benefit of the ENIAC Joint Undertaking will be common European procedures and work plans through an EU-level distribution network.

As regards the sources of financing, the budgetary assessment indicates maximum Community expenditure of EUR 450 million over the initial period of the ENIAC Joint Undertaking (up to 2017), which would need to be committed before 31 December 2013 when the FP7 budget comes to an end. An initial EUR 42.5 million is to be committed in 2008. AENEAS will contribute to the running (non-R&D) costs of the Joint Undertaking up to EUR 20 million equivalent to 1% of the overall costs of R&D whichever figure is higher – but not exceeding EUR 30 million. However, the numbers quoted below (under heading "Co-financing) list that these overall costs will amount to EUR 30 million. The Community contribution to running costs will total EUR 10 million.

In addition, the Member States who participate on the Joint Undertaking will, at a national level, make annual commitments of funds that are to be spent on R&D projects launched by the Joint Undertaking. These additional resources are estimated to be at least 1.8 times the operational expenditure – i.e. at least EUR 792 million for the duration of the Joint Undertaking.