

ECSEL Joint Undertaking for the implementation of the Joint Technology Initiative on ‘Electronic Components and Systems for European Leadership’

2013/0234(NLE) - 10/07/2013 - Legislative proposal

PURPOSE: the establishment of the Electronic Components and Systems for European Leadership (ECSEL) Joint Undertaking (JU).

PROPOSED ACT: Council Regulation.

ROLE OF THE EUROPEAN PARLIAMENT: the Council adopts the act after consulting the European Parliament but without being obliged to follow its opinion.

BACKGROUND: in order to better align EU support for research and innovation with industrial goals and attract higher industrial investments in Europe, [Horizon 2020](#) provides for the setting-up of **public-private partnerships in key areas** where research and innovation could contribute to Europe’s wider competitiveness goals and help tackle societal challenges. **Micro- and nanoelectronics, and smart embedded components and systems** are priority fields identified within the ICT theme in Horizon 2020.

Europe is facing **two main challenges** in electronic components and systems, a sector that represents more than EUR 1 000 billion in turnover worldwide. One is to be in control of the key elements of the value chain, (i.e. design, manufacturing and integration in final products), that are essential to ensure the sustainability of value creation from electronics in Europe including the competitiveness of many other European industrial sectors (automotive, energy, health, web industry, etc.). The other is to bridge important gaps in the innovation chains in order to better transform research excellence into commercial successes. At the same time, Europe must cope with fierce global competition, declining market shares of its industry, high costs of research and innovation and fast-paced technological development.

The ECSEL JU **replaces** the previous [ENIAC](#) and [ARTEMIS](#) JUs launched under the Seventh Framework Programme (2007-2013) which respectively aimed at creating a Europe-wide research and development programme in the fields of nanoelectronics and embedded systems with an incentive for industry, Member States and the European Union to align strategies and increase investments.

The JUs demonstrated that they can successfully play the role of **catalyst for ambitious projects** increasing the engagement of the private sector champions in a framework in which national and European public authorities can support topics of high strategic value. In the period 2008-2012, a total research, development and innovation investment of EUR 2.8 billion was realised by some 2 000 participants of which over 500 are SMEs.

IMPACT ASSESSMENT: the proposal is accompanied by [a summary of the impact assessment](#).

LEGAL BASIS: Articles 187 and 188 of the Treaty on the Functioning of the European Union (TFEU).

CONTENT: the new proposal for a public-private partnership (PPP) concerns a **Joint Undertaking (JU) in the field of electronic components and systems**. The ECSEL (Electronic Components and Systems for European Leadership) JU **replaces the previous ENIAC and ARTEMIS JUs** respectively in the

fields of nanoelectronics and embedded computing systems launched under the Seventh Framework Programme.

The proposal lays down the **objectives, the legal status, the operating rules and the statutes for the period 2014-2024** (and financial programming up to 2020). The JU's headquarters would be in Brussels (Belgium).

The main **specific objectives of this new JU** include the following:

- to contribute to the development of a strong and globally competitive electronics components and systems industry in the Union;
- to align strategies with Member States to attract private investment and contribute to sound public finances by avoiding unnecessary duplication and fragmentation of efforts;
- to maintain and grow semiconductor and smart system manufacturing capability in Europe;
- to secure a commanding position in design and systems engineering including embedded technologies;
- to provide access for all stakeholders to a world-class infrastructure for the design and manufacture of electronic components and embedded and smart systems;
- to build a dynamic ecosystem involving innovative small- and medium-sized enterprises (SMEs), strengthening existing clusters and nurturing the creation of new clusters in promising new areas.

BUDGETARY IMPLICATION: the indicative EU contribution is of **EUR 1 215 255 000** at current prices (EFTA included) over the total lifetime of the ECSEL JU (until 2024). This allocation would have to be committed before 21 December 2020, when the Horizon 2020 comes to an end and paid by 31 December 2024.