



Call for Expression of Interest

Important Projects of Common European Interest (IPCEI) on Microelectronics and Communications Technologies

Criteria and Scope of Call

The Department of Enterprise, Trade and Employment invites project proposals under this call for expression of interest for the Important Project of Common European Interest (IPCEI) on Microelectronics and Communications Technologies. This call is intended to identify businesses active in the field of microelectronics and communications technologies that may wish to put forward projects that could fit within the scope of the upcoming IPCEI on Microelectronics and Communications Technologies (ME IPCEI2) and accordingly be considered for possible funding.

Microelectronic components are of great relevance for almost all industrial sectors, especially for the automotive, telecommunications, mechanical and plant engineering, electrical and medical engineering, energy supply and consumer electronics sectors. As the basis for a competitive 5G- or 6G-based industry as well as for high-performance networking for Industry 4.0, (basic and application-oriented) research and development as well as the production of microelectronic hardware (transmit/receive chips, fast energy-efficient or special processors, etc.) and the development of software in Europe are a basic prerequisite.

Scope

Such an IPCEI in the field of microelectronics and communication technologies is characterised as disruptive and ambitious research and innovation (R&I), beyond the state-of-the-art innovation in the sector, followed by first industrial deployment, where very important R&I is still necessary (e.g., to scale up a pilot line). In addition, positive spill-over effects on the internal market of the EU (e.g., systemically relevant effects at several levels of the value chain or in the upstream or downstream markets, use in other sectors of the economy) and on European society are essential, in order to make an important contribution to the growth, employment and competitiveness of European industry and the economy. The benefits of a funded project must therefore not be limited to the enterprises or the sector concerned but must be of wider relevance. In addition, the objectives and benefits of the project must be clear and defined in a concrete and recognisable way.

The primary focus of this IPCEI is on digital; data processing; and communication with power efficiency / sustainability. The objective of ME IPCEI2 is to strengthen capabilities in design and increase the safety and sustainability of microelectronic components in Europe by promoting the integration and production of solutions to support European industry and to ensure competitiveness of European Union (EU) industry on the global market, including (but not limited to):

- Design of processor cores and AI chips for different vertical markets, e.g., components for automotive sector and aerospace as well as industry automation (Industry 4.0) and for edge computing
- Design of chips and systems for communication (5G / 6G and other)



- Development of advanced semiconductor processes
- Advanced packaging for 2D/3D heterogeneous integration
- Low power, sustainable electronics

Criteria

It is hoped that these projects can be supported as an "Important Project of Common European Interest" according to Art. 107(3)(b) of the Treaty of the Functioning of the European Union. Specific criteria for the assessment of compatibility of State aid to promote the execution of IPCEI projects are further elaborated in European Commission's Communication no. 2014/C 188/2.¹

Participation of projects in ME IPCEI2, in addition to conditions stipulated in related Commission Regulations, shall be subject to the following conditions:

- a. Applicants must form part of the microelectronics value chain (from the raw materials necessary for the manufacture of the product right through to the recycling of same)
- b. Proposed projects shall be implemented in Ireland
- c. Projects shall constitute R&D and the first phase of industrial deployment of new technologies developed²
- d. Applicants will be required to be able to demonstrate prior work in the relevant area and provide evidence that the project differs significantly from the "state of the art"
- e. State Aid may only be provided if the applicant can convincingly demonstrate that under market conditions the project could not be financed or implemented without the funding
- f. The project should be of significant size/ambition in order to be able to make a significant contribution to major European strategies
- g. The project must involve co-financing by the beneficiary
- h. The benefits of the project must not be limited to the undertakings or to the sector concerned but must be of wider relevance and application to the European economy or society through positive spill-over effects which are clearly defined in a concrete and identifiable manner
- i. The project will have to be carried out either by:
 - i. a company
 - ii. a research organisation; or
 - iii. a consortium of one or more companies and / or one or more research organisations
- j. Start-ups are eligible, in which case the file must be submitted by future shareholders

¹ [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52014XC0620\(01\)&from=EN](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52014XC0620(01)&from=EN)

² First industrial deployment refers to the transition from pilot plants to large-scale installations or to the first equipment and installations of their kind covering the post-pilot line phases, including the experimental phase. Mass production phases and commercial activities are not eligible.



- k. Applicants must not be undertakings which are subject to an outstanding recovery order following a previous European Commission decision declaring an aid illegal and incompatible with the internal market; and
- l. Applicants must not be undertaking in difficulty according to the definition of the European Commission Guidelines on State aid for rescuing and restructuring non-financial undertaking in difficulty ((2014/C 249/01) Article 2 point 2.2).

The following selection criteria will also be taken into consideration when evaluating proposals:

- a. Relevance to objectives and expected
- b. Socio-economic impact and expected benefits
- c. Innovative and value-added products or services developed
- d. Quality and relevance of proposed partnerships
- e. Quality of business model, business plan and financing presented; and
- f. Environmental impacts and, if necessary, expected positive effects from an ecological point of view.

Submitting a Proposal

Companies, in particular SMEs (as defined by the European Commission³), and / or consortia from the field of microelectronics, communication technologies and other companies in the relevant value chains with research and production in Ireland that are willing to participate in an integrated European project can submit their project proposals, expressing their interest in funding, by **noon on 30 June 2021**. These should be sent, using the proposal template, to industrialpolicy@enterprise.gov.ie with *Microelectronics IPCEI Proposal* as the subject line.

The submission of a project concept within the framework of the expression of interest neither establishes a claim to, nor is it a prerequisite for, public funding in the intended IPCEI or any other form of public funding.

Contacts

For any queries, please first see the FAQs.

For anything further, please contact industrialpolicy@enterprise.gov.ie.

Confidentiality

All parties involved in this call for expression of interest for participation in ME IPCEI2 make a commitment to ensure the confidentiality of any and all documents and information sent as a result of an application related to this call, regardless of result of pre-selection process.

³ 'The category of micro, small and medium-sized enterprises (SMEs) is made up of enterprises which employ fewer than 250 persons and which have an annual turnover not exceeding EUR 50 million, and/or an annual balance sheet total not exceeding EUR 43 million.' Extract of Article 2 of the annex to Recommendation 2003/361/EC