



Call for Expressions of Interest

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

August 2021

Criteria and Scope of Call

The Department of Enterprise, Trade and Employment invites project proposals under this call for expressions 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 heterogenous 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

Specific criteria set out in the State aid Communication on IPCEI

- R&I projects must be of a major innovative nature or constitute an important added value in terms of R&I in light of the state-of-the-art in the sector concerned.
- Projects comprising of first industrial deployment² must allow for the development of a new product or service with high research and innovation content and/or the deployment of a fundamentally innovative production process. Regular upgrades without an innovative dimension of existing facilities and the development of newer versions of existing products do not qualify as IPCEI.
- Environmental, energy or transport projects must either be of great importance for the environmental, energy (including security of energy supply), or transport strategy of the Union or contribute significantly to the internal market, including, but not limited to, those specific sectors.³

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 means the upscaling of pilot facilities, demonstration plants or of the first-in-kind equipment and facilities covering the steps subsequent to the pilot line including the testing phase, but neither mass production nor commercial activities. First industrial deployment activities can be financed with State aid as long as the first industrial deployment follows on from an R&D&I activity and itself contains a very important R&D&I component which constitutes an integral and necessary element for the successful implementation of the project. The first industrial deployment does not need to be carried out by the same entity that carried out the R&D&I activity, as long as the former acquires the rights to use the results from the previous R&D&I activity, and the R&D&I activity and the first industrial deployment are both covered by the project.

³ For this criterion, the project must be quantitatively or qualitatively important; either particularly large in size or scope and/or imply a very considerable level of technological or financial risk



Conditions

Participation of projects in ME IPCEI2, in addition to conditions stipulated in related Commission Regulations, shall be subject to the following conditions and **the proposal submitted should clearly address each of these:**

- a. Applicants must form part of the microelectronics value chain (from research to raw materials, to processing, right through to the recycling, and if unavoidable, disposal of products)
- b. Proposed projects shall be implemented in Ireland
- c. Proposed projects shall meet one or more of the specific criteria set out in the State aid Communication on IPCEI (noted above)
- d. Applicants will be required to be able to demonstrate prior work in the relevant area
- e. Applicants will be required to provide evidence that the proposed project differs significantly from the existing "state of the art" and are of a highly innovative nature
- f. 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
- g. The project should be of significant size/ambition in order to be able to make a significant contribution to major European strategies
- h. The project must involve co-financing by the beneficiary
- i. 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
- j. 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

Start-ups are eligible, in which case the proposal must be submitted by future shareholders.

- k. Applicants must not be
 - i. 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; or



- ii. an 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).

Proposals determined not to have addressed the above conditions sufficiently will not be considered.

Selection Criteria

The following selection criteria will be taken into consideration when evaluating proposals and **should be addressed in the proposals:**

A. Relevance to National and EU objectives and strategies

The proposed project must contribute, in a concrete, clear and identifiable manner, to one or more Union objectives and must have a significant impact on competitiveness of the EU, sustainable growth, addressing societal challenges or value creation across the EU.

B. Innovative and value-added products or services developed

The proposal should set out how the proposed project is beyond global state of the art for the sector. The proposal must meet the specific criteria as set out in the State aid communication for IPCEI outlined above.

C. Quality and relevance of proposed partnerships

The proposal should set out how benefits of the proposed project must not be limited to the undertakings or to the sector concerned but must be of wider relevance and application to the EU economy or society including through positive spillover effects (such as having systemic effects on multiple levels of the value chain, or up- or downstream markets, or having alternative uses in other sectors or modal shift) which are clearly defined in a concrete and identifiable manner.

D. Quality of business model, business plan and financing presented

The proposal should give a clear, high-level outline of the proposed project, with timelines and costings included. The proposal should clearly show that under market conditions the proposed project could not be financed or implemented without the State aid funding.

E. Socio-economic impact and expected benefits

The proposal should set out how the proposed project will benefit the Irish and EU economy and wider national and European society.

F. Environmental impacts

Within the proposal, any expected impacts to the environment should be set out and any positive effects identified and an indication of how these can be measured provided.



Submitting a Proposal

Companies, in particular SMEs (as defined by the European Commission⁴), 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 27 August 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 call for expressions 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 expressions 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.

⁴ '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