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Trádála agus Fostaíochta
Department of Enterprise,
Trade and Employment

Call for Expressions of Interest

Competence Centre in Semiconductors

April 2024

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1. Expressions of interest

The Department of Enterprise, Trade and Employment invites expressions of interest for a candidate Competence Centre in Semiconductors for Ireland under the European Chips Act ([Regulation 2023/1781](#)).

The Chips Act envisages the establishment of at least one Competence Centre in Semiconductors in each Member State in order to promote the use of semiconductor technologies, to provide access to design and pilot line facilities, and to address skills gaps across the Union.

The EU [Chips Joint Undertaking](#) will hold an open call for candidate Competence Centres in summer 2024 in which candidates will be evaluated in terms of their ability to fulfil the requirements of a Competence Centre from a European perspective. A letter of intent from the National Authority of the candidate’s Member State will be part of the admissibility criteria for this evaluation.

The objective of this national call is to select candidate(s) for consideration by the Chips Joint Undertaking as the Irish Competence Centre in Semiconductors.

Applicants must meet the general requirements for a Competence Centre in Semiconductors, as described in section 4, and clearly demonstrate their suitability in the application.

For any queries, please contact chips@enterprise.gov.ie

2. Chips for Europe Initiative

The European Chips Act provides for the development of a thriving semiconductor ecosystem and resilient supply chain, to build on Europe's strengths, address existing weaknesses, and establish measures to prepare, anticipate and respond to future supply chain disruptions. It provides an opportunity for all Member States to act collectively to ensure the European Union's resilience and technological sovereignty in the field of semiconductor technologies. The aim is to improve Europe's technological leadership, security of supply, and ability to respond to crisis situations. These ambitions reflect the EU goal of fulfilling 20% of the global semiconductor market by 2030.

The [Chips for Europe Initiative](#) is Pillar 1 of the European Chips Act. It aims to support technological capacity building and innovation in the Union by creating large-scale infrastructures such as pilot lines and a design platform to facilitate research, development, test, experimentation and validation of new technologies. Through the Chips for Europe Initiative, the EU aims to enable European industry to leverage R&D into demand-oriented, application-driven, secure and energy efficient semiconductor technologies (to bridge the gap between 'the lab and the fab').

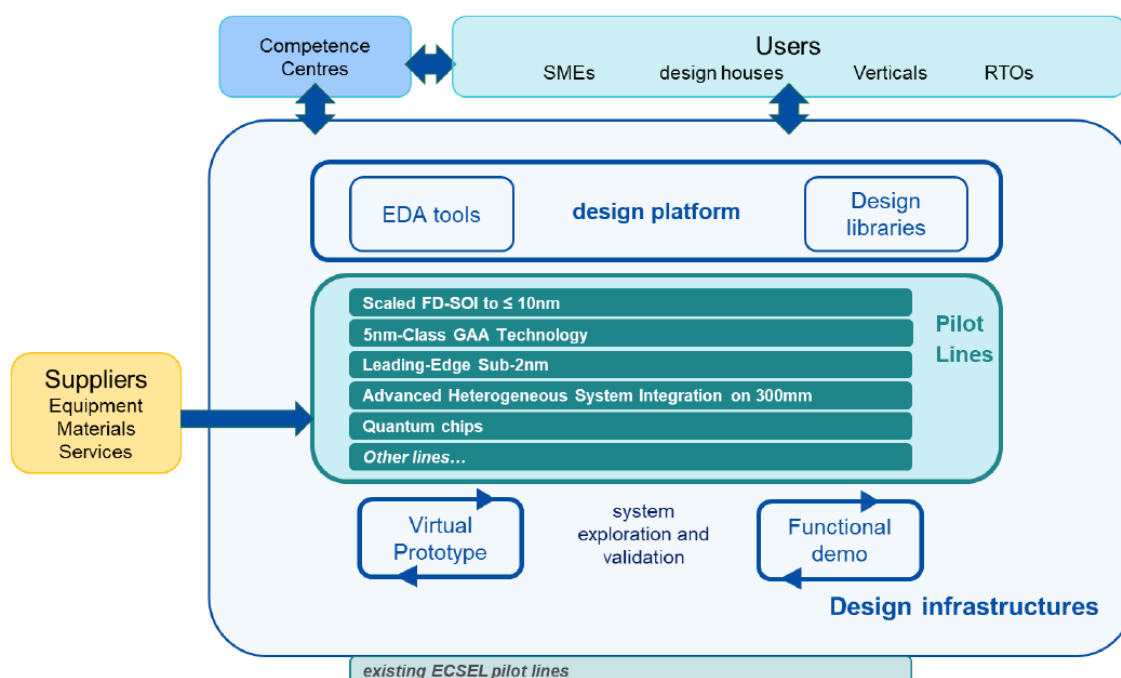


Figure 1 Initiative components

3. Competence Centres in Semiconductors

Competence Centres in Semiconductors will play an essential role in the Chips for Europe Initiative. The Centres will provide access to technical expertise and experimentation in the area of semiconductors, helping companies, SMEs in particular, to approach and improve design capabilities and developing skills. Competence Centres will provide services to semiconductor stakeholders, including start-ups and SMEs. Examples include facilitating access to pilot lines and to the design platform, providing training and skills development, support to finding investors, making use of existing local competencies or reaching out to the relevant verticals. The services should be provided on an open, transparent and non-discriminatory basis. Each Competence Centre should connect and be part of the European network of Competence Centres in Semiconductors and should act as an access point to other nodes of the network.

A Competence Centre in Semiconductors is a single organisation or a coordinated consortium of organisations with complementary expertise, established with a non-profit objective, aiming to promote the use of semiconductor technologies. Although there is formally no limit on the number of entities setting up a Competence Centre, a small number of partners per Centre is desirable.

Candidates for Competence Centres are not limited to those legal entities that are involved in the set-up of pilot lines, the design platform, or are involved in any other way in the Chips for Europe Initiative.

Typical users of the services offered by a Competence Centre are companies, in particular SMEs and startups, RTOs, and academic institutions at the regional, national and EU level. Public authorities and large enterprises may also use the services of a Competence Centre, but normally they are not the prime customers.

Services need to be made available for free or against reduced prices to SMEs and public sector organisations, and against market price or actual costs incurred for larger companies. In the exceptional cases where undertakings have financed at least 10% of the investment costs of a Centre, they may be granted preferential access under more favourable conditions.

4. Requirements

A Competence Centre will offer a number of support activities. Offering such support activities is a common function for all Competence Centres in Semiconductors and is a necessary characteristic to belong to the network of Competence Centres.

These support activities may include:

- facilitating access to pilot lines and to the design platform
- providing training and skills development,
- facilitating access to the Chips Fund and venture capital
- promotion and awareness raising
- participating in the broader European network of Competence Centres

Further information on the activities of Competence Centres in Semiconductors is presented in Annex 1.

Candidates should fulfil the following criteria:

- Appropriate competences to provide the services of a competence centre;
- Appropriate management capacity, staff and infrastructure necessary to provide the services;
- Operational and legal means to apply the administrative, contractual and financial management rules that come with a grant agreements;
- Appropriate financial viability, corresponding to the level of funds they will be called upon to manage.

Candidates should also demonstrate environmental considerations in their application.

The Competence Centres must be established as organisations with appropriate visibility to national communities. In general, Competence Centres should employ semiconductor specialists, primarily with full-time contracts, and with expertise in areas that are most relevant for the national communities and the specialisation of their Centres. A Competence Centre should have an independent organisational structure and its staff should not work under external supervision.

The Competence Centres forming the EU network will be selected by the EU Chips Joint Undertaking and will have substantial overall autonomy to lay down their organisation, composition and working methods. However, their organisation, composition and working

methods should comply with and contribute to the objectives of the European Chips Act and the Chips for Europe Initiative.

Competence Centres should contribute to maintaining the Union's lead with regard to chip research, development and innovation and design capabilities by focusing on the promotion of research, development, innovation and design, together with a focus on manufacturing. The promotion of human potential and skills through education in science, technology, engineering and mathematics (STEM) subjects up to the postdoctoral level is crucial for achieving that objective.

Competence Centres should have a specialised area of expertise. Each Competence Centre decides on its specialisation in a certain technology, domain, or set of activities, and pushes innovation in that area within the Union. Examples of areas of expertise are chips for medical devices, power electronics, cutting-edge semiconductors, packaging, metrology, EDA simulation tools, chips for automotive, silicon photonics, quantum chips, system design, etc. As a result, a Competence Centres can offer a number of support activities in that particular area of expertise, such as specialised technology transfer based on a specific request for its area of expertise from anywhere in the Union; dedicated trainings to other Competence Centres in its area of expertise; consulting on its scientific/technical area of expertise, etc.

5. Funding

The Union will make available up to EUR 1 million per year, per country, for a 4-year period.

Member States will co-finance their national Competence Centre together with the Union, i.e. 50% will be funded through EU contributions and 50% through national contributions. State aid considerations may enter into play for Member States' contributions to the Competence Centre. As the Competence Centre for Semiconductors will be co-financed from national and European funds, both national and EU funding rules apply. The cost base is the same and may only be charged once. The EU funding for the Competence Centres will be made available through Digital Europe grants, which allow for funding of specific cost items:

- Qualified personnel of the Competence Centre to deliver the services mentioned in Section 3 to companies, RTOs, academic institutions, and public administrations, including subcontracting for specialists;
- Procurement and/or depreciation costs for equipment and facilities, both hardware and software;
- Travel grants for personnel of the Competence Centre and local stakeholders to work with other Competence Centres.

6. Submission Procedure

Potential Competence Centres can submit their project proposals by **5pm on 29th May 2024**. These should be sent to **chips@enterprise.gov.ie** with 'National Competence Centre in Semiconductors' as the subject line.

Applicants must meet the general requirements for a Competence Centre, and clearly demonstrate their suitability in:

- facilitating access to pilot lines and to the design platform
- providing training and skills development,
- facilitating access to the Chips Fund and venture capital
- promotion and awareness raising
- participating in the broader European network of Competence Centres

7. Application information required

Clearly demonstrate the following areas in your proposal application:

Relevance

- Describe the overall and specific objectives of the project, outline clear measurable realistic and achievable objectives. Describe the overall concept, approach and how your proposal will contribute to long-term EU policy objectives.
- Describe in detail your Competence Centre, the geographical scope, sectors, targets focus, technology focus, and how this will respond to the demand of the ecosystem.
- Describe the set up and how your Competence Centre will operate.
- Explain the services you can offer.
- Clearly define your KPI and targets, indicating the number of companies you will engage with during the programme.
- Describe any regional national and international activities that will be linked to your proposal.

Implementation

- A brief overview of the overall structure of the work plan.
- Provide a work description including:
 - List and describe each of the work packages.
 - List the major deliverables.

- List the milestones.
 - Identify the critical risk and mitigating actions.
-
- In relation to resources, outline your current research infrastructure, list the planned investment in hardware, software and if you intend to use subcontractors.
 - Provide a list of services and their associated price.
 - If proposing a consortium, describe the consortium, how it brings together the necessary complementary expertise, how each has a vital role in the project. Detail the capacity of the members of the consortium to carry out the proposed work.
 - Describe the proposed management structure, procedures, risk, and innovation management.

Impact

- Describe how your project will contribute to the objectives of the Chips for Europe Initiative.
- Clearly describe the target group, the impact and benefit for them of the project and how you will reach out and engage with service users individually and at scale.
- Describe how the proposal will strengthen competitiveness and bring important benefits for the ecosystem.
- Describe how your project can demonstrate environmental considerations.
- Describe any barriers / obstacles that may affect the impact of the project for example regulation, standards, financing of follow-up steps etc.
- Provide an impact and communication plan, this will be regularly updated during the project. This will include how you will promote your Competence Centre, its services and results.

8. Evaluation and Decision

Expression of Interest in response to this call will be evaluated by an Evaluation Committee comprising of representatives of Department of Enterprise, Trade and Employment, its agencies, and other Departments as appropriate.

Please note –

- The candidate(s) with the highest score will be considered eligible for the Chips Joint Undertaking assessment.
- A threshold of 70% must be achieved for an application to be considered successful.
- The application will be evaluated under the criteria outlined below.

Relevance –

The evaluation will consider the alignment of the proposal with the operational objectives of the Chips for Europe Initiative. The proposal should identify how the Competence Centre will contribute to long-term policy objectives, relevant policies and strategies and synergies with activities at European and national level.

Implementation –

The evaluation will consider the maturity of the project and efficient use of resources, the soundness of the implementation plan and the capacity of the applicant/consortium as a whole to carry out the proposed work and mobilise the necessary resources.

Impact –

Considers the extent to which the proposal will achieve the expected impacts and plans to disseminate and communicate projects results. The extent to which the proposal will strengthen competitiveness and bring important benefits for the Irish semiconductor ecosystem and the extent to which the proposal demonstrates awareness of the environmental effects of the proposed action.

The proposal and information required reflects the information requirements and level of detail of the Chips Joint Undertaking selection process. DETE and/or its agencies may require additional information at any time during the evaluation and contractual process.

	Evaluation Criteria	% Weighting
1	Competence Centre structure - Expertise, focus, geographical reach	15
2	Relevance - Alignment with the objectives and activities of the Chips for Europe Initiative. Contribution to long-term policy objectives, relevant policies and strategies, and synergies with activities at European and national level. Specific objectives, overall concept and approach, outline services and Competences, KPIs and targets, how the Centre will operate.	25
3	Implementation - Proposed workplans, proposed management structure and capabilities, governance structure, ability to respond to the needs of industry	20
4	Impact – Achieve results, strengthen competitiveness, benefit the ecosystem	30
5	Governance – Management, financial, monitoring, funding	10
	Total	100

Annex 1 – Competence Centre Activities

Competence Centres in Semiconductors offer a number of **support activities**. Offering such support activities is a common function for all Competence Centres and is a necessary characteristic to belong to the network of Competence Centres. For instance, support activities of a Competence Centre include:

- **Facilitating access to the design platform and to pilot lines:** a Competence Centre should help stakeholders, and especially smaller companies including SMEs and startups, to connect to the design platform and to pilot lines. They should do so by providing information and support on how to access the platform or the pilot lines when stakeholders do not have the knowledge or expertise to do so directly.
- **Supporting interested stakeholders in developing semiconductor solutions (technology transfer):** SMEs often experience a lack of expertise and resources to acquire knowledge in new technologies, but also in fields such as legal, business coaching, and IPR. With limited resources, SMEs find it difficult to access the latest research and market data in the semiconductor industry. Competence Centres should support technology transfer activities at national level and – where needed – at EU level. Research activities as well as operation, administration or procurement of infrastructures are not within the scope of Competence Centres, but Competence Centres are expected to advise on such activities and support knowledge transfer e.g. from relevant R&D initiatives to the local semiconductor ecosystem. In addition, Competence Centres could grant facilitated access to experts in such areas as legal compliance and business development. They may offer assistance to SMEs in creating business plans and conducting market studies.
- **Providing (access to) training on skills:** Advanced training on specific design and manufacturing skills and practices is often difficult to access for SMEs and other stakeholders. They need access to education services for development of skills in different disciplines but also for different audiences or levels (e.g. bachelor, masters level), access to top-level teachers, or support for the set-up of a credentials/micro-credentials framework. A specific need relates to connecting with universities and leading authorities in the field to exchange knowledge, establish collaborations to incentivise training, and attract talent. Competence Centres should support national training and skills development in the area of semiconductors technologies through face-to-face as well as online training (e.g. via MOOC platforms). Competence Centres

should determine what is needed in their countries, should know the Competences of other Competence Centres, and – where needed – provide trainings to other Competence Centres ('train-the-trainer'). Trainings can be provided by Competence Centres themselves, or by third parties hired by the Centres. A variety of training models can be used, ranging from alternation model or cluster model, via on-the-job trainings and apprenticeships, to crash courses and mentoring programmes.

- **Facilitating access to the European Network of Competence Centres:** Competence Centres should help stakeholders, especially smaller companies such as SMEs and start-ups, to connect to other Competence Centres within the overall network of Competence Centres. They should provide stakeholders with information on relevant Competences in the network as well as on national and international programs, companies, and research centres in semiconductors. They should act as entry points to other European initiatives, such as the network of European Digital Innovation Hubs, HPC Competence Centres, cybersecurity Centres, etc. The goal is to ensure that national stakeholders have access to the best available expertise and support in Europe, by matching stakeholders' needs with the available expertise in the network of Competence Centres. Such expertise may be the specialisation of another Competence Centre. A Competence Centre should help a stakeholder to connect to the right Competence Centres within the overall network of Competence Centres, if the national Competence Centre does not have the right Competences to support the stakeholder. In return, a Competence Centre will support stakeholders from other regions and countries that need its (specialised) expertise through the network of Competence Centres.
- **Promoting the Chips Fund and facilitating access to venture capital:** SMEs and startups are often faced with insufficient financial support and have difficulties to get loans, equity, and/or grants. In particular, startups experience difficulties in managing resources and investment at the initial stage. Competence Centres in Semiconductors may support SMEs, startups, and other companies to access the Chips Fund. They may also support companies in finding investors, including venture capital.
- **Awareness raising, promoting services, promoting success stories:** the services offered by Competence Centres may be new and may not be well recognised in the beginning. Therefore, Competence Centres need to raise awareness about their services, need to promote their services, and may need to develop an outreach programme to promote the Competence Centres services to potential user companies, esp. smaller enterprises. Competence Centres may need to go to many events in their countries to increase familiarity of their services with their target customers. They may need to target specific vertical sectors. They may need to

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promote success stories that show how their services benefit their customers. They may need to hire staff with the right soft skills to interact with customers and provide the interface between technical Competence Centre staff and customers.

Chips Competence Centres should primarily offer services that address the needs from their prime user communities. Nevertheless, Competence Centres should also answer the needs from other organisations, e.g. from other countries, and work in close coordination and collaboration with the rest of the Network to achieve the highest possible impact, ensure the most efficient use of the Competence Centres' resources, and to avoid duplication of efforts among the Competence Centres and with other initiatives, such as the European Digital Innovation Hubs.