European Semiconductor Regions Alliance – Policy Paper on European Chips Act 2.0

The European Semiconductor Region of Excellence Label Encourages the Development of Attractive Ecosystems

The proposal appropriately recognizes the critical role of regions in strengthening the European semiconductor value chain and supporting the EU's digital sovereignty. The added value of the regions consists of their complementary expertise in different fields of semiconductors. The European Semiconductor Region of Excellence label can serve as a valuable incentive for regions to develop competitive and attractive innovation and investment ecosystems.

ESRA calls for a structured dialogue with the Commission for the defining the application process for the label, including the Member State endorsement. The label must be attainable under every Member State's territorial structure. Reporting efforts by labelled regions for monitoring must strictly be limited to essential data collections which provides mutual added value for the pursued purposes in the EU. The label itself should deliver tangible benefits to participating regions, enabling facilitated access to relevant EU funding and initiatives, technical assistance, and a stronger role in European coordination, creating a clear incentive for engagement and well-prepared investment plans.

Given the rapid pace of technological development, evolving market conditions, and relatively short decision-making cycles, the implementation phase of investment plans should be sufficiently flexible and adaptable throughout the five-year strategic horizon. The role of investment plans should be strategic, not operational, and its interregional character could be considered among the evaluation criteria in order to obtain the label; the collaboration among regions on the respective specializations can be a powerful element that contributes to strengthening the semiconductor value chain. Where relevant for regions, NRPP's and smart specialization strategies with a considerable commitment to semiconductor sector should be integrable with Semiconductor Regions Investment plans. Financing should be based on a combination of funding sources and tailored to regional strengths and needs. The regulation should explicitly provide for multi-source financing for the implementation of investment plans, cutting the dependency on a single funding instrument. A co-financing approach combining regional, national and European funding sources should be explicitly recognised in the implementation of regional investment plans.

ESRA Welcomes the Network of Excellence Regions and Stands Ready to Contribute

The proposed Network of European Semiconductor Regions of Excellence provides an important opportunity to strengthen the role of regions in the implementation of the Chips Act 2. ESRA, as a continuously expanding network of leading European semiconductor regions, represents a strong platform for practical cooperation and knowledge exchange within the sector. ESRA is well positioned to contribute by sharing the mapping work implemented by the alliance on identifying key actors, capabilities, bottlenecks, and opportunities for interregional cooperation. Regions should have the opportunity to be consulted by the European Semiconductor Board and involved in the Chips Joint Undertaking's Public Authorities Board for the definition of the ECS-SRIA.

Enhanced collaboration between European regions is essential, as strengthening the semiconductor value chain requires the effective combination of complementary capabilities, expertise, and innovation assets located across Europe. We call for European institutions to support and fund especially cross-regional access of SMEs to semiconductor tech infrastructures and pilot lines. We would welcome the continuation of initiatives such as 'Regional Innovation Valleys'. Such instruments should remain open also to emerging regions with a genuine contribution.

Strong Emphasis on Demand-Side Measures and Further Supply-Side Measures Is Needed

The proposal's strong focus on stimulating demand is particularly welcome. Measures related to strategic projects, grand challenges, and public procurement can play an important role in accelerating the growth and competitiveness of Europe's semiconductor ecosystem. Regions should be actively involved in the work of the Demand Forum to ensure that regional expertise and industrial capabilities are effectively reflected in its activities.

ESRA agrees with the idea that energy-efficient and sustainable chip production and operation should be prioritized. The growing global demand for energy-efficient chips offers a strategic opportunity to advance the Made in Europe Grand Challenge. A joint European demonstrator should showcase the entire circular chip value chain, bringing together industry, SMEs, start-ups, and academia while promoting sustainability, resource efficiency and cost-effective large-scale industrial deployment. The rapidly increasing energy demand of data centres remains a major unresolved challenge, and therefore it is essential to support companies developing innovative and disruptive energy-efficiency solutions. ESRA also agrees that optics and photonics should receive specific attention given the promising perspectives of photonic integrated circuits and next-generation optical network architectures. Efforts to enhance European strategic autonomy should recognise that semiconductor supply chains are global and highly interconnected. Europe's competitiveness and resilience will depend on maintaining collaboration with trusted partners outside the EU. Any measures such as European content requirements, preference mechanisms or

localisation incentives should be designed carefully to avoid fragmenting existing supply chains or disadvantaging established cross-border partnerships with trusted partners.

Efforts to streamline permitting procedures and introduce fast-track approval mechanisms for strategic projects are also highly valuable. Fast-track permitting should come with binding deadlines for the authorities' opinions. While ESRA supports the introduction of fast-track mechanisms, it is recommended to apply a certain flexibility in specific cases, avoiding penalising regions that undertake complex industrial site conversions. The Commission should clarify which types of projects qualify as strategic, how they are differentiated from IPCEIs and how regions are involved in these projects.

ESRA also welcomes the revised first-of-a-kind criterion and asks that it is confirmed for mature and larger-node technologies, advanced packaging and power electronics, ensuring adequate provisions in the next implementation programmes. However, it is indicated that the Commission shall assess the applications also based on 'proven experience of the applicant in operating similar initiatives'. We suggest allowing other alternative qualifications of excellence to be considered in such an assessment, as it is in Europe's interest to fast-track projects with high potential for scale. Allowing regions to champion local, smaller actors could help bridge the lab-to-fab gap. As SMEs constitute the backbone of many regional economies, broad participation of SMEs, including through enterprise associations, should remain a key objective.

Maximizing the utilization of existing infrastructures, including publicly funded chip pilot lines and the EU design platfrom, is essential to support the commercialization and scaling-up of European semiconductor innovations. The proposal successfully identifies the key application areas that are most relevant for strengthening Europe's technological sovereignty, resilience, and competitiveness.

ESRA supports the ambition to establish world-class manufacturing capacities for leading-edge and other ultra-performant chips in Europe ensuring both global competitiveness and sovereignty in the long term. The future framework must be industry-driven and market-oriented, based on credible demand, strong industrial participation, and potential anchor customers. ESRA considers that dedicated resources to foster a resilient semiconductor ecosystem capable of designing, manufacturing, and industrializing next-generation quantum devices are essential to enhance European leadership in quantum.

ESRA also stresses the importance of supporting Europe's fabless semiconductor sector. Although fabless companies account for a substantial share of global semiconductor revenues, Europe remains significantly underrepresented in this segment. Targeted measures should support the growth and scaling of European fabless companies, particularly in system design, analog design and AI-enabled semiconductor solutions.

Links to Funding Instruments Should Be Clarified

To maximize the impact of the proposal, the links between the objectives of the Chips Act 2 and the relevant EU funding instruments should be further clarified and strengthened. The success of the Chips Act 2 will depend on the availability of adequate and predictable funding through the forthcoming EU Multiannual Financial Framework (2028–2034).

In particular, the European Competitiveness Fund and Horizon Europe should provide sufficient and dedicated support for the semiconductor sector. This support is needed to help semiconductor companies cross the gap between pilot lines and mass production. We also underline that a skilled workforce is fundamental to the long-term success of the European semiconductor sector. Hence, ESRA stresses the need of sustained support for skills initiatives, as well as the development of interregional semiconductor skills pathways. Particular attention should be given to skills related to system design, analog design and AI. Awareness of semiconductor careers should be promoted from an early age and supported through stronger coordination and exchange of best practices among regions.

ESRA Ready to Support the Implementation of the European Chips Act 2.0

ESRA stands ready to actively contribute to further development and implementation of the European Chips Act 2.0. The alliance strongly supports the proposed focus on the continued build-up of the achievements of the first Chips Act.

Furthermore, ESRA calls for a clear governance and implementation model. Explicit synergy with the Cloud and AI Development Act is welcomed. ESRA welcomes explicit synergies between the European Chips Act 2.0 and the Cloud and AI Development Act and stands ready to contribute to their coherent implementation within a broader European digital policy framework. Overall, ESRA advocates for a coherent digital policy and funding framework.

Position paper is approved by following regions

Andalucía | Auvergne-Rhône-Alpes | Baden-Württemberg | Basque Country

ESRA
European Semiconductor Regions Alliance

Bavaria

Bratislava

Carinthia

Catalonia

Centro region of Portugal

Gelderland

Hamburg

Helsinki-Uusimaa

Île-de-France

Lombardia

Lower Saxony

Noord-Brabant

North Rhine-Westphalia

Occitanie

Overijssel

Oulu Region

Piemonte

Plzeň

Pomerania

Provence-Alpes-Côte d'Azur

Saxony

Saxony-Anhalt

Schleswig-Holstein

Skåne

South Moravia

Styria

Tampere Region

Thuringia

Zlin

Flevoland

Hessen

Norte