



International Cooperation On Semiconductors

Challenges and objectives



In the context of the recent chip shortage that has significantly affected European industries and citizens, the role, concept and objectives of ICOS have become more strategically important than ever.

The main objective of ICOS is to support the European Commission in its effort to re-establish the global position of Europe in the semiconductor value chain, including semiconductor-based photonics, as outlined in the European Chips Act. This involves identifying topics on which international cooperation could benefit the growth of the European industry.

Goals

To support the European position and be aligned with the main objectives of the EU's Digital transition and Green Deal, ICOS provides the European Commission with strategic advice on collaborative actions based on its analyses.



International Cooperation On Semiconductors

Contact details:

Francis Balestra Grenoble INP / CNRS / SiNANO Institute francis.balestra@grenoble-inp.fr +33 4 56 52 95 10

The project envisions international collaboration as a cornerstone for building the future of European semiconductor ecosystem. With this concern, following an in-depth risk-benefit assessment, it identifies possible partnerships with key semiconductors nations to strengthen the continent position.

Expected impact

The ICOS project has already achieved significant results in the first half of its implementation, serving as a driver for impactful actions across Europe.

A comprehensive analysis of the semiconductor industrial ecosystems in EU and seven leading non-EU countries was conducted to identify potential cooperation with a focus on Industrial Strengths & Weaknesses, Strategic Autonomy of the EU and market opportunities. The project produced reports on the identification of next-generation and emerging technologies in Advanced Computation and Functionalities with Strengths and Gaps for possible cooperation, and the generic Challenges and Needs in the Semiconductor field for which International Cooperation is important.



ICOS available results!

 Economic Landscape Analysis to identify opportunities for

The outcome of this work, along with future efforts within ICOS, aims at reinforcing the European sovereignty in emerging enabling technologies. By strengthening Europe's capacities in key parts of digital and future supply and value chains, allowing agile responses to urgent needs, and by investing in early discovery and industrial uptake of new technologies.



international cooperation
White paper "Generic Challenges and International Cooperation in the Semiconductor Field
Report on Future Technologies for Advanced Functionality

 Report on Future Technologies for Advanced

Computation

ICOS has received funding (2023 – 2025) from the European Union's Horizon Europe research and innovation programme under GA Nº 101092562

