

PRESS RELEASE

New ICOS reports released: a step further in international cooperation for Semiconductors

February 2nd, 2026

The ICOS - International Cooperation On Semiconductors - project was launched in January 2023, backed by the European Union's HORIZON Europe research and innovation programme under GA N°101092562. The project aims at delivering a comprehensive analysis of the semiconductors industry, enabling Europe to forge strategic collaborations with influential countries and leverage collective strengths to shape the future of chips.

The ICOS project has recently released two pivotal reports: Update on Future Technologies for Advanced Computation and Functionality and Policy Advice on International Cooperation in Semiconductors.

The report "[Update on Future Technologies for Advanced Computation and Functionality](#)", coordinated by Nadine Collaert, Fellow at imec, identifies a fundamental shift: AI is now the primary driver of the global semiconductor roadmap.

As AI workloads scale rapidly, the key limitations are no longer transistor performance but memory bandwidth, data movement, and thermal constraints. The report underlines the growing importance of memory-centric architectures, heterogeneous integration, and advanced 2.5D/3D packaging, which are becoming strategic enablers for combining high-performance logic with photonics, sensors, and power electronics.

The analysis also identifies Europe's strengths in photonics and wide-bandgap power electronics as key opportunities, while emphasizing the need to strengthen pilot lines, advanced packaging capacity, and system-level co-design skills to accelerate time to market.

Parallel to the technical roadmap, "[Policy Advice on International Cooperation in Semiconductors](#)", authored by Dr. Melanie Hentsche and Dr. Susanne Hintschich (VDI/VDE-IT), addresses the "hegemonic rivalry" between global powers. The report provides concrete recommendations to strengthen Europe's position in an increasingly competitive and geopolitically sensitive environment. Based on extensive analysis, workshops, and stakeholder interviews, the report proposes a framework built on three pillars: coordinated action, strategic investment, and innovation support. Key measures include establishing an [open and transparent EU collaboration database](#), [leveraging Research and Technology Organisations \(RTOs\)](#) and pilot lines as interfaces for international cooperation, [strengthening Europractice to bridge the "lab-to-fab" gap](#), and [developing a long-term vision for future technologies](#) such as advanced packaging, photonics, quantum and neuromorphic computing, and sustainable electronics.

Final ICOS Event in Brussels

The full ICOS results will be presented at the [ICOS Final Event in Brussels on 3 February 2026](#), held as a satellite workshop of the ECS Brokerage Event.

Both reports are public and available for download on the [ICOS website](#).



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On Semiconductors



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