



## Soitec kicks off European project to develop future high-frequency semiconductors

Bernin, France, 10<sup>th</sup> September 2024 – A European research and industry consortium led by Soitec, a world leader in the design and manufacture of innovative semiconductor materials, has begun work to develop a future generation of high-frequency semiconductors based on Indium Phosphide (InP).

These technologies are set to address applications ranging from photonics for mega data centers and AI to radio frequency front-ends and integrated antennas critical for 6G mobile communication, Sub-THz radar sensing and beyond.

Indium phosphide (InP) devices can operate at frequencies approaching or exceeding 1 terahertz (THz), offering superior speeds and increased energy-efficiency compared to silicon technologies.

The 27-member consortium, Move2THz, aims to lay the groundwork for a robust European supply and manufacturing ecosystem for InP semiconductors and tackle barriers to their wider adoption, including the cost and availability of InP-based advanced substrates. The three-year project is a recipient of European Union funding as well as top-up financing from the governments of France, Switzerland, Germany, Sweden, the Netherlands and Belgium.

Emmanuelle Bely, Soitec General Secretary, stated:

*"This project marks a key milestone in the integration of ever more powerful and energy-efficient semiconductor technologies. Together, we are paving the way for innovation based on indium phosphide that will transform critical sectors such as 6G telecommunications, photonics and artificial intelligence. Furthermore, it fully embodies our shared ambition to create a strong and autonomous European ecosystem capable of meeting the technical and economic challenges to large-scale adoption of these cutting-edge technologies."*

Work formally began at a July 9-10 kick-off meeting at Soitec headquarters in Bernin, France.

The consortium members are:

France	Soitec (project lead) French Alternative Energies and Atomic Energy Commission STMicroelectronics National Center for Scientific Research Institute of Electronics, Microelectronics and Nanotechnology InPACT III-V Lab Almae Technologies The University of Bordeaux
Germany	Fraunhofer-Gesellschaft (EMFT and IZM) Ferdinand-Braun-Institut, Leibniz-Institut für Höchstfrequenztechnik Aixtron University of Duisburg-Essen Freiberger Compound Materials Microwave Photonics Advanced Modeling Solutions (AdMOS)
Belgium	Imec Université catholique de Louvain Incize

<i>Switzerland</i>	Diramics ETH Zürich Albis Optoelectronics
<i>Sweden</i>	Chalmers University of Technology Low Noise Factory
<i>The Netherlands</i>	Eindhoven University of Technology Smart Photonics
<i>Lithuania</i>	Teraglobus

### About Move2THz

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For more information : <https://www.move2thz.eu/>

### About Soitec

Soitec (Euronext - Tech Leaders), a world leader in innovative semiconductor materials, has been developing cutting-edge products delivering both technological performance and energy efficiency for over 30 years. From its global headquarters in France, Soitec is expanding internationally with its unique solutions, and generated sales of 1 billion Euros in fiscal year 2023-2024. Soitec occupies a key position in the semiconductor value chain, serving three main strategic markets: Mobile Communications, Automotive and Industrial, and Edge and Cloud AI. The company relies on the talent and diversity of its 2,300 employees, representing 50 different nationalities, working at its sites in Europe, the United States and Asia. Soitec has registered over 4,000 patents.

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