

Press release – X-TREME 6G, an SNS JU project, is proud to share its advancements obtained over its first 6 months

Six months ago, X-TREME 6G, a SNS JU-funded project aimed at creating disruptive chiplets and chipsets in support of key 6G use cases for the creation of a 6G platform in Europe, was kicked off in Grenoble. The sun was shining over the capital of the Alps.

On June 24th and 25th, the sun was still shining bright over the Peloponnese, where X-TREME 6G's 17 partners gathered at the initiative of the University of Patras and p-NET, to go over the advancements reached in the last six months and set up the next steps towards our ambitious objectives.

With the upcoming publication of our first public technical deliverable, entitled *“Platform architecture definition and use cases”*, X-TREME 6G is about to reach a crucial stage in the specification work conducted as a first step of our project journey. The activities led within the work package two and three, which have been jointly coordinated over those first six months, have also led to significant progress: a PDK is to be distributed among all project partners at the end of September 2025 – a big step to lead our collective action from specification to key disruptive RFIC design!

*„X-TREME 6G is an ambitious project. Both in the fact that it **lays at the unique and yet under-exploited intersection of telecommunications and microelectronics** ; and that it **covers a holistic technological area**, as well as a **diverse set of future use cases**, aimed at **making of Europe an optimal experimentation ground for 6G deployment**. With 17 partners spread across 8 European countries, X-TREME 6G aims to **unleash the full potential of 6G**, and enable the **emergence of new applications** through specific developments for the underpinning novel microelectronic technologies“.*

Didier Belot, X-TREME 6G's coordinator, ST Microelectronics.



For the next 36 months, X-TREME 6G's mission will consist of successfully switching from definition to specification, specification to development, and development to demonstration.

At the end of the project, the development of 6G Platforms' IC building blocks as RF Transmitters, Receivers, LNAs, PAs, frequency synthesizers, for Ka, Q-V, D, and G-,H-Bands, based in SiGe and promising InP technologies, and finally packaged in 3D heterogeneous strategy; the future of 6G in Europe will benefit from X-TREME 6G's results.

Those results will illustrate the potential of **Wireless X-haul ; Joint Communication and Sensing (JCAS); Non Terrestrial Networks (NTN); Network as Sensor (NaS) and Private 6G networks**; as a platform for the development of a new generation wireless technology in the continent, **to the benefit of research, industry, business, and society as a whole**, with **respect of all the principles shaping the European community**, at the very initiative of this project.

Such a platform will allow for **ground-breaking outcomes, including faster connection speed and unprecedented levels of interconnectivity**; bridging the gap between people and devices; and allowing for **greater precision in automated activities**, freeing spaces for humans to strategize, reflect, and achieve greater levels of well-being within the European economy.

Teaser – X-TREME6G's next consortium meeting will take place in Germany, home to three of our partners: the Karlsruhe Institute of Technology, IMST and Fraunhofer IZM. *"Wir freuen uns schon"!*

To keep track of our advancements, on which we communicate regularly, follow us on LinkedIn (<https://www.linkedin.com/company/x-treme-6g>), and visit our website (<https://x-treme6g.eu/>)

