JULY 1, 2023

# **SHIFT Newsletter No.I**

News on Sustainable Technologies Enabling Future Telecom Applications



### ABOUT SHIFT - SUSTAINABLE TECHNOLOGIES ENABLING FUTURE TELECOM APPLICATIONS

#### By SHIFT Consortium

SHIFT is a three-year research and development project co-funded by the KDT Joint Undertaking and National Authorities. The key objectives of SHIFT are to develop new semiconductor and packaging technologies for the high frequencies of 6G era, demonstrate the new semiconductor technologies by innovative and competitive system demonstrators for wireless and fiber optics telecommunication systems and satellite telecommunication and Earth observation systems, and to demonstrate their economic and societal effects while reducing current environmental impacts.

SHIFT makes significant contributions to the "twin transition" through innovations for advanced telecommunications. Furthermore, SHIFT develops innovative semiconductor and packaging technologies for telecommunication areas such as 5GNR (Beyond 5G) and 6G wireless network access and backhaul, ultra-high speed optical links between servers, satellite telecommunications, and Earth observation. The consortium's work contributes to addressing the environmental and societal concerns by analysing the carbon footprint of telecommunications products through their manufacturing chain, operational use, and recycling. SHIFT supports Europe's will for sovereignty in semiconductors by accelerating the development and dissemination of new European technologies

SHIFT receives funding from KDT JU and national agencies under Grant Agreement No.101096256.

#### NEWSLETTER NO.1



## Newsletter Highlights

An Overview of the SHIFT Project

SHIFT Announced on the KDT JU Walk of Fame

SHIFT Community on Zenodo

Interview with the Coordinator



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# SHIFT COMMUNICATION NEWS

## SHIFT ANNOUNCED ON THE KDT JU WALK OF FAME

The SHIFT project's key objectives were highlighted in KDT JU's Walk of Fame initiative on the social media this month. This initiative highlights the projects cofinanced by the KDT JU in different technology sectors.





#### SHIFT COMMUNITY ON ZENODO

SHIFT Community on Zenodo has been createdfor open-access data sharing. Zenodo is an open repository for all scholarship, enabling researchers from all disciplines to share and preserve their research.

www.shiftkdt.eu



https://www.linkedin.com/co mpany/shift-kdtju/



## HOW DO WE MOLD THE FUTURE IN OUR HANDS

## An interview with the Coordinator of SHIFT -Pierre-Jerome Goirand/ STMicroelectronics



PIERRE-JEROME GOIRAND

Can you tell us a bit about how and when the inspiration for the SHIFT project came about?

The manufacture of RF semiconductor technologies and infrastructure telecommunications systems is a recognized European expertise, and we have had several collaborative projects in this field; it was only natural to suggest partnering with SHIFT with other industrialists and academics to keep pace.

What is your role in the project?

I represent STMicroelectronics which is coordinating SHIFT.

SHIFT is an ambitious project with 43 partners from 8 European countries. What are the main benefits and challenges of such a large project?

EC-funded collaborative projects aim to promote European innovation and research and development activities. The main consequences of these collaborative projects, are the promotion of European industrials and academics and their activities and products, thanks to a commitment of the partners to disseminate and publish the results of their activities in the project, and to foster collaboration in certain targeted areas, thanks to the pooling of expert resources.

#### What is the greatest ambition for SHIFT?

One of the greatest ambitions in SHIFT, is to show the greatest level of expertise in RF semiconductor (BiCMOS and GaN) technologies, and successfully achieve the demonstrators' targets for terrestrial and satellite telecommunication systems

SHIFT consortium works on telecommunication technologies that will eventually be used by our society daily, such as Beyond-5G and 6G. What will the impact of SHIFT be on European society and worldwide?

SHIFT will participate in the improvement of telecommunication technologies whether for terrestrial or satellite telecommunication systems. As this it will foster digitization, and telecommunication performance, energy consumption, and availability. Based on this the services that can be offered through Beyond-5G and 6G will become real.

# Last but not least, what is your wish for the first year of the project and for the SHIFT consortium?

I wish the best to the consortium with the first results.