

## NXP, Nokia Awarded CATRENE Award for Driving 5G Innovation

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Highlights

- Awarded for driving innovation in smaller and more energy efficient 5G small cell and massive MIMO systems of the future
- Award winning concepts enable switching 5G transmitters across bands without creating unwanted signals in other bands
- Reduces power consumption for 5G to enable cost savings for network operators



EINDHOVEN, Netherlands, Dec. 18, 2018 (GLOBE NEWSWIRE) -- NXP Semiconductors N.V. (NASDAQ:NXPI) today announced that NXP and its partners of the EAST consortium (smart everything, everywhere access to content through small cells technologies) including Nokia, Besi, Anteverta, Bruco, Delft University of Technology, Eindhoven University of Technology and TNO, has recently received the CATRENE innovation award. The EAST project was selected for developing highly integrated and energy-efficient cost-effective technologies to support the rollout of 5G mobile communication networks.

"The EAST consortium has developed innovative concepts for switching 5G transmitters across bands without creating unwanted signals in other bands, saving cost on filter components that would have been needed in today's concepts," said Mark Tomesen, senior director of R&D and innovation at NXP. "On the receiver side, a highly efficient antenna concept has been developed that allows switching between 5G bands with stronger resulting signals. Also, on the receiver side this eliminates the need for expensive filter and switching concepts."



"We at Nokia Bell Labs have been very impressed with the developed technologies, the very high degree of cohesion between the partners and strong alignment of the various contributions, resulting in a number of cutting edge technologies for smaller and more energy efficient 5G small cell and massive MIMO systems of the future," said Dr. Florian Pivit, Department Head at Nokia Bell Labs and a work-package lead in the project. "For Nokia as a provider of such systems we have gained a substantial amount of new ideas and concepts that will help the industry to advance significantly."

The EAST project was executed over a period of 3.5 years in the CATRENE programme, which is a EUREKA Cluster managed by AENEAS Industry Association. EAST solves the increase of power consumption with more efficient concepts. Improvements in power consumption decrease the environmental footprint of 5G and drive cost savings for network operators deploying 5G. For more information about the EAST Project see: http://www.catrene.org/web/downloads/profiles\_catrene/catrene-project-profile-EAST.pdf

The award was presented at European Forum for Electronic and Components and Systems (EFECS) in Lisbon, Portugal, 21 November 2018. For more information about AENEAS and CATRENE visit: <u>https://aeneas-office.org/</u> and <u>http://www.catrene.org/</u>

## About NXP Semiconductors

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We adhere to the highest ethical business standards as we create technology with social purpose, quality and integrity. Nokia is enabling the infrastructure for 5G and the Internet of Things to transform the human experience. <u>www.nokia.com</u>

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