



## PRESS RELEASE

- FOR IMMEDIATE RELEASE -

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The DRAGON-Project is co-financed  
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## **NEW BREAKTHROUGH IN NANOSCALE RADIO ARCHITECTURES IMPROVES EVERYDAY-LIFE**

Technological innovations make systems smaller, cheaper, smarter and more centred on users and their needs. Within the DRAGON project a highly qualified European team searches for new ways to improve wireless access to a wide range of multimedia services and new applications.

Since data rates are increasing every day, the energy consumption per transmitted or received data bit has to be reduced in order to save energy and to avoid thermal problems. The DRAGON project is a collaborative project which is co-financed by the European Commission under the Seventh Framework Programme. It started on February 1<sup>st</sup> 2010 and is scheduled to run for 36 months. The acronym "DRAGON" stands for "Design methods for Radio Architectures Going Nanoscale". DRAGON aims at developing new design methodologies, very innovative systems and circuit solutions for a novel RF transceiver architecture that will improve wireless access to a wide range of multimedia services and new areas of application like healthcare, public safety and autonomous surveillance systems.

Major emphasis is being put on the use of nm CMOS to make sure to keep up with the scaling of state-of-the-art digital CMOS designs and technologies. At current growth rates, it was estimated that the number of worldwide subscribers of cellular services will exceed 4.5 billions by the end of 2009. To achieve acceptable power consumption, talk time and performance, at low cost, the latest CMOS technologies, characterised by their increased integration capabilities, have to be used. The vision of the DRAGON project is to provide more functionality and performance at lower costs, while also improving scalability and adaptability.

"With the DRAGON project we are addressing critical technical issues for next generation cellular transceivers like power consumption, scalable performance over multiple standards as well as cost efficiency", states the technical leader, Sven Mattisson (PhD), Senior Expert in Analog System Design at Ericsson Research, Ericsson AB in Sweden. "By exploiting nm CMOS technology, novel circuit techniques and design methodologies our target is to demonstrate significant improvements compared to existing solutions, e.g. in terms of integration and energy per transmitted or received information bit, both for future LTE standards and for existing ones."

The DRAGON consortium brings together partners and competencies from Europe's leading companies in the areas of nano electronics and wireless communication, one research institute and

three universities, with radio chip designers and system experts (Technikon Forschungs- und Planungsgesellschaft mbH (AT), Ericsson AB (SE), Infineon Technologies Austria AG (AT), Lund University (SE), Katholieke Universiteit Leuven (BE), imec (BE), Graz University of Technology (AT)). Top universities are participating to achieve optimum innovation and overcome current boundaries of the state-of-the-art. The combination of partners guarantees a high-quality performance and optimal industrial exploitation of the project's outcomes.

For more information about the DRAGON project please visit the project's website <http://www.dragon-project.eu> or send an e-mail to [coordination@dragon-project.eu](mailto:coordination@dragon-project.eu)

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