**New Flex5GWare Project Brings Together Technology Innovators to Develop Flexible 5G Networks**

- *Leading companies, research institutions and universities collaborate to improve the efficiency and performance of mobile networks*

**Neubiberg, August 26, 2015 –** A broad coalition of 17 organizations spanning industry and academia have joined forces to create a flexible, reconfigurable communications platform for fifth-generation (5G) mobile services and applications. The Flex5Gware project will focus on flexible and efficient hardware and software platforms for 5G network elements and devices. To achieve this vision, Flex5Gware will conduct research on key 5G building blocks and demonstrate these blocks as proof-of-concept implementations.  Flex5Gware is an initiative of the [5G Infrastructure Public Private Partnership (5G-PPP)](.)*.*

While many 5G research projects concentrate on development of new radio wave forms and network architecture concepts, the Flex5Gware project focuses on simplifying the implementation of these concepts.  Flex5Gware will explore various technical challenges involving radio frequency (RF), mixed signal technology, baseband digital signal processing (DSP), software implementations of protocol stacks, and other key aspects of 5G networks.

Flex5Gware includes infrastructure providers (Alcatel-Lucent (Germany), Ericsson (Sweden) and NEC (UK)), semiconductor manufacturers (Intel (Germany) and Sequans (a SME from France)) and network operators (Telecom Italia (Italy)) as well as leading research and academic institutions (CEA-Leti (France), CNIT (Italy), CTTC (Spain), Fraunhofer IAF (Germany), iMinds (Belgium), KU Leuven (Belgium), UC3M (Spain), University of Pisa (Italy), VTT (Finland)) and is reinforced with the participation of 2 additional SME (TST-Sistemas (Spain), and Wings ICT-Solutions (Greece)), which are specialized on wireless devices and on the management of wireless technologies, respectively.

Design requirements for future networks are expected to differ markedly from previous generations. Exponential growth in mobile data traffic, combined with a rapidly increasing diversity of traditional mobile devices and new low-bitrate, low-power machine-to-machine devices, require enhanced hardware and software platforms for greater flexibility.  The Flex5Gware project's research will aim to improve technology in several key areas, including:

- quality of experience (e.g., capacity, latency, resilience)
- energy efficiency
- scalability, modularity and reconfigurability for multiple radio access technologies

To achieve these requirements, Flex5Gware partners envision 5G networks with highly reconfigurable hardware platforms and advanced hardware-agnostic software platforms.

"Future networks will require not only new air interface and architecture solutions, but also design characteristics that allow these solutions to be implemented efficiently under widely varying circumstances," said Michael Färber of Intel Deutschland GmbH, project lead for Flex5Gware.  "The Flex5ware project will explore new hardware and software building blocks for the flexible, reconfigurable and efficient operation of future communication platforms, which will underpin all 5G mobile services and applications."

**About 5G-PPP and Horizon 2020**
5G-PPP is a collaborative research program that is organized as part of the European Commission's Horizon 2020 program –The European Union Program for Research and Innovation. It is aimed at fostering industry-driven research, which is controlled by business-related, performance and societal KPIs. The 5G-PPP has a lifetime from 2014 to 2020 and is open for international cooperation and participation. Within this research and innovation framework, the European Commission, with the approval of the European Parliament, has committed 700 M€ of public funds to supporting 5G-PPP activities. Complementary private investment in the order of five times this amount is expected to be provided by Industry, SME, and Research Institutes to realize the 5G-PPP vision. The private side in 5G-PPP is represented by the 5G Infrastructure Association.

More information is available at http://5g-ppp.eu

Horizon 2020 is the biggest EU Research and Innovation program ever with nearly 80 billion Euro of funding available over 7 years (2014 to 2020) – in addition to the private investment that this money will attract. It promises more breakthroughs, discoveries and world-firsts by taking great ideas from the lab to the market. Horizon 2020 is the financial instrument implementing the Innovation Union, a Europe 2020 flagship initiative aimed at securing Europe's global competitiveness. This project receives funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 671563.

**Contact:**
Project Lead : Michael Färber, Intel Deutschland, GmbH: Flex5Gware-Contact@5g-ppp.eu

http://www.flex5gware.eu/

**Flex5Gware Partners:**