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TRIANGLE: 5G Applications and Devices Benchmarking

The focus of TRIANGLE is the development of a framework that facilitates the evaluation of the Quality of Experience (QoE) of new mobile applications, services and devices designed to operate in future 5G mobile broadband networks. The framework will exploit existing FIRE facilities, adding new facilities when necessary. The project will identify reference deployment scenarios, will define new Key Performance Indicators (KPIs) and QoE metrics, will develop new testing methodologies and tools, and will design a complete evaluation scheme.

How does it work?

The project will focus on the development of a framework to ensure user QoE in the new challenging situations, especially those due to heterogeneous networks and considering the role software will have in the new 5G ecosystem. The framework will also provide the means to allow certification and a quality label for the applications, services and devices compliant to the requirements and test specifications developed in the project, but also extendable to other FIRE test solutions. This will allow vendor differentiation, especially for start-ups and SMEs, in the current globalized and competitive markets, and further visibility for the FIRE facilities. The test facility will incorporate all the end-to-end elements that could influence the performance of a 5G-based service: from the latest generation of Radio Access Networks, currently LTE-A, to emulated SDN-powered transport network and 3GPP Evolved Packet Core, to IMS and business services such as Virtual Path Slicing.

Key objectives

The framework, methods and tools developed during the project will enable non-experts in the radio and networking fields, such as Mobile App developers and Device Manufacturers, to define and run controlled live tests on their products. This facilitation role of the project will promote testing, benchmarking, and certification of all the end-to-end elements of the future 5G-based services.

How to get involved?

The first Open Call will soon be published on the project website and potential experimenters and contributors will be able to submit their proposal by the end of 2016, and start their experiments in the beginning of 2017. Furthermore, the project is open to receive inputs from the different players in the value chain regarding their needs, that would help in properly defining the architecture and the structural elements of the test bed.

Project Facts

CALL: Collaborative Projects Call 2 - ICT12 | **EXECUTION:** From January 2016 to Decembre 2018

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