

EUROPEAN COOPERATION
IN SCIENCE
AND TECHNOLOGY

CA15104 TD(16)02044
Durham, UK
October 4-6, 2016

EURO-COST

SOURCE: Eurecom, France

OpenAirInterface Massive MIMO Testbed: A 5G Innovation Platform

Florian Kaltenberger, Xiwen Jiang

Abstract - Massive MIMO is one of the key technologies enabling the next generation of wireless communications. With its high potential in increasing network capacity, offering high spectrum efficiency, saving transceivers' energy and many other advantages, Massive MIMO has attracted great attention from the research and industrial community. The OpenAirInterface Massive MIMO testbed is built on the open source 5G platform OpenAirInterface. It is one of the world's first LTE full protocol stack compatible base stations equipped with large antenna array, which can directly provide services to commercial user equipments (UEs). It shows the feasibility of using Massive MIMO in LTE standard, indicating the possibility of smoothly evolving the wireless network from 4G to 5G. It provides an innovation platform in solving 5G challenges, by giving the possibility of advanced algorithm testing, concept validation, channel measurements, etc.

Florian Kaltenberger
Eurecom
Campus SophiaTech
450, route des Chappes
06410 Biot
FRANCE
Phone: + 33 4 93008186
Email: florian.kaltenberger@eurecom.fr