

**IEEE Healthcom
WWRF Workshop
16 September 2016
Munich, Germany**

Title: Setting the Scene for the 5G-enabled Health Ecosystem

Mobile health (m-Health) covers health applications that are enabled by mobile communication devices such as smart phones, tablets and laptop computers. The forthcoming 5G (fifth generation of mobile communications) will enable the independent communication of intelligent devices (known as the Internet of Things **IoT**) providing an ecosystem where such devices will have the autonomy to monitor the health related issues of individuals and update the Electronic Patient Record (EPR) that is centrally controlled by the healthcare system. This ecosystem will provide amazing opportunities for innovative applications that could transform the quality and efficiency of healthcare delivery and personalised support. It is envisaged that together with prescribed medication we will be prescribed a mobile application system that will provide support on the way that we treat our health conditions. It is also important to point out that this ecosystem is predicted to create jobs and economic growth combining ICT, smart medical devices, and smart pharmaceuticals all working together for the delivery of healthcare encouraging prevention and leading to a healthier lifestyle.

It is thus very important to provide in advance the infrastructure requirements for such ecosystems bringing the stakeholders together and develop future scenarios in order to demonstrate the value of this ecosystem to all the people that will be involved, identify the issues and the challenges that need to be addressed, remove the barriers and then work towards the development of a strategy for the establishment of this infrastructure.

The aim of this workshop is to present the vision of m-Health under 5G, provide experts' views on the development of this future ecosystem of intelligent devices and demonstrate with the presentation of case studies and short demos the benefits to the healthcare industry and the individuals.

Workshop Chair: Prof Christos Politis, Kingston University, UK

Workshop co-Chairs: Dr Konstantinos Danas, Kingston University, UK and Dr Bin Zhen, Huawei, China

TPC Chairs: Prof Christoph Thuemmler, Napier University, UK and Dr Nigel Jefferies, Huawei, UK

Programme:

9.00 **Welcome**

9.05-9.20 **The WWRF and the e/m-Health VIP** (Christos Politis)

9.20-09.40 **WWRF VIP White paper** (Bin Zhen)

09.40-10.10 **Use Case: MS** (Dr Christos Bakirtzis¹ and Prof Nikos Grigoriadis, AHEPA Hospital and AUTH, Greece)

10.10-10.30 Coffee break

10.30-11.00 **The Development and Applications of m-Health and Some Hints to 5G** (Prof Guixia Kang, BUPT, China)

11.00-11.30 **What 5G will bring to m-Health? An industry perspective** (Dr Pantelis Angelidis, Vidavo and University of Western Macedonia, Greece)

11.30-12.00 **5G-enabled Digital Health Technologies for Quality of Life Enhancements** (Dr Katarzyna Wac, University of Geneva, Switzerland)

12.00-12.30 **Transforming Health care models with 5G** (Cindy Fedell, Bradford Teaching Hospitals NHS Foundation Trust, UK)

12.30-13.00 **Panel & Closing Remarks** (Kostas Danas)

¹ Dr Bakirtzis will present the Use Case on behalf of Prof Grigoriadis.