

SME Success Story - 2020



IQUADRAT

IQUADRAT R&D has a focused business plan specifically intended on delivering a “new generation of research tools for system level evaluation of wireless integrated communication systems”. The company’s R&D department is involved in many National and EU-funded research projects, and has extensive know-how in Network Function Virtualization (NFV) technologies, Zero-touch automation at the network layer using state-of-the-art machine learning algorithms for network status prediction, IoT Networking, simulation methodologies for Radio Access Networks, Software Defined Networking (SDN) and Demand Response algorithms for the Smart Grid. Under the framework of the 5G-PPP project 5G-PHOS, IQUADRAT has developed a software that enables SDN-based dynamic network resource management for 5G fronthaul configurations that optimizes the fronthaul’s grade of service and power consumption by adjusting the functional splitting according to the fronthaul load levels. The developed software has been tested by considering the 5G-PHOS converged optical-wireless network architecture, which proved that our product can provide useful insights for the development of resource management techniques adapted to fronthaul architectures with virtualization and dynamic functional splitting capabilities.