





























Grand Agreement: 761989

Duration: Sep 2017 - Aug 2020 (36 Months)

Coordinator: Aristotle University of Thessaloniki

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Project website: www.5g-phos.eu

Total Budget: € 9,621,446.25 Euros

EC contribution: € 7,848,540.88 Euros



www.5g-ppp.eu







www.5g-phos.eu

"5G integrated Fiber-Wireless networks exploiting existing photonic technologies for high-density SDN-programmable network architectures"

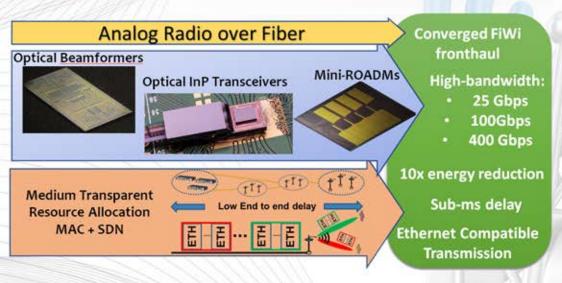




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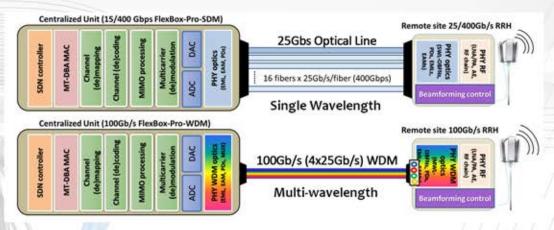
What is 5G-PHOS?

5G-PHOS is a Phase II 5G-PPP EU research project that aims to architect novel 5G fronthaul networks for ultra-dense and hotspot use cases by exploiting the recent advances in optical communications, producing an integrated Fiber-Wireless (FiWi) packetized C-RAN fronthaul supporting massive mmWave MIMO communications.



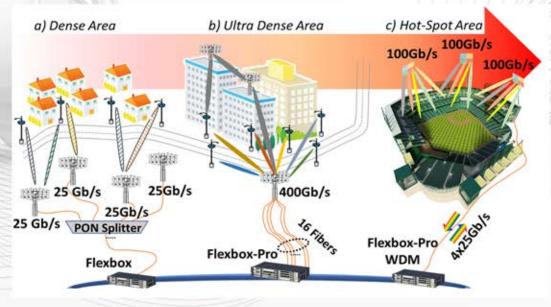
5G-PHOS Technology MIMO module 64x64 Massive (16x16) MIMO antenna SDN + MAC processo Beamforming + MIMO **FPGA** mapping/codin 10GHz TX + Minimodule EAM PHY (4x4) ROADM Optics FlexBox family Centralized Unit RRH

Low Physical Layer Functional Split



5G-PHOS employs Low Physical layer functional split, placing the majority of the hardware in the Flexbox Centralized Unit, while specifying an operationally simple Remote Radio Head (RRH) that contains only the necessary RF/optics and beamforming modules.

3 Use-case scenarios



Website: www.5g-phos.eu