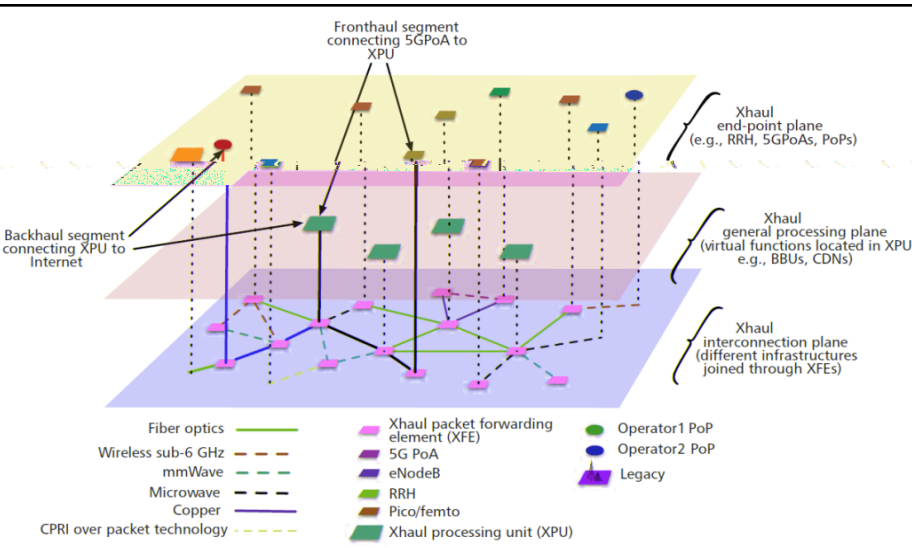# 5GXCrosshaul
the integrated fronthaul/backhaul

[5G-Crosshaul](#) [[Abstract](#)]

The 5G Integrated Fronthaul/Backhaul Transport Network

5G-Crosshaul Focus areas

- Unified control plane for fronthaul/backhaul SDN/NFV-based (XCI)
- Unified data plane for fronthaul/backhaul technologies (XCF, XFE)
- 5G-enabling transm. techs, e.g., mmWave, uWave, optical and copper
- UCs: Dense Urban Society, Multi-Tenancy, Media Distr, MEC, Vehicular
- 5G demonstration testbeds in Berlin, Madrid, Barcelona, Taiwan

5G-Crosshaul Consortium

Operators – Orange, Telefonica, Telecom Italia

Vendors – ATOS, Ericsson, Interdigital, NEC, Nokia

Broadcaster/ Tech. Provider – Visiona, Telnet

SMEs – Eblink, Nextworks, CND,

R&D Centers – Create-net, CTTC, Fraunhofer HHI, ITRI

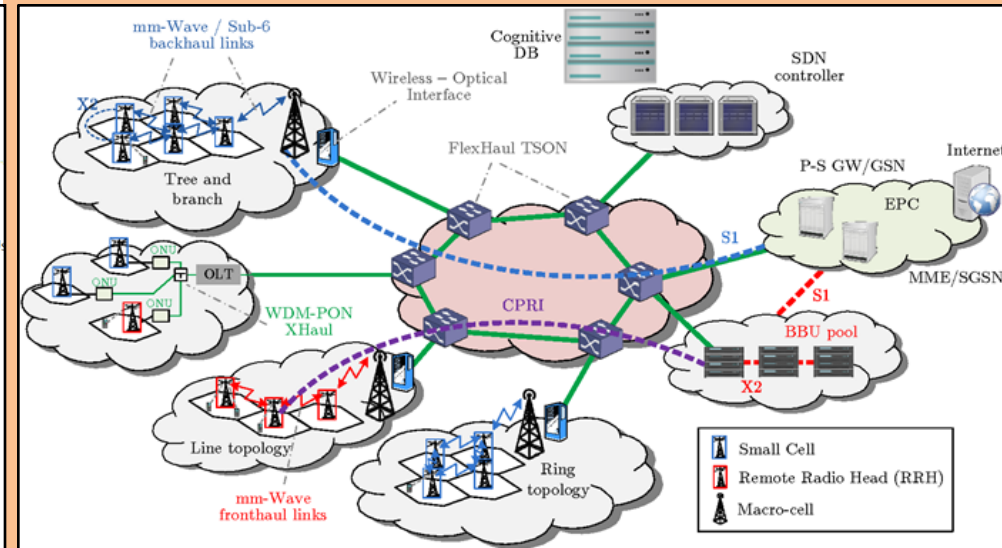**Universities** – Univ. Carlos III, Univ. Lund, Pol.Univ. Torino

PM – Arturo Azcorra (UC3M)

TM - Xavier Costa (NEC)

5G-XHaul

[5G-Xhaul](#) [[Abstract](#)]

Dynamically Reconfigurable Optical-Wireless Backhaul/Fronthaul with Cognitive Control Plane for Small Cells and Cloud-RANs

5G-XHaul Focus areas

- Converged Wireless-Optical, Fronthaul-Backhaul Network Architecture
- Multi-technology wireless and optical programmable data plane
- Flexible wireless (60 GHz / Sub-6) transport
- Hybrid WDM optical transport: active/elastic TSON and PON
- Dense Urban Society (xMBB) use case
- 5G-XHaul Demonstrator in Bristol BIO

5G- Xhaul Consortium

Operators – Cosmote, Telefonica

Vendors – Adva, Bluwireless, Huawei, IHP

SMEs – Airrays, TES Electronic Solutions

R&D Center – i2cat

Universities – TU Dresden, Univ. Bristol, Univ. Thessaly

PM – Eckhard Grass (IHP)

TM - Daniel Camps (i2cat)