



5G Transport and dimensioning Training

This course is designed to introduce the main concepts behind transport networks and 5G. This will be considered on a high-level basis, with focus on the technology and the key components. It will also provide an insight into the latest technology and its application within 5G and the mobile technology sector.

Content :

1) 5G Network Requirements:

- Services and requirements:
- Bandwidth, latency.
- Service provider challenges.

2) 5G Architecture:

- Evolution of wireless technology.
- 5G x-Haul (fronthaul/midhaul/backhaul).
- 5G capacity requirements.

- User Plane Redundancy.
- 5G slicing support in the transport network.
- Edge computing considerations and placement.

3) 5G x-Haul Transport:

- Fronthaul / Midhaul:
- Functional split options.
- Higher layer and lower layer approaches.
- RAN deployment scenarios.
- Backhaul:
- Topology and technology options.

4) Transport Technology Options:

- Optical transport.
- Ethernet.
- mmWave and microwave.

5) Time Sensitive Networks:

- Time sensitive network overview.
- TSN and 5G.
- TSN industrial use case.

6) 5G Synchronization

- 5G requirements
- SyncE and PTPv2