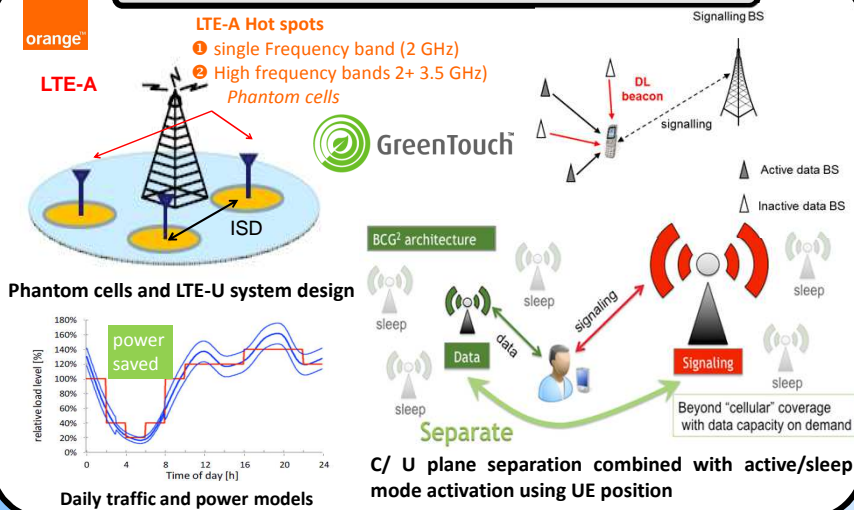


About 5G Key Technical Challenges

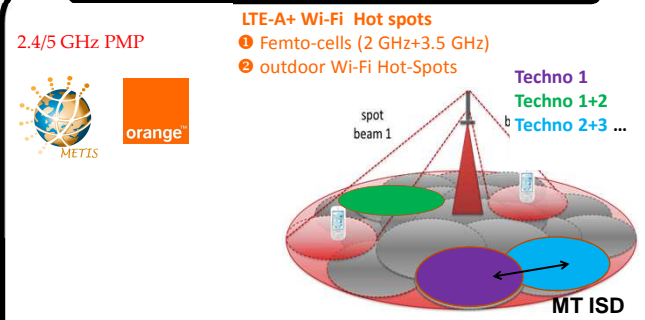
1000 time network capacity increase in the next 10 years with constant power consumption and infrastructure cost

- Network cellular densification with small cell integration into macro cells (HETNets)
- Multi-Techno HETNets in cooperative and Energy Efficient networks
- Licensed and licensed free spectrum combination
- Multi-Band Flexible Air interface design
- New waveforms for innovative information transports

Green HETNet scenarios



Green Multi Techno-HETNets scenarios



Air Interface selection using Green CQI metrics. MT ISD optimization

MT LA CQI Metric evaluation

Air interface selection

Air interface implementation

Fast session Transfer (Wi-Fi technologies)

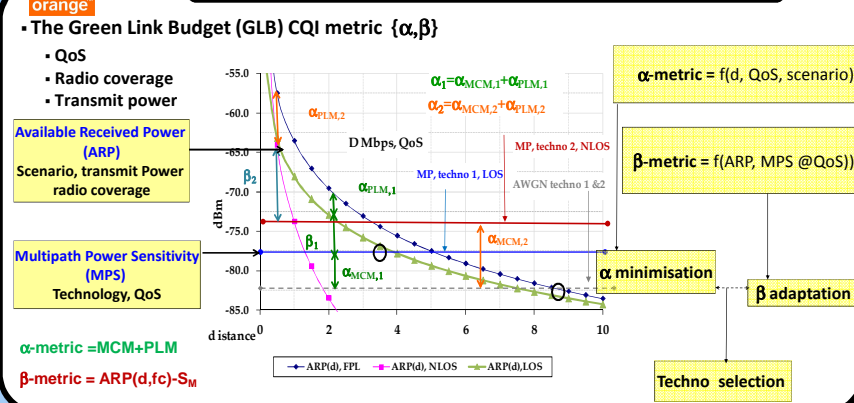
L2.5 Layer Independent interfaces

ANDSF (LTE-Wi-Fi)
Discovery protocols of Wi-Fi+ Wimax networks to be used in addition to 3GPP

Green CQI metrics implementation schemes using signaling, Control frames

Multiple Interface Management combined with Unified Air Interface and Multi-Band processing to limit complexity

MT Link Adaptation CQI metric definition



GLB metric assessments and Green MT Engineering platform

