OPERA-Net Project Leaflet

WP1 – Project Management (WP Leaders Projects management)

WP2 – Mobile RAN E2E :
- KPI for energy efficiency,
- DC power, Cooling system,
- Sleep-mode,
- Energy efficient of : cell sizes, MAC, etc

Partners Expertise:
- E2E management of mobile networks
- Energy management for ITC networks
- Software and Hardware tools for Base Station management

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WP3 - Link level :
- Optimization techniques for Link-level power efficiency,
- Energy-aware device (terminals & infrastructure) design

Partners Expertise:
- signal processing for broadband wireless systems
- design of RF analogue and mixed-signal circuits
- signal processing for multimedia applications
- design methodologies & tools for complex embedded systems

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WP4 - Technology enablers:
- Improvement of base station RF power amplifiers
- Energy recovery in Base Stations,

Partners Expertise:
- RF Power Semiconductors
- Small & High power RF Amplification, modules, structures & modulation strategy
- Thermal management and thermo-electrics technology
- Non-linear device characterisation & PA architecture design methodology.

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WP6 - Network Test Bed:
- Integration of devices (proof of concept)
- Mobile Radio Access Network end to end efficiency

Partners Expertise:
- integration and RF component architecture
- integration and small & high power Transmitter architectures
- energy scavenging technology
- base station integration
- End-to-End mobile networks modelling

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WP5 – Dissemination, Standardization (contribution to Standardization bodies - Data for website, publications –Conferences/Shows/Events- Demonstrations)

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