General overview (Radio planning and optimisation)

Site acquisition

Site database management:
- Site database (technical and administrative data), rank of potential candidates sites (backhaul availability, site cost, planning coverage targets….

Best site selection

Automatic Network planning:
- Automatic site candidates selection according to the coverage and traffic targets
- Automatic Cell Planning (ACP)
- Automatic Site Placement (ASP)

DL/UL Coverage calculation and analysis

DL/UL coverage calculation and analysis:
- Automatic link budget calculator (DL/UL) taking into account % of reliability at the cell edge
- Composite, best server (1st, 2nd, …), overlapping, number of servers, etc.
- Coverage analysis (surface, population, vectors, points…)

Traffic analysis

Traffic analysis:
- Import of traffic map (user profiles with traffic demand, subscribers database, density of users…)
- Automatic traffic dimensioning (Erlang and data)
- Network traffic congestion analysis

Interference analysis

Interference and Automatic frequency assignment:
- Interference analysis (Co-channel, adjacent, N+2,…)
- Spurious interference analysis (intermod , dezensification, coexistence analysis…
- Automatic Frequency Planning (AFP)

General overview (Radio planning and optimisation)

Automatic optimization

Automatic optimization:
▸ Automatic site optimization in order to improve the coverage inside a polygon or along a vector line
▸ Automatic site optimization in order to reduce the interference
▸ Automatic site optimization to increase the number of connected subscribers (calculation done according to the subscriber distribution)
▸ Automatic search of repeaters/gap filler to improve the existing coverage and to solve the gap of coverage.
▸ Etc…

Handover and neighbor analysis

Handover analysis :
▸ Handover maps
▸ Automatic Neighbor list

Drive test analysis and correlation with prediction

Drive test analysis:
▸ Comparison of the measurement data (drive tests, punctual measurements…) and the prediction.
▸ Automatic tuning propagation model
▸ KPI analysis with statistics charts