BACKHAUL PLANNING FOR THE FUTURE

CONNECT is a wireless backhaul network planning tool providing microwave link planning, path profiling, frequency and interference analysis and routing and capacity optimization.

CONNECT provides a complete backhaul network planning solution covering all wireless backhaul technologies, including point-to-multipoint, non-line-of-sight and micro and millimeter wave radio support and is thus ideally suited to small cell backhaul planning. Analysys Mason ranks AIRCOM (which TEOCO acquired in 2013) as the largest vendor of network planning software.

CONNECT is part of the TEOCO planning portfolio, a set of tightly integrated tools to make the entire planning process as seamless as possible. The other products in the portfolio include ASSET (radio planning), CAPESSO (automatic cell planning) and DIMENSION (capacity planning).
CONNECT HIGHLIGHTS

COMPLETE BACKHAUL SOLUTION

CONNECT provides a complete backhaul planning solution for microwave, optical, satellite and copper links. Support is provided for SDH, PDH, Ethernet / IP and Hybrid radio's, both TDD and FDD, to support backhaul for multiple RAN technologies including LTE.

GIS – MAP VIEW

At the heart of CONNECT is a GIS designed specifically with the backhaul network planner in mind. It features a comprehensive set of display and layering functionality including the ability to display web Maps, full MapInfo support and KML export to Google earth.

PATH PROFILER

The Path Profiler provides multipath fading and reflection analysis based on the latest ITU recommendations for microwave links, with support for up to 6 Fresnel zones. Clearance calculations take ground height, clutter type and height and building vectors and rasters into account to provide accurate profile analysis.

ROUTING AND CAPACITY OPTIMISATION

With CONNECT, multiple RAN technologies can be routed across the same physical links. User defined constraints are considered and capacity bottlenecks are flagged during routing. Capacity planning can be based on actual or simulated user traffic allowing accurate ‘what if’ scenarios to be run.

FREQUENCY AND INTERFERENCE ANALYSIS

Interference analysis can be performed on an area, a filter or a single link. Results provide the best polarization and channel settings per link. Support for Adaptive Modulation and Coding (AMC) techniques help save spectrum or increase throughputs while minimizing overall interference.

EQUIPMENT AND LINK DATABASE

The equipment database holds the parameters of all antennas and radios. The link database contains the parameters for all links as well as a view of the expected performance of each link. A chain wizard allows the calculation of end-to-end link performance over a number of hops.

COST ANALYSIS

Cost analysis allows creation of budget forecasts for different planning scenarios including an ROI for the network deployment. CAPEX and OPEX costs of links can also be generated to aid financial planning.

SECURITY & MULTI-USER ACCESS

Excellent security provides a true multi-user environment for large scale corporate deployments. Privileges may be specified to manage individual and group access. The CONNECT database is shared across multiple users and multiple sites, with a current view of the network always available and no need to synchronize manually.

ASSET INTEGRATION

CONNECT is tightly integrated with ASSET providing the ability to utilize ASSET’s Carried Traffic Analysis as an input for backhaul routing and capacity analysis. Integrated site and equipment databases as well as a shared GIS for simultaneous visualization of sites and links allow enhanced productivity.