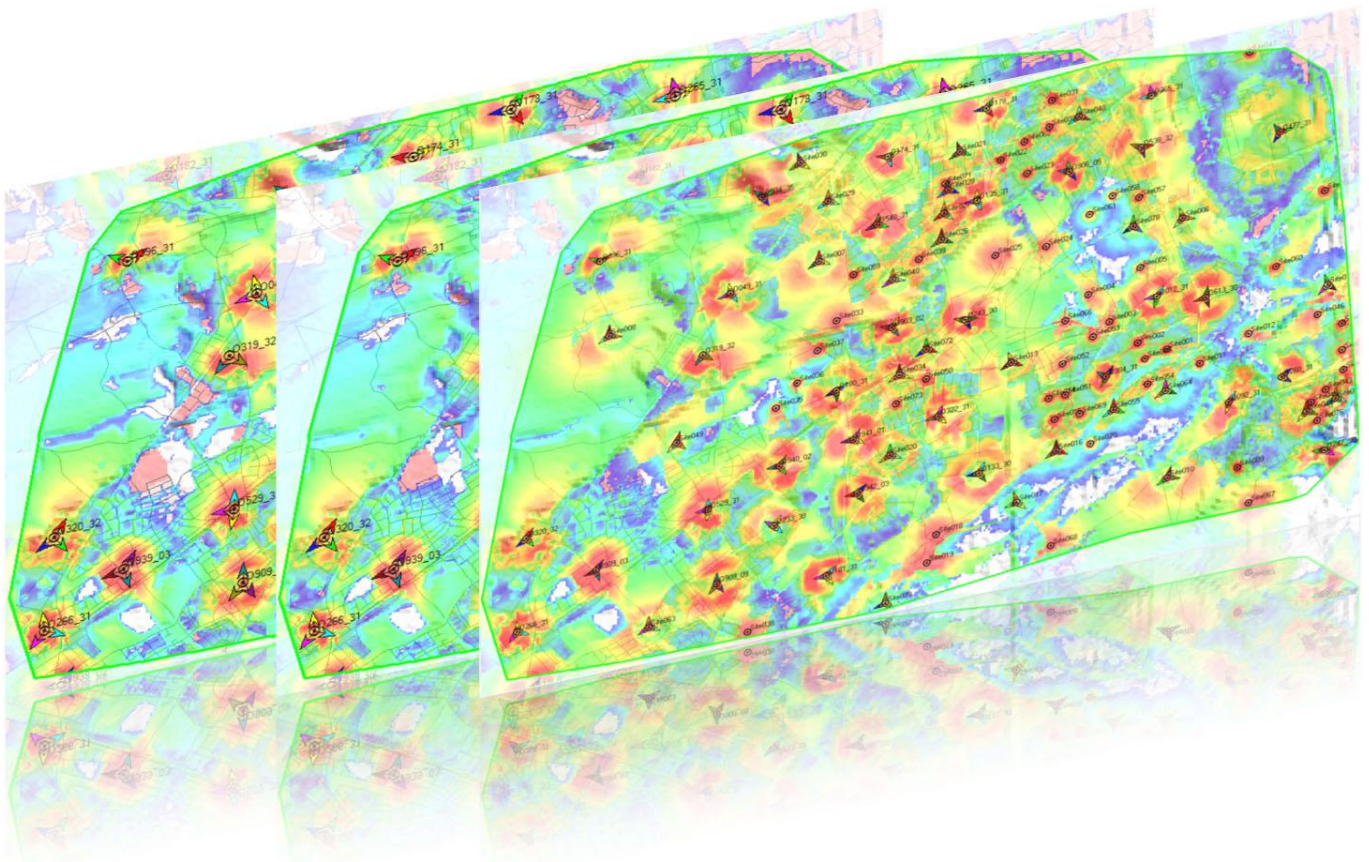


CAPESSO



COMPLETE NETWORK LIFECYCLE OPTIMIZATION

CAPESSO is a multi-technology automatic cell planning tool with the capability to leverage predictions, drive test data and geo-located data to ensure the richest data source is used for optimization at each stage of the network lifecycle for best results. CAPESSO combines information about the radio network with planning objectives like coverage, capacity and quality to automatically find the best network design based on that information.

CAPESSO is complementary to existing planning and propagation software and tightly integrated with all leading commercial radio network planning tools. Analysys Mason ranks AIRCOM (which TEOCO acquired in 2013) as the largest vendor of network planning software.

CAPESSO 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), CONNECT (transmission planning) and DIMENSION (capacity planning).

**Comprehensive
Feature Set &
Strong Integration**

**Security &
Integrity**

Local Support

**Largest Player in
the Market**

**Future Proof
Investment**



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HIGHLIGHTS

HETEROGENEOUS NETWORK (HETNET) SUPPORT



Modern networks deliver service across multiple technologies, frequency bands and cell architectures including GSM, UMTS and LTE networks. CAPESSO's multi-system functionality delivers simultaneous joint planning across heterogeneous network components. Shared components like multi-band antennas can be optimized to meet shared performance objectives. CAPESSO can balance objectives between networks to deliver the best overall HetNet performance.

TIGHT INTEGRATION WITH ASSET



The CAPESSO design philosophy is to complement the planning tool and not replace it. This is achieved by the tight integration of CAPESSO with the planning tool (ASSET in our case). Tight integration has two parts: firstly there is one click, hands-off transfer of the data between tools. Secondly CAPESSO's calculations are harmonized with ASSET. Harmonization means ASSET and CAPESSO provide the same view of your network's operation. So CAPESSO builds on your investment in ASSET, minimizes training and improves productivity.

NETWORK MEASUREMENT INPUTS



In addition to prediction based optimization, CAPESSO can utilize measurement data to optimize a network design. This could be drive test data or geo-located measurements. Utilizing geo-located measurements allows CAPESSO to optimize the network based on actual traffic, a highly accurate and cost-effective approach for mature networks.

IMPLEMENTATION PLANNING



The implementation planning in CAPESSO takes a theoretical plan and makes it practical. CAPESSO ranks each proposed change according to the performance improvement it will have on the network. This ordered list allows the most valuable changes to be done first, providing the most network improvement at the earliest possible stage

COMPREHENSIVE OPTIMIZATION FUNCTIONALITY



CAPESSO's primary aim is to determine the best possible network configuration to meet the business and network performance needs of an operator. Every operator's network is different and every operator has different business objectives so to achieve this CAPESSO has an extensive list of objectives, constraints and parameters which can be configured.

- Optimization targets for objectives such as coverage, interference and capacity can be set. It is also possible to weight combinations of multiple objectives and target levels and to set inter-system objectives. An engineer can therefore guide CAPESSO to optimize the design to their most important criteria
- Constraints can also be used to guide CAPESSO's optimization. Time and cost budgets can be placed on various types of changes and an overall budget can be assigned per project. CAPESSO will then work to achieve the optimization targets within the set constraints. Constraints can also be placed on parameter changes, these can be as high level as only allowing electrical tilt changes down to as details as not allowing a certain azimuth range on a specific cell (due possibly to some known obstacle).
- CAPESSO Inspector is a purpose built geographical information system (GIS) to quickly and effectively view and compare the inputs, outputs and results of optimization tasks.