ASSET is a radio planning tool, providing RF coverage, capacity, cell parameter, and neighbor planning for wireless and mobile cellular networks.

A network plan is never static, as traffic grows and moves the network design needs tweaking, plugging coverage holes and adding capacity where required. Additionally, as new technologies, such as LTE and 5G, are adopted these need to be deployed on top of existing networks in the most cost-effective manner possible. This requires careful planning, especially when technology layers are expected to work together as a seamless network.

“TEOCO is able to offer the kind of large-footprint solutions for assurance and network planning and optimization that CSPs increasingly desire.” - Analysys Mason

ASSET is a multi-technology radio planning software tool for the planning of wireless networks across GSM, UMTS, LTE, 5G and other technologies in a single project. It can be customized through a range of productivity packs, adding additional functionality to suit customer needs.

Along with the existing 2G, 3G and 4G support, ASSET is now a fully capable 5G radio planning tool. 5G NR modeling with advanced propagation models, complex antenna arrays and full multi-technology capacity simulation are all supported.

TEOCO is a network engineering tools market leader

In 2018, Analysys Mason again ranked TEOCO as a leading vendor of network engineering software tools.
Deliver a cost effective, high performance LTE network

The migration to LTE presents considerable challenges for operators across their radio, transmission and core networks. ASSET Radio provides comprehensive coverage, capacity, cell parameter and neighbor planning capabilities for LTE and LTE Advanced networks. Modeling of carriers, bearers, services and terminal types is supported as are TDD, FDD and H-FDD network modes. VoLTE and NB-IoT are supported too, and automation such as the automatic RSI planner ensures maximum efficiency.

Take an integrated approach to planning

Radio network planning is no longer a standalone business activity; a planning tool needs to connect to the wider OSS/BSS eco-system to leverage the vast amounts of valuable data available to deliver better plans. ASSET seamlessly and reliably integrates with other systems, including inventory, site acquisition, site rollout, configuration management, and performance management. This data sharing approach significantly improves radio network planning accuracy, business process efficiency and ultimately network performance.

Validate 5G business cases and plan 5G networks

ASSET delivers all the radio planning capabilities you need to design the best 5G network possible. Maximize CAPEX efficiency by validating 5G business cases and technology decisions. Reduce time-to-market and maximize revenue potential with sound roll-out plans. Reduce pressure on design teams with highly efficient planning and design optimization capabilities. Maintain customer QoS by successfully integrating 5G and your existing network technologies.
ASSET Radio is a part of the TEOCO planning portfolio, a set of tightly integrated products to make the entire planning process as efficient as possible. Other products in the suite include:

**ASSET Backhaul**
Wireless backhaul network planning. Microwave link planning, path profiling and frequency interference analysis.

**ASSET Design**

**ASSET Update**
Planning tool update. Update ASSET with actual network settings and audit the network against a defined baseline.

**ASSET Capacity**
End-to-end network capacity planning. Network visualization, capacity management and scenario planning.

**ASSET Indoor**
In-building system design. Design for a seamless user experience in buildings, stadiums, underground transport.

**ASSET Geo**
Geo-located traffic and performance maps for more accurate radio network planning and design optimization.
Hyper accurate coverage predictions are becoming critical for network planning, especially at higher frequencies where cell sizes are small. ASSET Radio has a number of components to ensure accurate predictions.

**Landscan Population Maps**

LandScan™ is the finest resolution global population distribution data available and is well suited to the needs of CSPs due to the smart modeling approach employed to disaggregate census data. TEOCO processes LandScan™ data to make it usable in ASSET Radio. This data is invaluable for network expansion budgeting and planning and ensures accurate population-covered statistics for regulatory and marketing purposes.

**3D Building Vector Data**

Building vector data is a useful addition for more accurate LTE planning but is mandatory for 5G, especially where millimetre wave frequencies are concerned. TEOCO’s innovative approach to 3D building data creation results in a dataset with exceptional accuracy at a fraction of the cost of commercially available data.

**Advanced Propagation Modeling**

Advanced propagation models improve the accuracy of predictions, providing support for 3D building vector data support, mmWave frequency support and multipath and reflection modeling. This is critical for 5G planning. ASSET supports both the MYRIAD and Volcano models.
TEOCO is a leading provider of analytics, assurance & optimization solutions to over 300 communication service providers (CSPs) and OEMs worldwide.

Our solutions enable the digital transformation of CSPs while enhancing their network QoS, improving their customer experience and reducing their operational costs.

Through advanced analytics and automation, TEOCO solutions provide actionable and measureable insights into network and customer behavior. This includes the optimization, effective monetization, and delivery of new and existing services, such as VoLTE and Video.

Our commitment to network flexibility and agility makes TEOCO the obvious choice for CSPs looking to leverage NFV/SDN and the rise of 5G, and to maximize the revenue potential of new opportunities tied to video and the emerging Internet of Things (IoT).

“TEOCO’s market leading position in Engineering Systems reflects the success of its extensive network planning and optimization solution set, built by some very cohesive acquisitions and integrated effectively to form a leading portfolio”

- Analysys Mason