TD-SCDMA

Atoll TD-SCDMA has been developed in partnership with major players in the TD-SCDMA scene in China, and is the most widely used TD-SCDMA planning software on the market.

Atoll supports TD-SCDMA/TD-LTE co-planning, and allows TD-SCDMA operators to plan and analyse the evolution of their networks towards TD-LTE/LTE-Advanced.

Network Modelling

- Support for N-Frequency mode
- TD-SCDMA equipment modelling including RRM and capacity parameters
- Smart antenna modelling
- HSDPA modelling
- UpPCH shifting modelling
- MBMS modelling

Traffic Modelling

- Modelling of voice and data services
- Modelling of user equipment, user profiles and environment types
- Multi-service 2D & 3D traffic demand maps generated from multiple sources: vector, raster, and live traffic data

Simulation and Analysis

- TD-SCDMA Monte Carlo simulator including timeslot modelling, smart antenna modelling, and Dynamic Channel Allocation (DCA) modelling
- Generation of prediction plots, based on simulations or on user-defined per-timeslot cell load figures, including:
- DL and UL Eb/Nt coverage
- Required power
- Effective service areas
- Cell-to-cell interference
- UpPCH interference
- P-CCPCH pollution
- Offered/required capacity per cell
- DwPCH, UpPCH coverage
- Baton handover
- HSDPA prediction plots: CQI, RLC, MAC and application throughput per pixel
- MBMS service area

**Neighbour and Scrambling Code Planning**

- Manual and automatic multi-carrier neighbour planning
- Automatic scrambling code allocation supporting various allocation strategies
- Scrambling code allocation analysis
- Automatic carrier allocation

**2G/TD-SCDMA Co-planning**

- Site sharing
- Simultaneous display and analysis of 2G and TD-SCDMA networks
- Inter-technology handover modelling

**TD-SCDMA/TD-LTE Co-planning**

- Site sharing
- Simultaneous display and analysis of TD-SCDMA and TD-LTE networks
- Inter-technology handover modelling