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Figure 1: Overview of LTE Self Organizing Network

1. LTE SON Overview

- Improving the Efficiency of Network Deployment and Operation
 - Collects and analyzes data in order to reconfigure the network
 - Reduces field survey frequency with the use of measurement instruments
- User Quality Improvement
 - Quality enhanced by self-optimization and self-healing

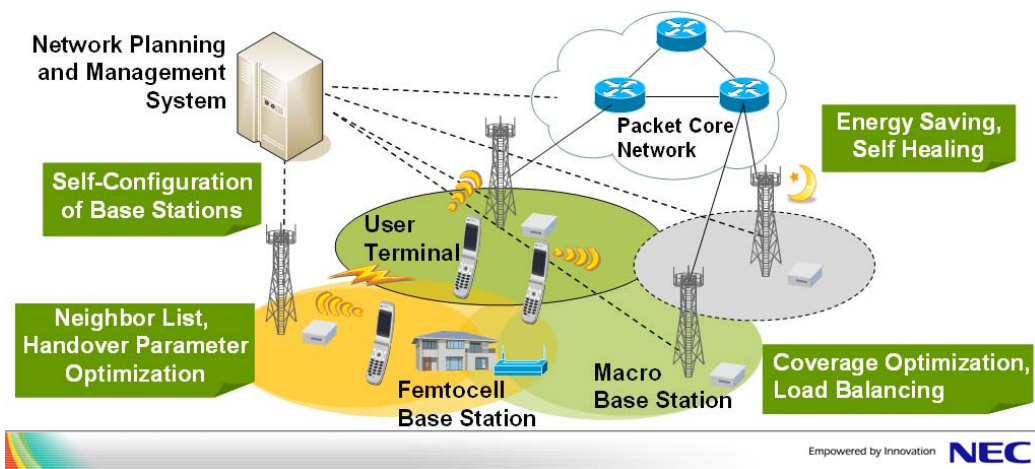


Figure 2: 3-Dimensional LTE SON Simulator Features

2. Features of LTE SON 3-dimensional Simulator

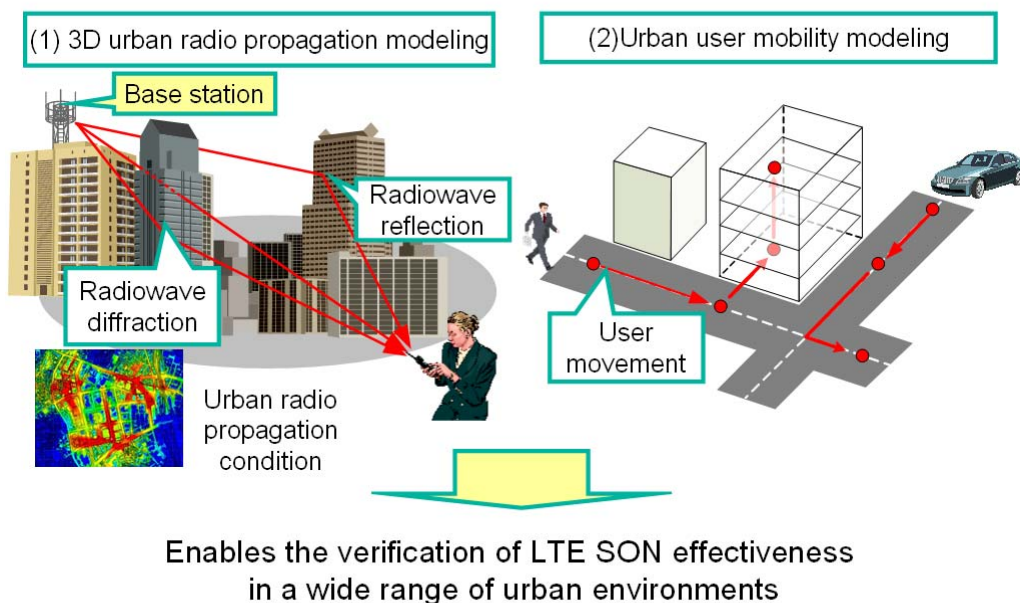


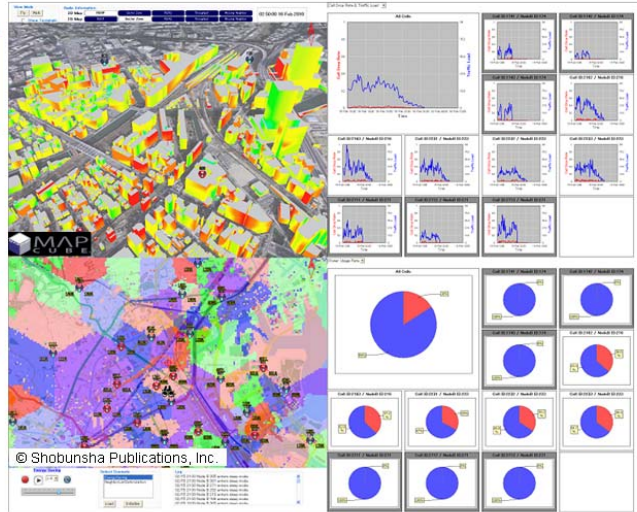
Figure 3: Simulation in Yokohama, Japan

3. An example of simulation in Yokohama, Japan

- Automatic optimization of neighbor lists prevents dropped calls
- Base stations save energy by hour-dependent sleep controls

3-dimensional radio quality characteristics

Radio cell map



Time-series communication quality

Base stations' current operation Status