

COMPANY INFORMATION

Company name **Radio Lab NN LLC** (UNN Radio Physics Faculty)
 Project name **Software complex to simulate 3G/4G/4G+ wireless communications systems**
 Project leader **Prof. Maltsev A.A., co-founder of Radio Lab NN**
 Contacts **Email: maltsev@rf.unn.ru**
Phone: +7 962 5050236



Company/project history **Set up in 2010, the company features researchers and postgraduates from the UNN Radio Physics Faculty with vast experience in work to order from global high-tech leaders. Won the START and START-NN competitions in 2011.**

PROJECT INFORMATION

Description of technology/product

A software complex to simulate 4G 3GPP LTE-Advanced mobile communications systems both at physical and system levels. Could be used in solving practical problems of deployment of future LTE networks, developing and testing telecommunication equipment and user terminals and also in researching the next generations of telecommunication systems and related standardization issues.

Diagrams and photos

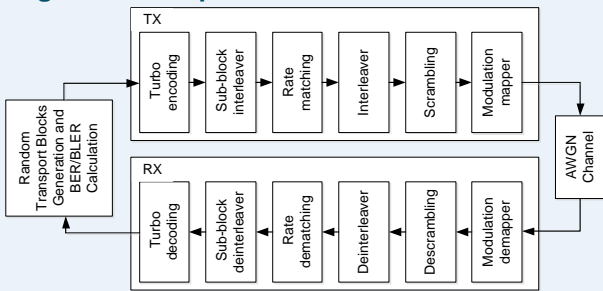


Fig. 1 Signal processing at physical level

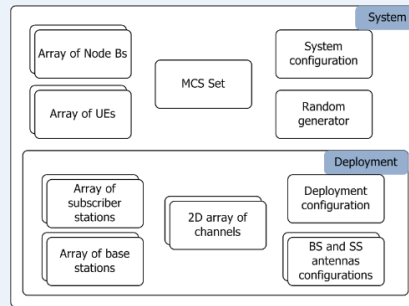


Fig. 2 Diagram for system level simulator

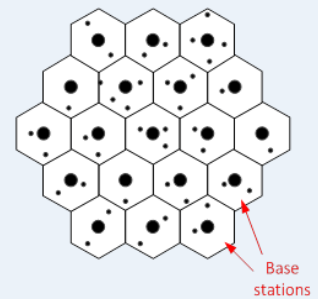


Fig. 3 Example of base stations deployment scenario

Added value

The solution offered is expected to help telecom specialists to develop and test equipment, evaluate new algorithms of space-time processing of signals and distribution of frequency-temporal resources for their further standardization, and evaluate options for new network planning and deployment.

Current status of technology/product

Developed software complex for 3G/4G mobile communications systems modeling at physical and system levels was successfully used during R&D projects for global leaders in high technology, including Sitronics Labs, Nokia Solutions and Networks and Intel Corporation

Key advantages

The new software complex will enable the modeling of 4G systems both at physical and system levels, which will help to reduce duration and costs of new network planning and optimization works. In addition, the simulator will help potential customers save their own financial and manpower resources.

Competitors

- NOMOR (Novel Mobile Radio), Germany. Positions itself on the market very similarly to Radio Lab NN.
- Steepest Ascent Ltd., U.S. Focuses on the development of libraries for software simulators of wireless and mobile systems, as well as on consulting services and the development of software for telecom systems.

Potential markets

Potential customers include manufacturers of telecom equipment and telecom operators.

Scientific publications and patents

Eight scientific publications on the topic published, IP for computer program registered.

US contacts sought

- telecom companies (manufacturers of equipment and operators);
- scientific and research organizations.

Objectives for trip to US

- present the company and showcase its innovative product to international audiences;
- look into potential US markets;
- find customers/partners.