

**Speaker:** Mr. Dmitry Tarasov  
Science Director of ZNIIS Russian Federation

**Title of Presentation:** Global Approaches of testing.

---

The intensive increase a number of equipments and software with NGN functionality and the lack of uniform principles and mechanisms for deployment NGN networks to require harmonization of new NGN technologies and to develop a uniform approach for implementation NGN technologies.

This problematic take a mirror on the ITU activities and is presented in Resolution WTSA-08 76 "Global interoperability" and Resolution WTDC-10 47 "Enhancement of knowledge and effective application of ITU Recommendations in developing countries, including conformance and interoperability testing of systems manufactured on the basis of ITU Recommendations".

With purpose for realization this Resolutions ITU plans to follow a directional policy in functional compliance and interoperability testing of equipments, system-network solutions and services.

Over the past six years, the ITU conduct the serious work to detect of testing approaches and testing methodologies. In accordance with the decision of the WTSA-04 was open the Q.8/11 question «Specification testing of signaling protocols NGN», developed and approved a series of recommendations Q.3900 — Q.3904, is presented by ZNIIS (Central Research Telecommunication Institute) on behalf of the Communications Administration of the Russian Federation and some new draft 12 recommendations include participation of expert from different countries (Austria, South Korea, Poland and China) were prepared.

In current time a research area in testing part has expanded considerably, according to the WTSA-08 to cover following questions: QoS (Q.10/11), monitoring systems (Q.9/11), service testing (Q.11/11) and USN testing (Q.12/11).

After analysis of existing experience of operators, ITU experts came to the idea of determining the Model network — as a basic tool for interoperability and compliance testing. This approach provides a possibility to design and simulate various scenarios of interaction in terms of border characteristics of equipment working without broken the existing SP's infrastructure. This approach is reflected in the acting ITU-T recommendation Q.3900.

However, on the exist date the central and actual question — standardization of testing methodologies for different exist ITU-T standards, especially for interoperability process.

This report will present a general approach for NGN testing, planned and implemented by ITU in pursuance of WTSA-08 Resolution 76 and WTDC-10 Resolution 47.

---