

Title of Presentation: The International Testing Center Project. Approaches of Testing Labs creation. Purposes, tasks and facilities of Testing Labs.

Nowadays the active integration of new telecommunication technologies and the equipment on all the world service providers networks community is conducted. Thus, the main product of any introduced and maintained technologies and the equipment is the telecommunication service.

In the conditions of the wide spectrum of the technologies focused on networks with packet switching, communication service ceases to depend on technology and can be realized by means of the polytypic equipment (for example, basic telephone service could be realized by — Softswitch, IMS, SS7 TDM, PS etc.). As a result, for the purpose of granting of services with the set parameters, the world community now is faced the questions of compatibility and mutual conformity of used technologies, the equipment and system-network solutions especially sharply.

For the decision of the given problem operators have already constructed and widely use now the advanced test-centers which are the one of the main department of service provider and carrying out the activity on preoperational testing of the equipment introduced on the self exist network.

Certainly given process raises the price of the equipment and the system-network solutions planned to install on a network, but in the conditions of the developed countries the given indicator is not essential in connection with high GDP (Gross Domestic Product). However, for developing countries and the countries with transitive economy the given position is essential and can be reduced by means of unification of works with a view of all regions.

As a result, one of the ways of the decision of the given problem could be testing of the equipment and system-network solutions in the unified centers — the Regional Centers of Testing (further the Center).

For instance first one was realized by joint ITU-ZNIIS project ITTC since 2008 there were conducted a large number of activities aimed at finding and removing errors and differences in the implementation of NGN technical means from different vendors before putting them into commercial service on the existing operators networks and training of specialists form the telecommunications organizations of developing countries considering aspects of NGN equipment testing.

This Center can be created for the Region's tasks and may define in each of them specific requirements to the equipment, system-network solutions and services and may assume carrying out of following kinds of checks:

- testing for the conformity to the international standards and specifications;
- testing of the regional specific requirements;
- testing of the base and special requirements to the telecommunication service;
- testing of the equipment for the compatibility (interoperability testing);
- testing of the system-network solutions for interaction by granting of the telecommunication service;
- modeling and testing of parameters of quality;
- etc.

As a result of joint activities of the ITU and ZNIIS was received and distributed to developing countries experience in testing of the following NGN systems and network solutions and protocols:

- Softswitch;

- IMS;
- Fixed Broadband access;
- IP/MPLS;
- SIP protocol;
- MEGACO/H.248 protocol.

It is also important to note that the ITTC events regularly attended by European operators experts and owing to this attendance specialists from telecommunications organizations of developing countries acquainted with experience of testing and implementation of NGN in Europe.

This presentation will be submitted to the international experience of projects for NGN testing, including: background and experience in creating ITTC, aspects of different types of testing, experience of European operators in the area of services testing, experience in testing NGN system-network solutions in the scope of ITTC project, including Softswitch, IMS, Fixed Broadband access and IP / MPLS.

Also, in the present report the approach to construction of the similar Centers will be considered, including: the analysis of the international experience on the creation of the testing centers, the choice of the optimal strategy regarding the realization of the testing process, the presumable Center structure, the requirement to the telecommunication and measuring infrastructure of the Center, typical operational activity of the Center and a typical plan of measures on creation and the Center commissioning. Within this presentation the experience and possibilities of FSUE ZNIIS on the creation of the similar centers will be shown.