

Implementation of the CIS Regional Initiatives

THE FUTURE: The WTDC-14 Dubai Action Plan and the Regional Initiatives (2015-2018)

CIS4: Development of broadband access and adoption of broadband

STATUS: What is the situation today?

<u>Country</u>	<u>Status</u>
All CIS countries	<p>All countries of CIS region are countries with developing economies that are actively implementing their national plans of socio-economic development. One of the most important elements, which will affect the fulfillment of these plans is the necessity to implement national programs to reduce the digital divide. The most important element of national programs for the development of information and communication technologies (ICT) is providing access to the Internet, i.e. the ensuring of broadband access. Currently, it is considered that the growth of broadband Internet access (BIA) penetration by 10% leads to an increase in GDP (gross domestic product) by 1%. Thus doubling the average speed of BIA in the country increases GDP by 0.3%. It shows that the construction of high-speed broadband networks has a direct influence on the development of the national economy. By the September 2014, the level of penetration of broadband services in Russia, according to the Ministry of Telecom and Mass Communications, was 61%, about 35% of these in rural areas. According to the plans of the Ministry to 2018, the ability to connect to BIA should be available in 93% of the population. There are similar plans for the development of BIA in other countries of the region. For example, during the period 2015-2018 the Republic of Kazakhstan planning to connect BIA only in the countryside about 1700 settlements with population of more than 2 mln. people. Despite the efforts of the countries of the region coverage by BIA of the population remains low, a lot of settlements stay without communication, only few countries of the region have developed national strategy and the concept of the BIA development. Another problem is allocation of radio frequency spectrum (RFS) for new technologies (LTE, LTE Advance and so on). An example of a successful concept for the development of broadband access with the allocation of RFS for new technologies would be the Republic of Moldova. The project concept in this country called "Digital Moldova 2020".</p> <p>Analysis of existing approaches to the construction of modern access networks allows to allocate a large number of options, which are formed by technologies and scenarios, as well as architectural and topological solutions, on which can built network. The choice of a particular architectural model of building access network in specific countries, regions, and sometimes in specific localities is not a trivial task and based on the analysis of technical and economic indicators.</p> <p>The correct choice of a particular technology not only allows to use funds for the construction of networks more efficient, but also to ensure an appropriate level of quality customer service.</p>

Objective: To assist interested Member States in the development of broadband access using energy-efficient technologies, including broadband access in rural and remote areas.

Expected Results:

- 1) Recommendations for Member States on the development of national ICT plans to meet the demands of populations in participating countries
- 2) Improved infrastructure for broadband access to ICT services of acceptable price and quality, in urban, rural and remote areas
- 3) Measures to promote the development of broadband access with a view to connecting state social institutions, training centres, and healthcare and social rehabilitation centres, and to promote the use of ICTs by the general public in order to access social services
- 4) Improved skills in the use of broadband access networks; this will involve online training seminars and other activities
- 5) Recommendations on selecting the most suitable technologies for constructing broadband networks for countries with regions with low population density
- 6) Assistance in the construction of satellite networks for broadband Internet access in countries with low population density.

Project №1: Development of recommendations on the establishment of national plans of Member States in the ICT's field, aimed at the satisfaction of needs of the population of the CIS countries. Development of recommendations for choosing of technological bases of construction of broadband access networks for areas with low population density

The development of clear methodological recommendations determines the optimal design of network access in the framework of a specific country, region, locality. Software to automate the choosing process the optimal script for a particular populated locality for building of BIA networks. Into the basis of the automation must be put an approach which based on simulation of the process of network construction using different technological solutions, depending on parameters of specific areas (population density, demand for services, existence of competition, availability of RFS, etc.). As criterion of optimality it can be used the required investment amount and timing of construction by providing technical indicators at the appropriate level.

Project objective:

1. Analysis of BIA development in the CIS region (existing legislative base, regulatory-right acts, contributing to the BIA development, including authorization system using the RFS for new wireless systems).
2. Development of recommendations to the CIS countries on the drawing up strategies, the concept of BIA development, based on the use of RFS for perspective wireless broadband systems, including satellite systems, allowing the best usage of different technologies for the BIA development, taking into account geographical location and economic status of countries of the CIS region (up to specific populated localities).
3. Development of recommendations on choosing of technological bases of construction of broadband access networks for the countries of the CIS region, which have regions with low population density.
4. Advanced training of human resources in the field of usage of broadband access networks, including organization and conducting of educational online seminars and other events.

Expected Results: 1-6

Estimated Budget for Project 2: (US Dollars)

Description	Total	ITU	Partners
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Development of recommendations, development of software, etc.	40 000	25 000	15 000
Conducting of the training seminars	15 000	10 000	5 000
Total	55 000	35 000	20 000
Grand Total	55 000		

Potential Partners:

1. Communication Administration of the CIS countries
2. OJSC «Intellect Telecom», Russian Federation
3. A.S. Popov Odessa National Academy of Telecommunications (ONAT), Ukraine

Country or countries involved: All CIS countries (developed recommendations will be intended for all countries of the region, taking into account their characteristics)

2015 Activities

Collection, analysis, and generalization of materials and statistical data and expert evaluation of the received information. Creating of a database with information about existing technical solutions, analysis and development of a methodology for the choosing of technologies.

2016 Activities

The development of the first version of the Recommendations.

The development of the program of choosing of technology in accordance with the chosen methodology.

2017 Activities

The completion of the Recommendations, taking into account results of conducted consultations and received data.

Testing and debugging of developed solutions to until their readiness.

Conducting of the training seminar