# **Implementation of the CIS Regional Initiatives**

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

CIS3: Introduction of training technologies and methods using telecommunications/ICTs in order to develop human potential

# **STATUS: What is the situation today?**

Country	Status
All CIS countries	As it known, in the modern world human resources continue to be the most important asset. Thus, crucial for the development of any skills have continuous and permanent professional training and exchange of ideas with other specialist professional skills, training and development. Today it is especially important question in rural areas where people have limited opportunities to use ICT in full measure. The CIS countries have a number of features, in particular, the general "post-Soviet" model of education which paid insufficient attention to the personal characteristics of the individual student, for example, individual differences in supply, perception and assimilate information. Furthermore, the use of a single Internet space and the level of ICT development, approximate language environment (knowledge of the Russian language), broadband access to the end user opens the possibility of significant improvement of education with the use of telecommunication/ICT and practical implementation of the learning approach that focuses on the personality.  Almost all countries in the region have their own projects on implementation of ICT in education. Thus some of them have the status of national programs.  For example, in the Republic of Azerbaijan acts the state program on Informatization of education system, one of the projects of which is AzEduNet (Azerbaijan Educational Network), which is engaged in providing high-speed Corporate Education Internet connection for academic and educational institutions of the Republic of Azerbaijan. In its turn, the main purpose of the "Concept of development of information technologies and information society in Armenia to 2018" is the development of the information network. The basis of the state policy in the field of education is "The state program of education development in the Republic of Armenia for 2008-2015". The Ministry of education and science of the Republic of Armenia approved the "Regulations on the usage of distance learning in higher and postgraduate education".  Th
	solving practical problems of distance education in the Kyrgyz Republic

established Kyrgyz Association of Distance Education (KADE).

Introduction of methods and technologies with application of telecommunications / ICT in the educational system of the Kyrgyz Republic and CIS countries due to many factors, including: demand for a mobile professional, enthusiastic professionals capable of making optimal decisions in an uncertain market conditions and increasing competition in the labor market specialists on the former Soviet Union. Changing forms and methods of training - training activity character becomes, the emphasis should be directed to learning by doing, productive work in small groups, building individual learning paths and personal responsibility for making decisions.

Education is one of the priorities of the long-term Strategy "Kazakhstan - 2030". In accordance with the Law of RK "On education" 2007, informatization of education is the most important mechanism for the implementation of the state educational policy, and distance education is defined as a new innovative technology of education. In the Strategic development plan of Kazakhstan till 2020, approved in 2010, confirmed the focus on further informatization of the all education system and mass adoption of electronic learning.

In Uzbekistan, questions of the informatization of education are under close attention of the Government of Uzbekistan. In particular, it discusses the necessity of developing of digital libraries and their effective application in close connection of the project of information and library institutions integrated network to create a national network of electronic learning, use of electronic resources and multimedia products in all higher educational institutions.

In the Republic of Belarus main activities of informatization of education implemented in the framework of the State program "Information society". It is planned to complete the creation of the national information environment of the education system of the Republic of Belarus until 2015.

In the Republic of Moldova one of the national strategy objectives for the information society "Electronic Moldova" has been the implementation of the pilot institutions of secondary vocational education of distance learning modules for electronic books accessing. In the Russian Federation in the framework of the Federal target program of education development electronic educational resources of the new generation in all subjects of the school curriculum and multimedia resources for preschool education are gradually created. In Ukraine the action plan for the development of ICT for educational sphere defined in the framework of the State program "Information"

# **Expected Results:**

1) Further training courses, training sessions and seminars on introducing telecommunications/ICTs into education and human capacity building, including in rural areas

and communication technologies in education and science.

- 2) Development of distance-learning technologies and methods in areas including the protection of ethnic minorities' rights to receive education in their own languages by providing additional educational opportunities
- 3) Development of methods for assessing personality traits in order to select the most suitable teaching methods for individual students using telecommunications/ICTs

- 4) Recommendations on methods of setting up national programmes for the introduction of telecommunications/ICTs into education
- 5) Comprehensive human capacity building through education using modern developments in telecommunications/ICTs.

<u>Objective</u>: To assist ITU Member States in the CIS region in setting up and developing national programmes for introducing telecommunications/ICTs into education.

# <u>Project No1: Development of recommendations for creation of e-districts to addressing the needs of</u> ethnic minorities' to education in their own language

Development of a standard project documentation for building online educational districts, including guidelines for choosing hardware and software, as well as instructions on its installation and configuration with a view to organize technical platform of standard e-district. The development of a standard set of software for online e-district with the maximum usage of open source software (or freeware). Development of methodical recommendations on organizing lessons using online districts, including electronic access to educational materials, video conferencing, preparing of content for training in electronic form and so on.

#### Project objective:

Creating of recommendations for building a single information environment of the educational institutions to ensure the rights of national minorities by providing additional educational opportunities, including recommendations for providing remote access to educational resources educational institutions (including at weekends, during holidays or quarantine).

### Expected Results: 2, 4, 5

# Estimated Budget:

Description	Total	ITU	Partners
Development of recommendations, development of a standard set of software, development of a project documentation	28 000	15 000	13 000
Missions (presentation of recommendations to the schools in the region, consulting support etc.)	2 000	_	2 000
Total	30 000	15 000	15 000
Grand Total	30 000		

# **Potential Partners:**

- 1. Ministries of Education of CIS countries
- 2. A.S. Popov Odessa National Academy of Telecommunications (ONAT), Ukraine
- 3. Institute of Electronics and Telecommunications at I.Razzakov KSTU

Country or countries involved: All CIS countries

#### 2015 Activities

Not planed

#### 2016 Activities

Development of a standard project documentation for building online educational districts, including guidelines for choosing hardware and software, as well as instructions on its installation and configuration with a view to organize technical platform of standard district. The development of a standard set of software for online educational district with the maximum usage of free software.

# 2017 Activities

Development of methodical recommendations on conducting lessons using online districts, including electronic access to educational materials, video conferencing, preparing of content for training in electronic form and so on.

# Project No2: Development of recommendations and an automated system for diagnosing personality traits in order to select the most suitable teaching methods for individual students using telecommunications/ICTs

Within the framework of the project it is offered to develop methodical recommendations and an online system for the diagnosis of personal traits of the students to choose the most suitable individual techniques and forms.

#### Project objective:

Identification of personal traits of students that affect the achievement of high results in the educational process. Determination of the optimal forms and methods for the presentation of materials for education with the use of telecommunication/ICT. Creating a platform for mass testing students in the region to determine the optimal supply of educational and other materials taking into account the specifics of a particular educational institution with the usage of electronic working methods.

# Expected Results: 3, 5

#### **Estimated Budget:**

Description	Total	ITU	Partners
Organizing of a pilot survey, development of recommendations, software development, technical support, testing and installation of software etc.	40 000	20 000	20 000
Missions (presentation of the system at schools in the region, consulting support, and etc.)	2 000	-	2 000
Equipment (server and network equipment to accommodate the platform)	8 000	_	8 000
Communication (ensuring continuous (24/7) high-speed access to the server from the Internet during the years 2015-2018)	5 000	-	5 000
Miscellaneous (rental space for placement of equipment, payment of electricity, network infrastructure support, seminar presentation at the end of the project etc.)	10 000	_	10 000
Total	65 000	20 000	45 000
Grand Total	65 000		

#### **Potential Partners:**

- 1. Ministries of Education of CIS countries
- 2. A.S. Popov Odessa National Academy of Telecommunications (ONAT), Ukraine

### Country or countries involved: All CIS countries

# 2015 Activities

Organization a pilot survey of target groups to identify the most appropriate techniques for their further usage in creating and deploying the system.

# 2016 Activities

Survey data processing and development of guidelines for the diagnosis of personal traits of students with the aim to select the most appropriate methods of supply of educational materials for teaching with the use of telecommunication/ICT.

# 2017 Activities

Development of a diagnostic online system for analyze personal traits of students with the aim to select the most appropriate methods for teaching with the use of telecommunication/ICT.

Test the questionnaire is designed for not less than 500 students.

# <u>Project №3: The use of telecommunications / ICT in the development of qualitative interactive educational</u> resource

The project aims to introduce the technology, the development and dissemination of electronic educational resources and services for all levels of education, for cataloging of electronic educational resources of various types through the use of common information model metadata, based on well-known and widely accepted standard. Elearning modules to be created on the thematic elements of subjects and disciplines and is a complete interactive multimedia products aimed at solving the problem. Methodology and guidelines have been developed for creating high-quality interactive educational resource will be tested as part of the Kyrgyz Republic and transferred to the ITU and the CIS countries.

# Objectives of the project:

Development of guidelines and methods of distance education to provide quality interactive educational resource using ICT. Formation of the concept of an electronic resource:

- collection of educational material and its editing;
- development of forms of control and preparation of test tasks and practical tasks for mastering the material;
- software implementation of educational resources;
- development of virtual multimedia components;
- development of graphic and animation materials, recording video clips;
- development of the user interface;
- preparation of an educational resource for the dissemination and application in the educational process;
- develop guidelines for the creation of high-quality interactive educational resource, testing within the Kyrgyz Republic and their transfer to the ITU and the CIS countries.

# Expected Results: 1, 2, 4

#### **Estimated Budget:**

Description	Total	ITU	Partners
Development of methodologies and recommendations (technical support, development of regulatory documents, coordination within national programs for the implementation of telecommunications / ICT in education, etc.)	35 000	10 000	25 000

Development of guidance and teaching materials for use in application of remote technologies	10 000	-	10 000
Conducting trainings (seminars at the end of the project)	16 500	15 000	1 500
Miscellaneous (training space for equipment, payment of electricity, infrastructure support, etc.)	10 000	-	10 000
Studio equipment (acquisition, software, installation, etc.)	80 000	-	80 000
Total	151 500	25 000	126 500
Grand Total	151 500		

#### **Potential Partners:**

- 1. Ministry of Education and Science of the Kyrgyz Republic;
- 2. Kyrgyz Association of Distance Education (KADE);
- 3. Institute of Electronics and Telecommunications at I.Razzakov KSTU;
- 4. JSC "Kyrgyztelekom";
- 5. State Communications Agency under the Government of the Kyrgyz Republic;
- 6. A.S. Popov Odessa National Academy of Telecommunications (ONAT), Ukraine

**Country or countries involved:** All CIS countries

# **2015 Activities**

Not planed

# **2016 Activities**

Development of the concept of quality interactive educational resource that will contribute to the needs of stakeholders, especially educational programs and quality assurance mechanisms.

# **2017 Activities**

Development, coordination, application programs, implemented using distance learning technologies in various educational spaces - CIS, including in the virtual world educational space. Carrying out testing within the Kyrgyz Republic and the transfer of methodologies and guidelines in the ITU and the CIS countries.

# **2018 Activities**

Conducting trainings.