



CJSC “Intervale”
Russian Federation



International Telecommunication
Union
Telecommunication
Development Bureau



Odessa National Academy
of Telecommunications
named after A.S.Popov
Ukraine

REPORT
of Implementation of CIS Regional Initiative approved by
the 2010 World Telecommunication Development Conference (Hyderabad, India)
«Development of Recommendations and Creation of a Pilot Segment of a Telecommunication/
ICT System to Support Secure Remote Retail Payments and the Management
of Bank Accounts Using Wireless Communication Networks»

The wide occurrence of mobile communications in the world creates a unique opportunity to use mobile devices as remote terminals for mobile commerce and mobile banking systems. The predominance of non-cash retail operations, including those using mobile terminals, is an indicator of high degree of development of the financial system in the country and an important agency of banking sector stability. Therefore, increasing the share of non-cash turnover is an extremely important goal for the governments of developing countries, including the countries of the CIS. The availability of tools for remote management of the bank account and bank transfers in a safe and user-friendly manner, at any time and in any place, is a key prerequisite for attracting large-scale customers in the banking sector and increase customer confidence to banking services.

On the other hand, in countries without a developed banking system, mobile payment system with flexibility in the choice of means of payment, can partially replace the banking system for individuals and serve to engage her citizens. A striking example of this system is m-Pesa, which operates in Kenya very successful and served as the model for a number of countries in Africa and Asia. The choice of the type of system and the means of payment is dependent on legislation and degree of development of the banking system in each country.

In this regard, the countries of the CIS region and other developing countries have strategic goal: to implement mobile retail payment systems, which are characterized with usability, high security, and efficient operation for both existing and innovative payment systems. One of the first steps towards solving this problem is to create a framework for widespread development of secure mobile transaction technologies by elaborating recommendations for organization and operation of reliable and safe services for banking sector and telecommunications companies, as well as for regulators and the communications administrations of the region.

To meet this goal, the CIS countries proposed a regional initiative (RI), which was approved by the 2010 World Telecommunication Development Conference (WTDC-10), held in Hyderabad, India: "Development of recommendations and creation of a pilot segment of a telecommunication/ICT system to support secure remote retail payments and the management of bank accounts using wireless communication networks". The objective of this RI was to generalize the best practices in the field of mobile payment systems, analyse security aspects, develop recommendations for the establishment of the systems of the kind and implement an operational pilot project, on the basis of which the recommendations were elaborated, including for developing countries.

The overall management of the implementation of the RI (during 2011-2014) was conducted by the ITU Area office for CIS in close collaboration with two ITU-D sector members: CJSC “Intervale” (Russian Federation) and the Odessa national Academy of Telecommunications (ONAT) named A.S. Popov (Ukraine).

The main results of the implementation of the RI were:

1. Creation by the Intervale Group of Companies of a pilot segment of a telecommunication/ICT system to support secure remote retail payments and the management of bank accounts using wireless communication networks.

In the process of work on the implementation of the RI, the Intervale Group of Companies created and put into commercial operation mobile payment systems in the Russian Federation (Easy payment, MasterCard mobile) and the Republic of Kazakhstan (MyPay.Kz). On the basis of experience gained during the design, creation and putting into operation of the systems, recommendations and guidelines were developed by the Intervale, which were presented at the ITU Regional Workshop for CIS "Mobile Payments: The Issues and Prospects for the Development", which was held in Baku, Republic of Azerbaijan, from 14 to 16 October 2014.

2. Elaboration of the Recommendations for the Countries of the CIS on Creation of Mobile Payment Systems and Improving the Legislative Framework for the Development of Mobile Payments.

To develop the Recommendations, two experts in the field of mobile payment systems were recruited:

- *Mr. Yuri Bogor, Head, Plastic Card Department, OJSC Bank "OPENING";*
- *Mr. Roman Lukashov, Head, Development and Analysis Department, Centre for Payment System and Settlements Research.*

Within the framework of development of the Recommendations, the experts elaborated the reports: "Analysis of the Experience of the Development of Mobile Payments in the World" (Roman Lukashov) and "Analysis of the Current State, Trends and Prospects of Mobile Payment Service in the CIS Countries" (Yuri Bogor). The latter report includes as annex the report by CJSC Intervale on implementation of regional initiative.

Final Recommendations, presented at the Workshop, were elaborated on the basis of the proposals of CJSC Intervale and of the two experts, as well as of the presentations of the Workshop. The Final Recommendations mention promising technological solutions, as well as the specific steps which are recommended to be taken to remove barriers in the national regulatory framework, for arrangement of the interaction between the participants and fueling the development of mobile payments in the CIS region.

3. Elaboration of the Training Course and Guidelines for Organization of a Laboratory Cycle on the Subject "Design, Technical Operation and Security of Mobile Payment Systems".

For elaboration of the training course, the BTU ITU recruited the expert representing telecommunications educational institutions of CIS, Mr. Vadim Kaptur, Vice-rector on Scientific Work, Odessa National Academy of Telecommunications (ONAT) n.a. A.S. Popov, Ph.D., candidate of technical Sciences, senior scientific worker, Vice-Chairman of the ITU-D Study Group 1.

Within the framework of the task, the expert elaborated a course of lectures and recommendations on organization of a laboratory cycle on the subject "Design, Technical Operation and Security of Mobile Payment Systems". The course is meant for students of telecommunication universities in the CIS region and covers a wide range of issues related to the development of technologies used for construction and operation of mobile payment systems. The course consists of 9 lectures and 4 laboratory works.

Also, the ONAT developed an educational mobile training system, which is available at: <http://mobile-banking.onat.edu.ua>.

The training course will be posted on the ITU Academy website and distributed to all interested telecommunication universities of the CIS region for further implementation in the educational programme.

As final stage of the regional initiative implementation, BDT/ITU in cooperation with CJSC Intervale and Odessa National Academy of Telecommunications n.a. A.Popov and with the support of MobeyForum International Non-commercial Association organized **the regional workshop for CIS “Mobile payments: Problems and Prospects of the Development”**, which was held in Baku, Republic of Azerbaijan, from 14 to 16 October 2014 at the kind invitation of the Ministry of Communications and High Technologies of the Republic of Azerbaijan.

The workshop was attended by 68 representatives of 14 countries (Republic of Azerbaijan, Republic of Belarus, the UK, Greece, Spain, Republic of Kazakhstan, Kyrgyz Republic, Republic of Moldova, Russian Federation, the United States, Republic of Tajikistan, Ukraine, France, Switzerland), including 8 CIS countries.

Within the framework of the Workshop, 21 presentations were delivered elaborated by the experts of international organizations, state bodies, financial and telecommunications companies, system integrators, educational institutions and other organizations. The Workshop was held in Russian with simultaneous interpretation into English. Based on the results of the Workshop, the participants composed recommendations in the field of legislative and regulatory framework, business operations, and well as in the field of technologies used for creation of mobile payment systems in the CIS.

The Report and other materials of the Workshop (agenda, list of participants, conclusions and recommendations, presentations etc.) are posted on the ITU website: http://www.itu.int/en/ITU-D/Regional-Presence/CIS/Pages/EVENTS/2014/10_Baku/ITU-Regional-Workshop-for-CIS-on-Mobile-Payments.aspx.