

## MODERN DEVELOPMENT OF THE NATIONAL PAYMENT CARD SYSTEM IN RUSSIA

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### Abstract

The establishment of the National Payment Card System (NSPK) in Russia is an important step on the way of the creation of a secure and effective system of cashless transactions in the country. This article analyzes the questions of the Russian NSPK development, which are relevant in the light of different approaches to determination of the stages and the principles of its creation. During the research specific features of the Russian NSPK development were identified and the main directions of its improvement as one of the most important elements of the national payment system were defined.

**Keywords:** payment system, the National Payment Card System, cashless payment instruments, «Mir» national payment card.

**JEL code:** E42, F14, F45

### Introduction

The creation and development of the new payment systems is one of the fastest growing and perspective directions in activity of credit institutes, providers of payment services and monetary regulators around the world. This tendency is confirmed by active participation of the Bank of Russia in establishment in 2014 the Russian National Payment Card System and support of her development at the national level.

It should be noted that interest in building of the National Payment Card System in Russia was based not only on economic reasons (aspiration to keep costs down, to increase the speed and safe of making payments, to improve payment infrastructure in the country), but also it is provoked by a number of political factors, first of all, the impositions of USA and other western countries the economic sanctions against Russia as a result of which domestic payment risks sharply increased.

It is possible to allocate a number of the main objectives which the Russian National Payment Card System serves to ensure: 1) uninterrupted processing of transactions made with the payment cards on the territory of Russia; 2) the Russian payment space sovereignty; 3) issuing and service transactions with the national payment instrument – «Mir» payment system card in the territory of Russia and other countries.

The project of the National Payment Card System creation in Russia is not the unique project on domestic card payment systems development. The experience of the National Payment Card System creation in a number of the western and East Asian countries is especially noteworthy. For example, in Canada – the payment association Interac, in France – the Cartes Bancaires system, in Denmark – Dankort, in Japan – JCB, in China – UnionPay, in India – RuPay, in Vietnam – BanknetVN, etc.

The functional and institutional features characterize each National Payment Card System. In our research we will analyze the Russian National Payment Card System to reveal distinctive aspects of her building and to draw conclusions concerning perspectives of her development.

### **Main characteristics of the Russian National Payment Card System**

The Russian National Payment Card System was established on 23 July 2014 in the form of Joint Stock Company and is wholly owned by the Central bank of the Russian Federation (Bank of Russia). The first stage of the National Payment Card System development in Russia is that NSPK put operations into the NSPK Operations and Payment Clearing Centre for the processing of domestic transactions made with international payment systems (IPS)<sup>1</sup> cards. At the end of the first quarter 2015 the processing of domestic transactions on VISA and MasterCard payment systems cards (which share made about 99% of issued cards of IPS in Russia) was transferred to the territory of Russia. The processing according to other cards – JCB, American Express and UnionPay (about 1% of issued cards of IPS in Russia) was transferred to Russia in 2016. Thus, in 2016 the Russian National Payment Card System began to process solely transactions of IPS in the territory of Russia. It allowed excluding the potential influence of external factors, connected with restriction in making payments, on functioning of the Russian payment space<sup>2</sup>.

The second stage of the National Payment Card System development in Russia was allocated for the launch and realizing the national payment card (the name for the national payment card and payment system selected as a result of an All-Russia competition and in general they received name «Mir»).

It is envisaged that the third stage will focus on the NSPK product line enhancement by offering up-to-date payment products and services, their promotion and expansion on the territory of Russia. It is also envisaged to further promote the national payment cards and other electronic means of payment abroad. In this regard the Bank of Russia and NSPK announced the start of «Mir» card issuing on 15 December 2015. Gazprombank, MDM Bank, Moscow Industrial Bank, RNKB Bank, Bank Rossiya, the Sviaz-Bank and SMP Bank became the first banks, which issued the national payment cards. In turn, NSPK became the operator of «Mir» payment system.

As shown in figure 1, at the beginning of October 2016 only about 600 thousands payment cards of «Mir» payment system were issued, while within 9 months 2017 19,3 million payment cards of «Mir» payment system was release<sup>3</sup> that is 32 times more than a similar indicator of 2016. However, at the beginning of October 2017 there are more than 267 million payment cards (credit and debit) in the territory of Russia<sup>4</sup> and the national payment instrument percentage was only 7,2 per cent (figure 2).

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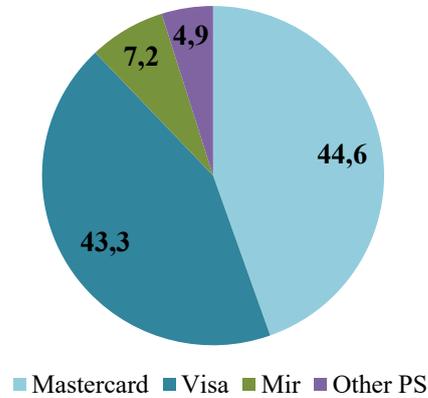
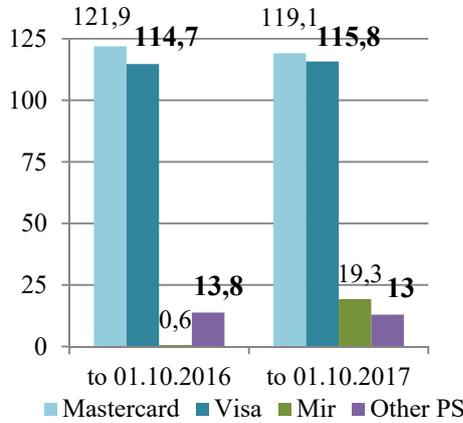
<sup>1</sup> According to the Register of operators of payment systems, published on the official site of the Bank of Russia in 2017, five international card payment systems functioned in the territory of Russia: VISA, MasterCard, JCB, American Express, UnionPay.

Transfer of processing in Russia led to increase in expenses of VISA in annual terms by 70 mln dollars USA, of MasterCard – by 50 mln dollars USA without the cost of transaction processing through NSPK. At the same time in 2016 NSPK revenue for international payment systems processing made 6,2 billion rubles. (The NSPK Press release of 31 March 2017).

<sup>3</sup> The round table of «Mir» payment system at the Forum of the financial innovation technologies Finopolis 2017, available on-line at [http://www.nspk.ru/about/press/news\\_project/karty-mir-skoro-mozhno-budet-zagruzit-v-smartfon/?sphrase\\_id=25234](http://www.nspk.ru/about/press/news_project/karty-mir-skoro-mozhno-budet-zagruzit-v-smartfon/?sphrase_id=25234) (Reference date: 28.11.2017).

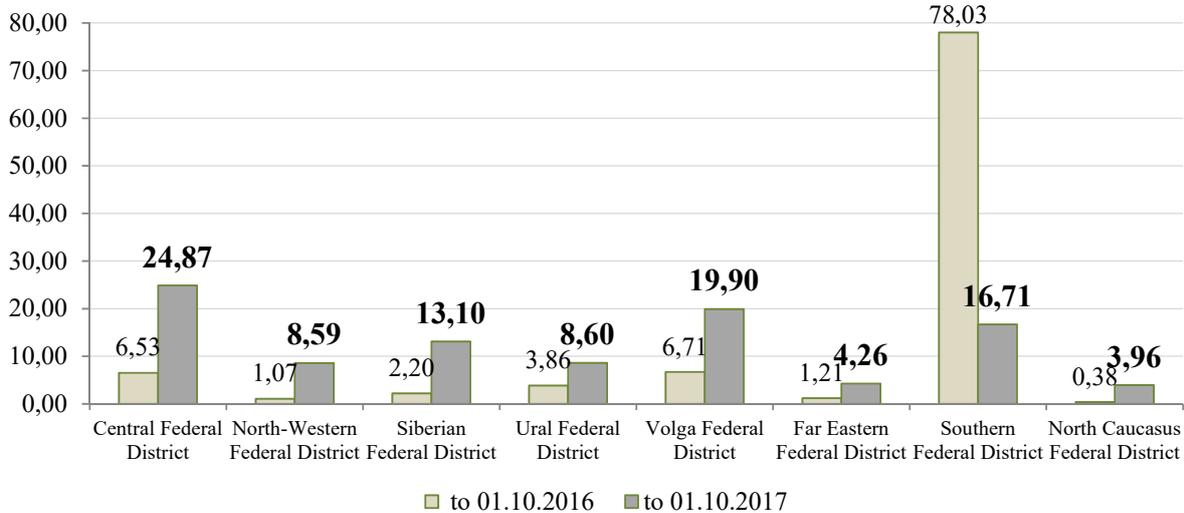
<sup>4</sup> Key indicators of the national payment system development, available on-line at [https://www.cbr.ru/statistics/p\\_sys/print.aspx?file=sheet001.htm&pid=psrf&sid=ITM\\_30245](https://www.cbr.ru/statistics/p_sys/print.aspx?file=sheet001.htm&pid=psrf&sid=ITM_30245) (Reference date: 28.11.2017).

Quantity characteristics of the Russian National Payment Card System development reflect irregularity of payment cards market evolution in certain regions of Russia (fig. 3).



**Figure 1. Payment cards market share in Russia in 2016-2017, billion units**  
 Source: The reporting forms №0409250 sent by credit institutions to the Bank of Russia on 01.10.2017.

**Figure 2. Payment cards market share in Russia on 01.10.2017, %**  
 Source: The reporting forms №0409250 sent by credit institutions to the Bank of Russia on 01.10.2017.



**Figure 3. Regional distribution of the «Mir» payment system cards in 2016-2017, %**  
 Source: The reporting forms №0409250 sent by credit institutions to the Bank of Russia on 01.10.2017.

As you can see on figure 3, at the beginning of October 2016 the main part of the «Mir» payment system cards fell on the Crimean federal district that was caused by lack of the necessary level of payment infrastructure development whose had been most adversely affected by the economic sanctions from a number of the western countries. However, at the beginning of October 2017 distribution of the «Mir» payment system cards becomes more uniformly and equally with a

predominance of the most densely populated regions of Russia. This trend better mirrors the real needs of the population for the national payment cards.

### **Key parameters and factors of the Russian National Payment Card System development**

The development of the National Payment Card System in Russia is characterized by the following specific parameters.

At first, *the National Payment Card System creation in Russia is based on protection of the national payment space*. Related to this are extremely short terms of the national payment products issue, consolidation of issuing banks and acquiring banks in the unified payment and the transaction network, the infrastructure creation of payment services for making transactions by payment products at the national level.

Secondly, *there are measures of the state support at the legislative and administrative levels, which are used for the National Payment Card System development in Russia*. It is expressed in the whole set of the legislative and administrative measures directed to creation of more favorable conditions for the Russian National Payment Card System development in comparison with MPI. Such measures include the introduction of requirements for card issuing of the National Payment Card Systems by credit institutions, requirements for acceptance of the national payment cards in the existing payment infrastructure and ATM networks, requirements for remittance and the different social payments to the disadvantages groups of population on the national payment cards, etc.

Thirdly, *the National Payment Card System development in Russia, despite a stated purpose on the national card product creation, is not limited to national borders*. The Russian NSPK is setting the ambitious targets for expansion of the card products to foreign markets. The term allocated to expansion of the «Mir» payment system cards on foreign markets is about five years – from 2015 to 2019<sup>1</sup>.

Our analysis of building and development of the Russian NSPK will be carried out by a number of factors: 1) creation premises; 2) purposes and problems of development; 3) internal structure and financing sources; 4) international cooperation and collaborative regional projects.

### **Creation premises**

In spite of the fact that attempts to create the national card payment system were made over a period of 1993-2014, these projects did not come to the end with success due to lack of the necessary financial resources on extensive infrastructure creation on issue, acceptance and using of such cards, absence of government interest and support in development of the national card projects. The commercial banks acted as initiators and participants of such projects. The Union Card system (founded in 1993 and integrating more than 300 banks), the «Gold Corona» (founded in 1994 and integrating more than 550 banks) and also the projects of public company Sberbank – Sberkart and PRO100 (1994-2016) can be examples of such national card systems.

On the contrary, the Russian National Payment Card System was established in 2014 in the conditions of a clear state support. On 5 May 2014 the President of the Russian Federation V.V. Putin signed the law on creation of the National Payment Card System. At the same time, building of the Russian NSPK was released in a context of absence of purely economic incentives for creation of similar system and was provoked by financial security losses of the state. In particular,

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<sup>1</sup> For example, the Japanese payment system JCB (founded in 1961) needed 20 years for an access of this cards to the international level.

on 21 March international payment systems VISA and MasterCard for the purpose of compliance to the American legislation, suspended access to payment services for the banks entering the sanctions list - namely, Bank Rossiya, Sobinbank, SMP Bank, InvestCapitalBank.

It should be noted that at the time of building of the National Payment Card System in Russia more than 90 per cent of the Russian payment cards market fell on cards of MPI, in both quantitative and valuation terms. Besides, the growth of the National Payment Card System was observed in the economic sanctions regime, with slow economic growth (less than 1 per cent of GDP). These important economic determinants inevitably were felt in the choice of the purpose and problems of development of the National Payment Card System.

### **Purposes and problems of development**

The Russian National Payment Card System was faced by a tactical target: ensuring uninterrupted operation of payment card transactions, aggregation of domestic country transactions on one platform and decrease in dependence on international payment systems. At the same time the National Payment Card System implementation in Russia should be based on requirements of economic safety and limitations for cooperation with the leading MPI. Therefore, despite the existence of a strategic objective on an access to international markets, there is now weaker emphasis on this purpose in view of the gap in tools and solutions for global payment system expansion.

It has historically developed that Russia focuses considerable resources at the development of payment infrastructure only in a small number of the largest cities. If this situation is to be changed, it is going to use the «Mir» payment system cards within a wide range of salary projects. However, it is necessary to take into account that in initial phase of the sphere of cashless transactions and her basic element – a payment card, practice of salary projects had failed in the territory of the Russian Federation, with the exception of cases where it was used the administrative resource.

### **Internal structure and financing sources**

The central element of the Russian National Payment Card System is open joint-stock company NSPK which activities is supervised by the Central bank of the Russian Federation. The Bank of Russia has at least 50 per cent of voting share. Besides, the shareholders of NSPK can be: the Russian Vnesheconombank, foreign credit institutions, foreign Central Banks, international financial institutions. All these institutes have to act as individual participants of the National Payment Card System.

The settlement bank on money transfer with use of the international payment cards and the national payment instrument in the NSPK is the Bank of Russia. As earlier Settlement bank of MasterCard and VISA payment systems had previously been public joint-stock companies Sberbank and VTB Bank, suggesting that the profitability in the field of calculations for these banks is decrease. From positive effects for the Russian economy it should be noted accumulation of money within the country, which earlier directly flowed, away in different MPI.

There is not exact information on the size of the amounts necessary on implementation the Russian National Payment Card System. However it is obvious that development of infrastructure and promotion of payment products and services requires highly financial investments. So, the Bank of Russia contributed half a billion rubles in authorized capital of NSPK, having produced in total 5 thousand stocks which nominal value is hundred thousand rubles. According to the Charter of NSPK, company has the right to issue stocks on 4 billion rubles in addition to the enclosed amount. In 2016 NSPK services as Operational and Payment Clearing Centre of the National

Payment Card System and provided services on functioning of «Mir» payment system. On results of year the net profit of NSPK amounted to 2,6 billion rubles and profitability of the capital amounted to 39,7 per cent in comparison with 29,8 per cent in 2015<sup>1</sup>.

As we stated earlier, at the first stage of the National Payment Card System development in 2015-2016 all internal and external transactions of Russia was transfer into the territory of Russia thanks to creation of NSPK Operational and Payment Clearing Centre.

At the second stage of the National Payment Card System development Russian banks – members of NSPK have begun the issue of the «Mir» payment system cards for recipients of the budget payments since 01.07.2017. All Russian banks have begun acceptance of the «Mir» payment system cards in the ATM and acquiring networks since 01.07.2017. Trade and service companies which annual turnover is made by more than 40 million rubles a year have begun acceptance of national payment instrument since 01.10.2017<sup>2</sup>. Also it is supposed that in 2018 this requirement will cover all outlets in the Russian Internet segment.

### **International cooperation and collaborative regional projects**

Despite the existence of the apparent conflict between the National Payment Card System and MPI, the Russian system of payment cards is interested in international cooperation, which alone can provide access to international payment markets. At this time will be further access of «Mir» payment system card to the international payment markets. This goal will be reached together with Eurasian Economic Union member countries by creation of single payment space and also due to cooperation with MPI MasterCard, JCB, AmEx, UnionPay to launch of co-badging cards. So, in December 2015 NSPK announced the start of first co-badging «Mir»-Maestro cards issuing («Mir» and MasterCard brands), in August 2016 and July 2017 were firstly issued «Mir»-JCB and «Mir»-UnionPay cards.

Such partners projects allow distribute «Mir» payment system products and services outside Russia and mitigating the issue of functionality incompleteness of national payment cards at an early stage. However, similar cooperation opens only certain and very limited markets of interaction and calls into question the requirements for ensuring payment sovereignty and aspiration of creation of a unique payment system capable of competing in the world market.

In order to take into account interests of all payment and transaction relation participants, the Russian National Payment Card System emphasizes development of regional collaborative projects that distinguishes her from international payment systems. In particular, the National Payment Card System seeks to allocate the national payment instrument with additional functionality, cooperating with Russian regions, largest credit institutions and private companies. So, the National Payment Card System has concluded agreements with the Governments of the Rostov region, the Karachay-Cherkessia, the Republics of Tatarstan, Bashkortostan and Mordovia, Far Eastern Federal District, the Nizhny Novgorod Region, etc. on release of a multifunction smart card based on the national payment instrument equally available in the territory of the whole country.

The main regional projects realized by the Russian National Payment Card System in cooperation with regional Governments, banks and private companies are provided to table 1.

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<sup>1</sup> The round table of «Mir» payment system at the Forum of the financial innovation technologies Finopolis 2017, available on-line at [http://www.nspk.ru/about/press/news\\_project/karty-mir-skoro-mozhno-budet-zagruzit-v-smartfon/?sphrase\\_id=25234](http://www.nspk.ru/about/press/news_project/karty-mir-skoro-mozhno-budet-zagruzit-v-smartfon/?sphrase_id=25234) (Reference date: 28.11.2017).

<sup>2</sup> The Russian Federation Federal Law of 27.06.2011 №161 «On the National Payment System» (with amendment and additional of 01.05.2017, effective from 01.10.2017), the Consultant Plus legal database.

**Table 1. The main regional projects realized by the National Payment Card System**

<b>Name of project</b>	<b>Card tool used in project</b>	<b>Terms of signing and project implementation</b>	<b>Participants</b>
<b>Muscovite's Social Card</b>	The multifunctional personalized smart card based on «Mir» payment system card which combine in itself the following applications: - payments; - identification; - electronic signature; - social services (storage of health insurance and pension information, etc.); - transport.	The conclusion of the memorandum	Bank of Russia and Government of Moscow
<b>Unified card of the Saint-Petersburg citizen</b>		The conclusion of the memorandum on the XXV International Financial Congress 30.06.2016	Bank of Russia and Government of Saint Petersburg
<b>Dweller Card in the Rostov region</b>		The signing of the agreement 17.06.2016	NSPK, Government of the Rostov region, Center-Invest Bank
<b>Social card in Mordovia Republic</b>		The signing of the agreement 06.07.2016	NSPK, Government of the Republic of Mordovia, KS Bank
<b>Dweller Card in Yekaterinburg</b>	«Mir» payment system card with the regional transport application	The card was presented on International Innoprom-2016 exhibition 11.07.2016	NSPK, Gazprom Bank, Administration of Yekaterinburg
<b>Social card in Karachay-Cherkessia</b>	The multifunctional personalized smart card based on «Mir» payment system card which combine in itself the following applications: - payments; - identification; - electronic signature; - social services (storage of health insurance and pension information, etc.); - transport.	The signing of the agreement at the XV International Investment forum 30.09.2016	NSPK, Government of the Karachay-Cherkessia, Svyaz-Bank
<b>Dweller Card in Tatarstan Republic</b>		The conclusion of the memorandum at the Forum FINOPOLIS 2016 13.10.2016	Bank of Russia, Government of the Republic of Tatarstan
<b>Dweller Card in Bashkortostan Republic</b>		The signing of the agreement 24.11.2016	NSPK, Government of the Republic of Bashkortostan, Bank URALSIB
<b>Dweller Card in the Nizhny Novgorod Region</b>		The signing of the agreement at the X International forum of the innovation technologies «ITFORUM2020 / Digital world» 12.04.2017	NSPK, Government of the Nizhny Novgorod Region
<b>The card for university students</b>		Electronic record book based on «Mir» payment system card with payment and identification functionality	Mass release since the beginning of 2018. Addition of the transport application by the end of 2018

*Source:* The round table of «Mir» payment system at the Forum of the financial innovation technologies Finopolis 2017 [The electronic document]. – Access mode: [http://www.nspk.ru/about/press/news\\_project/karty-mir-skoro-mozhno-budet-zagruzit-v-smartfon/?sphrase\\_id=25234](http://www.nspk.ru/about/press/news_project/karty-mir-skoro-mozhno-budet-zagruzit-v-smartfon/?sphrase_id=25234) (Reference date: 28.11.2017).

As shown in table 1, the National Payment Card System concluded memorandums of design the social card of the Muscovite and the social card of the Saint-Petersburg citizen, which will integrate payment, transport, social and information options.

The first Dweller Card became operational starting in the second half of 2016 in Yekaterinburg. This payment instrument are equipped with the transport application, which

provides feed-in tariffs for different social groups and are accepted by all city carriers, including private transport companies.

The multifunction payment, ID and accounting card based on «Mir» payment system for Russian university students is planned to issue in 2018.

Thus, the multifunction card based on a national payment card can bring together the user friendliness and simplicity of use of financial and non-financial instruments, selective social assistance and transparency of budget funds costs. The consideration of territorial interests and independent functioning of platforms are essential adjunct to smart card capacity.

The main aspects of the Russian National Payment Card System development are presented in table 2.

Table 2. The major factors and criteria characterizing development of the National Payment Card System in Russia

<b>Factors</b>	<b>Criteria</b>	<b>Russian National Payment Card System («Mir» payment system)</b>
<b>Main stages</b>	Date of establishment	23 July 2014
	Time frames and stages of building	1) 2014-2016 – rapid buildout of NSPK, transfer of processing and clearing transactions made with MPI cards on the territory of Russia. 2) 2015-2017 – design and development of the national payment instrument – the card of «Mir» payment system, expanding the product line, mass issue, and creation infrastructure of payment services for transactions in the territory of Russia. 3) 2015-2019 – access to international markets
	Release of the first payment card	15 December 2015.
<b>Purpose and problems of development</b>	Key tasks	- ensuring uninterrupted operation of payment card transactions at the national level; - aggregation of domestic country bank card transactions on one platform controlled by the regulator; - reducing dependence on MPI by means of implementation of the national payment instrument
	Target user	The population receiving the budgetary funds and social payments
<b>Internal structure and financing sources</b>	Management	The Central bank of the Russian Federation acts as supervisory authority and transactions center
	Authorized capital	4,3 billion rubles
	Financing sources	Central Bank of the Russian Federation, profit of NSPK
<b>International cooperation and collaborative regional projects</b>	The signed agreements with the domestic country organizations	Regional projects with banks, transport and other companies on creation of multifunctional payment card
	The signed agreements with the international organizations	Partnership with: 1) payment systems of Eurasian Economic Union member countries: Belkart, Armenian Card, Tengri-kart, ELKART, with UZCARD payment system of Uzbekistan, etc. Creation of single payment space is planned by 2019; 2) international payment systems: MasterCard, JCB, AmEx, BanknetVN, UnionPay; 3) most popular tourist directions (negotiations on acceptance of cards in Turkey and in Thailand are conducted)

## **Conclusions**

The study reached the following conclusions. The building of the Russian National Payment Card System is caused by the potential risks of loss of the financial state safety, which was connected with imposition of the economic sanctions from the USA. In contrast to the international payment systems the Russian NSPK have to face less as the international expanding of the business than as capture the Russian payment market share, in which the international payment systems dominate.

Now the Russian National Payment Card System is the insufficiently developed system both from the point of view of the issued cards number, and from the point of view of their using intensity (in quantitative and value terms). Nowadays NSPK is more specialized, but not the universal payment system since the «Mir» payment system cards have only domestic country distribution.

At a present stage of the Russian National Payment Card System development it's important to pay special attention on the implementation of joint multifunction payment, transport and social projects with credit institutes and transport companies in the different Russian regions. Besides, one of the priorities of the Russian National Payment Card System activity is creation of the single payment space between the Eurasian Economic Union member countries.

The regional distribution of the «Mir» payment system cards has currently equal value with dominance in the most densely inhabited regions of the country. The potential users of the national cards are the employees of the budget sphere and also the retirees who lead mainly a settled lifestyle.

At the same time it should be noted that the state measures for support of the «Mir» payment system development at the legislative and administrative level should not replace the economic incentives for the participants of a payment system and also reverse the market competition.

The Russian National Payment Card System needs to improve the infrastructure of the payment services for making transactions by the payment products and also to raise the level of financial literacy and trust to financial institutions among the population to stimulate more intensive use of the «Mir» payment system cards in cashless transactions in Russia.

It should be noted that the Russian National Payment Card System will be able to compete at the appropriate level and win in the competition to MPI only if it will be capable to create favorable conditions for users of the national payment cards, to implement innovations in the field of acceptance and payment processing and also to offer price and functional competitive advantages on the payment products for different participants of payment systems.

## **References**

Berezina, M. (2015) «Problems of the Russian national payment system forming and development», *Money and credit scientific review*, vol. 11, no. 19-25.

Key indicators of the national payment system development, URL: [https://www.cbr.ru/statistics/p\\_sys/print.aspx?file=sheet001.htm&pid=psrf&sid=ITM\\_30245](https://www.cbr.ru/statistics/p_sys/print.aspx?file=sheet001.htm&pid=psrf&sid=ITM_30245) (Reference date: 28.11.2017).

Krivoruchko S.V., Lopatin VA. (2016) «Conceptual and structural features of the retail payment systems market», *Money and credit scientific review*, vol. 8, no. 43-48.

Statistics on payment, clearing and settlement systems in the CPMI Countries – Figures for 2016, URL: <http://www.bis.org/cpmi/publ/d171.pdf> (Reference date: 28.11.2017).

The National Payment Card System development strategy (approved by Resolution of the NSPK JSC Supervisory Board dated 06 February 2015), URL: <http://www.nspk.ru/about/investor-relations/strategy/> (Reference date: 28.11.2017).

The NSPK Press release of 31 March 2017, URL: [http://www.nspk.ru/about/press/press\\_releases/chistaya-pribyl-ao-nspk-po-rsbu-v-2016-g-sostavila-2-6-mlrd-rub/](http://www.nspk.ru/about/press/press_releases/chistaya-pribyl-ao-nspk-po-rsbu-v-2016-g-sostavila-2-6-mlrd-rub/) (Reference date: 28.11.2017).

The Russian Federation Federal Law of 27.06.2011 №161 «On the National Payment System» (with amendment and additional of 01.05.2017, effective from 01.10.2017), the Consultant Plus legal database.

The reporting forms №0409250 «The data on the transactions with use of payment cards and on the infrastructure intended for commission with use and without use of payment cards of the issue (acceptance) transactions of cash and payments for the goods (works, services)», sent by credit institutions to the Bank of Russia on 01.10.2017.

The round table of «Mir» payment system at the Forum of the financial innovation technologies

Finopolis 2017, URL: [http://www.nspk.ru/about/press/news\\_project/karty-mir-skoro-mozhno-budet-zagruzit-v-smartfon/?sphrase\\_id=25234](http://www.nspk.ru/about/press/news_project/karty-mir-skoro-mozhno-budet-zagruzit-v-smartfon/?sphrase_id=25234) (Reference date: 28.11.2017).