



**CENTRAL BANK OF THE
REPUBLIC OF AZERBAIJAN**

Digital Payments Strategy of the Central Bank of the Republic of Azerbaijan for

2021-2023

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1. SUMMARY

One of the principal activities of the Central Bank is the organization, coordination, regulation and control of stable, reliable, secure operation of payment systems in the country, as well as the constant development considering the latest trends. To achieve these goals, the Central Bank, together with relevant government agencies, international organizations and the banking sector, has been constantly implementing national projects and strategic initiatives to develop electronic payment systems and expand cashless payments in the country since the early 2000s.

For the purpose of establishing the National Payments System (NPS) that meets the latest requirements, as well as for expansion of the cashless payment environment among citizens, businesses and government agencies, the Central Bank has developed and successfully implemented the **“The State Program for Development of the National Payments System in the Republic of Azerbaijan for 2005-2007”** approved by the Decree No. 152 dated 9 December 2004 of the President of the Republic of Azerbaijan and the **"State Program on Expansion of Digital Payments in the Republic of Azerbaijan for 2018-2020"** approved by the Decree No. 508 dated 26 September 2018 of the President of the Republic of Azerbaijan.

As a consequence of measures taken in the recently adopted State Program to further improve the institutional environment of digital payments, revitalize of the banking sector, form a digital ecosystem and strengthen literacy and public awareness on digital payments, the card infrastructure has been improved, cashless payments have been increased, the **Instant Payments System** and blockchain-based **Digital Identification System**, which include the latest payment solutions, have been developed.

At the same time, comprehensive measures taken by relevant government agencies to reduce the shadow economy in the country have increased the opportunities for expanding non-cash payments. Thus, as a result of the "bleaching" policy pursued over the past two years, 240,000 jobs have been removed from the "shadow", and financial relations between employees and employers have been made more transparent. During 2017-2020, the number of active taxpayers increased by 36.2%, the number of officially registered employees increased by 23%, and the share of simplified taxpayers in the number of active taxpayers decreased by 32.2%. In the context of combating the shadow economy, the impact of executed measures will increase the volume of non-cash payments in the upcoming years.

As of 1 January 2020, the introduction of financial sanctions for non-installation of POS-terminals in the economic entities or the refusal to accept cashless payments created conditions for strengthening administrative control in this area. Starting from 2020, the refund of a certain part of VAT paid on goods purchased from persons engaged in retail trade or public catering activities in the territory of the Republic of Azerbaijan also stimulated cashless payments.

Despite the comprehensive measures taken, comparisons of KPIs with benchmark countries show that indicators have not reached the desired level. This is directly related to the fact that there are still some problems with both the institutional infrastructure and the payments market.

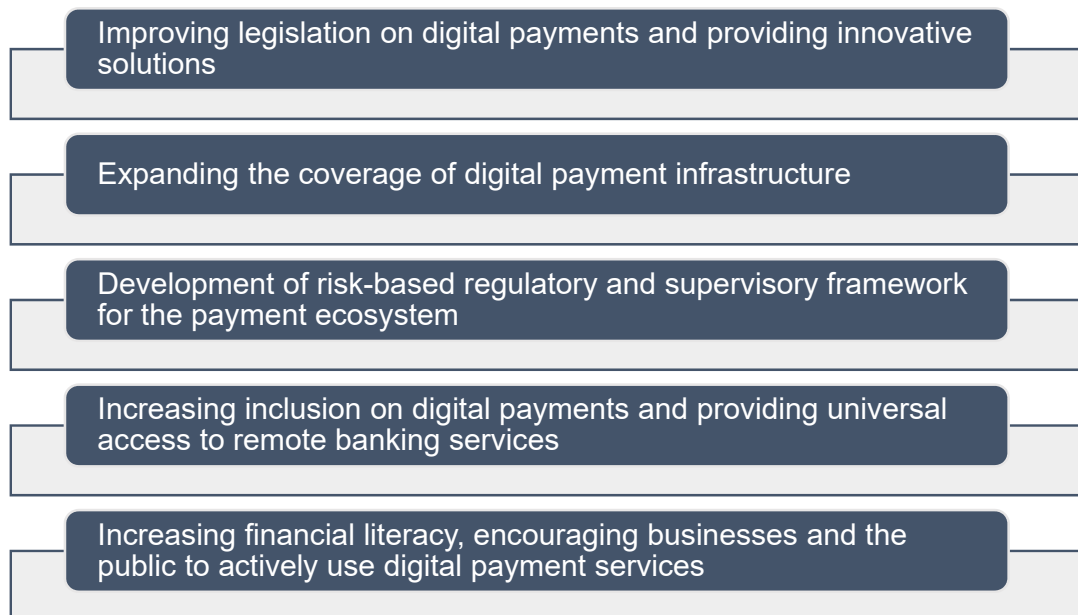
In the light of the above, to maintain a positive trend in the development of cashless payments, eliminate the problems existing in the payment market, increase the access of the population and businesses to financial services in any part of the country and expand the use of digital payment services, the **Digital Payments Strategy of the Central Bank of Azerbaijan for 2021-2023 years** have been developed. In the process of developing the strategy, the experience of developed and developing countries was studied, as well as a number of strategic roadmaps for the development of their payment markets were analyzed.

The main goal of the Digital Payment Strategy is **to provide convenient and affordable payment services for government, business and citizens**. In this regard, the Strategy aims to achieve the following goals:

- Organization of stable, sustainable operation and ensuring the sovereignty of the National Payment System;
- Creating a favorable legal framework for the application of innovations in the field of payment;
- Providing more affordable payment services to economic entities by strengthening the competitive environment;
- Ensuring access to payment services for all groups of the population, regardless of place of residence and income factors.

The new strategic plan aiming at **formation of a competitive, innovative and affordable payment ecosystem** identifies the following specific measures in 5 key areas taking into account the existig shortcomings in the domestic market and global trends.

Strategic pillars



2. CURRENT STATE OF DIGITAL PAYMENTS AND EXISTING PROBLEMS

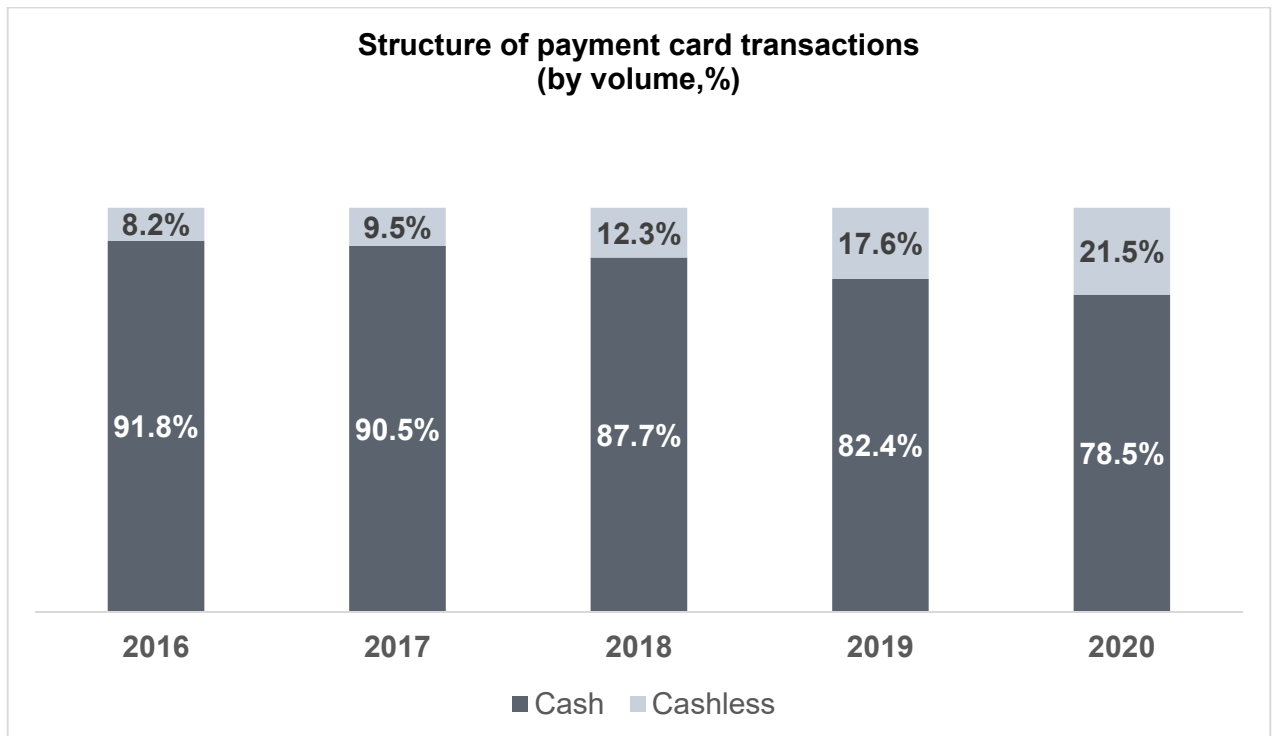
2.1. Performance and current status of digital payments in the country's market

As a logical consequence of ongoing systemic reforms, the Central Bank has established the National Payments System (NPS) with an architecture based on advanced technology and software. The total volume of payment transactions through the NPS in 2020 reached 223.4 billion manat, and the number of total payment transactions was 59.8 mln. Compared to the last 3 years, the volume of transactions decreased by 19%, and the number increased by 50%. The total volume of transactions through the Government Payment Portal amounted to 3.3 billion. manat, and the transaction number was 51.9 mln, and these indicators exceeded the indicators of the last 3 years by 34% and 39%, respectively (*Note: Government Payment Portal has been created for the centralized collection of payments for budget payments and public services, its operator is the Central Bank*). In 2020, 53.2 million transactions were carried out through the Interbank Card Center, the volume of transactions in the national currency was 2752 mln. manat, and in foreign currency was 14.6 mln. USD and 3.1 mln. EUR. Compared to 2018, the total number of transactions processed in the system increased by 1.9 times, the volume in manats by 2.8 times, in US dollars by 2.6 times and in euros by 1.6 times.

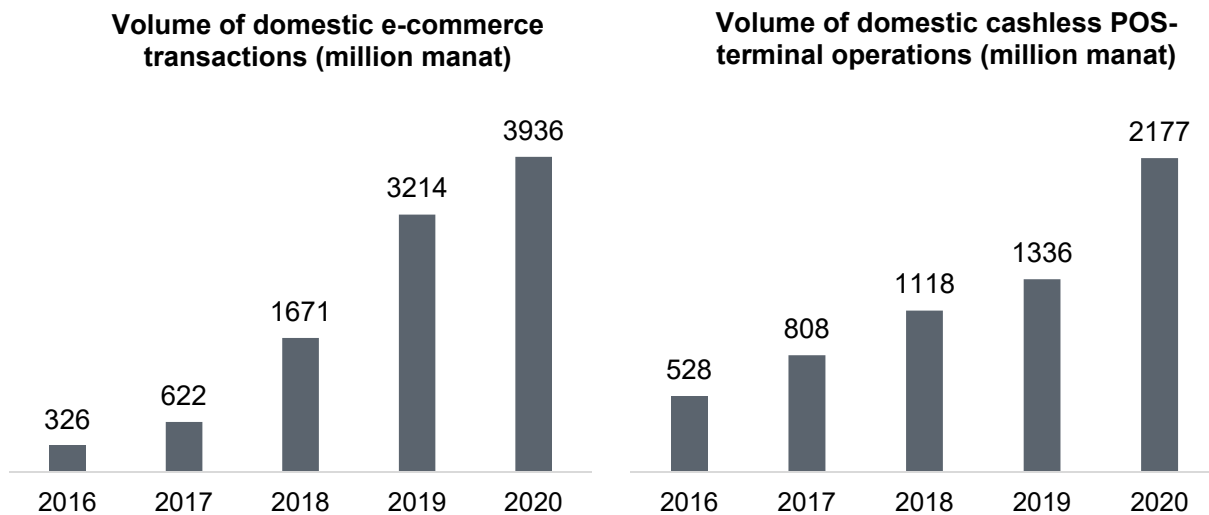
Significant progress has been made in the card infrastructure over the last 3 years. As of 01.01.2021, the total number of payment cards issued by banks and the national

postal operator operating in the country amounted to 9.6 million, 39% of which were contactless cards. The total number of payment cards increased by 44% compared to the last 3 years, and the number of contactless cards increased by 5.5 times. As of 01.01.2021, there were 2779 ATMs, 57344 POS-terminals (60% or 34181 of them being contactless), 1928 payment terminals in the country, including the service network of “Azerpost” LLC. Compared to 2018, the number of ATMs increased by 8%, the number of contactless POS-terminals by 57%, and the number of payment terminals by 24%.

The share of non-cash payments in card payments increased from 9.5% to 22.7% over the past 5 years. However, this figure is in the range of 60-70% in advanced countries such as Estonia and Russia. In turn, it shows the great potential for development in this area. During 2020, only 16% of payments in the retail trade turnover in the country were made in cashless form through payment cards. The corresponding figure was 28% in Turkey, 49% in the United Kingdom and 70% in Russia.

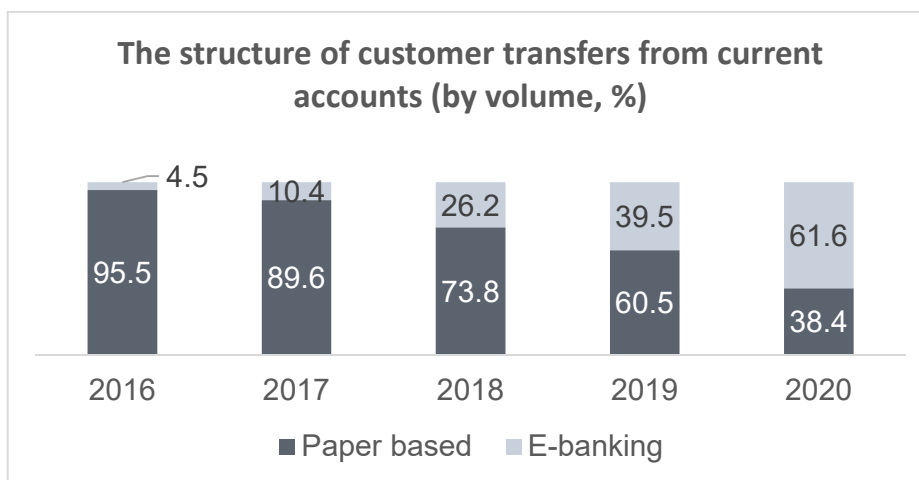


The volume of e-commerce transactions in the country has increased 12.1 times over the past 5 years, and the volume of non-cash transactions through POS-terminals has increased 4.1 times. In 2016, the share of contactless payments in non-cash payments made through POS-terminals in the country was 0.2%, while in 2020 this figure was 39%.



Despite high growth rates over a short period of time, cashless payment habits of the country's population still lag behind those of benchmark countries. Thus, one citizen in Azerbaijan made an average of 15 non-cash payments in 2021, in advanced countries this figure was higher - 184 in Latvia, 318 in Russia and 450 in the United Kingdom.

In recent years, there has been a positive trend in the use of e-banking services. Thus, in 2020, 75.2% of the number of transfers from the current accounts of bank customers, and 61.6% of the volume were made through e-banking. In other words, for every 100 manat customer transfers from current accounts, 61.6 manat was made electronically via the Internet or mobile banking. For comparison, these indicators exceed the number and volume of 2016 by 47.6 and 57 percentage points, respectively.



- According to international experience, in countries with high rates of cashless payments, the number of POS-terminals is also high. For comparison, by the end of 2020, the average number of POS-terminals per 10,000 people in Azerbaijan was 72, while in

Estonia it was 268, in Russia 272 and in Poland 292. The number of POS-terminals per capita in the country remains low, especially in the regions. By the end of 2020, with the exception of Baku, Shirvan, Naftalan, Gakh, Lankaran and Nakhchivan, the number of POS-terminals per ten thousand people in other 58 regions of the country was less than 50, including 20 regions where this indicator was less than 10. This is due to the fact that most of the payments in the regions are made in cash.

2.2. Problems existing in the digital payment market

Despite the implementation of continuous measures to expand cashless payments in our country, the dominant position of cash turnover still remains.

The main obstacle to the development of cashless payments are the institutional, economic and infrastructural factors that contribute to the high level of the shadow economy. At the same time, the competitive environment in the payment market, the legal framework that supports innovation, financial literacy, demand and supply of payment services affect the development of digital payments.

Problems arising from the institutional structure and level of development of the economy:

- *The dominant position of cash in the generation of income.* The bulk of the population's income is in cash: Although the "bleaching" policy of the last two years has removed 240,000 jobs from the shadow, a small part of the employed population (34.4%) works with the contract. At the same time, high non-bank cash flow ($M0 / M2 = 55\%$) indicates the presence of unregistered private sector income.

- *Inequality and low transparency in income distribution.* The low-income group (State Statistics Committee: 69% of the employed population has an income of less than AZN 500) uses digital payment services less due to poor access to financial services. The high-income group prefers cash payments due to the low transparency of income sources.

- *Inadequate management of money supply due to fiscal dominance.* The rapid expansion of the monetary base (twice in the last 3 years) is one of the important factors hindering the transition to cashless payments.

- *Low economic growth rate.* The fact that the production of goods and services has not increased on average in the last 3 years has a negative impact on the demand for paid services.

Problems with financial markets:

- *Weak development of financial markets.* Poor placement opportunities of liquids make banks uninterested in campaigns that encourage people to hold money in their bank accounts.
- *Lack of healthy competition environment.* The concentration of pension and salary projects of the main card users in the two largest banks makes other banks uninterested in infrastructure development, product diversification, marketing campaigns and hinders the optimization of acquiring tariffs.

Problems with payments market:

- *Limited and expensive digital payment offers.* The lack of legislation on the activities of non-bank organizations prevents them from being actively involved in the digital payments market. Weak competition affects the range and availability of digital products, making them expensive for the end user.
- *Poor use of cashless payment opportunities.* Poor use of payment opportunities created by businesses not only contributes to the high amount of cash in circulation, but also reduces the interest of payment providers to invest in digital payments. At the same time, Apple Pay, which offers innovative payment solutions, narrows the opportunities for attracting organizations such as Samsung Pay to the country.

Problems with financial literacy:

Low level of financial literacy of the population. Insufficient level of knowledge of the population on financial services, as well as lack of information about digital payments, their utilization methods and benefits have a negative impact on the use of these services. The study¹ conducted by the World Bank shows that there is little interest in opening bank accounts in Azerbaijan. In the regions and rural areas, financial literacy is lower among housewives and the elderly.

¹ <http://documents1.worldbank.org/curated/en/880631470853969754/pdf/107748-WP-P125462-PUBLIC-10-8-2016-12-5-10-AzerbaijanEnhancingFinancialCapabilityandInclusionFINAL.pdf>

3. GLOBAL TRENDS

3.1. Dynamic growth of cashless payments

As a result of the ease, convenience, security and speed of cashless payments, the socio-economic importance of cash and models of financial behavior of the population in some countries have undergone radical changes. In particular, proliferation of mobile device usage and the emergence of new innovative payment channels has paved the way for the rapid growth of digital payments.

According to the World Payments Report² 2020, the volume of cashless payments via the Internet increased by 14.1% and mobile payments by 8.1% over the past year. At the same time, although the world economy shrank in 2020 due to the COVID19 pandemic, the volume of cashless payments through e-commerce has increased significantly. Thus, the volume of credit card transactions in e-commerce increased by 62.4%, and debit cards - by 52.7%.

3.2. Standardization in the field of payments, development of Open Banking and risk management in this area

Expansion of technological capabilities and the emergence of new players in the payments market have given impetus to the standardization of information exchange between financial institutions and the use of innovative approaches such as Open Banking. Open Banking, which is the main strategy of most countries in the world, not only supports the development of innovations, but also creates new risks in this area. The choice of a properly balanced regulatory framework, cyber security in the financial system, protection of the confidentiality of sensitive information are in the focus of regulatory authorities.

3.3. Joint implementation of Instant Payment Systems and Open Banking services

One of the latest trends observed in the countries, which hold leading positions in the field of cashless payments, is the introduction of Open Banking services in the Instant Payments System. The implementation of this mechanism allows to expand the capabilities of the infrastructure by optimizing the processes and to offer customers innovative payment solutions by new payment service providers along with banks. As a

² <https://worldpaymentsreport.com/resources/world-payments-report-2020/>

result, the level of competition in the payment market is increasing and tariffs for payment services are becoming more accessible to users.

3.4. Expansion of Bank-FinTech collaboration to increase the efficiency of payments for corporate clients

The rapid development of technology in recent years has raised the relationship of financial institutions with customers to a new level, created additional incentives for the modernization of traditional business models and stimulated the formation of new markets.

In modern conditions, corporate clients are interested in conducting banking operations remotely, as well as minimizing the cost of managing cash flows. Banks are interested in creating effective solutions for corporate clients in cooperation with FinTechs, which offer low-cost payment solutions.

3.5. Rapid development of innovative digital payment technologies

As a result of the constant rapid development of technology, innovative and modern digital payment technologies are being formed in the global environment. One of the most important criteria for accelerating the introduction of innovations in cashless payments is consumer demand and selection preferences. In practice, the demand of consumers for faster and safer payments determines the future direction of innovation. New technologies are rapidly evolving digital payments in all areas of public life (whether in e-commerce or in the physical workplace). In addition, new methods such as Fast payments, QR (Quick Response) codes, biometric payments and mobile applications, cloud-based POS devices, mPOS, WeChat Pay are reducing companies' costs.

3.6 Entry of tech giants into the digital payment market

Technology giants such as Google, Facebook, Apple, Samsung and others are offering innovative payment solutions for their customers, taking into account modern trends. These organizations are strengthening their market share in this area by turning technological devices, which have become an integral part of our daily lives, into a means of payment. According to the results of the International Payments Report in 2020, 30% of consumers are actively using payment services provided by large technology companies, of which they are customers.

3.7. Country experiences

Experience 1. France

The Action Plan for 2019-2024 within the framework of the “National Strategy for Cashless Payment Instruments” identifies the following measures to develop digital payments, increase the security of cashless payment instruments and accelerate innovation applications:

- Increasing the use of electronic payments in consumer-business relations;
- Promoting electronic approaches to business and government payments;
- Supporting the development of new identification technologies;
- Strengthening the security of payment information;
- Making payments more accessible to people with disabilities;
- Expanding financial inclusion;
- Expanding the use of application programming interface (API);
- Using the achievements of France experience on Artificial Intelligence and Big Data in payments.

Experience 2. Indonesia

In the framework of the "Strategic Program for the Payment System of Indonesia", the Action Plan for 2020-2025 identifies the modernization of large and retail payment systems, the creation of a single data center and support for FinTechs to expand digital payments. The following measures are planned to be implemented in these areas:

- Modernization of systems BI-RTGS (Bank Indonesia Real Time Gross Settlement), BI-SSSS (Bank Indonesia Scriptless Securities Settlement System) and BI-ETP (Bank Indonesia Electronic Trading Platform);
- Creation of a single cloud-based data center with a reliable digital ID system;
- Standardization of technical programming interface (API) for the development of Open Banking, as well as strengthening interaction with FinTechs;
- Increasing the coverage of the Instant Payment System and improving the QR code standard;
- Promotion of a single licensing regime;
- Protection of personal data, strengthening of cyber security policy and formation of a new oversight concept.

Experience 3. Thailand

To modernize the country's payment systems, reduce system costs, support the development of innovative payment solutions and expand the inclusion, Thailand aims to implement the following measures within the framework of the "Payment Systems Roadmap" in 2019-2021:

- Expansion of the potential of PromptPay (Instant Payments System), BAHTNET (high value funds transfer system) and member banks' systems and improvement of risk management in this area;
- Implementation of ISO20022 standard;
- Implementation of biometric standards for identification of individuals in the process of KYC (Know Your Customer);
- Supporting sandbox to promote innovations;
- Promoting full digital business processes in trade, payments and tax documents through pilot projects by the government and the private sector;
- Supporting the reduction of mobile payment costs to increase the access of people living in the regions to payment services;
- Improving the supervision process according to service types and risk levels to increase the efficiency of the supervision process.

4. STRATEGIC PILLARS AND ACTIONS FOR ITS IMPLEMENTATION

Pillar 1: Improving the legislation on digital payments and providing innovative solutions

Action 1.1. Development of legal framework for electronic money and payment organizations

To promote the activities of non-bank payment service providers in the digital payment market, the business environment and regulatory regime established in leading countries (European Union, USA, Singapore, Indonesia, etc.) is constantly improving in line with market requirements. In addition to encouraging the development of innovations, regulators are trying to prevent potential damage to the financial system, consumers and minimize risks. The Directive 2 on Payment Services in the Internal Markets, improved by the European Parliament and the Council, encourages the development of innovative online and mobile payments, more secure and reliable operations and better protection of consumer rights.

In Azerbaijan, the draft law on “Payment services and payment systems”, based on the same Directive, will allow for the creation of a more integrated payment market by creating a market space of equal level for new players, as well as payment service providers, including FinTechs. The draft law will support innovation, competition and efficiency in the country's payment market.

The work on the approval of the draft law with the relevant state bodies will be completed. At the same time, after the adoption of the law, rules and other regulatory documents will be prepared in order to fully form the legal basis for the activities of payment organizations and electronic money organizations.

Action 1.2 Creating Sandbox platform and promoting FinTech activities

Given the role of innovative financial companies (FinTechs) in increasing financial inclusion, most countries adopt various policy documents to promote the activities of these organizations. At present, regulators in many advanced countries allow innovative products and services to be tested in a special regulatory and operational environment without risking the financial system. To develop international cooperation between central banks on innovative financial technologies, the Bank for International Settlements has established the Innovation Hub. Sandbox regime is available in Singapore, Kuwait, Bahrain, Korea and other countries. Through Innovation Hubs and sandbox regimes, regulators create a conducive environment for FinTech operations and strengthen collaboration with them. The fact that the conditions of a special regulatory regime are partially or completely exempt from certain regulatory requirements stimulates the development of a new product or service.

Measures will be taken to create a favorable regulatory environment for FinTechs in Azerbaijan, to involve them in payment services and to provide intangible (legal assistance, professional advice, etc.) support using international experience.

Action 1.3 Creating opportunities for applying the modern solutions to customer identification in digital payments

Development of digital technologies is tightening the requirements for information security of electronic payers. To strengthen security measures and simplify the payment process, the use of personal biometric data of the payer (face recognition, fingerprint, iris and retinal image or sound fragment) is expanding. Because biometric data can provide the highest level of security, the world's leading banks now use this type of information when customers access digital banking pages and confirm payments. Despite the many

benefits of the digital identification system, such as inclusion and sustainability, ongoing analysis is being conducted by leading countries to minimize the risks it may pose.³

To expand the use of similar practices in our country, the practical application of biometric methods will be analyzed and proposals will be developed together with financial institutions for the implementation of digital payments and secure identification of customers when using e-banking.

Action 1.4 Improvement of legal framework on e-banking

At present, a number of e-banking services are provided by all banks operating in the country. Although e-banking increases the efficiency and effectiveness of banking services, it makes necessary to improve operational and security risks and privacy policy. The degree of sensitivity of approaches to these issues varies in the rules of procedure of regulators in different countries. In the experience of advanced countries such as the European Union, Hong Kong, Singapore, India, special attention is paid to the application of digital identification and optical security in the development of e-banking.

“Account switching”, one of the global trends in e-banking, allows customers to choose between banks on the basis of transparent service fees and "transfer" their bank account to any bank. This, in turn, contributes to the formation of service fees at a more affordable level by strengthening competition between banks.

Based on international experience for the development of e-banking, the relevant legal framework will be extensively analyzed and necessary steps will be taken to improve it, taking into account the recommendations of the Basel Committee on Banking Supervision and FATF Recommendations. International experience in account switching will be studied and its feasibility will be assessed.

Pillar 2: Expansion of the coverage area of digital and standardized payment infrastructure

Action 2.1 Expansion of the coverage area of Instant Payments System

On 1 October 2020, the Instant Payments System (IPS) has been launched, which allows to complete digital payment transactions between individuals, businesses and government agencies 24/7/365 within 5-10 seconds. As of 01.01.2021, 17 banks, the State Treasury Agency of the Ministry of Finance of the Republic of Azerbaijan and Azerpost LLC have been integrated into the IPS platform. At the next stage, it will be ensured that all

³ https://www.gpfi.org/sites/gpfi/files/documents/G20_Digital_Identity_Onboarding.pdf

banks are connected to the IPS, which includes modern payment solutions, and bank customers are provided with the opportunities created by the system. At the same time, it is planned to improve the use of opportunities created for the settlements between the population-business-government agencies. To enable business entities to take full advantage of the IPS, the possibility of integrating the system with the corresponding systems of the respective agencies will be studied.

To ensure collection of tax payments, duties, rent and other budget payments, as well as payments for utilities, communications and other public services in a centralized manner, the ability to make instant payments to institutions integrated to the Government Payment Portal created by the Central Bank through the IPS will be expanded.

Action 2.2 Implementation of ISO20022 standard in the financial infrastructure

In the context of the digital payments growth, the implementation of ISO20022 standard is expanding in leading countries to improve the communication of the financial sector in the digital environment, to make different standards, concepts and formats the same for everyone in the financial sector. Application of the standard in the financial sector of the country allows to increase the coefficient of straight-through processing in payments, increase the completeness of the transmitted data.

Expansion of the use of new digital technologies in the world and modernization of payment systems, the transition of the countries to the ISO20022 standard, including advanced countries such as the United States, the European Union, Great Britain, China, India, Canada, Russia, Turkey, Japan, have made this process a global trend.

According to the recommendations of the SWIFT society, payment system operators shall complete the transition to new data formats by the end of 2022, and make international financial payments by 2025 in data formats developed in full accordance with ISO20022.

Taking into account the innovations in the international arena, the transition to the ISO20022 standard in the financial sector of Azerbaijan will be ensured in accordance with the developed action plan. Data formats to be applied in the infrastructure of the National Payment System will be developed in accordance with ISO20022 standard, as well as functional opportunities will be created for the use of these formats in infrastructure components and participants' internal information systems.

Action 2.3 Assessment of mutual integration issues of the international payment infrastructures

Changes in geopolitical processes in the international arena affect the direction of financial flows. In world trade, there are tendencies towards the use of mutual national currencies in international payments, and economic initiatives to meet the mutual payment needs of countries in different regions.

In recent years, the experience of integrating payment systems between the countries of the Association of Southeast Asian Nations is expanding. Integration initiatives are being put forward between the countries of the Eurasian Economic Union. The application of ISO20022 standards in the payment systems of the countries allows for a faster and more efficient integration process between these systems. Integration between payment systems allows the use of national currencies in international payments through currency swap agreements.

To meet the needs of Azerbaijan in mutual trade settlements with neighboring countries, as well as to create more convenient and cheaper alternative payment methods, analyzes on the integration of intercountry payment infrastructures will be conducted and proposals will be prepared based on assessments.

Pillar 3: Development of a risk-based regulatory and supervisory framework for the payment ecosystem

Action 3.1 Development of Application Programming Interface (API) standard

The financial sector is currently undergoing a deep transformation. This transformation enabled the rise of new financial technology providers known as FinTechs, combined with Open Banking. This new paradigm has the potential to turn the traditional financial services ecosystem into a dynamic and competitive environment where startups and small innovative companies are offering new products and services competing on an equal basis with larger providers.

Based on the experience of benchmark countries, the Central Bank of the Republic of Azerbaijan intends to pass into a centralized API infrastructure. To this end, it is planned to introduce three API categories as part of the digitalization of the financial sector:

1. Open data - submission of open information such as banking products, branches and divisions, ATMs, exchange rates, etc.;
2. AISP - list of accounts, account balance, information on transactions;
3. PISP – initiation of payment orders.

At the initial stage, the BankAPI infrastructure, the central platform of these APIs, will be created and the integration of startups into the banking sector will be ensured through this infrastructure. To implement Open Banking approach in the country, it is planned to conduct surveys on the banking sector with the International Finance Corporation, assess the current state of readiness and, as a result, to develop “Open Banking Roadmap”.

Action 3.2 Development of QR code standard

In recent years, in countries where technology is rapidly evolving and gaining importance, the significant expansion of the scope of payments made through QR codes has created the need to create standards and procedures for this innovative solution. The development of these standards will not only prevent scattered acceptance of QR code payments within the country, but also increase efficiency and enhance security.

The standards also make it easier to accept international QR payments. QR code payment opportunities are successfully used between India and Singapore, Poland and Denmark, Thailand and Cambodia. Cross-country integration allows a citizen of one country to pay by scanning QR codes via mobile applications in another country. The service promotes digital payments while providing cheaper international payment solutions.

Using international experience, the country will develop uniform standards for QR code payments. At the next stage, the possibility of accepting QR payments with countries with extensive economic and tourism ties will be assessed.

Action 3.3 Strengthening cyber security requirements in payments infrastructure (FINCERT)

The growing use of cashless payments requires increased security requirements in this area. Financial institutions must have appropriate security systems in place to prevent potential information and cyber threats in a timely manner and to implement preventive measures. In practice, regulators have established FINCERT - an information exchange system between financial market participants, law enforcement agencies, telecommunications providers, system integrators and other companies engaged in information security activities. FINCERT organizes the work of informing other market participants in order to collect, evaluate and prevent information and cyber security

incidents in the financial sector. In doing so, FINCERT helps to respond quickly to emerging threats, prevent their spread, and reduce losses to financial institutions and customers.

To strengthen the cyber security requirements of financial institutions' IT and payment infrastructure, the Central Bank will establish a "Security Operations Center" and form an appropriate supervisory framework.

Action 3.4 Establishment of a supervisory system over the activities of non-bank payment service providers

While the involvement of non-bank payment service providers, including FinTechs, in the payment market will have a positive impact on increasing competitiveness, diversifying the range and efficiency of payment services, it creates new challenges for regulators and makes it necessary to define a new framework. SupTech⁴ solutions allow regulators to establish effective control mechanisms based on the collection and analysis of data on control subjects using modern technologies. This mechanism not only provides proactive control over the relevant entities, but also allows to automate data processing. As a result, the data accuracy that is considered necessary to ensure effective control is increasing, allowing for more detailed analysis and the formation of flexible intervention mechanisms by the regulator.

The capabilities of the "Unified Monitoring System for Supervision of Financial Markets" created by the Central Bank to cover payment institutions and electronic money organizations will be assessed. The unified monitoring system will allow automating the licensing processes of organizations, the formation of a unified reporting system for controlled entities, the operational processing of the database.

Pillar 4: Enhancing the inclusion on digital payments and providing universal access to remote banking services

Action 4.1 Expanding the application of agent banking

In many countries where the development of financial inclusion is a priority, the practice of establishing a network of payment agents has been successfully applied. The network of payment agents of financial institutions plays an important role in expanding access to financial services, as well as in providing them more effectively. Legislation to establish softer requirements for payment agents providing limited services to other

⁴ <https://www.bis.org/fsi/publ/insights9.pdf>

financial institutions and the diversity of payment services provided will accelerate the development of the payment agent network.

Therefore, the development of the "Agent Banking Model" project and the availability of such financial services for both the population and businesses in the most remote parts of the country will be ensured.

Action 4.2 Establishment of e-KYC system

In modern times, digitalized business processes and banking operations have also increased the need to digitize the Know Your Customer (KYC) system. The integration of e-KYC into business processes raises the bank-customer relationship to a new level of service, allowing customers to provide faster, more efficient and accurate service. Along with developed Western and Asian countries, the experience of creating an E-KYC system in Arab countries is expanding. The Arab Regional FinTech Working Group has developed a guide entitled "Digital Identification and e-KYC in the Arab Region". The BENEFIT e-KYC system, created in Bahrain, provides access to customers of all financial institutions in the country.

Currently, the Digital Identification System established by the Central Bank has been integrated into the World-Check international database and the Financial Monitoring Service's database of persons subject to sanctions in order to strengthen measures to combat money laundering and money laundering. When purchasing banking products and services from a distance, individuals and legal entities have the opportunity to check at these databases.

Based on the experience of different countries, measures will be taken to implement the e-KYC system using the capabilities of the Digital Identification System established by the Central Bank.

Action 4.3 Defining the Central Bank's conceptual approach to the digital manat

The rapid development of modern technologies has led to the digitalization of the global economy, as well as radical changes in the architecture of global trade and the financial system. As a result, in response to the challenges of modern digitalization, "digital currencies" have emerged alongside money issued by central banks. Digital currency, being non-cash, acts as both a payment and an investment instrument among economic entities. Digital currency significantly reduces transaction costs by allowing fast and online settlements between economic entities. Digital currencies (CBDCs) issued by central banks are different from currencies issued by the private sector (eg Bitcoin, Ethereum and

Ripple). Thus, in practice, there is a high volatility in the value of currencies issued by the private sector.

As an important regulatory institution for macroeconomic and financial stability, the Central Bank pays special attention to the implementation of projects on the introduction of digital currency in the world, as well as researches, discussions related to this topic. As the world's leading central banks, researches about the impact of digital currency on the digital transformation of the global economy will continue. The Central Bank of Azerbaijan will study the threats and opportunities posed by digital currencies, as well as analyze the level of readiness of the domestic market.

Action 4.4 Expansion of the use of contactless payment solutions

In recent years, the use of contactless services has become a global trend. In terms of simplicity, convenience, security and financial efficiency, the application of cashless payments through mobile devices that support QR and NFC technologies is expanding, along with payment cards in everyday life. Regulators and central banks around the world are taking steps to increase QR payments to promote financial inclusion, following success in selected Asian countries (China, India, Hong Kong, Singapore, Malaysia and others). In the payment markets of highly developed countries such as the United States and Australia, consumers and businesses are more likely to use cards or NFC technology.

Appropriate measures will be taken in Azerbaijan together with the banking sector and relevant government agencies to identify areas of application of QR payment functionality via IPS. Within the framework of this cooperation, the creation of access to contactless payments in transport and parking will be encouraged. At the same time, a phased transition plan will be developed together with the banking sector for the full transition to contactless payment card infrastructure in the country.

Pillar 5: Increasing financial literacy, encouraging businesses and the public to actively use digital payment services

Action 5.1 Promoting electronic approaches to business payments

Businesses, being the main economic entities, are the main users of the created financial and payment services. Full electronic services between business and financial institutions, businesses and government agencies will help to eliminate paper carriers and increase process efficiency. According to the French "National Payment Strategy", along with the increase in the use of electronic payments in business, the introduction of

electronic invoices will allow businesses to drastically reduce payment terms by improving settlement procedures.

Measures will be taken in cooperation with relevant agencies and banks to eliminate paper carriers in business payments in the country, to improve payment documents, to ensure compliance between payment documents and electronic invoices. At the same time, the possibility of paying electronic invoices through the IPS infrastructure will be studied.

Action 5.2 Promoting digital payments among different population groups

According to the survey held among the customers of the country's banks in 2020, 75% of customers said that there was no difference in tariffs for payments made using electronic banking compared to paper carriers. At the same time, 64.7% of customers said they benefited from incentive campaigns provided through e-banking services.

Incentives are important in the framework of measures taken to expand digital payments. Periodic incentive campaigns by banks, as well as the calculation of cashback on payments, miles programs and similar measures are the main components of the promotion, which leads to the formation of cashless payment habits and reduced interest in the use of cash.

To stimulate digital payments and form cashless payment habits among the population, the Central Bank will carry out various campaigns together with banks, international card organizations and other relevant institutions.

Action 5.3 Strengthening nationwide awareness and promoting digital payments and e-banking services

According to a survey held among the customers of banks operating in the country in 2020, only 56.7% of customers use digital banking services. Digital payments and e-banking services combine a number of innovative innovations and require special skills to take advantage of those services. In particular, the lack of knowledge of the population on the use of mobile devices and computers hinders the widespread use of these services. At the same time, low confidence in banks calls into question the security of these services.

To increase public awareness and confidence in digital payments, nationwide awareness-raising and promotional events will be organized periodically with banks and international card organizations on the benefits and safe use of digital payments and e-banking services.

5. Expected results

The implementation of actions planned within the "Digital Payment Strategy of the Central Bank of the Republic of Azerbaijan for 2021-2023" will ensure the support of state, business and citizen interests, to allow the formation of a competitive, innovative and affordable payment environment in the country.

The expansion of non-cash payments will increase the transparency of economic turnover, significantly reduce the share of the shadow economy and increase budget revenues in the state budget. The accumulation of money in banks will expand investment opportunities, as well as reduce the cost of cash management.

The development of digital payment services can create new opportunities for electronic communication between business entities and coordination systems, innovation, management of new business models, reduction of employment opportunities for small and medium enterprises.

The implementation of the strategy will also increase the support of actions in coherence with financial inclusion, and expand the opportunities for the remote accessibility of financial services. The entry of new players (FinTech) into the payment market will support the development of this competitive environment and the formation of more affordable tariffs for users. At the same time, financial literacy of population will increase thanks to publicity and promotional events, the process of forming a "cashless society" will be accelerated.

Expected results on Key Performance Indicators

Key Performance Indicators		Current status	2021	2022	2023
Specific weightage of cards supporting contactless payments (%)		39	50	60	70
Specific weightage of POS-terminals supporting contactless payments (%)		60	67	74	80
Specific weightage of cashless turnover in card transactions (%)	<i>By number</i>	58	62	66	70
	<i>By volume</i>	23	30	35	40
Share of cashless transactions in retail trade turnover (by volume,%)		16	19	21	25
Specific weightage of e-banking in customer transfers from current accounts (%)	<i>By number</i>	75	80	85	90
	<i>By volume</i>	62	69	77	85

6. ACTION PLAN

№	Name of the action	Execution period
Pillar 1: Improving the legislation on digital payments and providing innovative solutions		2021-2023
1.1 Development of legal framework for electronic money and payment organizations		2021-2022
1.1.1	Full coordination of the draft law “On payment services and payment systems” with relevant government agencies and submission to the government	2021
1.1.2	Preparation of rules and other normative documents on the organization of the activity of payment organizations and electronic money organizations after the adoption of the law	2021-2022
1.2 Creating Sandbox platform and promoting FinTech activities		2022-2023
1.2.1	Creating a special regulatory regime for FinTechs using international experience	2022
1.2.2	Organizing incentive activities to involve FinTechs in payment services	2022-2023
1.3 Creating opportunities for applying the modern solutions to customer identification in digital services		2022-2023
1.3.1	Study of the modern solutions for customer identification in digital services	2021-2022
1.3.2	Development of the modern customer identification solution	2022-2023
1.4 Improvement of legal framework on e-banking		2021-2023
1.4.1	Establishing a minimum e-banking service basket with banks	2022
1.4.2	Improving the legislation for conducting e-banking services	2021-2022
1.4.3	Assessment of banks in accordance with new requirements for e-banking	2023
1.4.4	Study of international experience on “Account switching” (connecting banks accounts)	2023
Pillar 2: Expanding the coverage of digital payment infrastructure		2021-2023
2.1 Expanding the coverage of the Instant Payment System (IPS)		2021-2023
2.1.1	Completing the integration of all banks into the IPS	2022
2.1.2	Improving reporting forms	2021-2022
2.1.3	Improving the module on disputes	2021
2.1.4	Creation of IPS portal	2021
2.1.5	Launching the functionality of making payments via IPS for institutions integrated into the Government Payment Portal	2021
2.1.6	Continuation of work on expanding the coverage of IPS by integrating new organizations into the system	2022-2023

2.2 Implementation of ISO20022 standard in the financial infrastructure		2021-2023
2.2.1	Creation of data formats in accordance with ISO20022 standard	2021
2.2.2	Creating opportunities to use ISO20022 standard in the infrastructure of National Payment Systems (NPS)	2021
2.2.3	Creation of capabilities on use of ISO20022 in internal information systems of NPS infrastructure participants	2021-2022
2.2.4	Real-time release of new versions of NPS infrastructure components supporting ISO20022	2021
2.2.5	Providing participants with real-time access to ISO20022 compliant data formats	2021-2022
2.2.6	Organizing work on the use of ISO20022 by participating organizations in SWIFT infrastructure	2022-2023
2.3 Assessment of mutual integration issues of the international payment infrastructures		2022-2023
2.3.1	Research on conducting the possible mutual settlements with neighboring countries	2022
2.3.2	Preparation of proposals, discussions with the parties and submission of proposals accordingly	2022-2023
Pillar 3: Development of a risk-based regulatory and supervisory framework for the payment ecosystem		2021-2023
3.1 Development of Application Programming Interface (API) standard		2021-2023
3.1.1	Development of the Roadmap for Application of Open Banking with the involvement of international experts	2021-2022
3.1.2	Establishment of centralized API infrastructure on open banking (BankAPI)	2021-2022
3.1.3	Identification of API implementation areas in the country on the basis of international practice together with IT specialists of banks	2021-2022
3.1.4	Development and implementation of general standards (requirements) for implementation of API	2022-2023
3.2 Development of QR code standard		2021-2022
3.2.1	Development of unified QR code standards in the country	2021-2022
3.2.2	Implementation of QR standard	2022-2023
3.3 Strengthening cyber security requirements in payments infrastructure (FINCERT)		2021-2023
3.3.1	Evaluation of banks' IT and payments infrastructure on the basis of established security requirements	2021-2022
3.3.2	Establishing the incident information exchange system on incidents	2022
3.3.3	Arranging the use by all banks	2022-2023

3.4 Establishment of a supervisory system over the activities of non-bank payment service providers		2022-2023
3.4.1	Review of opportunities to automate licensing processes and preparation of proposals	2022-2023
3.4.2	Establishment of Unified Information Database for the supervision of non-bank payment service providers	2022
3.4.3	Creating a statistical database on the activities of non-bank payment service providers	2022-2023
Pillar 4: Enhancing the inclusion on digital payments and providing universal access to remote banking services		2021-2023
4.1 Expanding the implementation of the agent banking model		2021-2023
4.1.1	Launch of agent banking model with selected pilot banks	2021
4.1.2	Expanding the implementation of agent banking model in the regions and increasing the range of services together with payment service providers	2022-2023
4.2 Establishment of e-KYC system		2021-2022
4.2.1	Research of international experience and preparation of proposals on creation of e-KYC system	2021
4.2.2	Development of draft amendments to the legislation on the application of the e-KYC system and submitting accordingly	2022
4.2.3	Development and release of the e-KYC system	2023
4.3 Defining the Central Bank's conceptual approach to the digital manat		2021-2023
4.3.1	Research and analysis of digital currency projects implemented by international financial institutions and central banks	2021-2022
4.3.2	Creating the platform for cooperation on digital currency with leading central banks	2021
4.3.3	Defining the conceptual approach to the digital manat based on the conducted researches	2022-2023
4.4. Expanding the use of contactless payment solutions		2021-2023
4.4.1	Expanding the application areas of QR payments on IPS	2021-2023
4.4.2	Expanding the use of contactless payments with mobile devices	2022-2023
Pillar 5: Increasing financial literacy, encouraging businesses and the public to actively use digital payment services		2021-2023
Action 5.1 Promoting electronic approaches to business payments		2021-2023
5.1.1	Electronization of business-banking relations, minimization of paper carriers in payments	2021-2022
5.1.2	Investigation on the possibility of ensuring compliance between payment documents and electronic invoices	2022

5.1.3	Creating opportunities for payment of electronic invoices with IPS infrastructure	2022-2023
<u>5.2 Promoting digital payments among different population groups</u>		2021-2023
5.2.1	Conducting the stimulating lottery by the Central Bank	2021-2023
5.2.2	Organizing joint incentive campaigns with international card organizations	2021-2023
<u>5.3 Strengthening nationwide awareness and promoting digital payments and e-banking services</u>		2021-2023
5.3.1	Creation and broadcasting of educational videos with banks for encouraging customers to the active use of digital payments and e-banking services	2021-2023
5.3.2	Organization of trainings to improve knowledge and skills of bank employees working in the field of payment services	2021-2023
5.3.3	Organization of webinars for different target groups	2021-2023