Digitalization of Public Procurement in the Russian Federation: Case Study

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Abstract

Using the case study method, the study examines the prospects and initiatives of the state that can create preconditions for the formation of new areas of legal regulation in the field of digital public procurement as well as issues of improving the mechanisms of information systems, taking into account the specifics of states with a multi-structured economy. The objective of the study is to assess the applicability of the tools for digital transformation of the Russian Federation in the field of public procurement in the context of international practice. Confirming all the advantages of the idea of digital transformation of public procurement systems, the Russian experience is intended to demonstrate what problems at the level of legislative regulation the state policy associated with the implementation of such systems can face. In this case, in contrast to foreign practices, the Russian system of electronic public procurement in the aggregate creates a single information space that, in fact, has no direct analogues and is a special example of interaction between electronic platforms in this area. In addition, the example of introducing distributed ledger technology into such systems is significant from the point of view of the functioning of electronic public procurement platforms. The results of this study and the tools used to assess legal regulation in the field of public procurement can be used by state authorities of the Russian Federation, taking into account the needs of entrepreneurs, to better assess the feasibility and consequences of participation in public procurement procedures. This study's results can also be of relevance to researchers of comparative legislation in the field of legal regulation of public procurement.

Keywords:

Public procurement; digital technologies; digital transformation; Unified Procurement Information System (UPIS); distributed ledger technology.

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1. Introduction

In modern Russia, public procurement has become very important. It is designed to meet public needs for goods, works, services by means of realizing public interests in the form of national projects and state programs, ensuring the savings of budgetary funds and state extra-budgetary funds. It is obliged to serve as a tool to stimulate the production of innovative, high-tech products, support small businesses and socially oriented non-profit organizations.

The main source of financing for purchases is budget funds, the spending of which requires special monitoring and performance evaluation. According to the official website UPIS (in accordance with Art. 3 of the Federal Law of the Russian Federation No. 44-FZ – a unified system in the field of procurement, this is a set of information, information technologies and technical means that ensure the formation, processing and storage of such information and its provision through the official website www.zakupki.gov.ru), the volume of purchases (the total amount of placed purchases) in 2019 amounted to 9.81 trillion rubles, in 2018 – 8.38 trillion rubles, and in 2017 – 7.51 trillion rubles. However, the growth of government spending on the procurement of goods, works and services to meet public needs is not always accompanied by an adequate increase in their efficiency and effectiveness.

Today, e-procurement systems play a dominant role in the process of effective implementation of public procurement, since they provide unhindered access to procurement information to all stakeholders. E-procurement systems automate and standardize all procedures of the procurement cycle, reducing the time to complete tasks and reducing the degree of the influence of the human factor. E-procurement facilitates market access and thus contributes to increased efficiency, increased competition and reduced administrative burden and operating costs. The Russian Unified Procurement Information System is positioned as a unified information space for the entire public procurement sector in Russia. It is one of the largest world-class state systems in terms of the volume of stored and processed data, the complexity of the program code, the number of implemented business processes, controls and analytical functions. For Russia, its creation caused an increase in the sales market and business geography, saving time and money, legal protection of the parties, access to government orders, process transparency, convenient statistics and analysis of sales dynamics. Based on its procedural and functional tools, UPIS corresponds to the best foreign examples of electronic public procurement systems, in particular the European Electronic Public Procurement System.

Scientific research on the digitalization of the economy and public administration in Russia began to be carried out relatively recently, representatives of various sciences are mainly studying the issues of determining the essence of individual digital technologies, a uniform understanding of which has not yet developed. An

important area of research is the study of legal issues of digitalization in the public sector (Guseva et al. 2020; Kikavets and Tsaregradskaya 2020; Nemec et al. 2021; Placek et al. 2016; Špaček et al. 2020; Sysoeva 2016; Uyarra et al. 2014), as well as in the field of public procurement (Gavrilova et al. 2020; Langr 2018; Nyikos et al. 2018; Prier et al. 2018; Rašić et al. 2019; Styrin and Rodionova 2020; Tátrai and Vörösmarty 2020). However, the ongoing legal studies of the digitalization of public procurement are not holistic, but relate to individual problems, which does not allow developing general measures to modernize public procurement legislation. In the legal literature, there is no fundamental study of the creation of a digital infrastructure in this area.

International research on the implementation of public procurement in the era of digital transformation is devoted to such issues as the use of blockchain technologies in the field of public procurement (Farca and Dragos 2020; Pramod et al. 2019; Sánchez 2019), considering public procurement to be an instrument of public policy (Bobowski and Gola 2017; Grandia and Meehan 2017; Grega et al. 2019; Sanchez-Graells 2015) and the consideration of public procurement in the context of EU competition rules (Bobowski and Gola 2017; Gavurova et al. 2019, 2020a, 2020b; Sanchez-Graells 2015).

The objective of the research is to assess the applicability and effectiveness of modern tools for the implementation of electronic public procurement in the context of modern international practices and digital innovations. Considering the issue from the standpoint of existing international practices through the use of a case study method, the experience of Russia may be of considerable interest, since in Russia the system of electronic public procurement is not represented by any single platform for public procurement, but by an integral “ecosystem” (Styrin and Rodionova 2020). The current information system is closely connected with other regional information systems and electronic platforms, which together creates a single information space, which in fact has no direct analogues. The model of electronic public procurement adopted in Russia can be viewed as a positive experience by other states or supranational entities. At the same time, this study examines the entire cycle of legislative formation of such a model and the obstacles associated with its implementation.

2. Materials and methods

The study is based on an analysis of the legislation of the Russian Federation in the field of public procurement, in particular:

- Federal Law No. 44-FZ of April 5, 2013 “On the contract system in the procurement of goods, works, services to meet state and municipal needs”;
- Decree of the Government of the Russian Federation as of November 5, 2019, No. 1401 “On standard forms of applications for participation in (closed) elec-

tronic procedures, requirements for the content, composition, procedure for the development of standard procurement documentation and amendments to additional requirements for operators of (specialized) electronic platforms and the operation of (specialized) electronic platforms”;

The provisions of the Treaty on the Eurasian Economic Union (2014), as well as the relevant EU acts in the field of public procurement, were also considered:

- Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC;
- EC Regulation № 2019/1780 establishing standard forms for the publication of notices in the field of public procurement and repealing Implementing Regulation (EU) 2015/1986 (eForms).

Achievement of the research objectives was carried out by solving such tasks as:

- defining the concept of public procurement;
- consideration of theoretical and practical approaches in scientific research;
- generalization of existing practices in the conditions of Russia and foreign experience.

Using the case study method, the work traces the evolution of public procurement legislation in the Russian Federation and the foreign experience. Besides, legislative initiatives and law enforcement practices concerning legal relations in this area, in conjunction with foreign legislation (including EU) and practices were considered as well.

3. Case study

Public procurement is, without exaggeration, one of the key types of economic activity carried out, within their competence, by public authorities. In different jurisdictions, such activities involve the purchase of various kinds of goods and services by governments or other public sector organizations on a contractual basis (Kiiver and Kodym 2014) and allowing public sector legal entities to directly perform their functions and provide services (Uyarra et al. 2014). As a rule, the sphere of public procurement extends to the spheres of education, social security, etc. In the countries of the European Union, it covers up to 14% of GDP (European Commission 2015; Witjes and Lozano 2016).

In comparison with foreign legislation, Russian legislation on public procurement has recently been formed and reflects the changed role of the state in the transition to a market economy based on the laws of market economy, the main of which is competition. As emphasized in the literature, in market conditions, relations between the state and individuals should not be subject to a special regime,

since this leads to a violation of the conditions of competition and the destruction of the market itself (Khabrieva 2010).

Originating from the mid-2000s the Russian Federation was one of the first states where auctions in electronic form began to be held. Besides, from 1 January 2019, not only auctions, but also other competitive purchases – an open tender, a tender with limited participation, a two-stage tender, a request for quotations and a request for proposals – have been conducted in electronic form (Government of the Russian Federation 2017b). This is in line with the European experience in public procurement reform. Around the same period, the procedure for conducting electronic auctions was also used in the EU, but it was not considered an official procedure, as in Russia, but a procurement tool (European Parliament 2014). Along with such issues as the introduction of e-government and electronic administrative services, e-public procurement appears to be part of the measures of administrative reforms and the digital transformation of the activities of government agencies, set by the principles of the electronic (digital) economy to improve the quality of public administration (Špaček et al. 2020).

On 1 January 2014, Law No. 44-FZ entered into force, which regulates the functioning of the Unified Information System in the field of procurement (UPIS). The previously effective Federal Law as of 21 July 2005, No. 94-FZ “On Placing Orders for the Supply of Goods, Performing Works, Rendering Services for State and Municipal Needs” (State Duma 2005) was abolished, as it has been criticized by all subjects of legal relations in the field of procurement (Tsindeliiani et al. 2019).

Law No. 44-FZ was built on a new concept of procurement regulation – the concept of systematic regulation of relations arising at all stages of the procurement process, starting with procurement planning, carrying out the procedure for determining a supplier, contractor, executor, concluding a contract and its execution by the parties, including a wide range of control. When developing Law No. 44-FZ, the rules of the US Federal Procurement System, UNCITRAL, were largely used (Methods of public procurement in the Russian Federation in accordance with Federal Law No. 44-FZ “On the contract system in the procurement of goods, works, services to meet state and municipal needs”; Figure 1).

A condition conducive to the introduction of digital technologies is a procurement typification tool. According to part 11 of article 34 of Law No. 44-FZ, a set of standard contracts and standard conditions of contracts is created, the use of which reduces the labor intensity of customers for drafting contracts and increases the degree of transparency of procurement. Since 2020, standard forms of applications for participation in competitive procurement procedures (tenders, auctions, request for quotations and request for proposals conducted in electronic form) and standard procurement documentation formed by customers (Resolution of the Government of the Russian Federation No. 1401) have been applied (Government of the Russian Federation 2019).

Figure 1

Methods of public procurement in the Russian Federation in accordance with Federal Law No. 44-FZ “On the contract system in the procurement of goods, works, services to meet state and municipal needs”

Source: B2B Center (n.d.)

An achievement in the field of Russian procurement is the creation of a unified information system that provides information support for all purchases at all stages – from planning to execution, including their monitoring, control and audit (part 1 of article 4 of Law No. 44-FZ). The requirements for UPIS and the rules for its operation are established by the Government of the Russian Federation. UPIS is a key element in the procurement information infrastructure, which also integrates regional and municipal information systems, the Unified Trade Aggregator (UTA), nine electronic trading platforms, and the Independent Registrar – the monitoring system of UPIS' and electronic trading platforms' efficiency (Styrin and Rodionova 2020).

UPIS was put into operation on 1 January 2016. The tools for creating a digital contract system are cataloging and identification of purchases. A systematized list of purchased goods, works and services (catalog) is generated in electronic form based on the All-Russian Classifier of Products by Type of Economic Activity. This list is placed in UPIS and contains unified names of procurement objects, and each item of the catalog is assigned a unique digital code. The use of the catalog is intended to simplify the work of customers in describing the object of purchase, to facilitate the objective preparation of technical specifications for the purchase and to ensure the possibility of subsequent control by hardware and technical means. The procedure for the formation and maintenance of the catalog in UPIS and the rules for its use are established by RF Government. To date, the catalog includes more than 50,000 items of the most frequently purchased goods, works and services.

UPIS ensures the formation, processing, storage and provision of information to participants in the contract system throughout the procurement process, monitors the compliance of identification codes and controls the volume of financial support for purchases contained in various documents sent using UPIS. It also provides for the use of an enhanced qualified electronic signature for signing electronic documents provided for by Law No. 44-FZ. Thus, UPIS functionality is not limited to the one purpose specified in Article 4 of Law No. 44-FZ – information support of the contract system in the field of procurement; UPIS is a multifunctional state information system. In other words, UPIS is the core of the contract system, covering all stages of procurement, from the publication of a procurement announcement to audit, monitoring and control of public procurement.

It is difficult to overestimate the importance of UPIS, primarily as a center for placing information on procurement. UPIS processes 250 million transactions per day. For 10 months of 2019, the amount of contracts signed and placed in UPIS amounted to 5.6 trillion rubles (Krivoshepko 2019). Information coming into UPIS from disparate sources cannot be processed manually in a reasonable amount of time. This feature, as well as such features as volume, rate of formation and variety of data, are considered big data by scientists (Khokhlov 2019).

Electronification (transfer of competitive procedures for choosing a winner to an electronic format) has significantly increased the importance of electronic trading platforms as an element of the information infrastructure of the contractual system in the field of procurement. An electronic trading platform is defined in legislation as a website, complying with the requirements established by law, where competitive methods of determining suppliers (contractors, performers) in electronic form are carried out (clause 17 of article 3 of Law No. 44-FZ). Based on the latter, it can be concluded that an electronic trading platform should be considered an electronic information system designed to conduct competitive identification of suppliers (contractors, performers) in order to conclude contracts. After examining electronic trading platforms where subjects interact to conclude various civil transactions, researchers (Zharova et al. 2014) made a similar conclusion.

The resulting electronification of procurement, however, could not reduce the level of corruption offenses, including those related to pricing and other most acute problems in public procurement (Kikavets 2009). Although some authors equate electronification with digitalization, they should not be equated (Lipen 2019). When conducting procurement procedures in electronic form, the information technologies used cannot fully ensure unhindered access to information and proper protection of participants in the contractual system in the field of procurement from unfair actions of entities that use, among other things, various computer technologies, for example:

- software robots in electronic trading for the accumulation of information for the purpose of collusion;
- special accounts created in order to automatically send messages through regular or group chats (Telegram 2019) used for “negotiations” of participants intending to conclude an anti-competitive agreement;
- other modern technologies that ensure victory for a competitor by blocking other procurement participants, etc.

Considering the experience of Russia in matters of electronic public procurement, it is necessary to pay attention to the international context. In 2019, in accordance with the European Commission Regulation 2019/1780, the “Electronic Form” category was introduced into the EU legislation. The category is an open EU legislative standard for publishing public procurement data (European Commission 2020a). These standardized forms have been developed for use by governmental customers to publish notices in the Tenders Electronic Daily (TED), an online portal reporting on public procurement in the EU (European Commission 2020b). Based on the TED-platform the European Commission has created standard forms in accordance with various EU legal frameworks for the publication of public procurement data. The EU Publications Office is responsible for the official publication of EU public procurement notices in the specialized edition – Supplement to the

Official Journal of the European Union – via TED. For publication on TED, EU government customers can submit their procurement data (notices) via specialized applications – the eNotices app or via eSender (SIMAP 2019).

4. Discussion

The experience of the EU countries indicates that the de-facto need to move to the digital plane was one of the main factors in revising EU regulations in the field of public procurement, which in turn led to the adoption of the so-called Package of acts in the field of public procurement in 2014, as well as the regulation of electronic accounts and the introduction of rules for the use of electronic forms. Providing better data analytics is one of the main indicators at which the EU legislative regulation is aimed in matters of electronic forms, designed to significantly increase accessibility and to provide “higher quality” data on procurement for the purpose of transparency (Prier et al. 2018; Uyarra et al. 2020).

The digitization of the EU public procurement market has become an important driver of sustainable, socially inclusive growth based on innovation, thanks to the expected efficiency and transparency of public spending, while streamlining and better targeting such procedures and contracts. By contributing to the implementation of EU horizontal policies, e-procurement can be helpful in addressing a wide range of social, environmental and innovation issues by encouraging the private sector to bid and collaborate in consortia and joint ventures as tenderers. Consequently, more and more small and medium enterprises can be attracted to participate in the EU public procurement market, while increasing competition for mutually beneficial goals, and creating new jobs (Bobowski and Gola 2017; Figure 2).

At the same time, the European Commission identifies a number of issues that create obstacles to acceptance and, therefore, transnational participation in public procurement procedures, in particular: inertia and fear of contracting authorities and suppliers; lack of standards in e-procurement processes; costly technical requirements, especially for the authentication of bidders. As can be noted, the European Commission does not point to any bureaucratic difficulties or excessive regulation of legal relations as obstacles to the implementation of transnational policy in the field of public procurement, which is not at all typical of the Russian system (Ferreira and Amaral 2016). Studies of the Croatian e-procurement experience give reasons to assume that suppliers may feel the danger of some types of auctions. Many established vendors have trouble adapting to online arrangements due to the personal nature of the relationship and the negotiating tactics they have developed with customers over the years. Thus, their relationship is also distanced. Awareness and fear of technology can also play a role in decision-making. By forcing bidders to gradually lower their bids, some types of auctions can reduce supplier margins and even jeopardize business sustainability. In addition, electronic auctions can harm

the relationship between buyer and supplier, and it is important to specify the quality requirements for a successful electronic auction (Rašić et al. 2019).

Figure 2
Public e-procurement Process in EU

Source: European Parliament (2018)

The problems described are quite typical of the Russian system of electronic public procurement. At the same time, despite the fact that UPIS is often considered as the main tool for reducing corruption and costs, as well as increasing transparency and, therefore, the efficiency of the use of public funds, it has failed, to date, to reduce the level of corruption offenses, including those related to pricing, which is one of the most pressing problems of public procurement. In this context, it should be noted that even striving for more transparency may not always reduce corruption, and in fact, some types of transparency may instead facilitate collusion (Prier et al. 2018).

However, in general, it should be noted that in relation to the European public procurement system, considering it a standard (taking into account its supranational status and functionality), at the procedural and functional level, UPIS is not inferior to this system. This applies to all stages of the implementation of the procedure, from publication to evaluation. At the same time, UPIS differs in a structural sense,

taking into account the regional specifics of Russia and the multi-structured economy, including regional and municipal information systems. The implementation of UPIS undoubtedly was an effective measure to facilitate entrepreneurs' access to tender information and minimize corruption in procurement. For example, in 2016, the largest budget savings were obtained when determining suppliers (performers, contractors) through an electronic auction – 60 %, which, in particular, confirms the effectiveness of the use of this method by customers (Matveeva 2018). At the same time, according to the analysis of the Federal Antimonopoly Service of the Russian Federation, the main violations in the field of electronic public procurement include violations related to the placement of information in UPIS, the procedure for choosing a method for determining a supplier (contractor, performer), the procedure for selecting procurement participants; in the field of establishing requirements in procurement documentation, entailing a limitation of the number of bidders, the procedure for concluding a contract or improperly changing its terms, as well as concluding a contract in violation of the announced procurement conditions (Federal Antimonopoly Service 2020).

However, relatively recently, in order to prevent the described phenomena, the Russian system of electronic public procurement used an innovative mechanism that distinguishes the Russian EIS from similar mechanisms of electronic public procurement – the technology of a distributed register. From 1 January 2020, monitoring of the availability (operability) of UPIS, electronic trading platforms, including the storage of information about said availability, is carried out by a specially created SIS, referred to as the “Independent Registrar”. This system is based on the use of digital technology – a distributed ledger. Along with the procedure for the formation, storage and use of the information contained therein.

Distributed ledger technology, supported by a distributed network of computers, which provides storage of records protected from unauthorized access and changes, has been developed in foreign countries (Karp 2015). However, the doctrine has not developed a unified understanding of this technology, which is mainly regarded as a blockchain technology (Mikheeva and Reshetnikova 2020). At the same time, in the course of a number of studies, facts were noted that conceptually exclude the use of blockchain technology in the public procurement system, including in terms of simultaneous use with SIS “Independent Registrar” (Bulgakov 2016; Davtyan-Davydova 2020; Kikavets 2017).

Turning back to the Russian experience, it should be noted that the adoption of the unification formula “one economy – one public procurement law – one electronic platform” (like Finnish Hansel Oy or British YPO (UNSPSC; Deloitte 2020)) would look promising for Russia at first glance. However, it must be understood that this unification is good only from the point of view of ease of control, but at the same time it does not correspond to the complexity of economic relations and the specifics of procurement of legal entities, especially those working in non-resource

sectors. Such a simplified model, which does not allow taking into account the industry specifics of the customer, is not suitable either for states with a multi-structured economy, or simply for large countries in which many enterprises are owned by the state. Considering the current Kazakh public procurement system as an example for Russia, one could say that it is possible that the scale of Kazakhstan in practice is the limiting size at which the volume of GDP, the area of the territory and the population still allow all regulated procurement under one law on one electronic trading platform. However, even Kazakhstan, as it develops further, will find it increasingly difficult to ensure the proper level of electronic services of the trading platform in the absence of a competitive environment between operators of electronic platforms – after all, modern technologies and economic relations are developing so rapidly that it can be difficult to catch up with them by team methods alone (Issabayeva et al. 2019; Melnichuk and Samarin 2017).

It can be argued that the Kazakh model of public procurement regulation generally encourages customers to use modern procurement tools. The objectives of such regulation proclaimed interrelated factors of effective use of customer funds, development of competition and transparency of procurement. However, most of the methods used in Kazakhstan to achieve such goals are original and hardly suitable for borrowing by Russia. After all, Kazakhstan is behaving normally in the context of the post-Soviet space by testing procurement tools in the public sector in order to demonstrate their advantages to the business community. Imitation of Kazakh unification would be a step backward for Russian procurement legislation, since the current differentiation of procurement legislation requirements for different categories of domestic customers is much more appropriate, given the scale and complexity of the Russian economy (Single Portal of Electronic Signature 2016).

In Belarus, the lack of electronic document management functionality on official ETPs (electronic trading platforms) negatively affects the effectiveness of their use as the main instrument for public procurement. In general, it can be noted that the functional capabilities of the official Belarusian electronic trading platforms lag behind the set of functional requirements for this kind of software and hardware systems at the present stage. The lack of such necessary functions as electronic document management, application programming interface, integration with the treasury payment system and dispute resolution systems on the official ETP does not allow to fully unleash the potential of public procurement using electronic means, and also reduces efficiency, transparency and competition in conducting public procurement (Kovalkin and Sushko 2017).

Consideration of the above-described practices in the field of electronic public procurement in conjunction with the practice of Russia is important, first of all, in the context of integration procedures. When developing organizational, economic and legal measures for the use of digital technologies in the field of public procurement in Russia, it is necessary to correlate the measures taken with the correspond-

ing measures taken within the framework of integration associations, a member of which is Russia, above all, the Eurasian Economic Union (EAEU), (Eurasian Economic Union 2014), in which the integration processes are the most intense in comparison with other regional integration associations.

In the EAEU, by the Decision of the Supreme Eurasian Economic Council dated 11 October 2017, No. 12 “On the Main Directions for the Implementation of the Digital Agenda of the Eurasian Economic Union until 2025”, the goals, principles, objectives, and areas of cooperation of the EAEU Member States on the implementation of the digital agenda are defined (Eurasian Economic Union 2017). When creating a common digital market of the EAEU, the experience of the European Union (EU) is of great interest, in which in 2015, at a meeting of the EC, the Strategy for a Single Digital Market for Europe has been approved (European Commission 2015), which is being successfully implemented.

The measures being developed in the EAEU for the use of modern information and telecommunication technologies are aimed primarily at creating an integrated information system of the EAEU, the concept of creating a national segment of which was approved by the order of the Government of the Russian Federation dated 30 March 2017, No. 504-r (Government of the Russian Federation 2017a). The implementation of the concept of cross-border information interaction, approved by the Decision of the Eurasian Intergovernmental Council of August 9, 2019, No. 7, designed for the interaction of B2B and B2G entities, will allow the subjects of different EAEU member states to:

- transfer information in electronic form;
- ensure the identification and authentication of entities;
- fix the time of information transfer;
- verify the powers of subjects transmitting electronic documents signed with an electronic signature (Eurasian Economic Union 2017). Said permissions will contribute to the creation of a reliable mechanism for electronic cross-border interaction of business entities and government bodies.

Measures for the application of electronic information technologies in the field of public procurement in the EAEU, aimed at creating a common market for public procurement, are the measures provided for by the Roadmap to remove barriers and restrictions, including the development of a mechanism for mutual recognition of electronic signatures and bank guarantees issued by banks of one EAEU member state as security for an application for participation in procurement and ensuring the execution of a state contract when public procurements are carried out by customers of another EAEU member state. This is according to the Order of the Eurasian Intergovernmental Council No. 17, 2017. The creation of a single information portal for the EAEU, similar to the European TED (Tenders Electronic Daily) database, in which the search for proposals is categorized by states, types of

goods and services and other indicators will serve as a powerful incentive to create a common EAEU public procurement market.

5. Conclusions

Summing up the results of this study, it should be noted that when assessing the digital transformation of the public procurement sector, of course, one can assume that digital technologies in the sphere above are immature, they get excessive attention, and their probable development and usefulness are difficult to grasp beyond the relatively abstract level of their potential. However, to date, their introduction is caused by considerations of objective necessity based on the lack of competitive alternatives. Digitalization in the public sector faces a number of specific challenges – not least in terms of data availability and data skills. While it will undoubtedly have an impact on governance and public service delivery, it is likely to be gradual rather than revolutionary.

When determining the directions and means of increasing the efficiency of public procurement, it is necessary to take into account that digitalization should be considered a way to increase the efficiency of public procurement, the main directions of the development of legislation on which are the simplification of procurement rules, their centralization and unification. Foreign experience in the development of legislation is also in line with these trends.

The ongoing process of digitalization of the economy and public administration in Russia makes it necessary to solve the problem of consolidating new concepts in legislation (in particular, such as elements of distributed ledger technology). In the field of procurement, it seems that the evolutionary path of reforming procurement legislation is adequate to the ongoing digitalization.

The main policy recommendations connected to improving the functioning of the Russian system of electronic public procurement relate primarily to such issues as the need to invest in the professional level of procurement specialists, improving the rules and regulations for combating corruption in procurement. The improvement of procurement transparency mechanisms should be a priority for policy-makers in this area. In addition, a significant step to improve the Russian electronic public procurement system would be the introduction into the e-procurement toolbox of the qualitative and quantitative indicators of corruption and collusion risk, improvement of methods for assessing corruption risk in procurement, based on open data, as well as improvement of the legal and methodological support of the procurement process.

Considering the results of the study from the point of view of their applicability to international experience, it should be noted that the idea of creating a UPIS, which implies the possibility of centralization, deserves attention and suggests that this experience may well be implemented both by developing and developed states.

At the same time, it should be noted that the simplified model, which does not allow taking into account the industry specifics of the customer, is not suitable either for states with a mixed economy, or simply for large countries in which many enterprises belong to the state, and the existing system of electronic public procurement and differentiation of procurement legislation requirements for different categories of domestic customers is much more appropriate given the scale and complexity of the Russian economy.

The public procurement system is the subject of regulation of public and private law, thus creating a system of complex regulation. In the conditions of digitalization of economic relations, this regulation receives new content.

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