

PROSPECTS FOR LEGAL REGULATION OF THE DIGITALIZATION DEVELOPMENT PROGRAM OF THE AGRICULTURE AND FOOD INDUSTRY IN THE RUSSIAN FEDERATION

Yury Viktorovich Abramov¹, Yury Viktorovich Zemskov², Elena Viktorovna Kochetkova³, Evgeniy Nikolaevich Lotorev⁴, Tatiana Viktorovna Folomeeva⁵

¹²³⁴⁵K.G. Razumovsky Moscow State University of Technologies and Management (the First Cossak University) 73-Zemlyanoi Val Str., Moscow, Russia, 109004

Received 09 January 2018 • Revised 04 February 2018 • Accepted 27 March 2018

Abstract: *The urgency of the problem under study is due to issues arising from the lack of proper legal regulation at the legislative level of the process of creating a digital economy as a whole and the digitalization of agriculture, food and processing industries in the Russian Federation, as well as difficulties in the process of theoretical substantiation of these definitions. In this regard, this article is aimed at a comprehensive analysis of the phenomenon of digitalization as a process to create a new product in digital form with new functionality and customer properties, allowing for an economic breakthrough, gaining new competitive advantages in business, going to the construction of Industry 4.0. The leading approach to the study of this problem is to determine the specifics of legal regulation and the presence of a significant number of administrative barriers that impede the initiative in introducing elements of digitalization into individual farms. The article summarizes the problematic issues related to the need to adopt new legislation and make changes to the system and structure of public authorities, as well as the doctrinal approach to the subject matter.*

Keywords: *digitalization, digital economy, agriculture, food security, food and processing industry, peasant (farm) operation, departmental program, tax legal relations, antitrust, licensing, enhanced qualified electronic signature, public-private partnership, Internet of things, IT-services, aggregator, unmanned aerial vehicles, large user data, Central Information and Analytical System of Agriculture, Unified Federal Institute Formational System of Agricultural Land, Unified System of Identification and Authentication, Unified biometric system, "Effective hectare", quasicorporate electronic educational system "Land of Knowledge".*

INTRODUCTION

The topic of digitalization of economic processes today is one of the most discussed in the Russian Federation, both from an economic and legal point of view. This is due to the need to quickly catch up a significant technological gap in the cultivation and processing of agricultural products. Digitalization refers to the process of creating a new product in digital form with new functionality and consumer properties allowing for an economic breakthrough, gaining new competitive advantages in business, and moving on to the construction of Industry 4.0.

In the past five years, there has been an increase in domestic production in this area¹. This is especially noticeable in terms of the increased export volumes of grain and meat of pork, as well as substantially increased volumes of poultry meat production which practically covers the domestic needs of the country.

Nevertheless, these positive trends in the domestic economy cannot correct Russia's general unpreparedness for an economic breakthrough. The efficiency of domestic agricultural production is significantly inferior to the largest economies. As an example, we can cite indicators of the gross value of agricultural products per worker employed in its production. Thus, it is 195 thousand dollars per employee in the US. In Germany it is 24 thousand dollars. In Russia it is only 8 thousand dollars².

The reasons for such a significant backlog lie in several serious economic problems that have not yet received a satisfactory solution.

And the first of them is directly related to ensuring food security of the population of the Russian Federation. The strategic goal of food security is to provide the population of the country with safe agricultural products, fish and other products from aquatic bioresources and food. The guarantee of its achievement is the stability of domestic production, as well as the availability of the necessary reserves and stocks². The Rome Declaration on World Food Security refers to the duty of any state to ensure the right of everyone to access safe and healthy food in accordance with the right to adequate food and the right to be free from hunger³. Food security is one of the main objectives of the agrarian and economic policy of the state, including, of course, the Russian Federation.

However, in fact, there is a slightly different picture. The structure of consumption of Russian citizens is dominated by cheap and low-quality food.

In terms of products consumption, Russians are significantly inferior to citizens of economically developed countries. According to the Federal State Statistics Service, in 2017 meat and meat products in our country were consumed by 75 kg per person (without by-products - 69 kg) (73.5 kg in 2016)⁴, which is almost two times less than in the USA where a citizen had 120 kg of meat. It is also important to consider differences in the structure of meat consumed. In economically developed countries, expensive beef prevails among meat and meat products. Russian citizens prefer poultry meat (up to 45%). And the reasons are clear. It is relatively inexpensive.

In 2017 milk and dairy products were consumed by 231 kg (in 2016 - 239 kg), at the rate of 325 kg. In Germany and France, this consumption is 430 kg per person per year, and in the United States it is 270 kg⁵.

Citizens of the Russian Federation are experiencing a shortage in the consumption of vegetables and melons, fruits and berries. The difference with developed countries is about 20%.

The absence of expensive products mentioned above is compensated by the increased consumption of potatoes - 96 kg per person per year in 2017. This is an average figure. By regions there is a significant difference - from 62 kg in Moscow to 172 kg in the Jewish Autonomous Region⁶.

¹ Bulletin "The main indicators of agriculture in Russia in 2017". // Russian Federal Statistics Service. [Electronic resource]. URL: http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/publications/catalog/doc_1140096652250. ² Aletdinova A.A. (2017) "Innovative development of the agricultural sector on the basis of digitalization and the creation of technological platforms" // Innovation Journal. No. 4 p.12.

² About approval of the Doctrine of Food Security of the Russian Federation: Decree of the President of the Russian Federation of January 30, 2010, No. 120 // Meeting of the Legislation of the Russian Federation. 2010. No. 5. Art. 502.

³ Declaration of the World Summit on Food Security. Adopted at the World Summit on Food Security (Rome, 16–18 November 2009) // United Nations. Declarations. [Electronic resource]. URL: http://www.un.org/ru/documents/decl_conv/declarations/summit2009_declaration.shtml

⁴ Consumption of basic foodstuffs by the population of the Russian Federation // Federal State Statistics Service. [Electronic resource]. URL: http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/publications/catalog/doc_1286360627828

⁵ Digitization in agriculture: technological and economic barriers in Russia // CRN / RE ("IT-Business") [Electronic resource]. URL: <file:///Users/evgenijlotorev/Desktop/Digitalization%20agriculture%20farming%20technological%20economic%20carriers%20Russia.html>.

⁶ Consumption of basic foodstuffs by the population of the Russian Federation // Federal State Statistics Service. [Electronic resource]. URL: http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/publications/catalog/doc_1286360627828 ⁸ Standard of living. Real disposable cash income in the Russian Federation. // Federal State Statistics Service. [Electronic resource]. URL: http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/population/level/#.

The above characterizes another negative sign inherent in modern Russia, namely an increase in poverty. The real disposable income of the population has been declining over the past four years⁸. Thus, one should not expect an increase in the consumption of high-quality agricultural products due to the growth of incomes of the population soon.

The second problem relates to the high number of peasant (farmer) farms in the total mass of producers. According to the Federal State Statistics Service, the sown areas of agricultural enterprises amounted to 54 million hectares, peasant (farmer) farms – to 23 million hectares, private farms – to 3 million hectares in 2017⁷.

For certain types of products, the share of peasant (farmer) farms in production reaches 30% (grain, sunflower seeds). Potatoes are 90% and vegetables are 80% produced in peasant (farmer) and private farms.

For this type of farms, modern means of mechanization and automation of labor, as well as fertilizers and agrochemicals are not available. This results in low labor productivity, leading to an insufficient level of remuneration of workers and high unit costs to produce a unit of production.

Attempts to eliminate this problem by lending to agricultural producers do not solve it fully, even if the government subsidizes the interest rate on the loan. With a high level of debt load, most of the profits go towards debt servicing. There is no money left for the introduction of modern technologies, including digital ones.

The third problem is determined by the isolation of agricultural producers, especially small ones, from food retailing. There is a long chain of middlemen from wholesalers and retailers. As a result, up to 90% of the profits from retail sales of agricultural products remain with large wholesale and retail network companies and in the banking sector. At the same time, the size of the profits of each link in such a chain is rather small - about 5%.

Thus, small agricultural producers are often forced to sell their products at prices below the cost of their production. And only the integration of large farms with processing facilities and trading network enterprises allows to improve profit indicators.

The fourth problem is associated with the lack of proper legal regulation and the presence of a significant number of administrative barriers that impede the proactive introduction of the digitalization elements into individual farms. A typical case is the attempt of the investigating authorities to bring the farmer, Yevgeny Vasilyev, from the Kurgan region to criminal liability. He was charged with the illegal acquisition of special technical equipment intended for secretly obtaining information (under article 138.1 of the Russian Federation Code of Criminal Procedure)⁸. In fact, the farmer simply purchased a GPS tracker to track the location of animals. Evgeny Vasilyev was not brought to justice only because the prosecutor at the trial stage was sent to check the validity of criminal charges⁹. According to the results of the audit, no evidence was obtained confirming that the farmer had the intent to receive information without a written message¹⁰.

Thus, the state of the domestic legal system demonstrates a significant lag in the regulation of the formed group of public relations in the field of IT-technologies. Thus, obstacles are created before the digitalization of the economy, which can only be solved by the efforts of legislators with the preliminary elaboration of a program for the adoption of a whole complex of regulatory acts.

The introduction of the digital economy and the formation of digital ecosystems is aimed at solving the problems described above. For the main consequence of the digitalization of the agricultural and food processing industry is its transformation into a high-tech business. As a result, one can see an explosive increase in productivity.

Previously, high uncertainty in the results of agricultural production, natural risks that could destroy the harvest, did not make this type of business attractive to investors. But everything has changed since the

⁷ Bulletin "The main indicators of agriculture in Russia in 2017". // Federal State Statistics Service. [Electronic resource]. URL: http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/publications/catalog/doc_1140_096652250.

⁸ Russian Federation Code of Criminal Procedure of June 13, 1996 No. 63-FZ (as amended on December 27, 2018) // Meeting of the Legislation of the Russian Federation. 1996. № 25. Art. 2954.

⁹ Grinenko Alexander, Makeeva Inna System weakness of the criminal procedure legislation in modern Russia - Opción. Vol. 34, Num. 14, 2018. P. 1247.

¹⁰ The investigation closed the case of the Kurgan farmer who bought the GPS beacon for the cow // RIA-Novosti. [Electronic resource]. URL: <https://ria.ru/20180321/1516942148.html>

introduction of modern IT technologies into agricultural production, the main catalyst of which was a set of technologies, called the Internet of Things. It combined the achievements in the areas of data analysis, the development of sensors and unmanned machines, control systems, platforms and mobile applications.

Agricultural producers get access to a large array of data about their production through various applications, coming from equipment, sensors in the fields and on farms, unmanned devices, satellites, as well as to precise recommendations on farming, increasing productivity and reducing risks.

And finally, digitalization allows to simplify the chain of intermediaries as much as possible. While maintaining the level of profit for each link the total trade margin could be significantly reduced. The decrease in retail prices will entail an increase in consumption by the population, due to which, in turn, the profitability of retail trade in agricultural products will increase.

The relevance of the studied issues is determined by the prospects for building a digital economy in Russia and its implementation, primarily in agriculture and the food industry. It will allow to realize the potential of multiple growth in production and food consumption.

According to J'son & Partners Consulting, due to digitalization and the Internet of Things (IoT) it is possible to:

- reduce the trade margin for foodstuffs in the wholesale and retail segment by 2-3 times Without deterioration of product quality.
- increase in the volume of food consumption in Russia in physical terms with the current level of income of citizens more than in three times¹¹.

This ensures the food security of the population, agriculture and food production become the locomotive of the economic development of the country, solves the most important state task of overcoming the poverty of the population.

METHODS

The study is based on the dialectical method of knowledge of political, legal and socioeconomic processes and phenomena, which allowed to carry out a comprehensive analysis, synthesis, systematization and classification of interrelated relationships that make up its object. In addition, a complex of general scientific (analysis and synthesis, ascent from abstract to concrete and from concrete to abstract, systematic) and special (formal-legal, comparative-legal) methods were used in the work. Their correct use makes it possible to determine the theoretical and legal foundations of the digital economy in the Russian Federation, to identify the key existing legal restrictions that impede the development of the digitalization of agriculture and food industry of the Russian Federation, to identify ways to improve the regulatory framework of this group of public relations.

The start of legal system optimization of the Russian Federation for the needs of the digital economy was given by the program "Digital Economy of the Russian Federation" approved by the Government of the Russian Federation in July 2017. Creation of necessary and enough institutional and infrastructural conditions, removal of existing obstacles and restrictions for the creation and (or) development of high-tech businesses and prevention of new obstacles and restrictions both in traditional industries and in new industries and high-tech markets are among the objectives of this Program.

Among the main areas related to normative regulation is the removal of key legal restrictions and the creation of separate legal institutions aimed at addressing the priorities of the digital economy.

Even though this program was adopted only a little over a year ago, some preliminary results can be summed up. In accordance with the "roadmap", the first stage of the digital economy development has been implemented, namely the concept of priority measures to improve legal regulation. The key legal constraints for the digital economy development should already be lifted and the priority basic legal concepts and institutions necessary for its development should be identified.

The second stage of medium-term measures should be implemented to a depth until 2020, and the third final stage of comprehensive legal regulation will be completed in 2024.

¹¹ Ministry of Agriculture of the Russian Federation Departmental project "Digital Agriculture" // Dairynews: news of the dairy market [Electronic resource]. URL: http://www.dairynews.ru/news-image/2018/December/20181203/tsifr_s_hozyaystvo.pdf

As part of this study, it is necessary to evaluate the effectiveness of the implementation of this program in relation to the removal of key legal restrictions that could initiate the implementation of the new direction of the Digital Economy of the Russian Federation program "Digital Agriculture":

1. Regulation of tax legal relations. The Competence Center of the Regulatory Direction of the Digital Economy of the Russian Federation program, the Skolkovo Foundation, has prepared changes to the current tax legislation in terms of reducing the tax rate on intellectual property from 20% to 5%. It is also proposed for private venture investors willing to support projects and domestic companies to digitize the economy, the so-called business angel or angel investor, to establish a tax deduction from the personal income tax in the amount of 50% of investments put in startups.

Amendments were made to article 333.35 "Benefits for certain categories of individuals and organizations" of the Tax Code of the Russian Federation¹². Thus, state fees for registration of legal entities and individual entrepreneurs in electronic form were abolished.

The corresponding paragraph 3 of the above article of the Tax Code is supplemented by the provision as follows: "for performing legally significant actions stipulated in subparagraphs 1, 3, 6 and 7 of paragraph 1 of article 333.33 of the Tax Code, in cases of sending to the registering authority the documents necessary to carry out such legally significant actions in the form of electronic documents in the manner established by the legislation of the Russian Federation on the state registration of legal entities and individual entrepreneurs". These amendments to the Tax Code of the Russian Federation came into force on January 1, 2019.

The Federal Law of 28.11.2018 No. 444-FL "On Amendments to the Federal Law "On Accounting" was adopted. It ensures the implementation of the "one-stop" principle when submitting accounting (financial) reports to state bodies. It is established that a mandatory copy of the annual accounting (financial) statements, which is subject to mandatory audit, together with an audit report about it should be submitted in the form of an electronic document to the tax authority at the location of the economic entity¹³.

The Ministry of Finance has developed a bill improving tax conditions for exporters of IT services. This will require changes to part two of the Tax Code of the Russian Federation, which will allow the tax deduction of VAT amounts imposed on the taxpayer when purchasing goods (works, services, property rights) used to provide certain electronic services, as well as software development services for electronic computers and databases, their adaptation and modification, the place of realization of which is not recognized the territory of the Russian Federation¹⁴.

A clarification from the Ministry of Finance about the possibility to record losses incurred from embezzling funds from the company's accounts as part of expenses and thus reducing the basis for calculating profit tax will be helpful to bona fide companies. The condition to include the losses in expenses will be the presence of a document of the state authority stating that there are no guilty persons, i.e. it is necessary to initiate a criminal case, and then make a decision on the impossibility of identifying the perpetrators to recognize the loss.

2. Regulation of antitrust relations. The Federal Antimonopoly Service of Russia also made several proposals aimed at creating the regulatory framework for digitalization, i.e. the FAS of Russia suggested that digital platforms occupying more than 35% of the

"interchangeable services" market shall be considered monopolists. One of the criteria suggests the availability of revenue for the last calendar year at a level of at least 400 million rubles. One significant drawback in this proposal should be noted. The category of "interchangeable services" has an economic nature and is not statutory. There is no clear understanding of what content the FAS of Russia invests in it.

Also, the Federal Antimonopoly Service considers it necessary to include the on administrative violations a new type of punishment into the Russian Federation Code of Criminal Procedure, previously unknown to administrative legislation, namely "restricting access to information systems and (or) programs". The basis of administrative liability in this case will be anticompetitive violations. Restricting

¹² On Amendments to Article 333.35 of Part Two of the Tax Code of the Russian Federation: Federal Law No. 234-FZ of July 29, 2018, in Coll., Legislation of the Russian Federation. 2018. No. 31. Art. 4823.

¹³ On Amendments to the Federal Law "On Accounting": Federal Law of 28.11.2018, No. 444-FL // Meeting of the legislation of the Russian Federation. 2018. No. 49 (Part I). Art. 7516.

¹⁴ Implementation of the program "Digital Economy" // Analytical Center under the Government of the Russian Federation [Electronic resource]. URL: <http://ac.gov.ru/projects/otherprojects/014091.html>.

access to IT systems can be assigned for up to 90 days, but only in cases where a less severe type of administrative punishment has not achieved the goal of administrative punishment.

3. Licensing and authorization sphere of relations. The Ministry of Economic Development of Russia has prepared and introduced legislative initiatives aimed at rejecting paper licenses. Thus, paper licenses giving the right to perform work or provide services for legal entities and individual entrepreneurs will not be provided in paper form. There is only an entry in the appropriate registry, access to which will be open and publicly available. If you wish, you can get an extract from the corresponding registry. It is assumed that this will be done for free. This law is aimed at introducing a "registry model" of the provision of public services. The main feature of this model is the absence of paper workflow and the performance of legally significant actions by making changes to the relevant information resource. The fee is canceled in this case.

Amendments are made to the law "On licensing certain types of activities" and should have a positive impact on the de-bureaucratization of licensing procedures, simplifying and speeding up the provision of relevant state services¹⁵.

Another step to simplify access to the system of state and municipal services, as well as the opportunity to participate in various legal relationships (for example, remote notarial acts, making transactions in electronic form, etc.) is to use a single enhanced qualified electronic signature.

To do this, it is necessary, finally, to establish uniform requirements for the use of enhanced qualified electronic signature, to ensure proper control over the activities of accredited certification centers. It is also required to establish an institution of trusted third parties. This institute is widely used in world practice. Such a party is an attorney for identification and authentication. In general, domestic civilization allowed the involvement of a third party for the interaction of counterparties on a wide range of issues. This is carried out at the level of such civil law institutions as the institution of attorney, trustee, mediator, agent, commissioner, etc.

4. The sphere of public-private partnerships. The third reading in the summer of 2018 passed a bill that gives information systems the status of public-private partnership (hereinafter - PPP) objects. The main task that this bill will allow to solve is to attract private investment and new technologies in the IT infrastructure. It is proposed to make the objects of the concession agreement programs for electronic computers (computer programs), databases, information systems (including government information systems) and (or) sites in the information and telecommunication network "Internet" or other information and telecommunication networks, the composition of which includes such computer programs and (or) databases, or a combination of these objects (information technology objects), or information technology objects and property, technologically associated with one or more such objects, intended for the operation of their other activities or exercise, etc.

5. The sphere of consumer protection. From January 1, 2019, the Federal Law of July 29, 2018 No. 250-FL "On Amendments to the Law of the Russian Federation "On Protection of Consumer Rights"¹⁶ increases the legal responsibility of Internet aggregators. The concept of "aggregator" and "owner of aggregators of information about goods (services)" is introduced new for the Russian legislation. Now this owner of the aggregator comes as an independent subject of responsibility to consumers regarding the observance of their rights to information about a product or service. If deliberately inaccurate information about the product or service is provided, then the consumer suffered real damage, the consumer makes a requirement to the aggregator owner to return the amount of the advance payment of the goods made by him. The law also defines the conditions under which the owner of the aggregator will be required to return the money within 10 calendar days.

6. The regulation sphere of IT-technologies. In this direction, the reverse process of the creation of new barriers to digitalization is also observed. So, in the summer of 2018, changes to the Federal Law "On Communications"¹⁷ require checking surnames, names and patronymic, as well as dates of birth of corporate services users. These innovations are aimed at limiting the illicit trafficking of SIM-cards, but at the same time they impose serious risks for the development of the Internet of Things - an essential

¹⁵ On licensing certain types of activities: federal law of 04.05.2011, No. 99-FL (as amended on 27.12.2018) // Meeting of the legislation of the Russian Federation. 2011. № 19. Art. 2716.

¹⁶ On Amendments to the Law of the Russian Federation "On Protection of Consumer Rights": Federal Law No. 250-FL of July 29, 201 // Collected Legislation of the Russian Federation. 2018. No. 31. Art. 4839.

¹⁷ On communication: federal law of 07.07.2003, No. 126-FL (as amended on 12/27/2018) // Meeting of the legislation of the Russian Federation. 2003. № 28. Art. 2895.

component of building a digital economy. Mobile operators predict significant problems with sales of SIM-cards for the use in the Internet of things devices, cars equipped with GLONASS systems and so on, because here identification within the framework of the law is difficult. There is no other way to ensure machine-to-machine interaction besides the use of SIMcards. In this regard, it is relevant to release corporate clients from checking the data of users of machine-to-machine (M2M) devices.

And, finally, the attention of the legislator was attracted by two problems that did not receive satisfactory legal regulation in the analyzed field. This is an extremely recent use of big data and unmanned aircraft (drones). And if the first is the most relevant for corporate clients, then the second is widespread among citizens who use drones for a variety of purposes (including using this technique and farmers to inspect fields, search for livestock, detect pests, etc.).

On October 23, 2018, a bill was introduced into the State Duma that enshrined the following definitions: "large user data", "operator of large user data", and established the procedure for their processing.

Large user data is a collection of information about individuals, other than personal information, that does not allow determining a specific individual without using additional information or processing. Government operators, local governments, legal entities and individuals who process them are classified as large user data operators.

At the end of 2018, lawmakers begin to consider a bill aimed at regulating the use of unmanned aircraft. However, unfortunately, it is not necessary to demand a comprehensive legal regulation of this important issue from it. The main vector of regulation here is the powers clarification of the law enforcement agencies regarding the prevention of unauthorized drones in the airspace.

Thus, as we see, all the events held in 2018 within the framework of the implementation of the Digital Economy of the Russian Federation program were primarily of a preparatory nature. The situation has not changed drastically in terms of reforming the existing legislation. Thus, some authors consider it necessary to make changes to the Civil Code of the Russian Federation regarding the definition of transactions made in electronic form¹⁸. It is impossible to ensure effective electronic civil circulation, keep the balance of rights and obligations of the parties to the contract, protect the weaker side without this. But no such serious bills were proposed.

Nevertheless, the groundwork has been created for the transition from 2019 to the implementation of the "Digital Agriculture" direction. Digitalization of the following production directions is assumed:

- crop production, primary processing, accelerated selection and genetics;
- vegetables of open and closed ground, greenhouse industry;
- fruits and berries, processing and storage technologies;
- aquaculture, fish farming, processing technologies;
- poultry and livestock, nutrition, accelerated selection and genetics.

RESULTS AND DISCUSSION

Analysis of the need to digitalize the agricultural production, food industry and the economy of the Russian Federation as a whole, as well as the prospects for its legal regulation, leads to the following conclusions.

As it has been mentioned above, the main goal is to increase the efficiency of agriculture by 35 times based on the use of technologies such as broadband, mobile, LPWAN communications, information technologies (small and big data, AI, control platforms), as well as domestic instrument making (tags, controllers, sensors, control elements).

Creation of the following platforms is being planned:

1. The Central Information and Analytical System of Agriculture (CIASA) is an information bank integrated with information systems of federal executive authorities (Ministry of Agriculture of Russia,

¹⁸ On Amendments to the Federal Law "On Information, Information Technologies and Information Protection" and the Civil Procedure Code of the Russian Federation: Draft Federal Law No. 605945-7 (ed., Adopted by the State Duma of the Federal Assembly of the Russian Federation in I reading January 24, 2019) // "Consultant Plus Client" [Electronic resource]. URL: <http://client.consultant.ru/site/list/?id=1002809719>.

Russian Federal Statistics Service, Federal Customs Service, Russian Meteorological Service) and endowed with functions of operational monitoring and analysis of the state and development objects of the agro-industrial complex.

2. The Unified Federal Information System for Agricultural Lands (UFIS AL) contains up-to-date and reliable information on agricultural lands, including data on the location of the plot, state and actual use of each land plot considering regional specifics, on agricultural crops in real time. High level verification of this system provides integration with the databases of the Federal Agency for State Registration and the Russian Federal Space Agency.

The target indicator of this part of the program is the introduction of intelligent sectoral planning in all regions of the Russian Federation by 2021, considering the cultivation of the most profitable crops, as well as the transport arm to the place of processing or consumption¹⁹.

3. The Intellectual System of State Support Measures with access to the personal account of the grant recipient will be created in the Unified Identification and Authentication System and the Unified Biometric System based on the electronic identification of farmers. Rosselkhoz Bank will become an involved entity, on the basis of which this platform will be implemented. It will provide agribusiness package solutions (subsidy + credit + insurance). And access to the Russian Meteorological Service and EM bases will allow adjusting subsidies based on risk information in the regions.

4. Another interesting platform will be the "Efficient hectare", which will allow you to simulate the export flows of agricultural raw materials in real time and make an accurate forecast of yields and harvest time based on integration with the bases of Russian Meteorological Service, Agrochemical Centers and other departments.

The goal here is to achieve a completely paperless system of tracking agricultural products for export "from field to port" by 2021.

5. The creation and scaling of domestic integrated digital agro-solutions for enterprises of the agro-industrial complex is assumed. Such as "Smart field", "Smart flock", "Smart farm", "Smart greenhouse", etc.

6. Naturally, the fundamental transformation of agricultural production based on the digitalization of the economy will require many specialists with special competences. It is not possible to solve the problem of saturating the economy without an adequate retraining system. In this regard, a sectoral quasi-corporate electronic educational system "Knowledge Land" will be created based on several agricultural universities - Stavropol State Agrarian University, Kuban State Agrarian University, Russian State Agrarian University. This will be the first such experience in Russia.

The pilot regions for the implementation of these platforms in accordance with the Roadmap for the implementation of the departmental project "Digital Agriculture" will be the Tambov region, Belgorod region, the Republic of Bashkortostan, the Republic of Tatarstan, the Republic of Mordovia, the Samara region, the Kemerovo region, the Altai Territory, the Novosibirsk Region, the Krasnodar Territory. And starting from 2020, their successful experience should be multiplied by farms of all regions of Russia.

The emerging National Union of the Digital Transformation of Agriculture should be the coordinating and providing body. Its main task is to provide access to the program without any kind of discrimination of all participants in the agro-industrial market.

REFERENCES

- [1]. Declaration of the World Summit on Food Security. Adopted at the World Summit on Food Security (Rome, 16–18 November 2009) // United Nations. Declarations. [Electronic resource]. URL: http://www.un.org/ru/documents/decl_conv/declarations/summit2009_declaration.shtml
- [2]. On Amendments to the Federal Law "On Accounting": Federal Law dated 11.28.2018 No. 444-FL // Meeting of the legislation of the Russian Federation. 2018. No. 49 (Part I). Art. 7516.

¹⁹ Vaipan V.A. Legal regulation of the digital economy // Business Law. The application "Law and Business". 2018. № 1. P. 13.

- [3]. On Amendments to the Law of the Russian Federation "On Protection of Consumer Rights": Federal Law No. 250-FZ dated July 29, 2017 // Collection of the Legislation of the Russian Federation. 2018. No. 31. Art. 4839.
- [4]. On introducing changes to Article 333.35 of part two of the Tax Code of the Russian Federation: federal law No. 234-FL dated July 29, 2018. Meeting of the legislation of the Russian Federation. 2018. No. 31. Art. 4823.
- [5]. On licensing certain types of activities: federal law of 04.05.2011, No. 99-FL (as amended on 27.12.2018) // Meeting of the legislation of the Russian Federation. 2011. № 19. Art. 2716.
- [6]. About communication: federal law of 07.07.2003, No. 126-FL (as amended on 12/27/2018) // Meeting of the legislation of the Russian Federation. 2003. № 28. Art. 2895.
- [7]. Russian Federation Code of Criminal Procedure of June 13, 1996 No. 63-FZ (as amended on December 27, 2018) // Meeting of the Legislation of the Russian Federation. 1996. № 25. Art. 2954.
- [8]. On the Strategy for the Development of the Information Society in the Russian Federation for 2017-2030: Decree of the President of the Russian Federation No. 203 of May 9, 2017 // Collection of the Legislation of the Russian Federation. 2017. № 20. Art. 2901.
- [9]. On approval of the Doctrine of Food Security of the Russian Federation: Decree of the President of the Russian Federation of January 30, 2010, No. 120 // Meeting of the Legislation of the Russian Federation. 2010. No. 5. Art. 502.
- [10]. On the approval of the program "Digital economy of the Russian Federation": Decree of the Government of the Russian Federation of 28.07.2017, No. 1632-p // Collection of the legislation of the Russian Federation. 2017. No. 32. Art. 5138.
- [11]. On approval of the Strategy for the development of the food and processing industry of the
- [12]. Russian Federation for the period until 2020: Executive Order of the Government of the Russian Federation No. 559-p of April 17, 2012 (as amended on January 13, 2017) // Collection of
- [13]. Legislation of the Russian Federation. 2012. № 18. Art. 2246.
- [14]. Aletdinova A.A. "Innovative development of the agricultural sector on the basis of digitalization and the creation of technological platforms" // Innovation Journal. 2017. No. 4 P.1115.
- [15]. Bykov A.Yu. "The right of the digital economy: some national economic and political risks." Moscow: Prospect, 2018. 24 p.
- [16]. "The main indicators of agriculture in Russia in 2017". // Russian Federal Statistics Service. [Electronic resource]. URL: http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/publications/catalog/doc_1140_096652250.
- [17]. Vaipan V.A. "Legal regulation of the digital economy" // Business Law. The application "Law and Business". 2018. № 1. P. 12 - 17.
- [18]. Gayanova V.M., Yalunina E.N. "Improving the efficiency of the food industry in Russia with the help of strategic management tools" // Russian Journal of Entrepreneurship. 2014. No. 17 (263). Pp. 120-133.
- [19]. Kolomeichenko A.S. "Informational support of innovative development of the agroindustrial complex" // Vector economy. 2017. № 4 (10). Pp. 20-27.
- [20]. Kurazova D.A., Dzhentamirov M.Kh. "Problems of development of IP in the agroindustrial complex of the Russian Federation" // Research. 2017. № 2 (13). С.55 - 58.
- [21]. Меденников В.И., Муратова Л.Г., Сальников С.Г. и др. Отчет о НИР «Разработать теоретические основы и методологию оценки эффективности использования информационного ресурса в аграрной экономике». М.: ВИАПИ РАСХН, 2014. 198 с.
- [22]. Ministry of Agriculture of the Russian Federation Departmental project "Digital agriculture" // Dairynews: news of the dairy market [Electronic resource]. URL: http://www.dairynews.ru/news-image/2018/December/20181203/tsifr_s_ho-zyaystvo.pdf

21. On Amendments to the Federal Law "On Information, Information Technologies and Information Protection" and the Civil Procedure Code of the Russian Federation: Draft Federal Law No. 605945-7 (as adopted by the State Duma of the Federal Assembly of the Russian Federation in I reading January 24, 2019) // "Consultant Plus Client" [Electronic resource]. URL: <http://client.consultant.ru/site/list/?id=1002809719>.
- [23]. Consumption of basic foodstuffs by the population of the Russian Federation // Russian Federal Statistics Service. [Electronic resource]. URL: http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/publications/catalog/doc_1286360627828
- [24]. Implementation of the program "Digital Economy" // Analytical Center under the Government of the Russian Federation [Electronic resource]. URL: <http://ac.gov.ru/projects/otherprojects/014091.html>.
- [25]. The investigation closed the case of the Kurgan farmer who bought the GPS device for a cow // RIA-Novosti. [Electronic resource]. URL: <https://ria.ru/20180321/1516942148.html>
- [26]. Standard of living. Real disposable cash income in the Russian Federation. // Russian Federal Statistics Service. [Electronic resource]. URL: http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/population/level/#.
- [27]. Digitization in agriculture: technological and economic barriers in Russia // CRN / RE ("IT-Business") [Electronic resource]. URL: <file:///Users/evgenijlotorev/>
- [28]. Десктоп/Цифровизация%20в%20сельском%20хозяйстве_%20технологические%20и%20экономические%20барьеры%20в%20России.html.
- [29]. Grinenko Alexander, Makeeva Inna System weakness of the criminal procedure legislation in modern Russia - *Opción*. Vol. 34, Num. 14, 2018. Pp. 1246-1265.