### **RUSSIAN DIGITAL ECONOMY PROGRAM**

# Tatiana V. Ershova tatiana.ershova@digital.msu.ru National Digital Economy Center, Lomonosov Moscow State University, Moscow, Russia.

# Yuri E. Hohlov yuri.hohlov@iis.ru Institute of the Information Society, Moscow, Russia

#### ABSTRACT

The main implementation stages of digital economy development program in the Russian Federation are presented. The goals and objectives of the program, the main directions of its implementation and the links to other initiatives related to digital transformation of industries in Russia are described.

*Keywords* — digital economy, digital transformation, Russian Digital Economy Program, governance system,

### **1. INTRODUCTION**

The beginning of the new millennium is characterized by a special focus on the development and use of information and communication technologies (ICT), which are generally considered to be one of the main drivers of progress and socio-economic development. Following the adoption of the principles and action plan for the development of the information society at the World Summit of the Information Society, many countries have moved to the development of the digital economy – an economic activity based on the development and use of digital technologies.

The Russian Federation did not stand aside and on December 1, 2016, the President of the Russian Federation suggested "launching a large-scale system program for developing the economy of a new technological generation, the so-called digital economy" in his annual Message to the Federal Assembly [1].

### 2. RUSSIAN DIGITAL ECONOMY PROGRAM – DESIGN AND GOVERNANCE

In accordance with the order of the President, the Government of the Russian Federation, together with the Administration of the President of the Russian Federation, was to develop and approve a digital economy program by June 1, 2017. At the same time, work on the program was to be carried out by representatives of all stakeholders – government, business, and academia. The coordinator of the work was identified by the Ministry of Communications and Mass Media of Russian Federation, which in mid-March 2017 formed an inter-agency working group (IWG) including 9 subgroups along the main program components to develop the Digital Economy program:

- 1. Regulation of the digital economy.
- 2. Research and development.
- 3. Human resources and education.
- 4. Digital infrastructure.
- 5. Information security.
- 6. Digital government.
- 7. Digital healthcare.
- 8. Smart city.
- 9. Digital economy development governance.

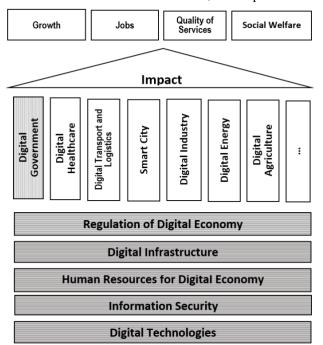
The subgroups structured the draft program around a matrix of goals, objectives, milestones and indicators with a planning horizon until the end of 2024.

In mid-March 2017, the Ministry of Communications and Mass Media of Russian Federation signed an agreement with the World Bank on the provision of advisory services on a digital economy program development. At the end of May 2017, the World Bank submitted a report "Developing a Common Approach to the Development of the Digital Economy Program Taking into Account International Experience". The results of this report were massively used in the course of the elaboration of the Russian Digital Economy Program.

Almost simultaneously with the beginning of work on the analysis of the international experience in the field of digital economy, in late March 2017, the World Bank took the initiative to develop a methodology for assessing the level of digital economy development in a particular country (Digital Economy Country Assessment, DECA), to test this methodology in Russia and prepare a country report. With

Author's contribution is partially supported by the Russian Foundation for Basic Research under the Grant No. 18-29-03086 and contains the results of a research project carried by the Center for Storage and Analysis of Big Data supported by the Ministry of Science and Higher Education of the Russian Federation under the Contract of Lomonosov Moscow State University with the National Technology Initiative Projects Support Fund of 11/12/2018 No. 13/1251/2018.

the help of Russian experts representing the Institute of the Information Society, Lomonosov Moscow State University (Faculty of Computational Mathematics and Cybernetics, National Center for Digital Economy), Plekhanov Russian University of Economics, Kazan (Volga Region) Federal University, Central Economics and Mathematics Institute III the Russian Academy of Sciences, Federal Bureau of Medical and Social Expertise, Financial University under the Government of the Russian Federation, from April to



# FIGURE 1: FRAMEWORK OF THE RUSSIAN DIGITAL ECONOMY PROGRAM

October 2017, an expanded system of indicators was formed for assessing the current situation in the area of digital

economy development in the country and prepared a report "Digital Economy Country Assessment for Russia" (DECA Russia) [2]. This report has a status of a World Bank product prepared in collaboration with the Institute of the Information Society.

The Digital Economy Program of the Russian Federation (further on referred to as Digital Economy Program) developed by the IWG, taking into account international experience, was approved at a meeting of the Presidential Council for Strategic Development and Priority Projects on July 5, 2017 and then approved by Government decree No. 1632 of July 28, 2017 [3].

For a number of reasons, only five components of nine mentioned above made the frame of the first version of the approved program. They all were aimed at creating conditions for the development of the digital economy: regulations, human resources and education, research competencies and technological groundwork, information infrastructure, information security (see Figure 1).

At the same time, the Government of the Russian Federation created a new governance model for the Digital Economy Program implementation, which was significantly different from the traditional methods of managing state programs. Government Resolution No. 969 of August 15, 2017 established a Subcommittee on the Digital Economy of the Government Commission on the Use of IT to Improve the Quality of Life and Business Conditions as a tool to manage the implementation of the Digital Economy Program. The first deputy head of the Government Office of the Russian Federation Maxim Akimov was appointed head of the Subcommittee.

At the meeting of the Subcommittee, the centers of competence and the leaders of the working groups for each five components of the program were identified:

- "Regulation of Digital Economy": competence center – Skolkovo Foundation; WG leader – R. Ibragimov (MTS).
- 2. "Human resources for Digital Economy": center of competence Agency for Strategic Initiatives; WG leader B. Nuraliev (1C).
- "Formation of Research Competencies and Technological Groundwork": competence centers – Rostech State Corporation and Rosatom State Corporation; WG leader – A. Povalko (Russian Venture Company).
- 4. "Digital Infrastructure": competence center Rostelecom PJSC; WG leader – A. Serebryanikova (Megaphone).
- 5. "Information Security": competence center Sberbank PJSC; WG leader – N. Kasperskaya (InfoWatch).

The functions of the program project office were assigned to the Analytical Center under the Government of the Russian Federation [4].

From the very beginning, the development of the digital economy of Russia was conceived as versatile and open to all interested participants, therefore the creation of the autonomous non-profit organization "Digital Economy" by 16 leading companies and development institutions [5] was a unique element of the governance system of the Digital Economy Program.

The main task of the Digital Economy NPO is the coordination of activities between the business community, scientific and educational organizations, other communities and government bodies, including through the established competence centers and WGs enlisted above. To this end, in March 2018, the Government of the Russian Federation joined the founders the Digital Economy NPO, and the Presidential Aide A. Belousov headed its supervisory board.

## 3. RUSSIAN DIGITAL ECONOMY PROGRAM – ACTION PLANS

The next stage in the development of the Digital Economy Program was the preparation of action plans for the five approved components (areas). This work started immediately after the approval of the program. In autumn 2017, the competence centers organized a dialogue with stakeholders and formed proposals for each of the areas. In turn, the working groups consisting of the most authoritative representatives of the government, business, and academia verified the proposals of the competence centers, after which they were coordinated by the relevant federal executive bodies and approved in late 2017 - early 2018 as plans of activities in all areas of the program, covering more than 1,000 actions [6].

More than 1,000 experts from leading companies and scientific organizations in Russia, representatives of 15 government authorities were involved in the development of action plans.

### 4. RUSSIAN DIGITAL ECONOMY PROGRAM – REBOOT

A new stage of development of the digital economy in the Russian Federation is associated with the new electoral cycle and is starting from the Presidential Decree of May 2018 [7], which defined the goals and target indicators of the country's socio-economic development until 2024. Development of 12 national projects (programs) began, one of which was supposed to be the national program "Digital Economy of the Russian Federation." In accordance with the Decree, by 2024, the domestic costs of the development of the digital economy from all sources (by share in the gross domestic product of the country) should increase no less than three times (compared to 2017); a stable and secure information and telecommunications infrastructure for high-speed transmission, processing and storage of large amounts of data should be created, accessible to all organizations and households; government authorities, local governments and organizations should primarily use domestic software.

The development of the national program was led by the transformed Ministry of Digital Development, Communications and Mass Communications of the Russian Federation, which took as its basis the approved Digital Economy Program and action plans. The Ministry of Economic Development of the Russian Federation and representatives of other stakeholders took part in the preparation of the draft national program.

In September 2018, the program "Digital Economy of the Russian Federation" moved to the level of national scale – the government approved the passport of the program, consisting of 6 federal projects [8]. In addition to the previously approved areas, the program was supplemented by the federal project "Digital Public Administration", some of the activities within the areas were specified and enlarged. To date, the national program "Digital Economy of the Russian Federation" includes the following federal projects:

- 1. Regulation of the Digital Environment (Head Deputy Minister of Economic Development of the Russian Federation S. Shipov).
- Digital Infrastructure (Head Deputy Minister of Digital Development, Communications and Mass Communications of the Russian Federation O. Ivanov).
- Human Resources for Digital Economy (Head Deputy Minister of Economic Development of the Russian Federation I. Torosov).
- 4. Information Security (Head Deputy Minister of Digital Development, Communications and Mass

Communications of the Russian Federation A. Sokolov).

- Digital Technologies (Head Deputy Minister of Digital Development, Communications and Mass Communications of the Russian Federation E. Kislyakov).
- Digital Government (Head Deputy Minister of Digital Development, Communications and Mass Communications of the Russian Federation M. Parshin).

The Deputy Prime Minister M. Akimov was appointed the curator of the national program "Digital Economy of the Russian Federation". Minister of Digital Development, Communications and Mass Communications of the Russian Federation K. Noskov became the head of the program. At the same time, the basic governance system of the digital economy development has not undergone significant changes. As before, the formation and implementation of federal projects activities takes place with the participation of key stakeholders coordinated by the Digital Economy NPO. To this end, in October 2018, a working group on digital public administration was formed (headed by O. Fomichev, Renova Holding Rus) [5], which took an active part in the verification of the relevant federal project activities.

The spending of the budget for the national program is planned in the amount of about 1.08 trillion rubles, and it is assumed that extra-budgetary funding will be even more than government spending [8].

Along with this, the development and use of digital technologies in individual industries was included in other national projects and departmental programs. Thus, the Ministry of Health of Russian Federation within the framework of the national project "Healthcare" will implement the federal project "Digital Healthcare" [9], the Ministry of Construction of Russian Federation approved the departmental project of digitalization of the municipal economy "Smart City", the Ministry of Industry and Trade of Russian Federation prepared the agency project "Digital Industry", the Ministry of Russian Federation is developing an agency Digital Energy project, etc.

### 5. RUSSIAN DIGITAL ECONOMY PROGRAM – WAY FORWARD

The past two years have been characterized by a large number of diverse initiatives in the development of the digital economy; the main strategic planning documents have been prepared, a system for managing the development of the digital economy has been developed, and the state budget for 2019-2021 has committed appropriate funds.

One of the management tools should be a system for monitoring the development of the digital economy in the Russian Federation, which will allow not only assessing the current state of affairs (see, for example, the latest World Bank report [11]), but also making informed decisions on the impact on digital transformation processes at the national level. Now the most crucial stage of the development of the digital economy in the Russian Federation has come – the transition from plans to their implementation. And the main challenge for this implementation will be the coordination and harmonization of numerous initiatives at federal, regional and municipal levels.

### REFERENCES

[1] Message from the President to the Federal Assembly of the Russian Federation. December 1, 2016. [Online]. Available:

http://www.kremlin.ru/events/president/news/53379 [Accessed Dec. 15, 2018].

- [2] Digital Economy Country Assessment for Russia. The World Bank Group in collaboration with the Institute of the Information Society, 2017. 155 p.
- [3] The program "Digital Economy of the Russian Federation". Approved by the order of the Government of the Russian Federation of July 28, 2017, No. 1632.
- [4] Analytical Center for the Government of the Russian Federation. "The implementation of the Digital Economy program". [Online]. Available: http://ac.gov.ru/en/projects/014097.html [Accessed Dec. 15, 2018].
- [5] NGO Digital Economy. [Online]. Available: http://www.data-economy.ru [Accessed Dec. 15, 2018].
- [6] Action plans ("road maps") of the program "Digital Economy of the Russian Federation". Approved by the Government Commission on the Use of Information Technology to Improve the Quality of Life and Business Conditions (Protocol No. 2 of December 18, 2017 and Protocol No. 1 of February 9, 2018.
- [7] On the national goals and strategic objectives of the development of the Russian Federation for the period up to 2024. Presidential Decree of 07.05.2018, No. 204. [Online]. Available: http://kremlin.ru/acts/bank/43027 [Accessed Dec. 15, 2018].
- [8] About the national program "Digital economy of the Russian Federation" and the national project "Safe and high-quality roads". [Online]. Available: http://government.ru/news/34001/ [Accessed Dec. 15, 2018].
- [9] Passport of the federal project "Creating a single digital circuit in health care on the basis of the unified state health information system (EGISZ)".
- [10] The agency project on the digitization of the municipal economy "Smart City". Approved by order of the Minister of Construction and Housing and Communal Services of the Russian Federation of 31.10.2018 No. 695/pr. [Online]. Available: http://www.minstroyrf.ru/docs/17594/ [Accessed Dec. 15, 2018].
- [11] World Bank. 2018. Russia Digital Economy Report, September 2018, Competing in the Digital Age: Policy Implications for the Russian Federation. Washington, D.C.: World Bank. License: Creative Commons Attribution CC BY 3.0 IGO. [Online]. Available: http://hdl.handle.net/10986/30584 [Accessed Dec. 15, 2018].