

## State Policy Strategies in the Field of Housing and Communal Services in the Russian Federation and EU Countries

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### **Abstract**

*This article is devoted to the research analysis of the peculiarities of the formation of the state policy strategy in the sphere of housing and communal services of the Russian Federation and the countries of the European Union. The need to analyze foreign experience in managing the housing and communal complex of the state is due to the task of determining the competitive advantages of the housing and communal services sector in the EU to borrow this practice from the example of Russia. It is important to identify the key technologies and strategic decisions of the regulatory bodies in the sphere of housing and communal services, which can be used in the Russian experience for reforming the state policy strategy. The relevance of the study on the selected problem is because the current level of quality of housing and communal services provided to the population in Russia remains unsatisfactory. For the Government of the Russian Federation, such a development strategy will allow solving several issues within the framework of the social and economic development of the state. The research methods were the systematization of scientific works on the topic "management of the housing and utilities sector" in Russia and the EU countries. A statistical analysis of the studies of Russian scientists was carried out on the account of the level of satisfaction of the population with the quality of housing and communal services, as well as trends in the modern development of the housing and communal services sector in Russia. Within the framework of the article, the main problems, barriers, and difficulties in the development of housing and communal services in Russia are considered. The prospects for the development of state policy in the sphere of the housing and communal complex of the Russian Federation within the framework of the digital transformation of the national economic system are analyzed. Special attention is paid to how, with the help of digital technologies, a strategy for improving the state policy of Russia in the field of housing and communal services can be carried out. In the conclusion, the author found that the most important component of the foreign experience in reforming housing and communal services is its digitalization.*

### **Keywords**

*Government policy; housing and utilities; housing and communal complex; management of housing and communal services; housing and communal services; the sphere of housing and communal services.*

### **Introduction**

The housing and utilities sector is one of the most important sectors of the national economy of any country, affecting all areas of society. Therefore, ensuring the stable functioning of this sector is an important task of national importance. The system of housing and communal services, based on the provision of quality housing and communal services, ensures the satisfaction of the primary material and domestic

needs of the population and creates the basis for the uninterrupted operation of enterprises.

Housing and communal services include the provision of water, heat, gas, electricity, and wastewater services to the population; bathing and laundry services; hotel services, landscaping and street lighting, cleaning and clearing the territory of the municipality.

As the management system for housing and utilities is characterized as highly complex and multi-layered, improvement processes are important. International practice in European countries has undergone radical changes, where the characteristic of the provision of housing and communal services means a transition to new green technologies, the use of digital and smart systems, and the construction of renewable energy facilities.

The countries of the European Union have one of the most sustainable strategies for the qualitative development of the housing and utilities sector. This is because, in their experience, the most important reforms took place 20-40 years ago. Nowadays the general development concept of the environmental security of the European countries is characterized by the necessity to reduce harmful emissions and man-caused environmental damage. As heating and electricity are the mainstays of municipal services, it is therefore important that measures are taken to revolutionize these sectors. Equally important is the development and implementation of a program to improve the housing and utilities system in Russia, where an improvement in the quality of the services provided is essential.

The relevance of the research on the topic "strategies of public policy in the sphere of housing and communal services in the Russian Federation and EU countries" is because the current level of quality of housing and communal services provided to the population in Russia remains unsatisfactory. This is due to several current problems and barriers, which can be addressed by improving the strategy of public policy in the sphere of housing and communal services. For the Government of the Russian Federation, such a development strategy would address several issues in the socio-economic development of the state.

Accordingly, the aim of the scientific article is the research analysis of peculiarities of formation of the state policy strategy in the sphere of housing and communal services of the Russian Federation and the countries of the European Union. The need to analyze foreign experience in the management of the state housing and communal complex is due to the task of identifying the competitive advantages of the sphere of housing and communal services in the EU to borrow this practice from the example of Russia. It is important to identify key technologies and strategic decisions of the regulatory bodies of the housing and communal sector, which can be used in the Russian experience to reform the strategy of public policy.

A.Y. Butyrin defines the housing and utilities sector as a multi-level, complex system of public administration whose task is to implement policies to ensure comfortable living conditions for Russian citizens (Butyrin, 2014, p. 77). Stukalov A.V. gives the following

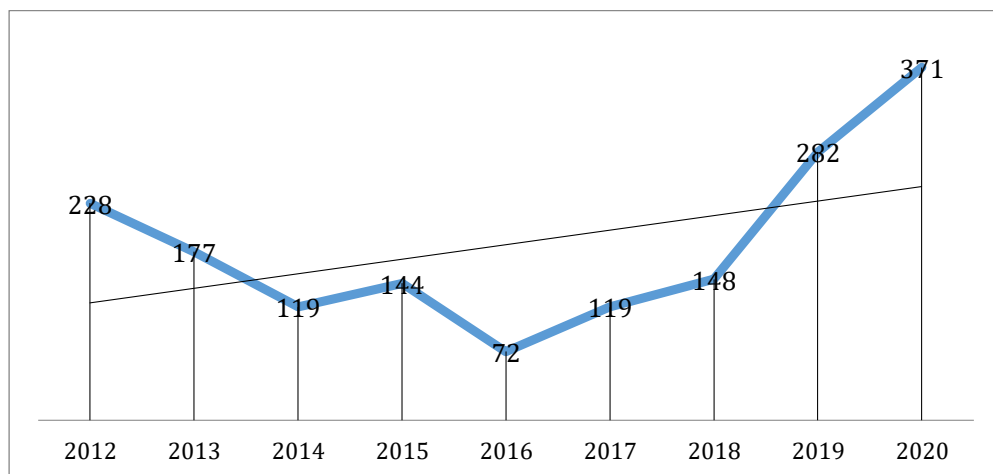
definition of housing and communal economy - it is a complex system, acting as a separate branch of the national economy of the Russian Federation, under the management tools of which are the infrastructure and real estate facilities that allow providing housing and communal services to the population to provide opportunities for a comfortable life (Stukalov, 2015, p. 3). E.Y. Grishina defines the housing and utilities sector as a branch of the Russian economy, the main purpose of which is to meet the needs of the population for quality living by providing housing and utility services (Grishina, 2017, p. 29).

Thus, having systematized scientific research of Russian scientists, it is possible to formulate the following author's definition of "housing and communal services" - it is a complex organizational system of public administration of the national economy of Russia, consisting of 5 levels of external management, the tasks of which are to implement policies to ensure comfortable housing of Russian citizens and to provide them with communal services.

### Problems and prospects for the development of housing and communal services in Russia

To analyze the problems and prospects of the development of the housing and communal services system in Russia, it is necessary to refer to recent and relevant statistical information. Thanks to the analysis of the data provided by Rosstat, it is possible to highlight certain trends in the current stage of functioning of the housing and utility sector, based on which problems and prospects can be identified.

Thus, the first and main trend in the development of the housing and utilities sector in the Russian regions is the growth of budgetary expenditures for its functioning, observed in the period from 2012 to 2020 (see Figure 1).



**Figure 1. Evolution of federal budget expenditures on public services in the sphere of housing and communal services in the period 2012 - 2020, bln. rub.**  
(Annual information on the execution of the federal budget. Ministry of Finance of Russia)

As the trend line shows, the trend of expenditure for the analyzed period has an increase to 371 billion roubles.

Apart from the renewed amount of budgetary funds allocated to finance the Russian housing and utilities system to date, other trends in the current phase of development can be highlighted (Kolarz, 2017, p. 11):

1. The number of economically active people in the country who are employed as employees of enterprises operating in the housing and utilities sector is increasing (Takmasheva & Konovalova, 2017, p. 85). According to the publication *Rosstat Labor and Employment* (2019), employment in "provision of electricity, gas, and steam; air conditioning" rose from 1.907 million to 1.924 million (an increase of around 17,000 people). In the area of water supply; wastewater management, waste management, waste disposal, and pollution abatement, employment increased from 0.506 million to 0.515 million (an increase of approximately 9,000 people).

2. Wages for employees of housing and utilities companies are increasing, which puts a strain on state and municipal government spending.

3. There has been a fundamental change in the management system of the housing and utilities sector, where many state and municipal enterprises in the sector have begun to move into private ownership, with new projects being implemented in the public-private partnership market.

4. There has been an increase in the rights of the economic actors in the housing and utilities sector, who can pursue autonomous and independent management policies.

5. Thanks to past government reforms in the housing and utilities sector of the Russian economy, there has been a 47% and 21% reduction in the accident rate in the heat and water supply, respectively, which has improved the quality of the services provided.

6. Thanks to past government reforms in the housing and utilities sector of the Russian economy, there has been an 18% and 14% reduction in resource loss in heating and water supply, respectively, which has improved the quality of the services provided.

These current trends in the development of the country's housing and utilities sector lead us to the small conclusion that this sector of the economy has prospects for further development. However, by far the following are some of the most popular and frequent problems of the current period in managing the development of the housing and utilities system in the Russian Federation, which includes:

1. Inefficiencies in the system of providing benefits to different categories of the country's population, which increases the cost structure (Kolarz, 2017, p. 12).

2. a large number of regional constituent entities of the Russian Federation have a high level of losses in the activities of enterprises of the housing and utilities sector. As a result, some regions of our country are underfunded in meeting their needs (Voronina & Twaury, 2017, p. 5).

3. The transition to a public-private partnership model has not led to an increase in the economic efficiency of housing and utility management. On the one hand, this model was intended to stimulate the development of the housing and communal sector in our country. However, the very economic efficiency of the management model does

not justify itself. This may be a temporary difficulty, which will disappear in the future (Dzhabiev, 2017, p. 61).

4. Minimal private and public investment. More precisely, insufficient funding for fixed capital investment in the housing and utilities sector, which leads to the following process: the rate of depreciation of fixed assets is higher than the rate of renewal of fixed assets (Sokolova & Borisova, 2017, p. 872).

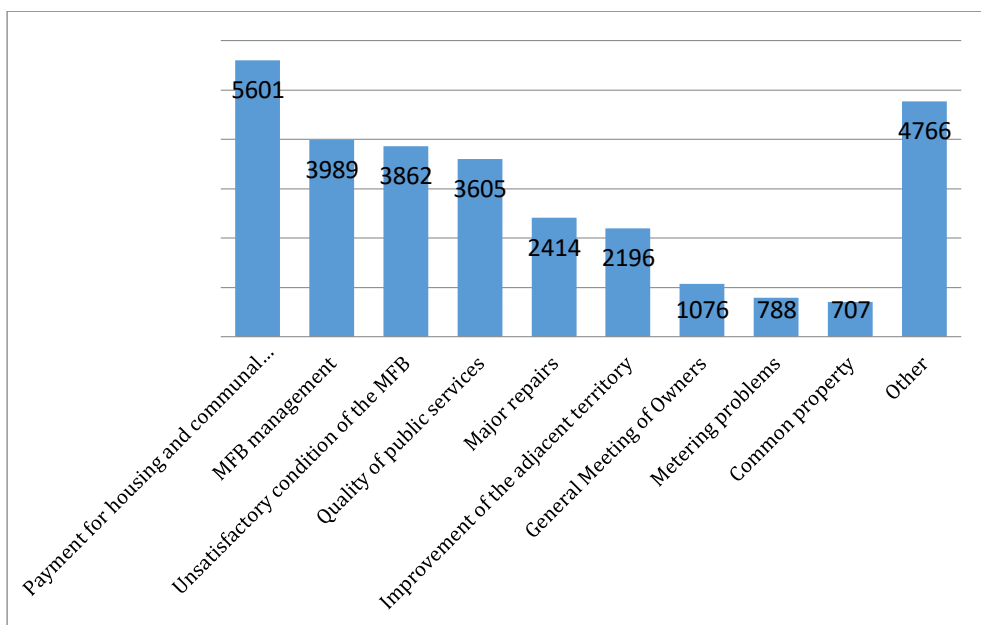
5. Lack of an effective mechanism for the development of competitive, market-based relations. The problem with existing housing maintenance companies is that they lack effective competition and an interest in reducing prices for the services they provide to the population. In addition, they are vertically integrated companies, as opposed to a well-functioning market, where the benefits of specialization usually lead to the emergence of multiple firms (Stepanova & Runkov, 2015, p. 194).

6. Lack of long-term planning of the tariff policy.

7. There is no institution of active and responsible owners of premises in apartment buildings with real rights and effective mechanisms for their implementation (Akifieva, 2014, p. 7).

8. Challenges of maintenance and technical operation of the housing stock (Akifieva, 2014, p. 7).

The National Centre for Public Control in the Sphere of Housing and Communal Services has published statistics on appeals from Russian citizens concerning the quality of housing and communal services. Thus, at the end of 2019, there were 29,004 appeals. The top 10 appeals according to the National Centre of Public Control in the sphere of housing and utilities are shown in Figure 2.



**Figure 2. Number of appeals from Russian citizens to the National Centre for Public Control in the Sphere of Housing and Communal Services in 2019**  
(Housing and utilities problem ranking. National Centre for Public Oversight)

The analysis of appeals shows that citizens are most concerned about problems related to the management of apartment buildings. In total, one-third of Russian citizens' appeals (33.22%) is devoted to these issues.

### Study of domestic and foreign experience of the EU countries in the development of housing and communal services

The issue of reforming the housing and utilities sector is one of the most pressing issues in all of Russia's constituent entities at present. This sphere is a whole complex that provides the population with vital resources, services for maintenance and repair of residential buildings, thus creating in general the conditions for a comfortable and safe living of the population. The special importance of the sphere of housing and communal services is determined by the fact that each person is a consumer of its services, so this sphere is more socially oriented (Mottaeva, 2019, p. 82).

Housing reform in Russia began when the Law on Privatisation of Housing was adopted in 1992. The law on housing privatization defined the right of Russian citizens to receive as personal property the living space they occupied.

Further, three medium-term reform phases of the housing and utilities sector were carried out, which included:

1. 1997-1998 - the list of new subjects of the housing and communal complex system, which included management companies, owners, and municipal housing funds was defined. It was this stage that determined the possibility of transition to contractual relations for the provision of housing and communal services.

2. 1999-2000 phase - this period involved work to introduce market-based payment of housing maintenance costs into the housing sector.

3. 2000-2003 phase - this period involved the following activities, among them:

- The accounting of resources consumed in the housing and utilities system;
- installation of meters for the metering of resources consumed in the housing and utilities system;
- organizing a system of contractual relations between managing organizations, owners, and contractors.

4. A newer phase of reform of the domestic housing and utilities system took place between 2003 and 2012. It included the following activities:

- attracting private investors to the industry;
- payment for housing and communal services at market prices;
- The gradual replacement of subsidies by subsidies;
- In 2005, the new Housing Code of the Russian Federation came into force;
- The Housing and Utilities Reform Assistance Fund was established in Russia in 2007.

5. The current phase of reform of the Russian housing and utility system includes the following areas (Kazanbieva, 2019, p. 85):

- The transition of the housing and utilities sector to a market-based model of relations;
- Attracting private business and private investment to modernize the industry;
- modernization of fixed assets of the entire complex of the country's housing and utilities sector;
- The formation of the institution of the effective owner;

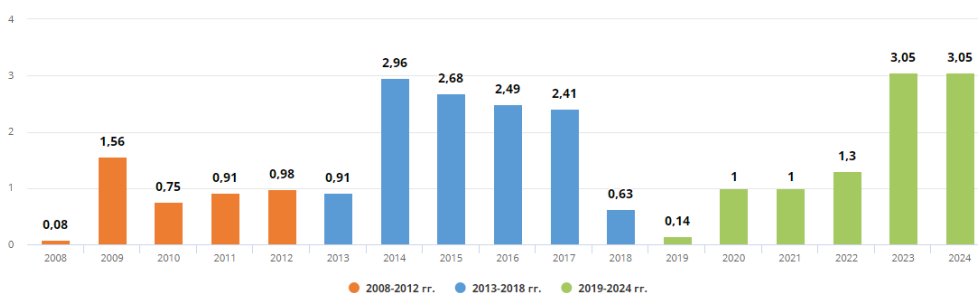
- capital repairs of apartment buildings;
- Resettlement of citizens from blocks of flats in a state of disrepair;
- introduction of energy-efficient technologies into the management system of the housing and utilities sector;
- Preservation of the social protection system for the privileged segments of the Russian population.

Of recent developments, it is worth noting that the federal project "Ensuring Sustainable Reduction of Uninhabitable Housing Stock" of the national project "Housing and Urban Environment", which is being implemented as part of Presidential Decree No. 204 of 7 May 2018, has been adopted.

Its main indicators are:

- the amount of funding for the project is 507.17 billion roubles;
- to resettle Russian citizens from emergency housing in the amount of 530,000 people;
- The implementation of the program takes place in the period 2019-2025.

The state project also aims to increase the volume of housing stock to be rehabilitated by millions of square meters. The target perspective and historical dynamics are shown in Figure 3.



**Figure 3: Resettlement of emergency housing stock from 2008 to 2018 and planned resettlement from 2019 to 2024 according to the passport of the national project "Housing and Urban Environment", million square meters.**

*(About the federal project "Housing and Urban Environment". Housing and Public Utilities Reform website)*

Also, the current stage of housing and utilities reform in Russia is its close integration with the principles and fundamentals of the digital economy. The modern stage of Russia's socio-economic development is impossible without the close impact of digitalization on many processes.

Digitalization, first and foremost, is the informatization and automation of all economic processes, which move into the physical form of digital data, the analysis, and systematization of which enable faster and more efficient development and adoption of management decisions (Turko, 2019, p. 88).

The relevance of the digital transformation of the national economic system and the housing and utilities sector is also supported by the state, which has developed the Digital Economy program.

It is important to note that further prospects for the development of utility and private company activity within the framework of making investments in information technology capital expenditures will occur only if there are concomitant factors on the part of the development of the digital economy itself and the housing and utilities sector. It is for this reason that the implementation of national projects of the state program "Digital Economy" is so important and relevant. This will confirm the cost-effectiveness of the use of budgetary resources for the digital transformation (Fezaliyev & Sa'donov, 2020, p. 400).

In addition, due to the digitalization of the economy and business activities, the proportion of information technology used is increasing, both in the management system and within accounting, auditing, and financial analysis. Thanks to digitalization, managers of organizations have the opportunity to form a system for automating the financial analysis, in particular the collection and systematization of economic information that is needed when carrying out calculations. Many existing financial analysis indicators and models can be time-consuming and complex to calculate. However, with the development of the digitalization of financial analysis processes, this shortcoming will be eliminated.

In general, the digitalization of the housing and utilities system in the Russian Federation can take place in two main directions:

1. information systems (an example is the GIS of the housing and utilities sector).
2. the internet of things (examples include an intelligent system for the remote transmission of individual utility metering, electricity metering system, cloud technology, smart home building management system, and household waste management system).

The benefits and opportunities of the Internet of Things in the utilities system that regulators and consumers may encounter include the following

- new products and services for different sectors and areas of economic activity of public utilities;
- improving the quality of existing technology products and services for the provision of housing and communal services;
- Cost reduction and cost savings for utilities in management processes and technologies.

Analyzing the foreign experience of EU countries in reforming the housing and utilities sector, however, the common characteristics were the formation of different forms of communal ownership, improved regulation, decentralization of utilities services, the connection of private providers, and informatization. In European countries, the housing and utilities sector is characterized by a variety of ownership forms. Housing co-operatives where owners and tenants live, private apartment buildings where flats are rented out, municipal houses for socially disadvantaged people, flat condominiums



where flat owners live, united in accordance with the law as Homeowners Associations.

Let us consider examples of housing and utilities reform in selected countries whose experience of using digital technologies and innovations can be borrowed when improving the domestic management system of the housing and utilities sector (Meruklov & Abakumov, 2018, p. 252).

**The United Kingdom.** At the heart of its reform of the housing and utilities system is the formation of a program of digital transformation of public administration that ensures the effective functioning of housing and utilities facilities and institutions, in particular those relating to the infrastructure of the sector. The objectives of this program are:

- ensuring the provision of digital housing and utilities services and the transparency of the administration of procedures and operation of the sector;
- Improvement of tools and processes to increase the performance of housing and utilities regulators, including the use of new management methods, improvement of technical equipment of workplaces, and development of digital tools;
- increasing the use of data, in particular Big Data, not only to ensure transparency in the provision of housing and utilities services but also to ensure an accelerated digital transformation process;
- Creating, supporting, and expanding the use of common platforms and capabilities to accelerate transformation, including the use of common templates, components, and the establishment of open standards.

An example of the use of digital technology in improving regulation of the UK housing and utilities system is Predictiv, an online platform that allows behavioral experiments to be conducted in real-time. The platform allows public authorities to test new measures of public regulation using randomized controlled trials with citizens online. In particular, this online platform can be used to:

- checking the degree of citizens' confidence in a particular measure of housing and utilities regulation;
- assessing the likely outcome of a decision when improving regulation of the housing and utilities sector;
- Determining the best choice of public policy to regulate the housing and utilities sector among the alternatives.

**Italy.** The Italian experience in regulating the housing and utilities system includes actions and programs to develop analytical tools that improve the efficiency of sector management and improve the quality of delivery of housing and utilities services to the country's citizens. Particularly since 2012, digital technology has been reliant - Big Data - which makes it possible to analyze different kinds of information to determine the right vectors of the development strategy for the regulation of the housing and utilities sector to ensure that its companies are operating more efficiently. These data sources range from smart meters in the housing and utilities system to aggregated data from business entities that are exchanged through machine-to-machine communication.

**Norway.** Its regulation of the housing and utilities system uses similar measures to those in the UK and Italy. In particular, a government online platform has been established, which aims to ensure an increase in the quality, reliability, and transparency of the provision of housing and utilities services to the population. Its special feature is that each housing and communal service is assessed along the following lines:

- The cost of the transaction - that is, the approximate cost to the government of making the service available to the end-user;
- Satisfaction of beneficiaries of housing and utilities services - assessed through an online survey;
- The degree of delivery of the housing service is the proportion of citizens who received their service among the total number of applicants;
- the level of digitalization is the proportion of the country's citizens who use housing and utility services through online platforms rather than through other means such as telephone, post, etc.

By systematizing the foreign experience of the European countries in reforming their housing and utility sector over the last 20-30 years, it is possible to identify common characteristics that are common to them:

- The main objective of the reform is to de-monopolize the market and create a free-market competition between the utilities;
- The principles of efficient management of the housing and utilities system are to minimize costs and improve the quality of the housing and utilities services provided;
- An important focus is the transfer of control of the utility system from the state apparatus of government to the municipal authorities, who often control the utilities;
- European citizens and residents have the right to freely choose their utility providers and to influence the management of apartment buildings.

Also, the most important component of foreign experience in reforming the housing and utilities sector is its digitalization. Thus, in the context of the digitalization of the housing and utilities sector, the state needs to focus its attention on the following tasks (Demenko & Tikhomirov, 2018, p. 60):

- increase the readiness of organizations and companies in the industry for the digitalization process;
- to intensify the processes of a public-private partnership system for the implementation of digital economy projects;
- intensify work on the implementation and development of a state information system for the control and management of the country's housing and utilities sector;
- Encourage activities to introduce technology to systematize and analyze incoming information to improve the management system of the housing and utilities sector;
- promote the development of renewable energy sources in Russia's energy supply system.

By systematizing the experiences of countries such as the UK, Italy, and Norway, it is possible to identify the following main areas of influence of the digital economy on the reform of their regulation of the housing and utilities system:

- Establishment of a program of digital transformation of the public administration that ensures the effective functioning of the facilities and institutions of the housing and utilities sector, in particular, those related to the sector's infrastructure;
- development of analytical tools as Big Data technology, which improves the efficiency of sector management and the quality of housing and communal services provided to the country's citizens;
- The formation of online platforms for the provision of public services in the field of housing and communal services and the assessment of the efficiency and quality of the provision of the services themselves.

Also, an important area of digitalization of the housing and utilities system regulation is Big Data technology. In our opinion, its main advantages in reforming the housing and utilities sector in Russia could be:

1. These technologies allow large amounts of data to be structured, processed, stored, and analyzed in a way that no human being can do.

2. technologies can conduct structuring of different types of content: text, graphic material, pictures, video, audio, and so on. This makes it possible to increase the toolkit of selection of information, which allows making a better assessment within the framework of regulation of provision of housing and communal services to the population.

3. the efficiency of utilities when using Big Data technology increases because:

- the needs of citizens are more clearly defined;
- assesses the actual level of satisfaction with the housing and utilities services;
- It is possible to assess whether the quality of housing services and customer care is in line with the expectations and needs of consumers;
- to generate information for the creation of new services and products for the provision of housing and communal services that will be demanded by the population.

In addition, a basic requirement for the functioning of the housing and utilities sector is the openness of information. Transparent financial relationships, availability of information on housing and utility facilities and entities, and the structure of tariffs for housing and utility services are prerequisites for the sustainable economic development of utility sector enterprises and for ensuring comfortable and safe living conditions for citizens (Voyevodkin & Devyaterikova, 2019, p. 37).

It is for this reason that the development and promotion of a digital transformation of the housing and utilities sector in Russia are of such high interest.

## Conclusions

Thus, in summarising the research, the following conclusions can be drawn:

1. The issue of reforming the housing and utilities sector in all constituent entities of Russia is one of the most pressing issues at present. This sphere is a whole complex that provides the population with vital resources, services for maintenance and repair of residential buildings, thus creating in general the conditions for a comfortable and safe living of the population. The special importance of the sphere of housing and

communal services is determined by the fact that each person is a consumer of its services, therefore this sphere is to a greater extent socially oriented.

2 Analysing the foreign experience of EU countries in reforming the housing and utilities sector, the common characteristics were the formation of different forms of communal ownership, improved regulation, decentralization of utilities services, a connection of private providers, and informatization.

3. The most important component of foreign experience in reforming the housing and utilities sector is its digitalization. Thus, in the context of the digitalization of the housing and utility sector, the state should focus its attention on the following tasks: increasing the degree of readiness of organizations and companies in the sector to the process of transition to digitalization; activating the processes of public-private partnership for the implementation of digital economy projects; stepping up work to implement and develop the state information system for control and management of the country's housing and utility sector; encouraging activities to implement the systematization and

4. Since the results of the scientific work established that the issues of reforming housing and communal services in all subjects of Russia is one of the most pressing at present, and the main direction of improving public policy strategy is digitalization, respectively, the practical value of the article is the possibility of application of recommendations at the level of housing and communal services regulation in Russia and EU countries. Further research should concern the detailed development of the strategy for the implementation of digital solutions in the state management of housing and communal services, including an assessment of the economic efficiency of the resources used. It is also important to identify possible mechanisms to activate the processes of a public-private partnership system for the implementation of digital economy projects in the sphere of housing and communal services in Russia and the European Union.

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