

# Management of reforming of housing-and-communal services

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**Abstract.** The international experience of reforming of housing and communal services is considered. The main scientific and methodical approaches of system transformation of the housing sphere are analyzed in the article. The main models of reforming are pointed out, interaction of participants of structural change process from the point of view of their commercial and social importance is characterized, advantages and shortcomings are revealed, model elements of the reform transformations from the point of view of the formation of investment appeal, competitiveness, energy efficiency and social importance of the carried-out actions are allocated.

## 1 Introduction

The entity of institutional housing-and-municipal conversions consists in change of elements of institutional system which can be carried out by legal enforcement from the state (on a centralized basis) or in case of the active involvement from economic agents (is decentral). A main goal is minimization of transactional expenses and a solution of the problem of outer effects. Distinctions in the level of economic development, industrialization and innovation of economic system predetermined several scientific and methodical approaches of system transformation of the housing sphere: French-Scandinavian (Dutch) approach and Anglo-American.

System of goals management (the French-Scandinavian Dutch approach) it is based on a combination of economic, organizational and administrative and legal methods. Such combination was aimed at formation of the competitive beginnings in housing and extension of a circle of participants of economic process. The basis of economic relations in this system is made by contractual obligations on the competitive beginnings. At the same time the state involvement to become selective, but isn't ignored absolutely [1].

The system of market regulation of housing was developed and in a consequence is realized in the United States of America. In its basis - fast transition to transmission of initiatives of revival and service of housing stock to hands of the private companies so that the housing sphere attracted to itself flows of finance from world and domestic markets of the capital under the projects having exclusively market incentives. The interference of the state in these projects shall be minimum and is justified only in relation to families with the low income (improving of quality of housing for them when lowering prime cost on it).

Therefore, the allocated options differ in formation of the different institutional structures of the housing market mediating interaction of the state and non-state, private organizations and institutions and causing his effective functioning from the point of view of compliance of result (quality and quantity) and expenses (financial, temporary and personnel).



Within the American approach the big commissions at the federal, regular or local level depending on jurisdiction under which there is a considered branch have been created. For example, the branch of water supply is regulated generally at the local level while power supply – at the level of the state. Anyway, jurisdictions usually partially coincide, and the federal government can also take part in regulation, for example, at the construction of a dam for supply with water of the large city influencing development of the state in which he is, and also on the next states. In most cases they very big, in them are developed the detailed rules of consideration of questions with carrying out the state audit including an assessment of experts and counter experts. Representing often clashing interests, decisions made by them usually are compromise and in this regard, don't satisfy any of the parties. Sluggishness of process and its bureaucratic lines were always exposed to criticism, and, certainly, comparative discredit of by these bodies which consistently destroys their image for the last twenty years can be explained with them [2].

Partially reacting to this not working capacity, the English model of regulators has been developed. The English government has added carrying out the main wave of privatization of the municipal enterprises, creation of regulators which had to be less bureaucratic and much more transparent, than in the American model. For realization of this decision in life one person bore responsibility for activity of each regulator in branches of telecommunications, gas supply, power supply, water supply and rail transportation. The idea consisted in accurate identification of the authorized officer, with granting wide independence to him, but also and imposing on him full responsibility for the made decisions that the consumer, thus, could know precisely whom to address with the complaint and whose decisions to challenge in case of disagreement [3].

## **2 Methodological approaches and analysis**

The analysis of experience of carrying out reform of housing and communal services, allowed to select three models of reforming:

1. England and Chile went on the way of complete privatization of critical infrastructure.
2. In Germany the diagram where the enterprises of branch become the joint-stock enterprises which main packet the municipality possesses is applied.
3. "The French model" assumes a combination of municipal property on objects of housing and communal services and control of them from private business on the terms of long-term lease contracts and the accompanying investment agreements.

In the general complex of problems of market conversions in the countries of Central and Eastern Europe the housing sector first appeared on the periphery of reforms. On the one hand, this results from the fact that all attention was concentrated on priority tasks of liberalization of economy, creation of multistructure forms of ownership, labor market, the capital and other structures adequate to the market. With another – the fact that in a number of the states certain changes in housing began to happen even before transition to the market. Development of market economy resulted in need of essential revising of a housing policy for all countries of the region. Reforms in the housing and communal services (HCS) everywhere became a part of economic conversions, but specific ways of their implementation depended on financial opportunities and the general course of economic reforms in this country. At the same time there are lines inherent in all post-socialist countries: shifts in structure of sources of financing of housing construction in favor of the private sector; privatization, restitution of dwellings; changes in mechanisms of maintenance of housing facilities and payment of housing and communal services, and also in mechanisms of social protection of the population on provision and the maintenance of dwellings [4].

The English experience where on reform of housing and communal services 15 years left, is very demonstrative and useful to Russia which the long period experiences reform conversions which consequences are ineffective. England long went to creation of socially acceptable and commercially attractive conditions in municipal sector. For example, in 1997 in case of labourists a ban of switch-off of services of water-supply for home customers was imposed, but the balancing decision on switching on of the amounts of an operating rate underpaid by customers was at the same time made. The

investment and tax model of an involvement in reforming of households, complexes and infrastructures was formulated. One more important lesson of municipal reforms in England - transfer and combining hundreds of municipal water utilities at first in property of ten regional state companies and their subsequent privatization. Before privatization, the state wrote off all debts of the municipal enterprises, footed the bill on coercion of property in up state, carried out its certification and setting on balance.

In the majority of the European countries, municipal infrastructure isn't transferred to a private property, and, remaining municipal, is exploited by private operators on terms of the contract of concession.

After the reunification of Germany of 15 large regional energetic plants shall be transferred to private enterprises of power supply from West Germany in its east part. The federal government considered that such method of restructuring will provide stable financing not of new housing-and-municipal infrastructure [5].

Approach in Germany is connected to features of the constitution in which the considerable power belongs to the regional governments and governmental bodies on places. Development of regulators at the different government levels became the result of existence of such hostess system. For the enterprises of water-supply and water disposal which generally are local monopolies it doesn't create big problems. For more difficult and large systems, such as system of electrical power supply, there is a tangled stranding of various instructions of different regulators that does a situation especially difficult for potential competitors. According to the German legislation all managing directors of firm are obliged to undergo the audit inspections with the right of an independent choice of the organization auditors. The union of housing firms of lands Berlin – Brandenburg (Verband Berlin-Brandenburgischer Wohnungsunternehmen) is at the same time branch combining of housing firms, and also the consulting and auditor company for the members. The union has the electronic database about the federal and land legislation in the housing sphere which is quarterly updated [6].

The French model is the most centralized. Most of the municipal enterprises were in state ownership not so long ago (the branch of telecommunications has opened for private investors and the competition in 1998). Until the end of the eightieth these state corporations have been directly subordinated to the ministry, the board of directors was appointed generally by the government, thus, political intervention was the rule. Anyway, this discretionary power has been actually strongly limited to existence of big and competent bureaucratic managements at the level of the ministries and high competence of managing directors of the state enterprises as well as presence of influential groups of interests for verification of their decisions (generally labor unions). Nevertheless, political intervention slows down normal decision-making process, and projects of reforms on creation of regulators in which the question of level of their independence is discussed are already prepared. The situation which has developed in branches of water supply and water disposal partially differs as the enterprises of these branches are the local monopolies which are in the basic under control of local governments and operated in most cases under contracts of concession (though is as well the state managing directors). But even in these branches, decisions of local regulators are rigidly limited to the rules of the game (an example can be standardization of contracts and rules for their acceptance) developed at the level of the central government.

In the countries with the developed market economy, with a long story of universal providing utilities to consumers, including those who experience economic difficulties as have shown the conducted researches that there are possibilities for modernization of housing-and-municipal infrastructure, improvement of quality of services, reduction of the size of tariffs and increase in the common consumer advantage [7].

Experience of institutional transformations in the Netherlands is of the greatest interest as, according to many authors, conditions of development of the Russian economy correspond to conditions of introduction of this housing system. Three tasks on which institutional transformations were based on the housing market have been defined:

- 1) care and providing with necessary housing;

2) protection of the acceptable quality of social housing (there was a change of the concept of quality of housing which includes the concept "made habitable the residential district");

3) availability of housing.

The system of goals management defined housing system which foundation has been laid in 1901 with adoption of "The housing law". Many experts in the right call this document the most important in process of improvement of residential system as he has designated global complex changes: he has marked transition to regulation of private initiatives by the Central Government, provincial and municipal authorities.

The social problem was a priority component of transformations of housing system, and therefore her decision logically laid down on shoulders of bodies of local self-government. In this regard the law defined that care of housing for the poor admitted an obligation of the state: The central Government took the responsibility to provide subsidies for construction of the social rented housing, so other way of financing at the established rules was inaccessible. The law has entered the quality standards of such housing to provide long duration of use of new housing stock in the long term, and has obliged municipalities to exercise control of their observance, being guided by construction rules, having allocated municipalities, thus, with one of important functions of management.

Then rules of intervention of the Government to the sphere of housing construction have been for the first time legislatively approved, duties and responsibility of all public and private parties operating in this area are defined. Since then the Central Government together with provincial and local authorities played an escalating role in the housing sphere [8].

During all post-war period the Government has allocated priority line of conduct subsidizing of operating costs in the social rented housing, covering a difference between the actual expenses of house owners and controlled level of the rent. It allowed to realize in practice the main task at that time: volumes of social housing construction became much higher than private. Thus, it is central adjustable construction process I have allowed to realize the large housing program on a covering of deficiency of housing: from 1947 to 1992 housing stock of the country was replenished with 4 million dwellings, and the total of houses and apartments has made 6 million and approximately was made even to number of households. The role of the state in provision of housing for all population has been enshrined also in the Constitution which 2nd paragraph of Art. 22 says: "To promote the population sufficient housing is care of the government".

In general management of housing represents complex system in which separate decisions are made at various levels presented by the state and the private sector.

The central Government defines policy of housing construction in general, allocating the main key moments by which all subordinate levels at protection of own interests have to be guided.

At the level of 12 provincial administrations regional plans which defined placement of new housing construction and infrastructure have been developed. In a consequence municipalities were guided by them by drawing up plans of zoning.

Municipalities own in the majority of the cities only territories under roads, squares and parks. Therefore, any town-planning projects begin with repayment of the earth by municipality at the private owner, her engineering training, the equipment under construction and the subsequent sale or delivery to builder for long-term rent.

The municipality rather freely disposes of the budgetary grants arriving from the center. The administration of the large cities (with the population more than 30 thousand people) has the right to solve, where to allocate the received funds: on provision of housing for the population with the smaller income or on stimulation of construction of private housing for own accommodation of owners. On a covering of the expenses connected with development of adverse territories, or on decrease in the rent in the central reconstructed regions. Small municipalities submit to stricter rules of an expenditure [9].

The municipality is allocated one of effective tools in realization of housing policy - registration of persons in need and granting social housing. According to requirements of the municipal law the city authorities have the right to establish the quality standards and the number of social housing. They have

to distribute him on the basis of announcements in the special free newspaper publishing the short information about all the subsidized houses and apartments which have again come to the local market.

Such forms of municipal associations in housing and communal services as the housing corporations operating by rules are typical for the European countries:

1. they have an opportunity to use the got profit for granting the credits to less successful corporations;
2. they can spend means for construction of expensive own housing;
3. Housing-and-communal complex is in advance obliged to develop the annual action plan answering to policy of municipality.

Actions of housing corporations are corrected not only "from above", but also from the public organizations uniting separate groups of the population on social and demographic signs. In the 80th years most such organizations have united in the Housing confederation getting financial support from the government. The role of commercial house owners is small; they own less than 1/4 housing. Large private house owners, the pension funds, insurance companies, banks are owners of better and elite housing.

### 3. Results

In Russia application of the Netherlands-Dutch experience of management of housing with direct assistance of the housing companies has extended. At similarity of a condition of the housing sphere at the moment, the economic, financial and social spheres which are directly connected with housing system are in the mentioned countries at higher level of development, than in Russia. It allows, more effectively to solve problems of housing and communal services. The large role in it is played by development of bank branch and the financial market, the insurance market, existence of the state guarantees, and also the standard of living of the population and so forth [10].

Thus, efficiency of the transformations which are carried out the reform in housing and communal services can be reached at a possibility of creation and realization:

1. the investment-tax mechanisms directed to enterprise appeal of this sector of economy to the purposes: constructions, reconstruction of housing-and-municipal complexes, farms, housing-and-municipal infrastructure, with attraction to participation of natural and/or legal entities, establishment of public-private partnerships, other legal forms in compliance to the law of the country of application;
2. economic incentives of improvement of quality of works and services in housing sector for the purpose of the fullest providing the accounting of interests of the population in the solution of questions of housing-and-municipal sector;
3. marketing maintenance by management of housing-and-municipal complexes, farms, housing and communal services;
4. effective innovative and technological administrative decisions;
5. available tariffs, a possibility of their choice, proceeding from preferences and the consumer's opportunities;
6. obligations of the company which is carrying out kinds of activity in the housing and communal services directions to obtain the license or to consist in membership of self-regulatory organizations, depending on requirements of the legislation of the country of establishment of a company and/or the place of implementation of activity by the company;
7. systems of insurance, reinsurance;
8. systems of vocational training, professional development, certification of shots;
9. measures for granting to socially not protected categories of citizens of preferential terms for payment of housing and communal services;
10. measures for strengthening of payment discipline;
11. protection of the property rights (including during creation of inseparable improvements) and guarantees of appropriate consideration of a dispute.

Besides, insufficient security increases risks of participants of economic activity and limits possibilities of their positive response to the undertaken housing reform. If the private sector is involved

in providing utilities, then the rights providing possibilities of receiving and free use of the income from effective activity have to be guaranteed. The high risk of expropriation of a quasi-rent by the government, can lead to unwillingness of private investors to receive concessions on management of the companies. It is especially important for branches of housing and communal services as here it is supposed to direct considerable and long-term investments. The problem also arises in case of providing "the vital services" by the municipal enterprise which is in state ownership. For creation of effective incentives by the managing director and worker, they have to have the right for a part of the income from increase in productivity and quality of work [9].

Efficiency of a management system, depends on regulation of the relations in the market of housing and communal services, and not just on the only administration or the ministry. Discretionary changes in agreements (for example, change of some purposes specified in the contract, or its duration) have to be approved by different institutes (for example, legislative and executive, or two chambers of parliament) and can be challenged in courts or the similar organizations. For example, in the independent Committee which is responsible for competition development.

In those branches in which concentration of a rent is high that is where assignment of an economic rent is controlled by limited number of subjects and her sizes are high, it is more difficult to carry out reforming.

Level of credibility to institutes as one of the main difficulties of functioning of the market of housing and communal services and involvement of the private companies to participation in supply of consumers with the main utilities, agreements which consider needs of those who can't pay the bill are (disabled people, pensioners, large families, etc.). The main complexity – determination of the status "economically insolvent" subjects of the market in contractual agreements.

Two approaches tending to reduction of the uncertainty created by mutually excludability of requirements of efficiency and the social equality shown to the state municipal enterprise were outlined. It can be carried out by means of the procedure of the self-choice within which the menu of tariffs which they can choose, proceeding from the opportunities is offered to users.

Within other approach applied by the government of Germany (and to a lesser extent in recent years the government of France), it is offered that suppliers of the vital services shouldn't resolve issues of social equality. The vital needs, consumers who can't be provided owing to the social difficulties realized by special services [10].

The payment discipline which is a result of compliance of tariff policy to threshold values of ability and readiness of the population to pay for housing and communal services, defines financial stability of housing and communal services and its appeal to private business, and eventually, reliability of work of all life support systems.

Level of payment discipline acts as an unrecognized integrated indicator of success of housing reform. If he significantly lower than 95% and losses from a shortage of payments can't be compensated neither from tariffs, nor from the budget, then business in housing and communal services becomes unprofitable, and objects of housing and communal services degrade from incomplete repair works.

The econometric analysis which is carried out by I. Bashmakov has shown that the key factor defining discipline of payments are even not tariffs, but the relation "payment for housing and communal services/income". To the first threshold - 6-7% - the gap between them depends on degree of rigidity of work of the housing and communal services enterprises for increase in a collecting and on collection of debt for housing and communal services, on "appeal of the housing real estate" and on quality of housing and communal services. In process of approach to the second threshold – 15% - even very drastic measures on increase in a collecting don't yield practical results. That is increase in loading on payment of housing and communal services at approach to the second threshold leads to such decrease in payment discipline that it isn't possible to restore it any measures any more [11].

The share of expenses on housing and communal services on average the income, equal 6-7%, is the not only Russian, but also universal international threshold of solvency providing a high collecting of payments for housing and communal services.

Institutes allow to solve, in particular, coordination problems and problems of cooperation.

#### 4 Discussion

Effective implementation of obligations in the market of housing and communal services is influenced by the following factors:

1. Reliability of obligations. The concept of reliability of obligations is often mentioned in connection with emergence of the contract relations and has a set of various values. In the real context specific guarantees which contractors provide by the conclusion of the contract for ensuring reliability of obligations of performance of terms of the contract mean. Most often, this aspect joins from the managing director, practically always in connection with participation of the private company. Are typical the pledges demanded from bidders for the right of obtaining the contract, which: guarantee gravity of intentions of participants and are a signal that participants will satisfy terms of the contract throughout all term of his existence.

2. Scheme of providing information. Information procedure for granting (with the indication of the main types of sources of the provided information), for example, in the form of annual reports, data on results of carrying out the independent audit inspections has to be in an explicit form stated in contracts, and also powers of regulator on obtaining information from the managing director, etc. are designated. The schemes of pricing described earlier are only one of ways of obtaining similar information. For example, presence of the H-factor at the scheme of establishment of limit of the price demands clarification of data on opportunities of managing directors to increase over time overall performance of the enterprise.

3. Stimulation mechanisms. Incentives are a component of the scheme of detection of information. For example, stimulation of workers to application of great efforts gives an idea of potential increase in labor productivity. First, there are incentives which are a component of the contract relations and provide creation of motivation for increase in overall performance of the enterprise in general.

Permission to foreign investors to take out the profit got as a result of work on the contract of concession in branches of water supply and power supply of Argentina has served for them as an incentive to increase in overall performance of firms. Similar to a possibility of the company operating system of water supply in Abidjan to gain income from collecting payment for services, is for her an incentive to collecting payments. On the contrary, the fact that remuneration of employees of the company on collecting payments for services in water supply in Mexico City doesn't depend on the raised funds doesn't stimulate them to carrying out the accounting of water consumption and effective control behind him. Besides, there are systems of the incentives created for motivation of the reforms serving to acceptance and/or to increase in productivity in the existing organization. Transition from public administration by the enterprise for water supply to Conakry (Guinea) to management at which dominating there are private interests, meant considerable reduction of number of personnel that has become possible, on condition of granting dismissed essential monetary compensation. The state enterprise which is responsible for system of water supply in Santiago (Chile) constantly increases overall performance. It is one of the best in this branch in South America and can bear comparison with the most effective systems functioning in the countries with the developed market economy thanks to the stimulation mechanism tying the income of managing directors to results of work of firm, and a salary of workers to increase in productivity.

4. Mechanism of settlement of disputes. Inclusion in contractual agreements of points defining an order of settling of conflict situations is necessary as it can reduce substantially uncertainty level in the relations between contractors (though there can also be relevant institutes for permission of these problems). In connection with the characteristics of the "utilities" provided in the considered branches it is impossible to avoid high risk of the state intervention in an order of settlement of disputes that increases randomness of decisions. Inclusion in the contractual agreement of points providing a possibility of settlement of disputes in the form of arbitration, avoiding games of politics, can strongly reduce risk of politicization of the contract and reduce transaction expenses. Inclusion in the contract of the agreement that in case of a conflict situation for settlement of dispute before application of other procedures the arbitration commission will be created can be one of similar points, one of members of which gets out the operator (even if this state enterprise), another – the government (it is desirable

independent government instance, for example, judicial), and the third – by agreement. The similar mechanism of settlement of disputes is often used in Germany and in the Scandinavian countries.

The model of effective management increases relevance of institutional transformations of the housing organizations. They are designed to reflect formation of modern mechanisms of management for the purpose of decrease in expenses, first of all financial, when granting housing and communal services. The main goal of institutional transformations consists in demonopolization of service and formation of the market of housing services. Contractual agreements which would promote increase in action of competitive forces have to be developed.

Example of existence of the competition in branches of water supply and water disposal when providing local services is Paris where the competing suppliers are responsible for rendering of services in a certain territory. This mechanism shows satisfactory results. Competitive pressure can take place at delivery. As supply of water can be easily decentralized and organized at the local level, there is a possibility of comparison of work of the enterprises, despite the available distinctions, for example, in water sources, her quality, seasonal changes. In a bigger degree it belongs to water disposal. Contractual agreements have to contain points imposing responsibility for providing a regularity of delivery of services on suppliers. It means accurate statement of the tasks connected with maintenance of network in working order and creation of the service which is engaged in satisfaction of the complaints arriving from consumers, establishment of terms of carrying out the main repair, etc. Ensuring reliability of these obligations requires accurate determination of criteria of their performance, for example, concerning carrying out repair and opportunities of their application by inclusion of points according to which considerable penalties can be imposed on performers.

## 5 Conclusions

Thus, the formation of bodies of regulation is decisive a condition of reforming of the municipal enterprises providing "the vital services" to households. Characteristics of regulator have crucial importance for successful carrying out reforms, especially if it is necessary to avoid expropriation of a rent. In most cases in the considered branches various forms of regulation, for example, economic regulation, or connected with ensuring purity of the environment, and regulation, achievement of social justice are applied. In the different countries the forms of regulation are applied. From here the strategy of the housing and communal services institutional transformations has to include:

1. audit of housing and communal services (completely or on separate components: housing stock, routes and highways of heat and water supply, personnel, system of staffing, control system and so forth);
2. forecast of tendencies of dynamics of development and activity of housing and communal services and social and economic consequences;
3. definition of priorities;
4. development of the concept;
5. model of effective management;
6. drawing up action plans.

## References

- [1] Meshcheryakova T 2017 *MATEC Web of Conferences* **106** 06021
- [2] Miroshnikova T and Taskaeva N 2017 *MATEC Web of Conferences* **106** 08093
- [3] Kisel T 2017 *MATEC Web of Conferences* **106** 08094
- [4] Ćetković J, Lakić S, Knežević S, Žarković M and Sazonova T 2016 The use of Transaction Costs Theory in Interorganizational Design *MATEC Web of Conferences* **53**
- [5] Ćetković J, Rutešić S, Žarković M, Knežević M and Nikolay V 2015 Primary directions and advancements in competitiveness of Montenegrin construction sector *Procedia Engineering* **117** pp 780-790

- [6] Četković J, Knežević M, Žarković M and Nikolay V 2015 Institutional framework, current investments and future strategic direction for development of construction sector in montenegro *Procedia Engineering* **117** pp 642-650
- [7] Rutešić S, Četković J, Žarković M, Knežević M and Nikolay V 2015 Analysis of the Situation in Montenegrin Civil Engineering Sector from the Point of Application of National Regulations and the EU Technical Standards in Construction, *Procedia Engineering* **117** pp 905 –915
- [8] Knežević M, Četković J and Žarković M 2015 Economics of transaction costs and its implications on modern interorganizational design *Wulfenia* **22(4)** pp 514-524
- [9] Četković J, Knežević M, Žarković M, Murgul V and Nikolay V 2014 *Applied Mechanics and Materials* **638-640** pp 2465-2470
- [10] Četković J and Žarković M The key challenges of future path of globalization in the world economy *Intellectual Economics* (Vilnius, Mykolo Romerio Universitetas) Vol. **2(14)** p 7-17 ISSN: 1822-8011
- [11] Jevrić M, Knežević M, Kalezić J, Kopitovič-Vuković N and Čipranič I 2014 Application of fractal geometry in urban pattern design, *Technical gazette*, Vol **21**, 4