

Trends in spatial planning of cities

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Abstract. The global trends of the modern development of urban planning activities are directly related to the theoretical and practical foundations of spatial planning of territories. In Russia today, the acute question is the interrelationships and contradictions of spatial and territorial views on the development of cities. There a lot of official discussions of the prospects for the implementation of such documents as a strategy or concept of spatial development in the professional research and scientific design community. The questions of master plan for the development of the territory, a comprehensive scheme for creating a comfortable environment are increasingly being raised also. The necessity and opportunity of replacing the master plan of the city with a spatial planning (or their symbiosis) is on the discussion at the federal level. The relevance of the research is determined by the need in the Russian theory and practice of urban planning to develop scientific and methodological foundations of spatial planning of urban development. The purpose of the work is to determine the types and role of spatial planning documents in the system of modern domestic urban planning activities.

1 Introduction

Modern global requirements and trends, along with the provisions of priority national target documents, dictate the need to apply advanced spatial planning and development management projects for territories not covered by the regulatory requirements of federal legislation (the Urban Planning Code of the Russian Federation) [1-3]. Such projects should be maximally focused on predicting probabilistic development and be more flexible than territorial planning documents. The result is the approval by many cities and regions of the following projects or strategic urban planning models: a concept or strategy for spatial development; a master plan for the development of the territory; a comprehensive scheme for creating a comfortable urban environment [4-6].

Today, the terms "spatial" and "territorial" planning are used by the authors in scientific, educational and professional publications, in project documentation as synonyms. A similar situation is with the terms "socio-economic" and "spatial" development, with the name of the

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projects themselves of the spatial organization of the territory. In this regard, there is a need for regulatory consolidation of both these terms and new types of urban planning documents.

In accordance with the stated goal, the objectives of the study are: to study and systematize the domestic experience of developing strategies, documents, projects and concepts of spatial development of cities with millions of people as leaders of progressive urban planning; to identify promising tasks and directions for the development of theory and practice of urban planning; principles of urban planning theory, world practice of territorial and spatial planning of urban development, some principles of systemic, strategic, socio-ecological, civilizational approaches, as well as methods of comparative analysis are involved. The practical significance of the work lies in the possibility of using the obtained research results in the formation of normative legal provisions on spatial planning of cities. The study is applicable in the development of documents for urban development of municipalities, in the educational process in the areas of training specialists, bachelors and masters "Architecture" and "Urban Planning".

2 Spatial planning of cities

The term "spatial planning" itself was introduced into the sphere of territorial development relatively recently. It was first officially used in 1999 in the international document "European Spatial Development Perspective" [7]. In 2000, at the 12th session of the CEMAT (CEMAT – European Conference of Ministers responsible on spatial (regional) development (planning)), the document "Guiding Principles for Sustainable Spatial Development of the European Continent" was adopted [8], which laid the foundation for understanding the fundamentals of strategic spatial planning. The following architectural and planning terms are actively used in this document: cultural diversity; natural and cultural heritage; natural and cultural landscapes; urban and rural areas; mountains, coastal and island regions; flood plains and water meadows. It also contains terms of strategic orientation: integration; mutual assistance and co-operation activities; competitiveness; balance of conditions; multiplication and protection of natural resources; eurocorridors; border regions and the like [9].

The general definition of the term "spatial development" is given in the 2008 Regulation on spatial planning of the United Nations Economic Commission for Europe "Spatial Planning: Key Instrument for Development and Effective Governance with Special Reference to Countries in Transition". According to this document, spatial development is considered as changes in the distribution of activities in space and the linkages between them through the conversion of land and property [10].

Within the framework of the UN Conference on Housing and Sustainable Urban Development (UN-Habitat III), it is noted that spatial planning should cover all levels of planning. At the same time, the concepts of urban and territorial planning are used as "a decision-making process aimed at the realization of economic, social and cultural goals using spatial representations, strategies and plans ..." [11].

In Russia, since 2019, the provision on spatial planning of the territory has been an integral part of every strategy for the socio-economic development of each subject of the Russian Federation. This is provided for by the Spatial Development Strategy until 2025 (approved by the Decree of the Government of the Russian Federation No. 207-r dated February 13, 2019).

Sections of socio-economic development strategies devoted to the spatial organization of the territory have also been developed in the cities of Moscow ("Spatial development and quality of the urban environment"), St. Petersburg ("Spatial and territorial development"), Yekaterinburg ("Spatial Development Strategy"), Ufa ("Spatial development"), Samara ("Spatial development and formation of a creative urban environment", "Urban ecological development"), Voronezh ("Main directions of socio-economic policies in the field of spatial

development and improvement of the quality of the urban environment"), Perm ("Spatial development"), Omsk ("Spatial development"), Volgograd ("Spatial development and quality of the urban environment"), Krasnodar ("Issues of spatial development" – draft Strategy for socio-economic development, Ernst & Young Consulting company, 2020).

Concepts (strategies) of spatial development of the city as independent documents of strategic urban planning in domestic practice are few and may differ radically.

For example, the Spatial Development Strategy of Yekaterinburg calls the following architectural and spatial elements basic: architectural ensemble, identity of urban spaces, the appearance of the city, the silhouette of the building [12]. "Spatial development" of Ufa provides for elements of strategic urban development: cluster growth points, urbanized and undeveloped territories, urbanized and natural frameworks. "Spatial development" of Omsk uses the following concepts: public participation, values, innovative potential, industrial traditions, identity and uniqueness, identity, active and calm territories, informal urban area, aggregated emotional assessment of residents, scale of emotional perception [13].

The definitions of the term "spatial development" are also different in these documents, which characterizes different types of planning and approaches to the organization of the city.

The concept (strategy) of spatial development of the city should be considered as a document of strategic urban development. It should determine the form of the spatial organization of the economy and the spatial planning structure of the city, taking into account the innovative and socially-oriented orientation, determine the role of the city in the regional and local settlement system. This document should take into account the formation of socio-economic, new industrial, socio-cultural and natural landscape complexes and clusters; the development of territories based on partnerships.

3 "Master plan" of territory development

In recent years, the term "master plan" of territory development has been increasingly used in Russia in relation to the spatial organization of cities. There are many scientific publications, professional forums and other events have been devoted to the topic of transition from general planning to master planning in the domestic practice of urban planning.

Among them it should be noted: the IV Moscow Urban Forum (Moscow, December 2014); the round table "Master Plan and (or) Master Plan" (Russian Academy of Architecture and Construction Sciences together with the Federal State Budgetary Institution "Central Research and Design Institute of the Ministry of Construction and Housing and Communal Services of the Russian Federation" and the Institute "Giprogor", Moscow, March 2019); research the work of KB-Strelka "Strategic Master Plan: a tool for managing the future" (Moscow, 2014); issue of the periodical scientific and professional journal "Urban Planning" (Russian Academy of Architecture and Construction Sciences (RAACS) and the Institute INTPI, No. 3(61) 2019); webinar of the Ministry of Construction of Russia "Master plan as a tool for synchronizing national projects on the territory of the settlement" (April 2020) and many others.

Master planning for the development of new planning units and facilities is widely used in modern foreign and domestic practice in many cities [14-16]. Today, master plans are also being actively developed in order to implement municipal, regional and national sectoral strategies, as well as programs for holding major events [17-19]. The situation is different with regard to the development of master plans of the cities themselves [20-22].

Master plans of two cities (Perm and Omsk) from 16 Russian cities of millions are presented on public Internet resources. The strategic master plan for urban development of Perm "Transformation of the city" was prepared in 2010 by the Dutch architectural bureaus "KCAP Architects& Planners" and "Bureau Alle Hosper", and the Finnish company "Pöyry

Infra Oy". It is characterized by a conceptual variable basis "both for the political course and for private initiatives." The master plan includes the following urban planning strategies: red and green zones, landscape and environment, development priorities, transport, public spaces, mixed use, neighborhoods, heritage, peripheral territories [23].

The master plan for the development of Omsk was prepared by ITP Grad as part of a private initiative. It is an open strategic mechanism for socio-economic and spatial planning and management of the city's development, taking into account the formation of its identity through urban values and the active involvement of residents. An important material in it is a mental map of Omsk with an aggregated emotional assessment of residents of informal urban areas or a scale of emotional perception of the city's spaces. The developers position the master plan as "an advanced expression of a high urban mission that meets the social demand of residents and carries the idea of economic growth." Also as a creative laboratory that systematizes and aggregates various opinions on the development of the territory, including the opinions of residents, professional and scientific and educational communities [24].

The city authorities of Kazan are currently developing a "Model of the city's identity" based on historical, cultural and material heritage." According to the analysis of world and domestic experience, the master plan for the development of the city is a document of architectural and spatial development aimed at the population - a non-professional person; a document of initiative spatial planning. It should form the figurative identity of the territory, the unique and recognizable appearance of populated places and inter-settlement territories and their artistic and aesthetic expressiveness.

4 Comprehensive scheme of landscaping and creating a comfortable environment

Specialists are also considering a comprehensive scheme of landscaping and creating a comfortable environment as a new type of spatial organization of the territory project. The general scheme of complex landscaping as an independent urban planning document of long-term planning was adopted only in Moscow. Short-term improvement programs have been approved for all million-plus cities as part of the implementation of the priority national project "Formation of a comfortable urban environment".

The Urban Environment Quality Index sets the main targets and criteria for evaluating the implementation of this national project. It takes into account 36 indicators with a value from 0 to 10 points. The indicators of the cities index are focused on 6 spaces (housing and adjacent spaces, public and business infrastructure and adjacent spaces, street and road network, social and leisure infrastructure and adjacent spaces, green spaces, citywide space) and 6 evaluation criteria (safety, comfort, environmental friendliness and health, identity and diversity, modernity and relevance environment, management efficiency). It should be noted that comprehensive documents that take into account the indicators of the urban environment quality index are currently missing.

An analysis of world experience shows that Complex schemes for creating a comfortable environment should be aimed at creating a comfortable, safe and well-maintained urban and rural environment; housing stock; models of landscaping and landscaping infrastructures; non-capital construction objects, small architectural forms [25-26].

5 Conclusion

The accumulated experience of introducing and using advanced technologies in the field of spatial planning and management of the development of territories requires a revision of the

provisions of the general theory and practice of urban planning and the formation of a new section - "spatial planning".

This section of urban planning should include a system of progressive terminology, current concepts, theoretical models, principles, techniques and methods; be based on the latest innovative principles of goal-setting, forecasting and implementation of sustainable development of territories. It should cover the basics of strategic urban planning, modeling the figurative identity of the territory, architectural and spatial planning [27-28].

The concept or strategy of spatial development, the master plan for the development of the territory, the integrated scheme for creating a comfortable city environment become the basic documents for spatial planning and management of the development of territories. In this connection, it is necessary to formalize them in the Urban Planning Code the Russian Federation, and to determine the role of each of these documents. It is necessary to develop spatial modeling as a basic tool for feasibility studies of the development of territories, taking into account the world experience of master planning.

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