

## PROCEEDINGS ARTICLE

# Urban Renovation: Urban Planning Heritage Concepts and "Associated" Regulations

Irina Kukina<sup>1,2,\*</sup><sup>1</sup>Scientific Research Institute of the Theory and History of Architecture and Urban Planning, Branch of the Federal State Budget Institution "Central Scientific-Research and Project Institute of the Ministry of Construction of the Russian Federation", Moscow, Russia<sup>2</sup>Siberian Federal University, Krasnoyarsk, Russia

## ABSTRACT

This article describes the attitudes to urban regulations. The history of urban planning as a broad professional activity begins with the concepts of restructuring (renovation) of an industrial city at the end of the 19th century. The concentration of ideas in various fields of knowledge, futuristic projects, theories, concepts, conferences, exhibitions and congresses lead to the provisions according to which the city should develop. There is a "testing" of concepts, which caused criticism and resistance from the professional community and citizens, a wave of fundamental understanding of what a "city" is. The global economic crisis of the late 1980s and the latest technologies bring down the methods of production and release urban creativity, focusing on the foundations of human existence. The minimalist concepts of the beginning of the century are given a new interpretation, while retaining their essential meaning: functionalism of the territories, self-sufficiency, logical division of the city structure, multifaceted connectivity, accessibility and polycentricity, expressed in architectural images. The renovation of cities is guided by 'associated' norms and standards.

## ARTICLE DATA

## Article History

Received 6 January 2022

Revised 12 January 2022

Accepted 25 November 2022

## Keywords

Renovation

Regulation

Associated norms and standards

## 1. INTRODUCTION

Urban planning, as a widely recognized activity, traces its roots to the concepts of industrial renovation in the late 19th century. By accumulating different scientific ideas, futuristic projects, theories, concepts, landmark conferences, exhibitions, and congresses, there occur certain rules to be used when developing the city. There is "testing", a wave of insights of what a "city" is. The concepts are criticized or even rejected by the professional community or the citizens. The second half of the 20th century involves large-scale building, remarkable development of old cities, as well as of the emerging new ones. The general urban layouts are taken by similar planning: neighborhood unit (United States), community (United Kingdom, Northern Europe), micro-district (Union of the Soviet Socialist Republics<sup>1</sup>, Eastern European countries) and working

unit (People's Republic of China). These concepts have held sway over many countries of the world [1].

In Russia, as well as in other countries, this very time was also notable for the urban planning regulations. Nationally, they are minimalistic, and obligatory for both designers and builders. It should be noted that despite a laconic character of the building norms and regulations, they were formulated by several scientific institutes, so each code resulted from the tests and calculations of hygienic, social, natural and climatic, technological, and real basis of building and design activities. Despite sometimes excessive architectural modesty in most Russian cities in the latter half of the 20th century, there were healthy living conditions, available zones and systems for the "readily-reached" recreation, transport and cultural infrastructures. By the force of rule-based building of educational, medical care, cultural, facilities and etc., the cities became territories of social assurances [2].

1. Country existed from 1922 – 1991.

\*Corresponding author. Email: [ikukina@inbox.ru](mailto:ikukina@inbox.ru)

© 2022 The Authors. Published by Athena International Publishing B.V.

This is an open access article distributed under the CC BY-NC 4.0 license (<https://creativecommons.org/licenses/by-nc/4.0/>).

Urban development at the end of the 20th and beginning of the 21st century experienced a smooth turn from large-scale construction to reconstruction, renovation of current buildings, and efficient use of the territories. The global recession of the late 1980s, and cutting-edge technologies destroyed the purely production mode and released the urban creativity, focusing on the very essence of the mankind. The opening minimalism is re-interpreted, while retaining its essential meaning: functionalism of the territories, independence, logical layout, complex interconnection and accessibility, and visual polycentricity.

Over time, it became clear that urban reconstruction means urban development, which does not always involve expansion, but rather preservation and adjustment of the urban body. There are urgent issues of how to integrate new, often high-density building ensembles, into the urban monographic, previously conversion premises, replacing dilapidated residential buildings. The Urban Planning Code of the Russian Federation has been enriched by the Articles in *Integrated Development of the Territory* (IDT) as the main mechanism for ensuring "balanced and sustainable development of settlements and urban districts by improving the quality of urban environment" ([3], paragraph 1, article 64). Practically, it means the extension of renovation, used earlier in Moscow, to all federal entities. Having lost the definition of "sustainable", the idea of "integrated development of territories", introduced by the Federal Law No. 494-Φ3, unites previously separated concepts of "built-up areas development", "integrated development" and "integrated land planning and management" into a single urban planning activity.

Such strategic turn in architectural and urban planning activities towards creative transformation of urban space is supported by fundamental research in both theory and practice: in urban planning and advances in analysis and spatial modeling of the real functioning of living areas, and morphological studies.

## 2. GUIDING SPATIAL STUDIES TO MEET THE INTEGRATED DEVELOPMENT

The legal model of the country appears to be essential when investigating complex goals of reconstruction and renovation of settlements, increasing efficiency and reasonable use of territories, or improving the urban environment. A special role is given to expert opinions, grounding trend-setting aspects, discussing provisional clashes and definitions that impede architectural and urban planning creative activity.

The functional and planning analysis of the city, based on urban morphology studies, permits identifying the

areas for the integrated urban development and clarifying the criteria on which they are included in the renovation or reconstruction zones. This method embraces the density analysis: buildings, road network, territory's functions; changes in building forms, and their chronology, architectural typology; forms of land use and landholding [4].

## 3. IDT AS A RENOVATION TOOL

Among the expert community, there is no compliance with the Urban Planning Code in interpreting the Articles of *Chapter 10. Integrated Development of Territories* ([3], chapter 10). The following supposedly re-activated clauses are being critically discussed:

*Projects on integrated development of the territories are open for the urban areas with no troubled facilities in conformity with the law.* This proposes to mark the "urban areas" (territories) to be renovated, but the criterion is still the absence of "troubled facilities". There are no territorial quality criteria: the right to approve specific criteria is given to the federal entities, and they are fully related to the "objects", i.e. the state of blocks. The current land surveying system, as we know, intensifies this problem by the fact that the neighboring residential buildings, being exploited in different ways, are often physically incomparable. Regarding that the areas, which fall within the integrated development were, in most cases, demarcated after being built-up, and they can have undemarcated parts, i.e. used spontaneously by the urban citizens and not subjected to any treatment rules and liability. This means that there is no way to think of any architecturally comfortable environment in "neutral territories".

Given the vagueness in the types of layout elements and the ambiguity of boundaries determination, extended parts of the urban building can match the purposes of the integrated development. In fact, in wider sense, the urban renovation affects much more territories, with very different functions and belonging to different zones in the general plan, than simply "outlining" the territories with a big share of troubled facilities.

*The decisions made earlier in the documents of territorial planning and urban zoning can be defied.* Practically, the development area planning is given priority in relation to the general plan and the rules of land use and building. The law enables public consideration of the IDT draft and the resultant draft amendments to the general plan, both at the same time. Unfortunately, the parameters of cross-border areas in this case remain beyond any analysis. For this reason, Russian cities increasingly more resemble a

patchwork, and it seems, one can assume to voluntarily adjust something, but it is not easy to coordinate multidirectional goals. Exactly by analyzing the public opinion, these optional, but highly recommended criteria for the living space, could be developed and applied through "associated" regulations; the package would be more of a strategic character.

There are also other objects of criticism: poor urban planning nature of IDT projects; violation of property and housing rights of the citizens. Thus, the ejection, justified to troubled buildings due to the danger of using, to other properties, mismatches the principles of protecting the property and housing rights. It also emphasizes the impossibility of aligning the maximum building output and the minimum accompanying infrastructure capability, inter-linked in spatial planning documents of the municipality, within the individual elements of the planning structure, where the IDT is done [5].

#### 4. POSSIBLE WAYS TO DEVELOP THE REGULATORY ACTIVITY

The spatial description of the city, as well as its regulation, is based on two consolidated groups: natural and anthropogenic indicators. Currently, the experts recognize that urban planning activities take place mainly in reconstruction and renovation, and this is their modern development, which does not necessarily mean increasing volumes. Indeed, the goal is to preserve the urban structure and adapt the urban fabric to the contemporary technological conditions, ideas about the spatial comfort, etc. Yet, until the present, the performance indicators and increasing volumes supersede preservation and adaptation, which is facilitated by the regulatory framework.

Meanwhile, the urban renovation can be guided by "associated" regulations. Through the examination of the reconstruction legislation, one can reasonably believe that the IDT management means to:

- Introduce not only "by-objects", but "by-territory" criteria as well in the urban planning regulations;
- Detail the criteria and methods for defining the spatial boundaries for IDT; maximum capacity and other building parameters, regarding favorable living conditions;
- Focus on the evaluation of the reconstructed territory in the city's structure;
- Obligatorily integrate the functions, affined land use, and urban systems (transport, and green, recreational facilities) into the adjacent territories;

- Assess the architectural typology of development, both diminishing and proposed (planned);
- Assess the territorial typology, both diminishing and proposed (planned);
- Evaluate the engineering and technical condition of the objects, to systemize it relying on the building development typology of different times, materials and construction technologies;
- Assess the social and economic conditions of the territory, in order to avoid the negative impact on the socio-economic processes possibly caused by the destruction of sustainability [6].

#### 5. SPECIAL PRACTICE FOR THE URBAN RECONSTRUCTION GUIDED BY "ASSOCIATED" REGULATIONS

Following the order of residential buildings reconstruction which replace the dilapidated ones, in the short term the "integrated development" will affect the mass panel housing of the first generations. The reason is the worn-out load-carrying and defending structures, inefficient use of territories, low density and land-to-building ratio.

The current state of housing in Krasnoyarsk proves that functional depreciation of the residential development and adjacent areas is also of importance. It appears in outdated norms of residential architecture and poor management of the urban land resources. For example, such enlarged neighborhoods of Svobodny Prospekt and Tolstoy Ulitsa, Lado Ketskhoveri and the railway have high development chances, but give a place to the remote peripheral areas. The urban planning problems of the adjacent territories functioning are in spontaneous integration of commercial functions into the first floors of the exterior perimeter and into the preschool institutions. In the whole squares, there are many abandoned and overgrown land plots left outside the landmarking, and therefore, randomly used.

Regarding this, attention should be paid to a poorly discussed topic of the mass residential housing areas development: tactical urbanism. This phenomenon has been studied through experience of Hungary and Slovenia, where like in Russia, efforts are being made to improve the quality of residential areas with only partial reconstruction. The goals are to quickly level up the territories by limited economical means, by the effect of socially oriented open public spaces, sometimes with the temporary architectural objects served for public purposes. This type of reconstruction is used, as a rule, when legal acts lag modern needs of transforming the residential areas.

The similarity of approaches to the open spaces in the "post-socialist" cities allows comparing them with the experience of improving the Russian cities under the *Comfortable Urban Environment Development*.

## 6. CONCLUSION

In this study, the social factors are limited on the availability and diversity of cultural institutions and consumer services enterprises; many commercial objects also indicate a higher level of economic activity. This factor is likely to be used negatively: the higher the diversity and number of service facilities that have developed in a territory, the less reasonable it is to include this territory in the IDT projects, since the risk of existing social, cultural and economic relations to be destroyed in the territory increases.

## ACKNOWLEDGMENTS

The reported study was funded by the Science and Technology Development State Program of the Russian Federation within the Program of Fundamental Research of the Ministry of Construction, Housing and Utilities of the Russian Federation and the Russian Academy of Architecture and Construction Sciences, 2022, project 1.1.6.2. "The Fundamentals of Architectural Regulation for Living Environment Development".

## REFERENCES

- [1] J. Monclús, C.D. Medina. Modernist Housing Estates in European Cities of the Western and Eastern Blocs. *Planning Perspectives*, 2016, 31(4): 533–562.  
<https://doi.org/10.1080/02665433.2015.1102642>
- [2] I.V. Kukina. Elementary Planning Units. *Housing Construction*, 2008(8): 26–29. (in Russian)
- [3] Urban Planning Code of the Russian Federation. (in Russian)
- [4] K. Dovey, E. Pafka, M. Ristic (Eds.). *Mapping Urbanities: Morphologies, Flows, Possibilities*. Abingdon: Routledge, 2018.
- [5] I.G. Fedchenko. About the Role of the Architectural-Urban Implementation of the Integrated Development of the Territory. *Architecture and Civil Engineering of Russia*, 2021, 237(1): 66–73. (in Russian)
- [6] I.V. Kukina, I.A. Ryaposov, K.V. Kamalova, Y.V. Chui. IDT – Panacea or Unregulated Densification of the City. *Project Baikal*, 2021, 18(70): 140–148. (in Russian)  
<https://doi.org/10.51461/projectbaikal.70.1903>