DOI: 10.24412/2070-1381-2022-94-108-120

Уровни пространственного планирования развития территорий

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Аннотация
Пространственное планирование развития территорий представляет собой сложную систему, что обусловлено, с одной стороны, наличием большого количества элементов пространства и несколькими категориями пространств, с другой стороны, саму систему пространственного планирования можно разделить на несколько уровней, которые находятся в непосредственном взаимодействии между собой и оказывают влияние на те процессы (как управленческие, так и исполнительские), которые происходят на других уровнях. Несмотря на то, что законодательно может быть определено, на каких уровнях осуществляется пространственное планирование развития как в целом государства, так и отдельных его территорий, нельзя исключать влияние, оказываемое другими уровнями пространственного планирования, которые непосредственно не регулируются законодательством государства. В данной статье проведен сравнительный контент-анализ подходов к исследованию уровней пространственного планирования развития территорий, предложена классификация уровней пространственного планирования, которые разделены на две группы: основные и обеспечивающие; выделены две группы критериев: основные и дополнительные, позволяющие разграничивать и анализировать уровни пространственного планирования. В результате проведенного исследования выявлено отсутствие единого подхода к классификации уровней пространственного планирования территорий и использованию критериев для их анализа, что обусловило необходимость разработки единой системы уровней пространственного планирования.

Ключевые слова
Уровни пространственного планирования, критерии пространственного планирования, система уровней пространственного планирования, основные и обеспечивающие уровни, матрица уровней и критериев.

Spatial Planning Levels for Territory Development

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Abstract
Spatial planning for the development of territories is a complex system which is defined by, on the one hand, a large number of space elements, and several categories of spaces, on the other hand, the spatial planning system itself can be divided into several levels that are in direct interaction with each other and influence on different processes (both managerial, and executive) that take place at other levels. Despite the fact the levels of spatial development planning can be determined by law both in the whole state and its individual territories, the influence exerted by other levels of spatial planning that are not directly regulated by state legislation cannot be ruled out. This article contains results of a comparative content analysis of the study approaches to the spatial planning levels for the territory development and classification of the spatial planning levels, which are divided into two groups: basic and supporting; two groups of criteria: basic and additional that allow distinguishing and analysing the spatial planning levels are provided. As a result, the absence of a unified approach to the classification of spatial planning levels of territories, and the use of criteria for level analysis was revealed, which necessitated the development of a unified system of spatial planning levels.

Keywords
Spatial planning levels, criteria for spatial planning, system of spatial planning levels, basic and supporting levels, matrix of levels and criteria.

Introduction

The regions spatial development provides development and implementation of measures not only by the government of the specific region, but also by the management subjects, both of higher and lower levels. Spatial development is affected by the implementation of projects at the global level, taken within the framework of the activities of the UN and other international organizations and associations of countries, and at the micro level, which involves the implementation of investment and other projects by companies or households.

It should be noted that the spatial development levels of regions as a certain part of the country are intertwined and interconnected. We can distinguish a group of criteria that underlie the differentiation between the levels of spatial planning and development, but it cannot be said that each level has its own rigid set of criteria. The certain criteria inclusion in the analysis is determined by the context of the study (industry specifics) and the environmental conditions that develop in a particular period, the change and occurrence of which does not depend on the object or subject of spatial planning.

Spatial planning as an activity direction of state and municipal authorities and as a direction of scientific research does not have a unique interpretation. Both in documents of different levels and in scientific publications, different approaches are used to understand this concept and its actual application. There is not a unique way for applying this term, and it's the reason of unnecessary difficulties in the actual implementation of the spatial development of both individual territories and regions, as well as countries and their associations.

Many researchers pay attention to this problem of the unified (or close to unified) approach absence and note that this problem has led some authors to say that the "spatial planning project" has failed [Scott et al. 2013]. But they refer spatial planning to the stage of evolutionary development of the planning system for the territories development (regions, countries), which does not mean control and restrictions as traditional approaches to planning, but integration processes in various directions: sectoral (cross-sectoral unification of the state policy of territorial development, interaction between the public, private and non-profit sectors), territorial (integration between levels of spatial development and between separate parts/territories of the same level of spatial development), organizational (combination and interaction of various strategies and programs for the territory development, integration of the implementation mechanism for spatial development by different actors, bringing together stakeholders operating at the same area).

Spatial planning is associated not only with the distribution in the region or country space of various objects, subjects and processes occurring between them, but also reflects the level and sustainability of the development of a community living and conducting activities in a specific territory. Some authors [Sapena et al. 2021] pay attention to the existing connection between the spatial model of the territory and indicators of the quality of life. Depending on the spatial structure settlements are characterized by different values and trends for groups of indicators of the quality of life. Thus, for remote agglomerations with sparse buildings, large tracts of vegetation and low saturation of industrial facilities, a lower mortality rate is characteristic. Among other indicators of the life quality and the spatial structure characteristics, the authors considered the level of income, the share of the employed population, the education level, etc. But it should be noted that these indicators of the life quality, which is determined by the spatial distribution, must be adjusted and adapted to those features of the spatial organization of the country or territory, which is analysed. After all, large countries have more opportunities to implement a policy of spatial development as an element of improving the life quality of the population than small countries that are in a certain dependence on the policy implemented by neighboring countries.

The complexity of the spatial planning system is noted by E. Oliveira and A.M. Hersperger [Oliveira, Hersperger 2018], including in its totality the design of development projects, master planning, land use planning and strategic planning. The authors also point at the existence of both public and private stakeholders in the implementation of spatial planning programs. At the same time, they noted the need for coordination of actions in terms of planning and implementing plans at different levels of state and municipal government as well as coordination between government authorities and private business entities, involving the population and various actors. At the same time, they refer to spatial planning as an element of strategic planning, i.e. spatial development programs are part of the strategic plans for the development of the country (regions, territories). According to this research, strategic spatial planning as a process and activity is a compromise between the competing interests of groups directly involved in the implementation of these plans. But it can be noted that spatial planning should also take into account the influence of the interests of those parties that are not related (indirectly or directly) to the implementation of plans for the spatial development of a specific territory, and those changes in the external environment that may have a negative impact on development or development potential of a territory.

Other researchers [Grădinaru et al. 2020] substantiated importance of legal regulation and formation of legal foundations for the spatial development of territories and settlements, mentioning Romania as an example, where during the transition from central planning at the communist period, when strict regulation and control were assumed when planning and implementing measures related to spatial development, to a market economy there was a "legal failure" in the legal regulation of planned activities, including spatial development of territories. This gap was overcome in the process of Romania's accession to the EU and bringing Romanian legislation in line with EU requirements.

In [Caparros-Midwood et al. 2015] it's pointed out that in the first decade of the 21st century in Europe, spatial planning was focused on ensuring the reduction of greenhouse gas emissions, i.e. spatial planning was supposed to rationalize the organization of settlements, primarily cities and metropolitan areas in order to minimize environmental impact. Within the framework of this approach, spatial planning becomes an element of the environmental policy of the country or regions. A similar approach to the relationship between environmental policy and spatial planning is considered in [Vallecillo et al. 2018], which includes ecosystem services in the framework of spatial planning, which involves minimizing the consequences of natural disasters arising from weather and climate change, which should contribute to increased levels of population well-being.

The study of J. Ran and Z. Nedovic-Budic [Ran, Nedovic-Budic 2016], who consider spatial planning as a tool for minimizing flood risks in populated areas, can be attributed to the context of environmental policy. But the authors define spatial planning as land-use planning or urban/regional planning, which we think refers to territorial planning, not spatial planning.

M. Dombi mentioned the complexity and multi-purpose orientation of spatial planning, which is aimed at a balanced distribution of resources for the territory (country) development, its economy or several sectors and industries (rural areas, environmental protection, etc.) [Dombi 2021]. At the same time, he noted that spatial planning involves participants with various motives: economic, environmental, social, political and industrial, i.e. this direction of planning involves the interconnection of the interests of a large number of stakeholders.

The study of built-up densely populated areas [He et al. 2021], in particular Chinese ones, shows the need to assess the consequences of the implementation of spatial development plans on the use of various lands (both built-up and agricultural) and to distinguish different land categories according to a functionally oriented attribute and development directions. We can assume that this study has greater relevance for densely populated countries and territories and less for countries with low population density.

The concept of "spatial quality" has a particular interest in the implementation of spatial development plans. Sh. Takeda presented different approaches to the understanding of this concept and the possibilities of practical application [Takeda 2016]. This concept was mentioned in documents regulating the spatial development of the Netherlands in the 1980s. The spatial quality in relation to individual territories and plans for their development involved an assessment of three components: functional value, practical (empirical) value and future value. At the same time, other researchers [Hooimeijer et al. 2001] offered criteria for evaluating these components in several areas: economic, social, environmental, and cultural (Habiforum matrix).

The complexity of the spatial planning system, which includes the unification of goals, regulations, and the structure of planning documentation, is noted in [Jiang et al. 2015]. In the process of studying the entire set of spatial planning plans and the entities responsible for their development, coordination and implementation, the authors concluded that the existing institution of spatial management is unreliable and there is need to improve it to ensure China's sustainable socio-economic development in the implementation of spatial planning at every level.

If we talk about the spatial planning levels, then most of the researches are focused on the regional (meso-) level, some of the papers concern planning at the level of individual settlements (cities and megacities), others analyse the interaction of planning levels, for example, between state and regional (municipal) ones.

Spatial planning: levels and their interdependence

The content analysis showed that the spatial planning levels are highlighted only in the report of the United Nations Economic Commission for Europe "Spatial planning" (2008)[1]. That report described three levels:

— national, including the basic policy of the country, legislative norms, measures for coordinating the regions' activities, monitoring and control of the implementation of spatial planning activities;

— regional, which implements the regional development strategy and provides support and assistance to local authorities;

— local, involving the preparation of local plans for spatial development, the acceptance of regulatory documents, the planning coordination with the authorities of neighboring municipalities or districts, monitoring the plans' implementation.

At all spatial planning first participants are state (federal (central) and regional) and municipal authorities, international organizations and associations of countries or regions as well as business entities.

There are a few levels of the spatial development of both the country as a whole and its territories (regions) as a part. But if we talk about territories (regions) there could be used not every level because this classification involves the allocation of possible options for the acceptance of individual programs, projects, regulations, and other documents focused on the spatial development of management objects. Despite not being involved in the spatial planning of a specific object, other levels of planning can influence both the planning process itself and the implementation of the spatial development measure.

The first level, which due to its peculiarity does not imply the existence of permanent spatial planning documents, but can influence at other levels, is global. This level is characterized by the participation of various international organizations, primarily the UN and its units, the presence of documents regulating

[1] Spatial Planning. Key Instrument for Development and Effective Governance with Special Reference to Countries in Transition // The United Nations Economic Commission for Europe. [Электронный ресурс]. URL: https://unece.org/fileadmin/DAM/hlm/documents/Publications/spatial_planning.e.pdf (accessed: 25.07.2022).

the system of interaction between subjects in various life spheres. Some of the sustainable development goals accepted by the UN are related to the spatial development of territories. This group includes the following sustainable development goals: 6 — clean water and sanitation, 7 — affordable and clean energy, 8 — decent work and economic growth, 9 — industry, innovation and infrastructure, 11 — sustainable cities and communities, 12 — responsible consumption and production, 13 — climate action, 15 — life on land. Individual tasks within the framework of these goals are directly related to spatial changes in territories, which can be part of the planned activities of various entities and are implemented on the territory of a country or region.

The second level is international, represented by associations of countries or international organizations operating within the same region of the world, for example, the EU, the Arctic Council, APEC, etc. Thus, the ESPON program operates in the European Union, which involves the implementation of a joint policy by the EU members in the territorial cooperation and spatial development. Even though the EU members pursue an independent policy of spatial and territorial development and land use, but within the framework of this integration grouping, joint programs are taken at achieving common goals and standards, including the spatial development, both of separate territories and the entire EU. Another example is the activities of the Arctic Council, which includes 8 countries and 6 organizations, but the Arctic Council's decisions, made to preserve the Arctic, affect not only the Arctic countries policy of the development and use of the Arctic territories, but also of other countries whose activities can be related, or influence the Arctic zone, for example using the Northern Sea Route.

The global and international levels are supporting levels for the others. Decisions, programs, and documents accepted at the global and international levels have a direct impact on the processes of spatial planning at the level of countries, their territories, or economic entities. Even though the spatial development of regions is not directly planned at the global and international levels, but due to the influence exerted we cannot exclude them from the hierarchy of spatial planning levels.

Spatial planning is directly realized at the state level. Depending on the form of government and the system of authorities' subordination, spatial planning can be realized just at the state (central) level or at a level lower in the hierarchy. At the state level, plans, concepts, or strategies for spatial development can be taken directly (the type of document is determined by national legislation), and templates or framework documents can be developed for lower levels (regional or municipal). An example of the first type of documents at the state level is the Spatial Development Strategy of the Russian Federation until 2025, the Spatial Development Strategy of the Republic of Croatia, and National Spatial Development Concept of Poland until 2030. The second type is South Africa's Spatial Development Guide (2011) for provinces, districts, and municipalities, which provides guidance for local and regional governments in developing their spatial development plans. Despite the existence of common spatial development projects in the EU, the history of the national spatial development policy of the Netherlands dates to the 1950s, when the first documents were developed.

At the regional level, spatial development plans are largely not developed. An analysis of the experience of individual countries showed the absence of such plans as separate documents. Basically, the regions accept strategies or plans for socio-economic development, which also contain goals of spatial development, but allocate a special section, or documents (strategies, plans, etc.), including a special section on spatial development of the region (activities, concepts, models, programs). In the Russian Federation, there is a second type of documents for the spatial development of regions — territorial planning schemes for subjects of the Russian Federation. Concepts or models of spatial development of subjects of the Russian Federation are presented in many schemes of territorial planning. An attempt to develop and accept a separate document — a spatial development strategy — was made in the Yaroslavl region, but

that document was not accepted and remained at the stage of public discussion, although the approach to the spatial development of the Yaroslavl region in this strategy was later used to develop the concept of spatial development as a part of the territorial planning scheme of the Yaroslavl region. A similar situation is observed in South Africa, where in 2019 the drafts of the National Concept of Spatial Development and the Concept of Spatial Development of the Eastern Cape were presented, but these documents are still being considered, while a separate regional spatial planning document was developed only in Eastern Cape, and in the remaining 8 provinces, spatial planning is included in the overall development plans or there is no mention of spatial development in the provincial development plans at all. For European countries, the most common option for spatial planning is either at the state or municipal level, but at the regional level, the Greater London Spatial Development Strategy (2012) can be distinguished, because Greater London is a specific territorial and administrative unit, which can be considered both as an urban agglomeration and as a region which included several counties and municipalities.

At the municipal level (both cities and rural areas), spatial planning can be presented both as separate documents and projects and as an integral part of strategies or plans for socio-economic development or urban plans. The first group of documents includes the Canberra Spatial Plan (Australia) or Spatial Development Framework for the City of Johannesburg (South Africa). In South Africa spatial development documents have become more widespread in cities than in provinces. The second group of documents is represented by Glasgow City Development Plan (Scotland), in which spatial planning — a strategy for sustainable spatial development — is presented as a part of the development policy of Glasgow; other examples here are the Navotas Comprehensive Land Use Plan (Philippines), the sixth section of which contains the spatial development plan for this city, the Strategic Development Plan of Yekaterinburg (Russian Federation), the fourth section of which is devoted to the spatial development strategy. The South African Spatial Development Guide (2011) for provinces, districts, and municipalities and the Spatial Development Guide for The Malawi Secondary Cities Plan (2022) show an attempt to unify the spatial development plans of municipalities. The Malawi Secondary Cities Plan is long-term oriented (until 2063) and aims to provide the basis for spatial development and the implementation of the national vision.

The final level of spatial planning is the micro level, which includes both individual economic entities and their associations. Plans for the spatial development of individual districts within municipalities are referred to the municipal level because it is developed, accepted, and implemented by municipal authorities, even though these plans are realized only at one part of the municipality and can be attributed to the micro level. Spatial planning of economic entities includes investment projects that involve not only the main and auxiliary production facilities, but also the implementation of such facilities which could be used by stakeholders, for example, infrastructure facilities — transport routes or information networks, landscaping, etc. Several projects related to spatial planning are implemented jointly by government authorities (of various levels) and business entities, such as industrial parks, clusters, etc. The distribution of roles in these projects is determined in each case separately, but their implementation involves spatial planning of several participants related to different planning levels. All levels of spatial planning influence each other (Figure 1).

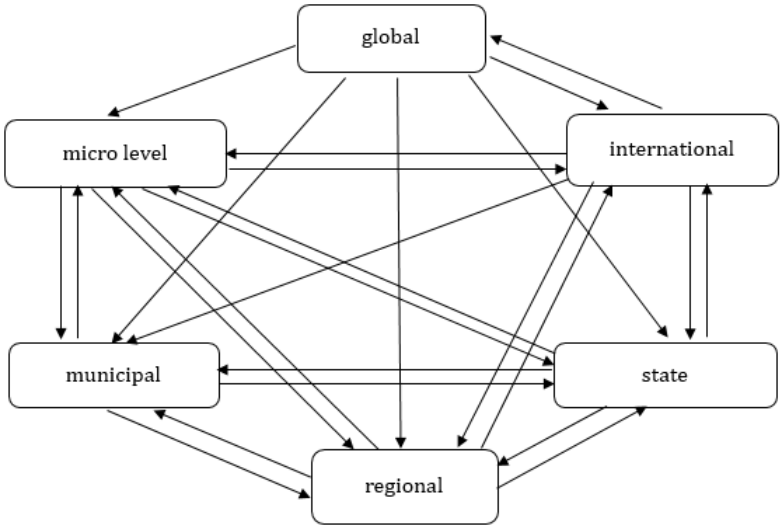

Figure 1. Interrelation between spatial planning levels[2]

Spatial planning level criteria

The spatial planning level is determined based on compliance with criteria that can be divided into two groups: basic and additional. The basic criteria include subjects of management, who plan the spatial development of the territory or accept documents related to spatial planning, and planning objects — global regions, interstate associations, countries, state regions, municipalities, and business entities. The latter can simultaneously be the subject of management.

Additional criteria include: scale of planning, number of participants and stakeholders, number of dependent levels, number of interrelation at the planning object, complexity of the spatial structure (natural and artificial), number of involved planning objects, complexity of the planning system, including socio-economic, the timing of the plans' implementation, focus on the long-term effect of the plans' implementation, number of involved space types, power of influence and number of informal institutions.

The scale of planning as a criterion, on the one hand, is similar to the basic criterion — the object of planning, but if we compare planning objects of the same category, it is necessary to take into account the scale of planning: for example, municipalities belong to the same category as objects of planning, but differ in scale — area, population, number of business entities, infrastructure facilities, etc. The scale of planning as a criterion is applicable in the conditions of one hierarchy, national, subnational, and municipal level, and the system of subordination of governing authorities.

If we discuss the number of planning participants and stakeholders, the planning participants directly correspond to the planning subjects and in most cases, they belong to the management level and are represented by the relevant management, while implementing joint projects (international, interregional, intermunicipal, investment, etc.) the number of planning participants will increase in proportion to the number of parties involved. The range of stakeholders tends to increase with the transition from the micro level to global.

In terms of planning processes or creating conditions for the implementation of spatial planning, most of the levels influence each other. Agreements, programs, projects, and various decisions taken at the global level influence the plans, strategies, and concepts of spatial development at the lower levels, down to the micro level. Documents at the international level influence both the lower levels and the global one. State plans and strategies for spatial development affect all levels below — the regional, municipal, and

[2] Compiled by the authors.

micro levels — and the international one, if the implementation of a country's spatial development plans can cause a multiplier effect in the development of neighboring countries (for example, the development of transport infrastructure as an element of space can influence all participants accessing that transport system). The regional level determines the directions of spatial development of its constituent municipalities (municipal level) and economic entities operating or planning activities on its territory (micro level) as well as the ability to influence the directions of spatial development (and planning) of the state and international agreements (especially in the case of border areas). The municipal level is able to influence directly the development plans accepted by economic entities (micro level), including those related to spatial development as well as plans and strategies accepted at the regional and state levels. The plans developed and implemented at the micro level can influence the spatial development planning at the municipal, regional, national, and international levels. If in the case of the municipal and regional level, spatial planning at the micro level has an impact due to the territorial location and economic activity, then in the case of the state and international levels, huge enterprises and transnational corporations involve participants located in different regions of the country and the world in their activities.

The complexity of the spatial structure is determined by the number of objects included in this structure, their links between themselves and the objects of neighboring territories (countries, regions, municipalities, etc.), the infrastructure development (transport, communication, etc.), the location of the population and objects over the territory, landscape, natural and climatic conditions. The global and international levels have the highest complexity of the spatial structure, the state, regional and municipal levels depend on the components that were listed. In the latter case, the complexity is determined by a set of factors that form the spatial structure.

The criterion of the number of involved planning objects is directly related to the complexity of the spatial structure, but it is also difficult to establish a clear hierarchy in this criterion due to the different approaches used in spatial planning. Plans, concepts, or strategies for spatial development can only contain targets, while the accompanying documents disclose the content of activities that contribute to spatial development. Therefore, the criterion is applicable if these documents contain objects that will contribute to the spatial development of a territory.

The complexity of the planning system is determined by the number of planning subjects, the volume of data analysed, and the number of documents related to spatial development plans. This criterion traces the complication of the planning system when moving from the micro level to the global one.

The terms for implementing spatial development plans or sections of socio-economic development strategies related to spatial planning do not have a unique gradation. Medium-term plans can be either state (Spatial Development Strategy of the Russian Federation until 2025 (2019)), regional (Vision for the Eastern Cape 2030: Provincial Development Plan (2019, South Africa)) or municipal (Glasgow City Development Plan with a planning period 2017–2022 and post-planning period 2023–2028 (Scotland)) and at the micro level (enterprise investment plans). But we should note that all levels are generally characterized by longer implementation periods, including long-term plans, such as the Spatial Development Guide for The Malawi Secondary Cities Plan (2022), the Spatial Development Framework for the City of Johannesburg 2040 (2016) or Poland's National Spatial Development Concept 2030 (2011).

A lesser focus on the long-term effect of the plans' implementation can be observed at the micro level as investment projects of economic entities involve the renewal of production and production infrastructure after a certain period. The higher the spatial plan is in the hierarchy, the longer the effect of the implementation of spatial development plans can be expected because more participants are involved in implementation and the number of stakeholders increases.

The number of involved space types increases if moving along the hierarchy of levels from the micro level to global, but it is worth noting that the territories of states and regions as well as municipalities and economic entities with access to the sea will always have a larger number of spaces compared to other objects of this level. Spaces include a set of objects and subjects distributed over a certain territory, and a system of institutions operating in this territory [Леонтьева, Проскурнова 2021] as well as air and water spaces. In this case, when moving to higher levels of the hierarchy, it is necessary to take into account the near-Earth orbit, i.e. outer space in which both countries and their associations and economic entities can have activities.

The last criterion is the power of influence and the number of informal institutions. In that case we can also talk about the formal one. At the micro level, formal institutions are represented by the state legislation of urban planning, land use, construction, investment, etc. as well as local documents of an economic entity about design, planning and its implementation. The informal institution is represented by the organizational culture of the economic entity, the cultural norms of territory, the prevalence of norms for involving stakeholders in the activities of companies, and the activity of the local population in the exercise of civil control over the implementation of different projects. The transition to higher levels of spatial planning is accompanied by an increase and complication of informal institutions composition. This happens because the organizational (business) culture of the regional and national levels is being formed, the composition of the national culture is becoming more complex, which at the state level is a combination of cultures of all the peoples of the country, and at the interstate and global levels, in addition to complicating the content of the organizational and national cultural components, there are norms of interaction between all subjects at the global level. In the case of formal institutions with moving up the levels of spatial planning, there is also a complication of the institutional component because the regulatory framework is expanding. But if moving from the micro level to the state level, the number of formal institutions is reduced: at the state level, all institutions are consolidated and they form aggregated formal institutions, and in the case of the international and global levels, aggregation of formal as well as informal institutions does not occur due to their uniqueness for each territory, states.

The comparative content analysis of 12 studies showed (Table 1) that the spatial development of territories or the spatial component is mainly considered at the state and municipal levels, less at the regional. Two studies contain the international level, while the global and micro levels were not presented in the mentioned papers. It should be noted that in almost all the analysed studies, the criteria of the basic group were identified — the subjects and objects of spatial planning, while they are more often used compared to the group of additional criteria. Among the additional criteria, the most popular are the number of participants and stakeholders, the number of dependent levels, the number of involved planning objects. At the same time, such criteria as the scale of planning, the complexity of the planning system, the timing of the plans' implementation, the number of involved space types, were not identified in any of the presented works. Thus, there is no unified approach to the classification of levels of spatial planning and a unified system of criteria for delimiting the levels of spatial planning and their analysis.

Table 1. Criteria distribution matrix by spatial planning levels[3]

Level	Criteria												
	Basic		Additional										
	Management subjects	Planning objects	Scale of planning	Participants and stakeholders	Dependent levels	Planning object interrelation	Complexity of the spatial structure	Number of planning objects	Complexity of the planning system	Timing of the plans' implementation	Long-term effect of the plans' implementation	Number of space types	Informal institutions
Global													
International	8	8		6 8	8			6 8					8
State	1 3 4 5 6 8 11	1 3 4 5 6 8 11		1 3 6 8 11	1 3 8 11	1 11	11	1 4 5 6 8			1 4 5		3 8
Regional	6 7 8	6 7 8 9		6 7 8	7 8	7		6 7 8 9					8
Municipal	1 3 5 6 7 8 10	1 2 3 5 6 7 8 10		1 3 6 7 8 10	1 3 7 8	1 7	2	1 5 6 7 8			1 5		3 8
Micro													

Authors:

1 — A.J. Scott, C. Carter, M.R. Reed, P. Larkham, D. Adams, N. Morton, R. Waters, D. Collier, C. Crean, R. Curzon, R. Forster, P. Gibbs, N. Grayson, M. Hardman, A. Hearle, D. Jarvis, M. Kennet, K. Leach, M. Middleton, N. Schiessel, B. Stonyer, R. Coles;

2 — M. Sapena, M. Wurm, H. Taubenböck, D. Tuia, L. A. Ruiz;

3 — E. Oliveira, A. M. Hersperger;

4 — S. R. Grădinaru, P. Fan, Cr. I. Iojă, M. Răzvan Niță, B. Suditu, A. M. Hersperger;

5 — D. Caparros-Midwood, S. Barr, R. Dawson;

6 — S. Vallecillo, Ch. Polce, A. Barbosa, C. P. Castillo, I. Vandecasteele, G. M. Rusch, J. Maes;

7 — J. Ran, Z. Nedovic-Budic;

8 — M. Dombi;

9 — Zh. He, Ch. Zhao, Ch. Fürst, A. M. Hersperger;

10 — Sh. Takeda; P. Hooimeijer, H. Kroon, J. Luttik;

11 — Zh. Jiang, D. Mulin, P. An.

[3] Compiled by the authors.

Conclusion

As a part of the study, we have identified two groups in the hierarchy of spatial planning levels: supporting levels, which include the global and international, and the basic ones, including the state, regional, municipal, and micro levels. In the group of basic levels, various subjects develop and accept plans, programs, projects focused on the spatial development of territories. And if three levels — state, regional, municipal — are directly responsible for the spatial planning of the territories to which they belong, then the projects implemented at the micro level can promote or implement the spatial development of the territories where economic entities are located. The hierarchy of spatial planning levels in the main group is not rigid and may vary depending on the state structure or planning traditions in administration in a particular country.

Some of the criteria for spatial planning levels are conditional and can be used to characterize each of the levels. Others, when conducting a comparative analysis, make it possible to distinguish between the levels of spatial development planning. The descriptive nature of the criteria is the basis for analysing the institutional framework for spatial planning of the development of countries, regions, municipalities.

The comparative content analysis led to the conclusion that there is no unified approach to the classification of spatial planning levels and the use of criteria in the differentiation of levels and their analysis. This conclusion suggests the need to develop a system of spatial planning levels, which can be used by various researchers to analyse different aspects of the spatial development of territories.

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Дата поступления/Received: 30.07.2022