

Maruniak, Eu. O.,¹
Palekha, Y. M.,²

ORCID: <https://orcid.org/0000-0002-6743-6883>,
 ORCID: <https://orcid.org/0000-0002-0750-0863>,

Kryshtop, T. V.³

¹ Institute of Geography of the National Academy of Sciences of Ukraine, Kyiv; Stanisław Leszczyński Institute of Geography and Spatial Organization Polish Academy of Sciences, Warsaw

² Bilokon Ukrainian State Scientific-Research Institute of Urban Design DIPROMISTO, Kyiv

³ State enterprise *Ukrainian Scientific, Research and Design Institute for Civil construction (SE UKRNDPICIVILBUD)*

Planning of Spatial Development in Times of War and Reconstruction: a Vision for Ukraine

In 2022, Ukraine became the object of full-scale Russian aggression, which led to human casualties and destruction, and landscape degradation. The final consequences of the hostilities are yet to be assessed, while the need for large-scale reconstruction of the country and its regions is once again evident. In this context, a comprehensive vision of the principles of the development of territories in the post-war period is of particular relevance. The article pays attention to the framework requirements for the planning process in Ukraine and the peculiarities of the documents to be developed at the national and local levels. It has been emphasized that in view of European integration, the General Scheme of Planning of the Territory of Ukraine is the most important document which defines conceptual solutions for planning and rational use of the territory of our state, maintaining a full-fledged living environment, ensuring sustainable development, environmental protection, historical, architectural and cultural sites, determining state priorities and conditions for the development of individual regions and settlements. It should be formed as an interactive modeling system of state management that will determine the strategy for the spatial development of Ukraine as part of the European planning space. The key directions for updating the existing General Scheme have been identified. The processes of reforming urban planning documentation at the local level have been analyzed, with special attention to the proposed integrated recovery programs. The importance of further introduction into the planning process of methods related to the assessment of territories and impacts on the environment and public health has been emphasized.

Keywords: *spatial planning, General Scheme of Planning, territorial communities, challenges.*

Маруняк Є. О.,¹
Палеха Ю. М.,²

ORCID: <https://orcid.org/0000-0002-6743-6883>,
 ORCID: <https://orcid.org/0000-0002-0750-0863>,

Криштоп Т. В.³

¹ Інститут географії Національної академії наук України, Київ; Інститут географії та просторової організації імені Станіслава Лещицького Польської академії наук, Варшава

² Державне підприємство «Український державний науково-дослідний інститут проектування міст „ДІПРОМІСТО“ імені Ю. М. Білоконого», Київ

³ Державне підприємство «Український науково-дослідний і проектний інститут цивільного будівництва» (ДП «УКРНДПЦІВІЛЬБУД»), Київ

Планування просторового розвитку в умовах війни і відбудови: бачення для України

У 2022 році Україна стала об'єктом повномасштабної агресії росії, що призвело до людських жертв і руйнувань, деградації ландшафтів. Наслідки воєнних дій ще мають бути оцінені, водночас, вже раз очевидно є потреба масштабної відбудови країни та її регіонів. У цьому контексті особливої актуальності набуває системне бачення засад розвитку територій у повоєнний період. У статті приділено увагу рамковим вимогам до планувального процесу в Україні та особливостям документів, що мають бути розроблені/розробляються на національному та місцевому рівнях. Підкреслено, що з огляду на євроінтеграцію Генеральна схема планування території України є найважливішим документом, який визначає концептуальні вирішення планування і раціонального використання території нашої держави, підтримання повноцінного життєвого середовища, забезпечення сталого розвитку, охорони довкілля, пам'яток історії, архітектури і культури, визначення державних пріоритетів та умов для розвитку окремих регіонів й населених пунктів. Така схема має формуватись як інтерактивна модельовальна система управління державою, що визначатиме стратегію просторового розвитку України як

частини Європейського планувального простору. Визначено ключові напрями оновлення чинної Генеральної схеми. Проаналізовано процеси реформування містобудівної документації на місцевому рівні, з особливою увагою до запропонованих програм комплексного відновлення. Підкреслено важливість подальшого впровадження в процес планування методик, що стосуються оцінки територій і впливів на довкілля та здоров'я населення.

Ключові слова: просторове планування, генеральна схема планування, територіальні громади, виклики.

Relevance

Spatial development planning is one of the main tools for responding to the challenges faced by countries and regions in the 21st century. This applies to the impact of globalization processes, the consequences of global and macro-regional conflicts and crises, climate change, and the large-scale degradation of ecosystems. For Ukraine, against this background, the impact of Russian aggression has been becoming decisive, and subsequently important is overcoming its consequences and rapid reconstruction of the territories.

Referring to history, it should be noted that the long stay in the USSR, on the one hand, led to the formation of a sufficiently structured multi-level system regulating the development of territories in Ukraine, on the other, it brought us to the emergence and long-term existence of a number of patterns inherent in non-democratic societies and ineffective in time of post-industrial transformations.

Accordingly, since independence, much attention has been paid to reforming and harmonizing methodological approaches and legislation in accordance with the basic principles of the spatial development of the EU countries. The success of such efforts might be assessed in different ways.

Among the undoubted achievements are the development and approval of the *General Scheme of Planning of the Territory of Ukraine*, which largely correlates with the European Spatial Development Perspective, the development of territorial planning schemes for most regions of Ukraine. It is also worth noting the approval of several strategies of state regional development, and regulatory documents that defined urban planning activities at different levels. Among the main gaps remained the poor interconnections of the adopted documents, interagency cooperation, as well as the completeness of implementation and monitoring of the planned activities.

The full-scale war that started in February 2022 has significantly adjusted the spatial planning agenda in Ukraine. Regions and communities have suffered degradation, pollution, and destruction, there have been processes of production relocation, and migration flows remain unpredictable. This means the need to define new principles of development in the post-war period, which would integrate previous developments, and modern European practices, as well as clearly define short- and long-term goals of plans and programs.

The current state of the researched issue

Planning of areas that require special attention and measures as a result of significant negative impacts is not new in Europe and worldwide. One of the notable impetuses for the development of research in this area was the challenges of the revival of countries, regions, and cities after the Second World War. This topic was later continued in the developments related to the consequences of the war in the Balkans and other regions of the world. We are talking about the restoration of territories in general, the socio-economic dimension and the revival of individual industries, and the findings of individual researchers and entire institutions and international organizations [1-2; 15-19].

One of the most pressing issues was the restoration of urban areas, the importance of which

in the life of society has been rapidly increasing during the 20th and 21st centuries [5-6; 8; 20]. Also, special attention was paid to the preservation and restoration of cultural heritage [4].

A broad analysis of the presented approaches allows us to identify certain standard components of the methodology, which involves an assessment of the pre-war/pre-conflict situation, the degree of destruction, existing concepts and technologies of development, and, ultimately, their perception by society or expert groups. At the same time, it is about finding a unique recipe for recovery that should take into account the peculiarities of society, economy, and ecosystems within a particular territory.

The article is aimed to outline a general framework for the planning process, which should be

implemented in the wartime and post-war period and provide grounds for the rapid reconstruction

of Ukraine, regions, and communities on the basis of sustainable development.

Main material

Defining the vision of post-war planning in Ukraine obviously includes institutional, regulatory, and thematic components. In other words, we are talking about the structures responsible for the development and implementation of plans and their interaction, the availability of legal acts, methodological recommendations which enable their implementation, and finally - the content and structure of documents on the basis of which the perspective directions of development of territories will be outlined.

In general, it is possible to talk about the need to develop the *Concept of Sustainable Spatial Development in Ukraine* [9], which would identify strategic development goals, main challenges, principles, and mechanisms of implementation, as well

as stakeholders and responsible parties. Its development should take into account both the international experience of rehabilitation of territories and the priorities of the *Post-War Recovery Plan of Ukraine*. One example is the *Landscape Program of Ukraine*, the implementation of which should correlate with spatial planning documents.

The implementation of the Concept should subsequently take place on the basis of the General Scheme of Planning of the Territory of Ukraine, the provisions of which will have a corresponding projection at the regional and local levels. In addition, the latter requires special attention and additional support in view of the ongoing decentralization reform and the prospects of increasingly close cooperation with European communities.

General scheme of planning of the territory of Ukraine

As mentioned above, the determining factor influencing the development of spatial planning today is globalization. Since 1987, when the Gro Harlem Brundtland Report was published, and continuing in the Concept of Sustainable Development adopted at the Rio de Janeiro Conference in 1992, as well as in the Guiding Principles for Sustainable Spatial Development of the European Continent adopted at the 12th CEMAT Conference in 2000 [3], the issue of interaction between globalization and sustainable development has become extremely important for geographers and architects in the context of creating a new paradigm of spatial planning.

Ukraine is an active participant in this process. In our opinion, further development of regulatory, methodological, and technological principles of the planning process should be based on the principles of global unity, interaction, and subsidiarity of space. The development and planning of the world space determine the planning processes on the European continent, and they, in turn, affect the spatial development of Ukraine. The organization of planning space in the state determines the development of its individual regions (oblasts, districts), and then, through the planning of communities and settlements, goes down to city blocks, and houses, ending with the planning of individual apartments. In this way, we do not lose in the planning process individuals as the main consumers of social, cultural, and spiritual values.

In an inseparable subsidiary chain: Earth → European continent → Ukraine → region → district → territorial community → settlement → block → house → apartment, the key place is occupied by the development of spatial planning documentation at the state level, which in Ukraine is the General Scheme of Planning of the Territory of Ukraine.

In the context of the development of European integration processes, the General Scheme is the most important document that defines the conceptual solutions for planning and rational use of the territory of the country, maintaining a full-fledged living environment, ensuring sustainable development, environmental protection, historical, architectural and cultural sites, determining state priorities and conditions for the development of individual regions and settlements.

It should be noted that the General Scheme was approved by the Law of Ukraine on February 7, 2002 [7], and became the first legally approved document of this level in the post-Soviet countries (*Fig. 1*).

However, the General Scheme expired on January 1, 2021, and Ukraine faces the issue of developing and approving a new version of it in the near future.

We have repeatedly drawn attention in publications [9; 12–14] to certain problems and shortcomings of the current General Scheme and pointed out the main ways of its further transformation. The General Scheme should be developed not just

ГЕНЕРАЛЬНА СХЕМА ПЛАНУВАННЯ ТЕРИТОРІЇ УКРАЇНИ

ПЛАНУВАЛЬНА СТРУКТУРА ТА ВИДИ ПЕРЕВАЖНОГО ВИКОРИСТАННЯ ТЕРИТОРІЇ

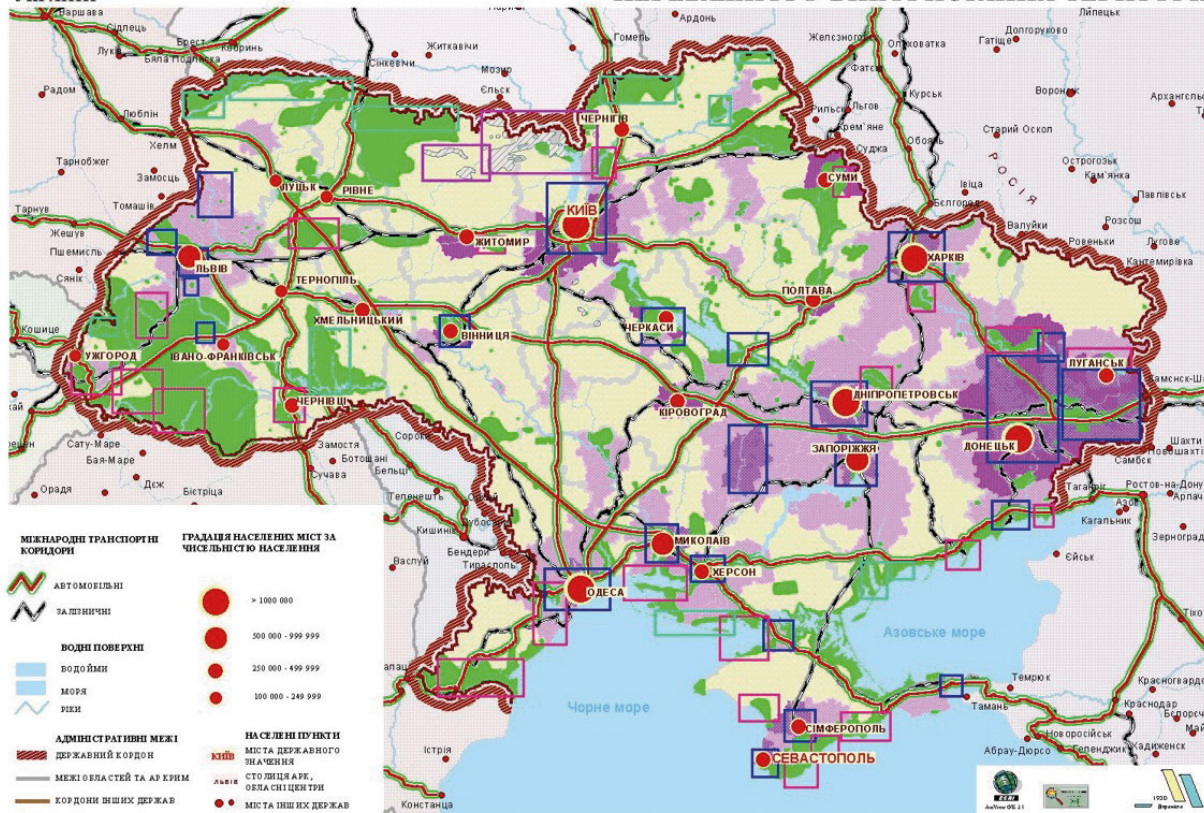


Fig. 1. General scheme of planning the territory of Ukraine.
Planning structure and types of the predominant use of the territory

as a document on spatial planning, but as an interactive modeling system of state management, which will determine the strategy for the spatial development of Ukraine as part of the European planning space and at the same time will be able to respond quickly to changes that occur both in the state and outside, allowing to change the trajectory of its development.

In our opinion, the creation of such a system should be based on the methodological and technological principles developed by the international community. In this context, the use of geographical information systems (GIS) to support the decisions of the General Scheme will ensure spatial, informational, and structural unity of data, constant updating and use of integrated sectoral data, modeling of spatial development options based on various components of the territory's potential and taking into account relevant changes and trends [12; 14].

Providing geoinformation support for the decisions of the General Scheme should be facilitated by the National Geospatial Data Infrastructure, as an integrated information system creating a common coordinated information field, which will

become the basis for informed decision-making on the further development of Ukraine.

At present, the consequences caused by the armed aggression of Russia against Ukraine, the destruction of settlements, and infrastructure demand development and approval of a new General Scheme, which will contain the main measures for the spatial development of our state after the victory. This requires us to change some accents of the General Scheme, first of all:

- Consideration of the probable timeframe for Ukraine to regain control over the temporarily occupied territories. Under the optimistic scenario, the restoration of control can be implemented in the short term, and under the pessimistic scenario—in the medium term. The provisions of the updated General Scheme should take into account both scenarios in order to ensure the effective development of the state regardless of military operations.
- Determination of the planning framework of our state in the post-war period, taking into account its integration into the European Community. The planning framework should

be formed both on the basis of pan-European transport axes— transport corridors, and taking into account strategic internal relations within the state and existing or potential axes of development [10–11]. Changing geopolitical situation, the occupation of Ukrainian territory by Russia significantly increases the role of meridional planning axes. First of all, the role of the axis that runs conventionally along the 25th meridian (Helsinki → Tallinn → Riga → Vilnius → Rivne → Ternopil → Chernivtsi → Suceava → Bucharest → Plovdiv → Alexandroupolis) is growing. At the same time, further development of latitudinal transport highways within the state is a guarantee of integrity.

- Change of the energy supply system taking into account the refusal to use Russian energy carriers and active development of renewable energy technologies, which should ensure the energy independence of Ukraine. The development of energy technologies in the world in recent years has gained rapid pace and now the energy independence of a separate household or industrial enterprise is absolutely real. Taking into account such trends and the potential of the territory of Ukraine, the General Scheme should offer the state an alternative energy strategy that will allow the transition to renewable energy sources in a timely manner.
- Optimization of the structure of the economic complex and preparation of proposals for the location of individual enterprises and industries, taking into account the relocation of part of the production to the Western region, as well as the need for renovation and diversification of production within the territories under temporary occupation. In this context, the importance of the revival of old industrial regions of Donbas on an innovative basis is growing. Obviously, the positive experience of reindustrialization, structural transformation, and modernization of old industrial regions of Europe, primarily the Ruhr (Germany), South Wales (UK), Upper Silesia (Poland), etc. has to be introduced.
- Optimization of the settlement system, taking into account its partial redistribution on the territory of Ukraine. The updated General Scheme should be based on the population projections taking into account the partial withdrawal from the economic activity of the population of the temporarily occupied territories, the movement of a significant part of migrants from the East to other regions of Ukraine, the possibility of increasing migration

outside Ukraine caused by both political and economic reasons in the short and medium term.

- Development of measures to ensure environmental sustainability of the Ukrainian territory, and neutralization of the consequences of military operations. For Ukraine, the issues of disposal of munitions and destroyed constructions, ensuring sustainable functioning of the energy and water supply system, and overcoming the consequences of military uricide, in general, are currently relevant. This involves ensuring the efficient use of water resources and equipping the entire drainage system in the country with treatment facilities, implementation of the best international experience in sanitation and waste management, preservation and development of the system of protected areas as a territorially integral framework which will contribute to maintaining a favorable living environment for the population.
- Optimization in the future of the land-use structure as a guarantee of the formation of a sustainable habitat, conservation, and enhancement of natural resources available in the state, support for sustainable development of Ukraine [14]. Today, almost $\frac{3}{4}$ of the area of Ukraine is agricultural land, which is largely used irrationally, causing soil depletion and loss of fertility. This may lead in the future to a decrease in grain production, which is a component of the strategic export potential of our country. At the same time, forests, other forested areas, recreation lands, and other natural and semi-natural lands make up only 22%. Such indicators do not correspond to the global practice of the distribution of land use types in developed countries (the share of agricultural land does not exceed 50%, while natural and semi-natural areas reach 35%). Thus, there is an obvious need to develop new indicators and proposals for land use structure changes within a new version of the General Scheme.

Thus the development of a new version of the General Scheme on a new technological and methodological basis using modern GIS is required in the context of transition challenges and further reconstruction. For legislative support of the development, it is necessary to adopt the 2nd edition of the Draft Law of Ukraine No. 3337 *On Amendments to the Law of Ukraine "On Regulation of Urban Development" regarding the General Scheme of Planning of the Territory of Ukraine* in the nearest prospect.

The updated General Scheme of Planning of the Territory of Ukraine will provide wide opportunities for the reconstruction of the territories of the temporarily occupied regions, and destroyed

settlements of Ukraine, and contribute to the further development of the entire complex of urban planning and design documentation at the regional and local levels.

Development of territorial communities

The issue of community planning is on the agenda in Ukraine due to the implementation of the decentralization reform. The reform, despite some criticism and gaps, is recognized as one of the most successful not only within our country but also by the countries of the European Union. It has raised the interests of people represented by local authorities to the same level as the interests of central and regional authorities. This principle of balance of interests is enshrined in many Ukrainian laws and other regulations. It provides for the right of territorial communities to submit their proposals in the development of state planning documents and participate in the further discussion of these documents, in particular, the State Strategy for Regional Development of Ukraine; regional development strategies; forecasts, and programs of socio-economic development. The new draft Law *On the General Scheme of Planning of the Territory of Ukraine* also provides such mutual coordination of the state, regions, and territorial communities' interests in the planning process.

Balancing the interests of the center, regions, and territorial communities is especially clear in the development of spatial planning documentation. At the beginning of such work, the community should receive from state and regional institutions a list of their interests in relation to their territory (which objects of state and regional importance should be built on the territory of this community). It is a question of international transport corridors, roads of state and regional importance, energy facilities, waste processing enterprises, etc. Such a list of objects of state and regional significance is formed on the basis of approved documents, in the preparation of which the community had the opportunity to participate, and which should be taken into account in the local Integrated Development Concept, and subsequently in spatial planning documentation.

It is worth noting that the activities on planning the spatial development of communities' territories began only in 2021 when they received the right to dispose of all land within their administrative boundaries. Therefore, the awareness of the importance of these works is quite slow. Among the factors that motivate communities on the way to developing plans, first of all, should be mentioned the

potential location of investment-attractive facilities that will create jobs and fill the budget. In addition, there is a need to justify unpopular administrative decisions related to the optimization (closure) of some social infrastructure facilities, which can be carried out on the basis of a spatial plan.

Attempts to overcome the existing gaps in the pre-war period were to some extent supported by international technical assistance projects which provided expert and even financial support to communities in the development of spatial planning projects, demonstrating the benefits of an integrated approach to decision-making on territorial resource management (**Fig. 2**). One such benefit is the contribution to the achievement of the Sustainable Development Goals, primarily Goal 11, but also indirectly Goals 6, 7, 8, 9 and 13.

Under the conditions of war and post-war reconstruction, territorial development planning becomes even more relevant. Therefore, much attention is paid to this issue in the draft Recovery Plan for Ukraine, developed in the summer of 2022 by government officials and experts. In the direction of *Restoration and Sustainable Development of Regions*, the key challenges in the draft Plan are identified as demographic and economic imbalance: changes in the number and gender and age composition of the population of Ukraine in different regions and territorial communities (depopulation in some and migration burden in others due to forced internal displacement of people), the mass outflow of the working-age population; lack of housing for internally displaced persons; destruction of social, engineering and transport infrastructure and its overloading due to both the destruction of the social and engineering infrastructure and the overloading of the transport infrastructure. Overcoming these problems requires the central, regional, and local authorities not only operational actions but also strategic decisions in the field of spatial planning.

In June 2022, the Ukrainian Parliament adopted amendments to the legislation that regulated the development of a new type of documentation: Comprehensive Recovery Program (the Program). It can be developed for the part of the region, as

КОМПЛЕКСНИЙ ПЛАН ПРОСТОРОВОГО РОЗВИТКУ ТЕРИТОРІЇ
РОГАНСЬКОЇ ТЕРИТОРІАЛЬНОЇ ГРОМАДИ ХАРКІВСЬКОЇ ОБЛАСТІ
ПРОЄКТНИЙ ПЛАН (ОСНОВНЕ КРЕСЛЕННЯ),
СУМІЩЕНІЙ ЗІ СХЕМОЮ ПРОЄКТНИХ ПЛАНУВАЛЬНИХ ОБМЕЖЕНЬ
Виконано завдяки підтримці «Програми USAID з аграрного та сільського розвитку (АГРО)»

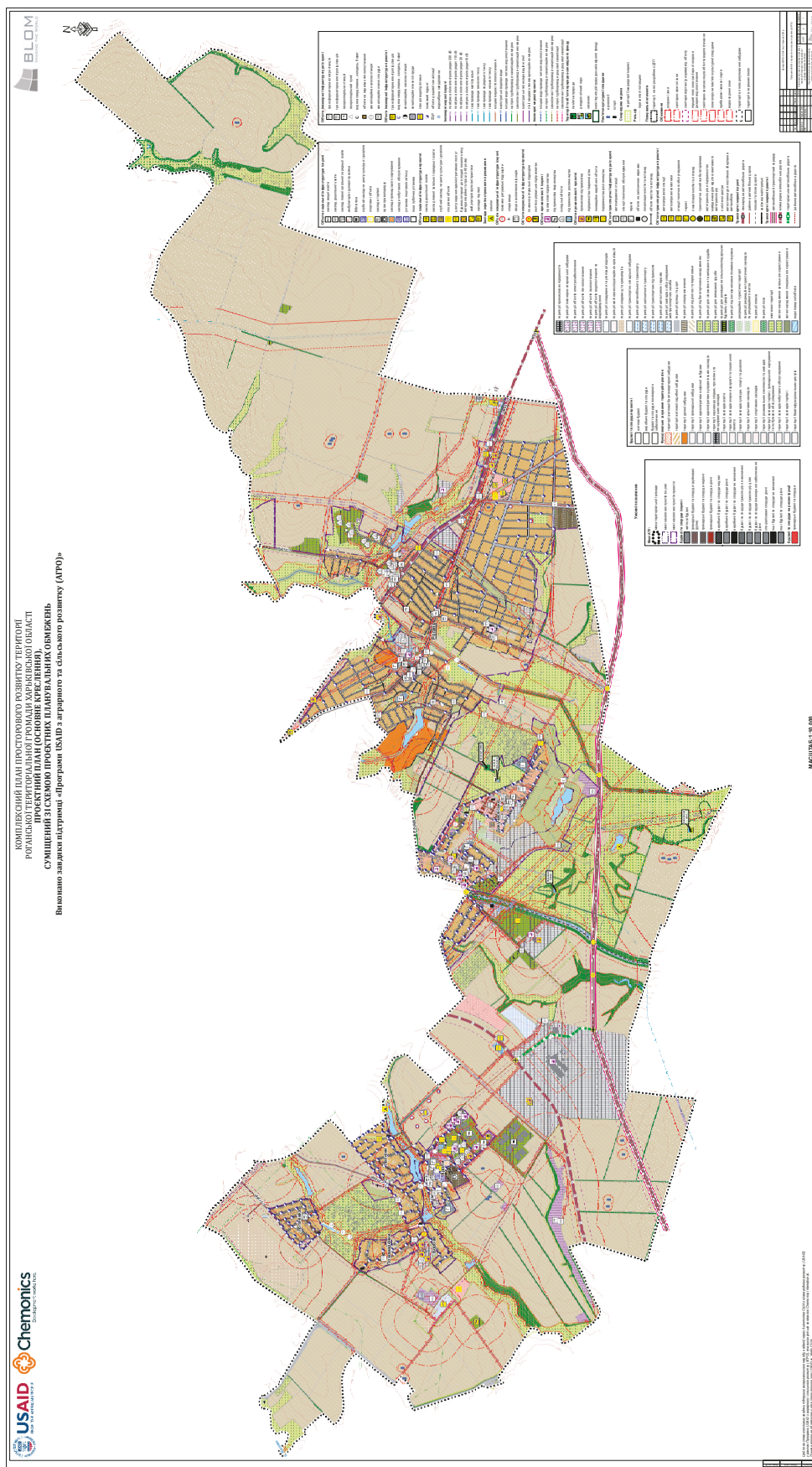


Fig. 2 (a). Comprehensive plan of the spatial development of the Rohan territorial community (Kharkiv region).
General view of the map.

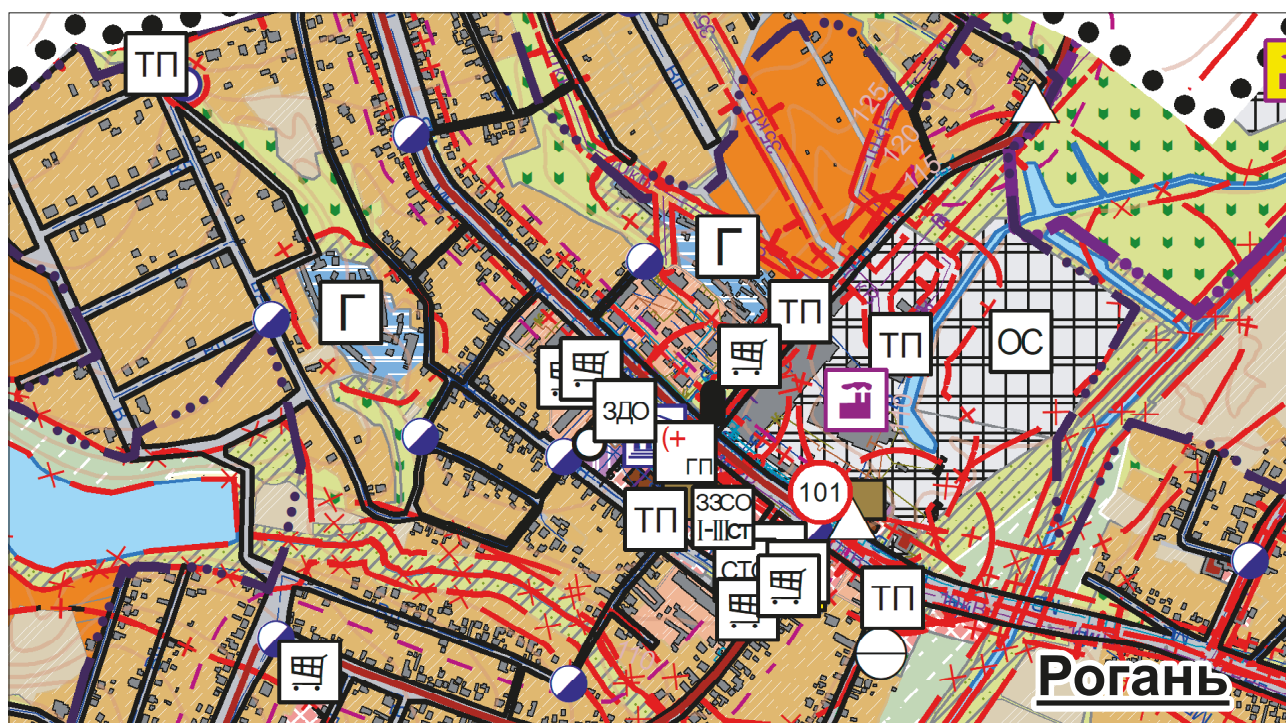


Fig. 2 (b). Detailed fragment of the map

well as the part of the territorial community affected by the armed aggression against Ukraine or in which socio-economic, infrastructural, environmental, or other crisis phenomena are concentrated. Thus, the region or community that is the recipient of refugees can also develop such a program that defines the main spatial, urban planning, and socio-economic priorities of the recovery policy and includes a set of measures to ensure the restoration of the territory.

The Law *On the Regulation of Urban Development* provides for the interrelation of regional and local tasks and interests: the approved Program of Comprehensive Restoration of the region is part of the initial data for the development of programs of comprehensive community restoration, and the Program of Comprehensive Restoration of the territorial community must be approved by the regional state administration.

The program is essentially analogous to the Integrated Development Concept. But since it is being developed in wartime, it requires less participation and, accordingly, can be developed much faster. The introduction of such a document is obviously accompanied by a number of risks, primarily in relation to the environment and cultural landscapes. Therefore, in the development and implementation of programs, it is important to

adhere to the guidelines laid down in the concept of integrated spatial development plans, in particular, to assess the state of environmental components, paying attention to the protected areas and historical and cultural heritage sites. Taking into account that in the future the Program will become a source of data for the development of spatial planning documentation at the regional and local levels, some decisions may be adjusted in new project periods.

However, the beginning of the post-war reconstruction of the territories should be preceded by integrated strategic spatial and economic planning at the state level, which, based on the goals of sustainable development, will form a vision of the future settlement system and a new economic framework within the country, identify the territories that need state support (potential growth centers to spread their positive impact on the development of neighboring territories and influence the development of the region as a whole, as well as territories with special development problems), which will be implemented in accordance with the goals of the Sustainable Development Goals. The new General Planning Scheme of Ukraine should become such a document. In the future, at the regional and local levels, spatial planning documents, taking into account the integrated recovery programs, will

offer solutions aimed at accelerating the economic growth of regions and territorial communities based on the effective use of their internal potential, improving the quality of living space, ensuring

sustainable mobility, creating new jobs, increasing employment and accessibility of public services, which will create conditions for the return of migrants to their homeland and human development.

Conclusions

The full-scale Russian aggression in Ukraine has led not only to significant human casualties and destruction, and loss of ecosystems but also to tectonic transformations in the economy and society. Such transformations pose a number of challenges for spatial planning, and one of the most difficult is to ensure a balance between the pace of recovery and the balance of planning decisions. The balance should be understood as almost the entire list of 2030 Goals, the indicators of achievement of which in Ukraine will certainly be revised taking into account the consequences of the war. The implementation of such an approach requires a comprehensive vision of the development of the country as a whole, different functional types of territories and connections, and should be guided by close interrelations with the spatial development policy of the EU countries, based on the principles of polycentrism, territorial cohesion, and spatial justice. Thus,

the restoration of cities should be based not only on overcoming the problems that arise in the internal environment but also on understanding their role and functions in the spatial framework of the country, macro-regional and global environment. This outlines the need for the preparation and approval of the Concept of Sustainable Spatial Development and its further implementation on the basis of the updated General Planning Scheme of Ukraine. It is also important to emphasize the importance of further introduction into the planning process of methods related to the assessment of territories and impacts on the environment and public health. Another priority is to preserve not only the powers but also the complexity of planning at the local level. The development of Integrated Recovery Programs, as well as comprehensive spatial development plans, will require international advisory support, monitoring, and adjustment.

References [Література]

1. Brown, R. H. (2005). Reconstruction of infrastructure in Iraq: End to a means or means to an end? *Third World Quarterly*, 26 (4–5). 759–775.
2. Cherry, G. E., et al. (1994). Fifty Years of Post-War Planning [with Comments]. *The Town Planning Review*, vol. 65, No. 3, 277–303. URL: <http://www.jstor.org/stable/40113647>.
3. Guiding principles for sustainable spatial development of the European continent. Translation and reproduction with the assistance of the CEMAT *Innovative Regions project* (GTZ, Germany). Kyiv, 2017. 40 p. [In Ukrainian]
[Керівні принципи сталого просторового розвитку Європейського континенту. Переклад та розмноження за сприяння проекту «Інноваційні регіони СЕМАТ (GTZ, Німеччина)», Київ. 2007. 40 с].
4. Khalaf, R.W. (2020). Cultural Heritage Reconstruction after Armed Conflict: Continuity, Change, and Sustainability Hist. *Environ. Policy Pract.* 11. 4–20.
5. Kil, W. (2014). Reconstruction as a chapter of urban history. A comparison of Neubrandenburg and Białystok. In *Laboratory of Modernism Post-War Architecture in Europe*; Sonntag, I., Ed: Dresden, Germany, Vol. 40, 47 p.
6. Larkham, P. & Lilley, K. (2003). Plans, planners and city images: place promotion and civic boosterism in British reconstruction planning. *Urban History*. 30. 183–205.
7. Law of Ukraine *On the General Scheme of Planning of the Territory of Ukraine* (Information of the *Verkhovna Rada* of Ukraine. 2002, No. 30. P. 204) [In Ukrainian].
[Закон України «Про Генеральну схему планування території України». Відомості Верховної Ради України (ВВР). 2002. № 30. С. 204].
8. Marmaras, E.V. (2015). Planning London for the Post-War Era 1945–1960. *XXI, Springer Cham*, 215 p. DOI: <https://doi.org/10.1007/978-3-319-07647-8>
9. Maruniak, Eu., Rudenko, L., Lisovskyi, S. & Palekha Yu. (2022). From destruction to a new dimension of sustainability in post-war Ukraine / Territoriall. *The ESPON magazine*. 2022. Issue 6, June 2022. 40–41.
10. Palekha, Yu. M. (2011). Development of the transport system as a basis for forming the planning framework of Ukraine. *Approach and prospects of development of the cities of Ukraine*. Vol. 21, 4–13. [In Ukrainian].
[Палеха Ю. М. Розвиток транспортної системи як основа формування планувального каркасу України. Досвід та перспективи розвитку міст України. № 21. С. 4–13].

11. Palekha, Yu. M. (2015). Planning framework of Ukraine as a basis for ensuring its sustainable spatial development. *Approach and prospects of development of the cities of Ukraine*, Vol. 29. 48–56. [In Ukrainian].
[Палеха Ю. М. Планувальний каркас України як основа забезпечення її сталого просторового розвитку. Досвід та перспективи розвитку міст України. № 29. С. 48–56].
12. Palekha, Yu. M. (2020). New edition of the General Scheme of planning of the territory of Ukraine — strategy of integration of Ukraine in the European space. *Ukrainian Geographical Journal*, 1. 7–15. [In Ukrainian].
[Палеха Ю. М. Нова редакція Генеральної схеми планування території України — стратегія інтеграції України у Європейський простір. Український географічний журнал. 2020. № 1. С. 7–15].
13. Palekha, Yu. M. (2020). Regional planning: Methodical guide. *Logos*. Kyiv. [In Ukrainian].
[Палеха Ю. М. Регіональне планування: Методичний посібник. К. : Логос, 2020. 224 с].
14. Palekha, Yu. M. & Oleshenko A. V. (2014). General scheme of planning of the territory of Ukraine and structural changes in land use (according to annual monitoring of the General scheme). *Land management and cadastre*. Vol. 1. 20–25. [In Ukrainian]
[Палеха Ю. М., Олещенко А. В. Генеральна схема планування території України і структурні зміни у використанні земель (за даними щорічного моніторингу Генеральної схеми). Землеустрій і кадастр. 2014. № 1. С. 20–25].
15. Post-conflict reconstruction in Japan, Republic of Korea, Vietnam, Cambodia, East Timor and Afghanistan : *Proceedings of an International Conference, Hiroshima, November 2002* / edited by Nassrine Azimi, Matt Fuller, Hiroko Nakayama. 324 p.
16. Rathmell, A. (2005). Planning post-conflict reconstruction in Iraq: What can we learn? *International Affairs*, 81(5), 1013–1038.
17. Schaefer P. F. & Schaefer P. C. (???). Planning for Reconstruction and Transformation of Japan after World War II (Case Study). [http://se2.isn.ch/serviceengine/FileContent?serviceID=ESDP&fileid=898B2CE0-A37F-EC5D-CA30-FC238207A1CD&lng=en].
18. Turner I. D. (1992). Reconstruction in Post-War Germany. *Berg Publishers*, 440 p.
19. World Bank Group Response to Post Conflict Reconstruction in Kosovo: General Framework For an Emergency Assistance Strategy. URL: <https://reliefweb.int/report/albania/world-bank-group-response-post-conflict-reconstruction-kosovo-general-framework>
20. Yarwood, John R. (2010). Urban Planning After War, Disaster and Disintegration: Case Studies. *Cambridge Scholars Publishing*. 211.

The article was included in the editorial office December 18, 2022

For citation [Для цитування]

Maruniak, Eu. O., Palekha, Y. M., & Kryshchuk, T. V. (2022). Planning of Spatial Development in Times of War and Reconstruction: a Vision for Ukraine. *Ukr. Geogr. Zh.*, 4, 13–22. [In English]. DOI: <https://doi.org/10.15407/ugz2022.04.013>

Маруняк Є. О., Палеха Ю. М., Криштоп Т. В. Планування просторового розвитку в умовах війни і відбудови: бачення для України // Укр. геогр. журн. 2022. № 4. С. 13–22. [Англійською мовою]. DOI: <https://doi.org/10.15407/ugz2022.04.013>