# SPATIAL PLANNING IN THE EUROPEAN UNION AND THE RUSSIAN FEDERATION

S. Skaterschikov\* A. Chistobaev\*\*

٩

\* LLC ENKO Research and Design Institute for Spatial Planning 33/35 10th Line of Vasilyevsky Island, Saint Petersburg 197342, Russia \*\* Saint Petersburg State University 7—9 Universitetskaya nab., Saint Petersburg, 199034, Russia

Submitted on December 7, 2013 doi: 10.5922/2079-8555-2014-1-9 © Skaterschikov S., Chistobaev A., 2014

This article analyzes the principles of spatial planning, which form the basis for this type of urban development in the countries of the European Union (EU) and in the Russian Federation. The following principles are considered and compared for both territories: 1) promotion of territorial cohesion through a more balanced social and economic development of regions and improved competitiveness; 2) encouragement of development generated by urban functions and improvement of the relationship between the town and countryside; 3) promotion of more balanced accessibility; 4) development of access to information and knowledge; 5) reduction of environmental damage; 6) enhancement and protection of natural resources and natural heritage; 7) enhancement of cultural heritage as a factor for development; 8) developing energy resources while maintaining safety; 9) encouragement of high-quality, sustainable tourism. An efficiency analysis of these principles showed that the level of their application for ensuring sustainable development differs. It is a result of the significant differences in natural and socio-economic conditions of sustainable development in these countries, as well as different experiences and traditions in the space-time dimension. In most EU countries, ministries of spatial planning were established as early as the 1960s; in the Russian Federation, such authority still does not exist. The coordination of spatial development by the Russian Ministry of Regional Development is of fragmentary nature; therefore, at the moment, the efficiency of spatial planning is rather low.

The authors find it necessary to adopt EU practices of urban planning in view of the Russian spatial potential.

*Key words:* spatial planning, European Union, Russian Federation, principles, development, environment

## Introduction

One of the central problems of modern natural and social sciences is ensuring sustainable development of territories. The solution of this problem depends on the degree to which the results of human activities and ecological parameters of Ecumene can be harmonised. The need to achieve such balance has been recognised in most of the world, including Russia. Presidential decree No. 440 on the Concept for the transition of the Russian Federation to sustainable development was adopted as early as 1996. Similar documents have been adopted in all EU countries. In 2002, the Committee of Ministers of the Council of Europe declared sustainable development of territory to be the priority of modern spatial planning [8].

Unlike territorial planning, spatial planning relates not only to the land but also water area (marine planning), in the future it might be also extended to airspace. This article will focus on the issues corresponding to the objectives of territorial planning, more precisely, allocation of functions and zoning of a territory. Its innate property is an immediate link to the territory, its natural and/or anthropogenic characteristics [1; 2].

In developed countries, the territorial resources management is regulated by ministries of spatial panning established in the mid-1960s. A special Commission was set up at the level of the EU; the Commission's approval is necessary for implementing any international or national territorial project. There were special principles of sustainable development policy formulated in Europe [8]. We believe that these principles can be adopted in Russia, too.

# Principles of sustainable spatial development policy

The principle of ensuring territorial cohesion through a balanced social and economic development of regions and increasing their competitiveness. It is central to territorial development management in the conditions of market economy. The principle is aimed at increasing the attractiveness of capitals and so called gateway cities, which connect a territory to the outer world, as well as structurally weak regions. Solutions for and investment in regional, national, and EU spaces should be based on a polycentric development model due to its importance for traditional industrial and agricultural districts. Regional and local authorities should have legitimate democratic territorial institutions with professional and experienced staff. Spatial development planning requires active participation of citizens and interest groups.

In Russia, zones of advanced development are expected to emerge in regional centres that have the following key resources at their disposal: economically active population, financial resources, capital investment, and infrastructure. In terms of territorial development, such distribution has an adverse (or even catastrophic) effect on the rest of the country's territory, especially single-enterprise towns and rural territories.

Recently, the problem of single-enterprise towns has been widely discussed in mass media; substantial funds have been allocated to its solution. This problem emerged in the mid-20<sup>th</sup> century against the background of administrative centralisation and concentration of production. The same

holds true for all components of the industrial, social, and institutional infrastructures [6].

Uneven distribution of production was accompanied by similar processes regarding population. Within urban territories, population concentrated in large cities, and in rural ones, — at central farms of kolkhozes and sovkhozes. At the same time, the so called "unpromising" villages were depopulated. The authorities hoped that population concentration would result in a rational change of the settlement structure. It was assumed that the concentration of rural population at central farms will increase the role of collective economy in the lives of peasants, decrease the number of individual farms, and develop the catering industry, cultural and community services, preschool education, etc. [15].

However, despite these expectations, rural areas were becoming desolate: residents of "unpromising villages" were moving to towns bypassing central kolkhoz farms. In each of the 29 republics of the Non-Black Earth of the RSFSR, thousands of villages were depopulated as "unpromising". The migration of rural residents to towns resulted in a decline in the price of labour. The qualification of labour resources decreased, which affected labour productivity and contributed to the development of a system crisis.

According to a 1074 governmental decree, 170,000 rural families were to be settled in the Non-Black Earth region of the RSFSR in 1975—1980. In the enclosure to this document only 43,000 of rural settlements (not more than 30% of their total number) were identified as promising [11]. Another remarkable fact is that nothing of the kind was planned in the other Soviet republics. All rural settlements were preserved there. In the autonomous republics (ASSR) of the RSFSR, the number of "unpromising" villages was much lower than in the regions.

The transition to the new economic conditions did not improve the situation in Russian agriculture but rather aggravated the degradation of rural areas. There are tens of thousands of abandoned villages throughout the country. It holds true not only for the northern territories of Siberia, but also for the Pskov, Smolensk, Novgorod, Tver, and other regions. Many regional leaders insist on depopulating scarcely populated villages, since sustaining such settlements — electricity supply, delivery of goods, and maintenance of roads — requires significant expenditure. The residents of such villages do not have the opportunity to discuss territorial development plans. The Urban Development Code of the Russian Federation suggests only public discussions of town master plans.

The principle of encouraging the development generated by urban functions and improving the rural-urban dynamics. According to this principle, the urban systems of the EU, including small and medium-sized regional centres should develop so that they are accessible for rural residents. Production and services industries become the responsibility of smaller companies situated both in urban and rural areas [17]. Partner relations between urban and rural areas should play an important role in improving public transportation, revitalising and diversifying agricultural production, increasing infrastructure efficiency, developing recreational

zones, and preserving natural and cultural heritage. An important condition for effective partnership is cooperation based on the equality of rural and urban authorities.

The Soviet urban development school also relied on the same principle of rural-urban interaction, and introducing urban lifestyle to the rural areas [3]. For example, it formed the basis for the methodology for developing population distribution systems [9]. Moreover, the corresponding regulating documents (Construction rules and regulations) suggested locating service facilities so that they were also available for the residents of rural areas [4]. However, these design proposals were not always implemented in full [14].

In modern Russia the aspect of the development generated by urban functions and improving the relationship between the town and the countryside is being completely ignored. As a result, the population of rural areas is rapidly declining. Kindergartens, schools, hospitals, social services facilities, and even medical and obstetrical stations are being closed on a mass scale. These processes are also explained by a dramatic decrease in rural population; however, it is a case of reverse causality: the population is declining because of the degradation of the agrarian sector and the lack of infrastructure. The overall population decline in the country has the same explanation: it was the rural area that sustained the country's demographic potential over many centuries. Numerous studies have emphasised the negative consequences of 'super concentration' of Russia's economic and social potentials in big cities (for example, see [7]), however, these considerations have not been put into practice: the concentration of population and production is rapidly increasing.

A perplexing fact is that there is no "equality of local authorities" in Russia. Urban authorities, especially those of urban districts, are not particularly concerned over the problems of neighboring rural areas and ignore the fact that without the support of agriculture, towns — the more so smaller ones — do not have a chance for survival.

The principle of parity of access to all inhabited areas. The EU countries, which do not have such vast territories as Russia, have some obvious advantages: there are no inhabited areas that do not have an easy access to national transport networks. Transport accessibility is considered one of the factors for sustainable development [19], thus transport service has become a focus of increasing attention. Spatial development documents suggest prompt creation of a European transport network ensuring stable access to any part of Europe [16]. The requirements for network capacity and configuration are often revisited in view of the changing directions of spatial development.

A more balanced territorial development requires the modernisation of links between smaller and medium-sized towns, rural and island settlements and trans-European networks and hubs (railways, motorways, navigable rivers, ports, airports, etc.). A constant quantitative growth of traffic flows makes it necessary to develop integrated strategies for different means of transport that will take into account spatial planning considerations.

A concept and strategy for transport infrastructure development have been prepared in Russia. Territorial planning schemes for constituent entities of the Russian Federation and municipalities are especially designed to ensure and enhance the accessibility of smaller towns and rural settlements. The implementation of such schemes will make it possible to deliver cargoes to all industrial facilities and ensure parity access to cultural, educational, and medical facilities.

The principles of access to information and knowledge. The need to create interfaces between the information producers and its potential users — science parks, technology transfer institutions, and research and education centres — is recognised in Western Europe at both national and regional levels. It is also deemed necessary to encourage the creation of current data banks (commodities, know-how, travel) for the development of relations between regions characterised by less favourable conditions and their ties with the world economy.

The large area of the Russian territory requires a different implementation of this principle. There are numerous districts, whose access to information is limited by natural or other conditions; such areas are found not only in the North, Siberia or Far East [10], but also in the European part of Russia. Therefore, territorial planning schemes should justify their propositions on ensuring access to information and knowledge.

The principle of reducing the environmental impact. The European implementation of this principle is aimed at preventing environmental problems through coordination of industrial programmes and increasing the efficiency of solutions found at the local level. Therefore, the EU spatial planning strives to prevent industrial accidents, reduce environmental impact, use green agricultural and forestry technologies, create environmentally friendly means of transport and energy systems, revitalisation of areas affected by industrial pollution or warfare, and contain the suburbanisation process. "Green" technologies are being introduced into all spheres of European everyday life [20].

Reducing environmental impact is even more relevant in Russia than in the EU. In many urban areas, on early cultivated territories, when in the vicinity of mineral extraction site, the environmental situation can be characterised as catastrophic [12]. Thus, this principle should become dominant in developing territorial planning scheme. The significance of the corresponding documents can hardly be overestimated in the case of territories, which are managed by governmental agencies. However, it is the integrated approach to territorial planning that makes it possible to analyse all factors that affect the environment.

The principle of enhancement and protection of natural resource and natural heritage. This principle is based on the Convention on the Conservation of European Wildlife and Natural Habitats (1979) and the Pan-European Biological and Landscape Diversity Strategy (1995). These documents suggest enhancing and protecting natural resources that not only maintain the ecosystem balance, but also increase the attractiveness of regions, and improve their recreational potential and living standards.

Spatial planning should take into account the revitalisation and preservation of ecological networks and swamp areas. Creation of a coordinated network of special areas of conservation is one of the measures designed to achieve this goal.

Comprehensive strategies for water resource management should cover the preservation of rivers and catchment areas, agricultural management in terms of irrigation and fertilisation, treatment of contaminated waters, etc. The possibility of water transfer between regions can be considered only in cases when local resources have proved to be insufficient, impossible to attract, or exhausted. The preservation of drinking water quality requires the expansion of water supply system to be accompanied by the development of sewage and water treatment systems. This principle is closely linked with the previous one.

Territorial planning documents designed for constituent entities of the Russian Federation should form the natural and ecological framework of a territory, including a network of existing and prospective conservation areas, which occupy much admittedly less areas in most regions than it is required for maintaining the territory's natural balance. Moreover, this framework includes protected forests, urban green spaces, water conservation areas, and swamp areas which regulate the hydrological regime of territories. Special economic regimes aimed to prevent the exhaustion of natural resources and the deterioration of the territory's environmental condition.

The principle of conservation and management of cultural heritage. In the EU countries, regions actively engage investors, tourists, and population in enhancing cultural heritage and increasing their contribution to the economic development and asserting regional identity. The spatial development policy should facilitate integrated management of the cultural heritage interpreted as an evolutionary process of its preservation in view of the needs of modern society. Many countries boast cultural sites and artefacts of different art schools and movements. Identification of cultural heritage and development of general methodologies for their conservation, restoration, and exploitation will be at the core of the Great Routes of Culture programme aimed not only at conservation of the past, but also at finding harmony between modern architecture and urban design and historical heritage.

The Russian Federation has vast opportunities for enhancing cultural heritage and increasing its contribution to the socio-economic development. Due to certain events that resulted in the destruction of numerous historical and cultural sites in the 20<sup>th</sup> century, the preservation and enhancement of cultural heritage assumes special significance, especially considering the country's multinational population. When working on territorial development documents, it is necessary to "anchor" all cultural heritage objects, including archaeological sites to certain territories, and identify protected zones. This information is used to formulate recommendations for the historical and cultural examination, restoration or conservation, and current use of objects [13].

As a rule, objects of cultural heritage are central to education tourism. Cultural and historical sites, cultural objects, preserved urban structures, and historical buildings are of particular interest for tourists. The Russian experience of revitalisation of such cities as Novgorod, Vladimir, Pskov, Saint Petersburg, and Suzdal, and their integration into tourist routes suggests that cultural objects are important not only from the educational perspective, but also because they can contribute to the country's economic potential. Education tourist is becoming a major and sometimes crucial item of income.

The principle of energy safety. In view of the current excessive energy consumption, energy efficiency of using the existing resources and facilities is becoming a priority. The objective is to increase the efficiency of CHPPs to reduce air pollution. Special attention should be paid to safety measures at NPPs, especially those that are to be shut down in the next decades. Energy development should focus on renewable energy sources as spatially "anchored" and environmentally friendly systems.

The scopes of energy resource production in Russia and the EU countries are incomparable. Therefore, increasing its safety is of special importance in Russia, predominantly in the field of oil and gas production. An equal environmental threat is posed by coal-based energy systems (CHPPs, boiler stations, etc.). Another issue is hydropower plants, first of all the Volga HPP. There a big number of exceptionally fertile lands were flooded and the natural hydrological regime of a vast territory was disrupted, which poses a potential threat of flooding the inhabited areas in the case of dam breach.

The principle of encouraging sustainable development of tourism. In the EU, the policy of spatial development is aimed at unlocking the economic growth potential created by tourism. This type of economic activity is developing, in particular, in backward regions. Tourism business is the seventh largest sector of the EU economy [18]. At the same time, the development of high-quality and stable tourism is identified as a priority. The preliminary stage of spatial planning includes: analysis of the ecosystem, calculation of the tourist capacity of the territory, and development of mechanisms for controlling the environmental impact of tourism.

In Russia, most regions show a considerable potential for the development of different types of tourism. However, the role of domestic tourism and mass recreation in the socio-economic development of the Russian Federation is underestimated, whereas the legal framework is not sufficiently developed [5]. This potential is being developed on a limited number of territories, whereas, for many municipalities, different forms of tourism and recreation seem to be next to the only promising areas of socio-economic development.

#### Conclusion

It has been established that the analysed principles of spatial planning are assigned different weights, which is explained by different natural and socioeconomic conditions of planning. This is also due to the fact that the time of

acquiring experience in this field is unequal in both cases. The experience of European countries should be taken into account when developing territorial planning schemes for Russian constituent entities and municipalities, which will increase the effectiveness of project designs.

## References

- 1. Vladimirov, V. V., Naimark, N. I. 2002, *Problemy razvitija teorii rasselenija v Rossii* [Problems of development of the theory of settlement in Russia], Moscow, 110 p.
  - 2. Glazychev, V. L. 2008, *Urbanistika* [Urbanistics], Moscow.
- 3. Vladimirov, V. V., Naimark, N. I., Subbotin, G. V. et al. (eds.), 1986, *Rajonnaja planirovka* [Regional planning], Moscow, 328 p.
- 4. *Instrukcii po sostavleniju shem i proektov rajonnoj planirovki* [Instructions for schemes and projects of regional planning], 1973, Moscow.
- 5. Kosarev, A. V. 2011, Territorial'nye rekreacionnye sistemy v rossijskom zakonodatel'stve: analiz i ocenka [Territorial recreation systems in the Russian legislation: analysis and evaluation]. In: Kaledin, N. V., Chistobaev, A. I. (eds.), *Geograficheskoe prostranstvo Rossii: obraz i modernizacija* [Russian geographical space: the image and modernization], Saint Petersburg, 354 p.
  - 6. Lappo, G. M. 1997, Geografija gorodov [Geography of cities], Moscow, 480 p.
- 7. Lexin, V., Karacharovskiy, V. 2007, Prichiny i posledstvija sverhkoncentracii jekonomicheskogo i social'nogo potencialov Rossii v ejo krupnyh gorodah [Causes and consequences of over-concentration of economic and social potential of Russia in its major cities], *Rossijskij jekonomicheskij zhurnal* [Russian Economics Journal], no. 1—2, p. 26—46.
- 8. Osnovopolagajushhie principy ustojchivogo prostranstvennogo razvitija Evropejskogo kontinenta i mery po ih realizacii [Guiding Principles for Sustainable Spatial Development of the European continent and measures for their implementation], 2003. In: *Materialy pjatoj konferencii «Okruzhajushhaja sreda dlja Evropy»* [Proceedings of the fifth Conference «Environment for Europe»], Kiev, Ukraine, 21—23 May 2003.
- 9. Pertsik, E. N. 2006, *Rajonnaja planirovka (territorial'noe planirovanie)* [Regional planning (spatial planning)], Moscow, 398 p.
- 10. Pilyasov, A. N. 2009, *I poslednie stanut pervymi: Severnaja periferija na puti k jekonomike znanij* [And the last shall be first: Northern Periphery towards the knowledge economy], Moscow, 544 p.
- 11. Postanovlenie CK KPSS, Sovmina SSSR ot 20 marta 1974 g. № 206 «O merah po dal'nejshemu razvitiju sel'skogo hozjajstva Nechernozemnoj zony RSFSR» [Resolution of the CPSU Central Committee and USSR Council of Ministers on March 20, 1974 N 206 «On measures for further development of agriculture chernozem zone of the RSFSR»], 1974. In: *Sobranie postanovlenij pravitel'stva SSSR* [Meeting government regulations USSR], no. 9, Art. 39.
- 12. Kotlyakov, V. M., Tishkov, A. A., Sdasyuk, G. V. (Science eds.), 2006, *Prirodopol'zovanie i ustojchivoe razvitie. Mirovye jekosistemy i problemy Rossii* [Environmental management and sustainable development. The world's ecosystems and problems of Russia], Moscow, 448 p.
- 13. Samsoshko, E. A. 2009, *Problemno-programmnyj podhod k sohraneniju obektov kul'turnogo nasledija v regionah subektah RF* [Problem-software approach to the conservation of cultural heritage in the regions the subjects of the

Economic geography

Russian Federation], author's abstract, Saint Petersburg, Saint Petersburg state university, 19 p.

- 14. Shchukin, A. K. 2008, Standarty i normativy v gradostroitel'noj dejatel'nosti [Standards and regulations in urban development activities], *Upravlenie razvitiem territorii* [Managing the development of the territory], no. 3, p. 18—22.
- 15. Chistobaev, A. I. 1990, A State Farm in Depths of the Nonchernozem ZONE, *Soviet Geography*, Vol. XXXI, March, 1990, p. 151—159.
- 16. Proceedings of the II Pan-European Conference of Ministers of Transport. Crete in March 1994, Paris, 1974.
- 17. Schuller, N. (ed.), 2009, Urban reports Urban strategies and visions in mid-sized cities in a local and global context, Zurich.
  - 18. European Travel Commissions Research Group Newsletter, 2006, no. 3.
- 19. Florida, R. 2008, Who's your city? How the creative economy is making where to live the most important decision of your life, New York.
  - 20. LeGates, R. T. (ed.), 2011, The city reader, London.

### About the authors

*Dr Sergey Skaterschikov*, Director General, LLC ENKO Research and Design Institute, Russia.

E-mail: svs49@mail.ru

*Prof. Anatoly Chistobaev,* Honored Scientist of the Russian Federation, Saint Petersburg State University, Russia.

E-mail: chistobaev40@mail.ru