This chapter aims to analyse current challenges within the system of new construction and spatial planning. Section A assesses practices in new construction, including the organization of the construction industry, trends in the demand for new construction, as well as concerns of construction norms and quality. Section B examines the planning process, which includes policies of land pricing, plan development, the planning environment and permission procedures.

A. New construction

1. Predominant characteristics of new construction

The Russian Federation with its enormous diversity of climatic conditions, cultural traditions and size of settlements as well as with the naturally diversified availability of natural raw materials suitable for the production of construction materials is strongly predisposed to the development of a highly differentiated construction industry. However, due to the long period of a highly centralized system of governance the Russian construction industry is still dominated by the construction of standardized, multi-storey blocks of flats. Ten years ago only five types of buildings were built. Now architects and constructors enjoy the possibility of more variety in the design of buildings.

With changes in technology the formerly common large-panel buildings give way to more complex construction systems in which concrete (including light concrete), brick and some ready elements of the construction are used. Concrete poured into tunnelled forms is used for the fast construction of housing blocks. A relatively simple and cheap method for the improvement of energy efficiency of buildings has been introduced in Moscow and Vladimir regions. Similarly to the commonly used method of the concrete construction, liquid concrete is poured into a form, which is made of boards. Then the concrete hardens and the form is no longer needed to keep the structure and therefore boards have usually been removed. However, as these boards are made from material (e.g. prefabricated polystyrene sheets) which has better thermal characteristics than concrete, with the new method the boards are left stuck to the concrete walls for thermal insulation.

The permanent growth of the above type of housing construction is particularly strong in the cities of Moscow and St Petersburg, in the republics of Chuvashija, Adygeja and Tatarstan, in Sverdlov, Novosibirsk, Tomsk, Tjumen, Kemerovo, Nizhny Novgorod, Vologda, Samara and Sakhalin regions, in Primorsky kraj. However, the bulk of new construction still consists of complexes of multi-storey block of flats. Low-rise residential buildings are still a rare phenomenon in Russian cities, let alone detached, single-family houses. The “Kurkino” housing estate in Moscow constitutes an example of recent housing construction. The whole estate is planned for more than 30,000 inhabitants but only a small fraction consists of single-family houses built specially for veterans. Buildings with fewer than 40 flats are considered “elite housing” in Moscow. Relatively smaller buildings are built on sites of historic and cultural importance (e.g. Pushkin near Saint Petersburg) where limits on the height and size of new construction protect the historic townscape.

As described in chapter VIII, the provision with utilities is insufficient, in particular in newly built single-family houses. Out of 22,600 single-family houses built in 2001 only one third (45.7% in cities and 22.5% in rural areas) were fully equipped, i.e. running cold and hot water, central heating, sewerage.

Newly built flats in multi-storey blocks are usually delivered in a very rough, unfinished state apparently to give to the owners the opportunity to complete the flat according to their individual wishes. As a consequence of the poor offer of specialized services, interior work is often done, more or less successfully, by the owners themselves. As a result the final standard of flats varies widely.

The domination of multi-family blocks in Russian cities goes in pair with the domination of large
construction companies on the Russian construction market. This dominance is also closely related to the situation of housing finance described in chapter V. The lack of a secure system of construction finance leads to a situation where banks provide loans for housing construction projects only if they trust the developer, i.e. if they have collaborated with the developer successfully for a long time. This situation favours for large established construction companies that are more or less rooted in the communist era and still accustomed to the style of housing construction of that time. This in turn hinders the development of a more diversified construction industry. This is how a closed circle in the construction industry was created. Large companies prefer to take up large-scale housing projects on empty construction sites rather than small-scale developments within a built urban environment. Local authorities, which usually obtain a share of the newly constructed flats, have little influence on the type and the quality of construction.

Construction companies in the Russian Federation undergo a double licensing procedure. Professionals in the construction industry must have their individual licences certifying their qualifications in construction or design. The company that employs them must have a separate licence for the same work. There is an acute shortage of small or medium-sized companies capable of performing small-scale construction works within built-up areas without excessively disturbing the daily life of the inhabitants of the neighbourhood. This concerns mainly constructions between existing buildings, reconstruction or extensions of existing buildings, major repairs as well as provision of utilities for existing single-family houses.

2. Capacity and know-how of the building industry and local authorities

The capacity and know-how of the building industry and local authorities do not develop evenly in all areas related to housing. In big cities there are many construction companies which use modern construction technologies. However, the progress takes place mainly within the predominant type of construction, i.e. the construction of multi-storey flat-roof housing blocks on empty construction sites. There is relatively little competition on the construction market. So there is also little incentive to take up innovative projects where new technologies would be accompanied with diversified design, type and scale of construction for the sake of the inhabitants, who would have a wider choice of flats in terms of price and comfort.

Yet local authorities depend on large construction companies to enlarge the municipal housing stock. They are thus unable to stimulate competition on the construction market. Local authorities have little knowledge about and exposure to situations where they are neither the developer nor the constructor but should create enabling conditions and stimulate fair competition among contractors for the benefit of the community.

3. The polarization of housing demand

Figures quoted in chapter II indicate that the current pace of new housing construction hardly exceeds the pace of deterioration of the existing stock. At the same time the average size of newly built flats is increasing. Diverging trends have occurred between the cooperative sector of housing construction (decreasing role) and individually financed construction (increasingly important role).

There is a trend towards polarization of newly built housing stock, as the share of large and small flats in the total of completed flats grows and that of medium-sized flats (i.e. two or three rooms) decreases. This reflects growing disparities in income levels. A relatively small group of rich people creates the demand for large flats (four rooms or more), whereas two other groups create the demand for small flats: those who can afford only the cheapest flats and those who manage to meet their own housing needs and still have some extra money. So they purchase a small flat, which they rent in order to have an additional and relatively secure source of income.

There is one more group of people who need flats, but do not create any market demand because they cannot afford it. They continue to live in the deteriorating stock and wait for their turn in the allocation of a new flat.
Diversified incomes mean that new housing construction should also become adequately diversified. It should meet the growing expectations of the rich and at the same time it should create affordable options to as many people as possible. The more people can afford their own flats, the sooner the municipality will be able to meet the basic housing needs of those households who need assistance.

4. Construction norms and standardization

Construction norms in the Russian Federation are established on the federal level and the level of the “subjects of the Federation”. Federal norms are divided into:

(a) Construction Norms and Specifications (SNiP);
(b) State Construction Standards (GOST);
(c) Code of Rules for Design and Construction (SP).

Moreover, the “subjects of the Russian Federation” prepare their own regulatory documents called territorial construction norms (TSN) for issues not regulated federally. The State Construction Committee approves and registers these territorial norms. The whole system of construction norms is gradually being updated. Some old norms have already been replaced with new ones, but for other issues norms drawn up in the 1980s or even earlier are still in force. Special attention has been paid recently to energy efficiency. The 1996 Law on Energy Saving tightened federal norms of heat transmission and consequently the “subjects of the Federation” have been introducing territorial construction norms for energy efficiency. However, as stated in chapter III, energy-efficiency standards are still below Western ones.

Russian construction norms are usually very detailed. As regards safety of construction and minimal standards they are usually good. However, because the State was long the only investor, the only developer and the only owner of land and buildings, some norms contain not only safety requirements but also detailed regulations on how buildings and other facilities should be built or designed. Even some recent norms are in the same style, i.e. they contain very detailed indicators leaving little room for individual wishes.

The major problem is not so much the contents of norms but their role, in housing construction. As a result of the lack of competition among builders even in newly constructed buildings, minimal normative values instead of clients’ demands are used as a basis for designing flats. Symptomatically, constructors on several visited construction sites when asked about specific features of the flats under construction assured that they were built in accordance with Russian construction norms. Norms should provide minimal conditions, in particular with regard to safety, whereas competition among constructors should lead to the development of a construction industry oriented towards satisfying consumers’ needs within affordability limits.

Therefore, there is a need to stimulate competition in all branches of the construction industry. Municipalities should focus their efforts on the organization of fair competition in the construction market. Particular emphasis should be put on the competition for municipal housing construction.

5. Quality of housing design

The economic and social sustainability of a building stock is largely dependent on its design quality. As there is only a limited tradition of diversified housing architecture, a whole new culture will have to be developed. There is a clear need for better design and for further diversification of housing forms to satisfy the needs of a diversified clientele. Builders will have to start listening to the consumers. The scale and size of operations as well as the way in which new collective ownership is organized will strongly influence the character of the new housing stock and hence the whole urban environment. The outcome will depend on the choices made in the near future by a large number of stakeholders, and it will be crucial whether the future users or the producers, developers and big construction enterprises put their stamp on these developments. One can expect that growing demand by the wealthy will lead to a gradual improvement in the quality of design of large and expensive flats. As regards the smallest and cheapest municipal flats built for people on waiting lists, market forces alone will not improve quality.
Therefore, local authorities should pay more attention to the quality of design of the smallest and cheapest category of flats. The smaller the flat, the more carefully it should be designed to make life in it bearable. Even small improvements in design not entailing excessive costs may facilitate significantly the everyday life of people who have to live on a very small area. For instance, the provision of sufficient (not only minimal) width of internal doors enables more flexibility in the location of furniture and this contributes to an efficient use of the floor area.

6. Wooden housing construction

There is a lack of statistical data about wooden construction. However, observations in many Russian cities and the countryside suggest that a significant part of the urban housing stock and the vast majority of rural housing are built out of wood. This part of the stock is in particularly poor technical condition, as wooden buildings usually date back to the pre-revolutionary era. Little care is taken of this stock although many of these buildings constitute a valuable part of the cultural heritage. Many wooden houses are still inhabited although they are totally run-down or dilapidated. In many cases, especially if the building is located in the city centre, the only solution is likely to be demolition and relocation of the inhabitants. However, there are several reasons for which this approach should not be applied to the whole wooden housing stock.

Firstly, it is unrealistic to think that city authorities will be able to provide sufficient new flats to replace the wooden housing stock in the near future. Secondly, many wooden single-family houses have been privatized together with the plots of land beneath them and their inhabitants are often against being moved to apartment blocks. Thirdly, wood as a construction material has many advantages and although there may be a shortage of high-quality modern wooden materials, raw wood is a relatively easily available construction material in the Russian Federation.

Bearing in mind the long period of neglect, simultaneous action in the production of wooden construction materials as well as in design and training is needed.

B. Spatial planning

1. Planning documentation

Spatial planning regulations heavily influence the environment around housing estates as well as the provision of housing. The allocation of land for housing is done in local spatial plans. Hence the importance of spatial planning for housing.

Spatial planning in the Russian Federation is moving from a situation where the State administration was the only actor in the development planning process, i.e. the only landowner, the only developer and the only spatial planner, to one where many actors are involved and there is a need for common rules and for securing a public interest among all other interests.

The new Town Planning Code of 7 May 1998 provides the legal framework for spatial planning. It seems to be a sort of compromise between the old planning system and the requirements of the new socio-economic conditions. Probably due to the transitional situation in many Russian cities and regions, the regulations of the Code are vague in some places. A broad term “planning documentation” is used for a set of documents. Each level of administration has its planning documentation. So two types of documents serve the purpose of spatial planning on the federal level:

(a) General Settlement Scheme of the Russian Federation;
(b) Consolidated Urban Planning Scheme, which covers the area of two or more “subjects of the Russian Federation”.

The territorial complex urban planning scheme of the development of the “subject of the Russian Federation” constitutes the planning documentation at regional level.

The local level planning documentation contains the biggest set of documents divided into two groups. The first group contains the following urban planning documents:
(a) **Territorial complex urban planning scheme of districts and rural areas.** According to the Code, this scheme should contain, among other items, basic directions for the implementation of government policy on spatial development. It should also contain rough divisions of the territory into different functional zones;

(b) **General plan of urban and rural settlements (Genplan).** According to the Code, this is a basic urban planning document defining the directions and boundaries of spatial development. The contents of the Genplan and the above described scheme overlap significantly. The Genplan is very similar to a spatial development plan of an urban area;

(c) **Draft lines of urban and rural settlements and other municipal entities.** This document is based on Genplan or the complex urban planning scheme. It may be a separate document or small towns and villages it may be incorporated into the general plan;

(d) **Rules for building in territories.** This document should also be based on the general plan or the complex urban planning scheme. It is the only document which, according to the Code, should be a normative local legal act.

The second group contains more detailed documents related to the process of developing land. These are:

(a) **Layout projects.** These are made for elements of the planning structure defined in the general plan. They cover selected parts of urban and rural settlements. They are therefore more detailed than general plans;

(b) **Projects of land subdivision.** These contain the planned subdivision of the area into plots of land. They may be incorporated into the layout project;

(c) **Development project.** This may be prepared by the developer. It covers either the single plot or the area defined in the layout project. Its contents include the exact location of buildings and other structures, number of storeys of buildings as well as other architectural and technical characteristics of planned buildings.

To make the matter more complicated many cities still have old master plans developed during the Soviet era.

Planning documentation provides the legal basis for location decisions. Although only “rules for building” are required to be a local legal act, the general plan (Genplan) is now usually perceived to be the crucial instrument for the introduction of new spatial planning rules. According to the Town Planning Code, the general plan should shape the living environment of settlements in the interest of the population and the State. It should also define directions and boundaries of the spatial development; zoning regulations and rules for the provision of utilities, for the development of the transport network and for basic social services. The plan should also include rules for the protection of the cultural and natural heritage.

Moreover, Genplan is expected to perform several other tasks not explicitly listed in the Code. It should be a spatial reflection and a supportive instrument for the implementation of the city development strategy. It should delineate the economic and functional spatial structure of the city. It should constitute a basis for the spatial allocation of particular land-use types and different forms of landownership. It should also delineate units of the territory for more detailed planning documents.5

The general plan is expected to be both a policy document and a legal regulatory document. Moreover, at the current stage of development planning it is also expected to play a distributive role with regard to landownership. This role is performed in several ways. The allocation of land for public roads, social services and other public purposes excludes some areas from privatization. On the other hand, allocations for other purposes (e.g. commercial activities) create demand among potential buyers. The distinction between areas for development and agricultural land also influences conditions of privatization because different regulations apply to the privatization of these two types of land. Finally, it is possible to earmark land in the plan for a particular type of ownership if the city’s strategy foresees this in the general plan. The distributive role is a unique feature of
current spatial plans. The next generation of spatial plans will have to take into account the landownership structure shaped by market forces. Therefore, there is a need to identify now the plots of land that should not be privatized in order to secure public interest (future transport corridors, public open space, etc.). A healthy balance should be struck while doing this.

There is a need to clarify the roles of the different local planning documents in the planning system. To make the system more transparent, policy documents, local legal acts and project documentation should be distinguished as clearly as possible.

2. The planning process

Another set of problems relates to the participation of different actors in spatial planning, especially in the process of plan-making. So far spatial development plans have been prepared by a relatively small group of professionals. This refers not only to old master plans from the Soviet era but also to the new plans under new socio-political conditions. The project of the new general plan of Moscow was prepared in cooperation between planners and a special committee of the city council and then approved by the council without much controversy.

By law, projects for new spatial plans should undergo a public review. The Town Planning Code states that local self-governments should establish their own procedures for project reviews and hearings and that they should also work out how comments should be taken into account. However, it refers only to one planning document, namely the “rules for building”.

A review usually takes the form of a media campaign and a few sessions (each of them lasting several days) to open the project to public inspection and organize public hearings. The experience of the first such public hearings has shown that they are attended mainly by representatives of institutions or organizations with a professional interest in the plan (e.g. utility providers), whereas the turnout of ordinary citizens was relatively poor and even those who attended had little prior knowledge of the subject. The first public hearings did not result in any written remarks. The experience of other countries in transition suggests that this process might have to undergo further changes.

The spatial planning system should allow for a much more active public involvement. Therefore, further clarification of the planning procedures is recommended. The institutions and organizations that represent the public interest and consequently are obliged to review, to negotiate and to approve or reject the contents of the project within their competencies prior to any public review should be defined. Furthermore, it should be possible for individuals and groups of inhabitants to make applications and remarks concerning the contents of the new plan before the public review. Similarly, there is a need for defining procedures for taking into account written remarks, protests, etc. during the public review.

A well-organized planning process may contribute greatly to facilitating new housing construction. Currently, a municipality can prepare and approve a new plan relatively easily while many potential actors remain passive. However, for the developer obtaining a building permit is usually time- and energy-consuming. Part of this problem should be transferred to the planning stage. Bodies that are now involved in the review of applications for building permits should be more involved in actual planning. This refers especially to the providers of utilities, transport and communication services. The review of the plan should result in a detailed and binding written agreement between the municipality and the utility providers. Rules and conditions for the provision of utilities and services to planned housing estates should be set out in these agreements and included in the plan regulations so as to make the subsequent application procedure clearer and more predictable.

3. Land prices and planning gains

Another challenge is related to the contributions that developers make to the municipality in return for the permission to carry out development. In the case of housing development this contribution usually consists of a certain number of flats that are transferred into municipal ownership. Currently, new developments are usually carried out on land which city authorities rent to the developer for the period of construction. The developer sells the flats and his title to the land
terminates after the completion of the building. If a condominium is formed, it may take over the
landownership. According to law, land under housing estates belongs to condominiums. However, no condominium has registered its
property rights.

City authorities grant the developer the building permit as well as the title to the land. It is not clear whether the constructor’s contributions in kind are made in return for the title to the land or in return for the building permit. However if the privatization of land goes ahead these two things will have to be separated. Issuing building permits will certainly remain in the hands of city authorities, whereas land may be bought and sold freely among citizens.

So the following question needs to be sorted out if the privatization of urban land is to become reality. Is the contribution made by the developer part of the price of land or it is a planning gain? The choice is difficult but unavoidable. Both options have advantages and disadvantages.

If the contribution is included in the price of land, it will be applicable to all cases where the municipal land is sold to the private owner. In such a situation the contribution could also be made in cash, which would allow the municipality more flexibility in spending it, e.g. on the construction of municipal housing or on the reconstruction of the existing stock. However, the land will be sold from municipal ownership only once and any profit will be gained also once.

If the concept of planning gain is applied, it will be up to the municipality to apply it to the particular case or not, regardless of the ownership of the land. The introduction of such an element in the Russian spatial planning system seems reasonable due to the permanent shortage of municipal funds and the considerable need for housing assistance as well as growing income disparities in society. However, care will have to be taken that this instrument is not abused. In addition, this might further complicate the already complicated development procedure and it might even hinder development. Moreover, it is not reasonable to apply the planning gain to small-scale development (e.g. single-family house) or to small construction companies, which are just starting up.

Scraping the current practice of allocating a certain number of flats to the municipality and replacing it with a system of cash payments seems a better solution because:

(a) There is a need to stimulate the development of new small and medium sized companies offering new products and services on the construction market;
(b) It creates better conditions for fair competition between developers;
(c) It makes the municipality less dependent on the existing big construction companies and gives it more flexibility in planning the use of its housing stock as well as in planning the provision of new municipal housing.

At present, municipalities have relatively little influence on the location and on the quality of new municipal housing. They are dependent on the choices of the large construction companies.

4. The planning environment

The planning environment consists not only of the building but also of its neighbourhood with all its links to the rest of the city and the region. The choice of the location of the first housing estates may affect the safety of the settlement, in particular if the area is prone to natural disasters. Like many European countries the Russian Federation suffered heavy floods in recent years. Moreover, floods have always endangered Saint Petersburg due to its location. The protection of existing settlements requires the construction of protective earth walls, dams, etc. For planning new housing it is certainly better to avoid endangered areas. In seismic areas (the Caucasus, some parts of Siberia and the far east)\(^1\), the danger of an earthquake should be taken into account in the territorial construction norms and all buildings should be earthquake-proof.

The arrangement and use of green open areas in cities is closely related to the quality of housing and the quality of life. There is usually enough open space in newly built housing estates and efforts are being made to preserve trees and water bodies on construction sites. However, the green space around housing blocks is usually poorly maintained. Moreover, the actual accessibility of open space is difficult for children and the elderly because housing estates are predominantly made
up of 5-storey blocks without lifts (problems for the elderly) and 10 to 20-storey blocks with lifts (problems for children).

Finally, the provision of public transport to housing estates is essential for the inhabitants’ quality of life. However, Russian planners are now more preoccupied with the provision of adequate space for garages and parking places, due to increasing car ownership, than with the provision of public transport.

5. Permission procedures

The general situation

One of the most important obstacles to construction (including housing) is the complicated procedure of issuing building permits. Russian and foreign sources report that developers who want to construct a building have to spend a lot of time and energy to collect all the required documents, approvals, permissions, etc. This is what prevents small and medium-sized enterprises from getting involved in the construction industry because such companies usually do not have the necessarily administrative staff. The developer is obliged to collect between 40 and 110 partial permissions from different institutions before applying for the final building permit. This seems to take from approximately three months to more than two years. The lack of transparency and predictability of the final outcome makes matters worse.

One should note, however, that this procedure entails not only granting the building permit but also granting the title to the plot of land for the construction. The Land Code (art. 30) specifies two ways of getting the title to the land for construction:

(a) Without the preliminary approval (given by the municipality) of the location of objects to be built: the title may be granted exclusively by means of selling municipal or State-owned land by auction. The purchaser gets the full ownership rights;

(b) With the preliminary approval of the location of objects to be built: in this way only the leasehold may be obtained. This is the case when the developer applies for a specific piece of land where he or she is going to build a specific object. Moreover, a significant part of urban land has been already privatized together with old wooden single-family houses. One can expect that the very process of land privatization may simplify the procedure to some extent, but this is not enough.

The Ivanovo case

A significant effort to simplify the procedure is currently being made in the Ivanovo region. The municipality of Ivanovo has drawn up suggestions for a new procedure for the preparation of the primary-permission and project documentation for construction. It is based on the “one-door” concept. In the new procedure the municipal administration would take on much more responsibility and would do the bulk of work related to preparing documentation required for building permits. The new procedure would consist of five stages.

1. Preparing primary-permission documentation. Two slightly different sub-procedures are proposed at this stage depending on whether preparing documentation includes the preliminary approval of the location or not. In both cases the first steps are the same. The developer applies to the municipality. Then the department of architecture and urban planning and the department of land resources consider the application and decide which sub-procedure to apply. Preparing the documentation without the preliminary approval of the location would be applicable to areas which are to be sold or rented on a tender basis and where sufficient and valid planning documentation exists. The second option would be applicable to all other cases. In both sub-procedures the municipal administration carries out the necessary preliminary urban planning works and land subdivision.

2. Specification of technical conditions. So far getting permissions and information about conditions under which the new construction can be connected to infrastructure networks has been the most troublesome part of the procedure for the developer. According to the Ivanovo procedure, obtaining all these permissions and conditions would be the task of the department of architecture and urban planning. It would be done on the basis of an agreement between the municipal administration...
(the department of architecture), the developer and organizations managing infrastructure networks.

3. **Preparing project documentation.** This part of the procedure would follow only after the preliminary decision of the executive body of the municipal government. Depending on which of the sub-procedures listed in point 1 is applicable, it may be either the decision on “allocation of the plot for development” or the permission “for implementing a project on the plot of land sold or rented on a tender basis”. Preparing project documentation is the task of the developer. The project itself must be executed by a licensed professional.

4. **Approval of the project documentation.** According to the proposal from Ivanovo, the project documentation should be approved by the department of architecture and urban planning as well as by the civil defence body and several other institutions.

5. **Issuing the building permit.** Finally, when all previous conditions are fulfilled and finance for the construction is secured, the developer may apply for a building permit. The permit is prepared by the department of architecture and urban planning and signed by the head of the municipal government.

**Further possibilities for easing the problem**

This effort to simplify the building permit procedure is certainly worth further development and wider dissemination. There are also other opportunities for smoothing the procedural path for new housing construction:

(a) Extend the range of construction works for which no building permit is needed and introduce a notification procedure for manor construction works;

(b) Abolish double licensing of construction companies and retain only personal licensing;

(c) Coordinate spatial planning and environmental impact assessment (EIA) procedures;

(d) Involve the institutions issuing partial permissions into the planning process.

6. **The need for an active land policy**

The apparent lack of discussions around the approval of new local spatial plans as well as the long permit procedures reflect the predominantly passive attitude of Russian local authorities to land management. It seems that their attitude to land is driven mainly by an instinctive fear of selling land into private ownership. Local authorities prefer to offer all kinds of leaseholds rather than full ownership rights. This situation must be changed if municipalities want to facilitate housing development.

Municipalities should work out and implement comprehensive land policies as a chain of concerted actions comprising: planning; land subdivision; provision of roads and utility networks; land privatization and development control.