

Chapter 5. Housing Construction

A. CONSTRUCTION REQUIREMENTS AND PROCEDURES

State regulation of construction activities

The Law of the Republic of Kazakhstan No. 242 on Architectural, Urban-Planning and Building Activities in the Republic of Kazakhstan of 16 July 2001 is the basic law regulating construction-related relations. Moreover, regulation by the Government is ensured by a system of normative documents on architectural, urban planning and construction activities.

These include:

- normative legal acts that establish mandatory requirements for the organization of activities, and regulate relations between architectural, urban planning and construction entities; state urban development norms and regulations; technical design and construction regulations (for buildings, structures, their complexes, and communications); standards of government architectural and construction inspection; departmental regulations for other government inspection agencies; construction guidelines;
- regulatory technical documents that establish mandatory safety requirements for certain types of products and/or their life cycle processes in line with the requirements of technical regulations (for buildings, structures, their complexes, and communications) – construction norms (CN); construction norms and regulations (SNIIP); operation flow charts; construction pricing regulations;
- optional regulatory technical documents: codes of practice for design and construction activities; legal and technical manuals; engineering standards; normative standardization documents for architectural, urban planning and construction activities, industry, building materials, products and structures; manuals and guidelines that contain practice-tested provisions for the development and enforcement of mandatory requirements for technical regulations and building codes, or for some individual issues that are not regulated by mandatory standards; and
- basic safety requirements for construction projects were established by the technical regulations entitled “Safety Requirements for Buildings and Structures, Building Materials and Products”, and were approved by Decree of the Government of the Republic of Kazakhstan dated 17 November 2010, No. 1202. Residential buildings are designed and constructed in accordance with the following normative and technical documents:
 - SNIIP of RK 3.02-43-2007 “Residential Buildings”;
 - SNIIP of RK 3.02-27-2004 “Single-Family Houses”; and
 - Construction Norms (CN) of RK 02-2013 3.02 “Technical Requirements for Housing”.

Certain issues related to the design of structures, fire protection, thermal protection, lighting, noise protection, and utility provision for residential buildings, are governed by the relevant national regulations.

Design and construction activities in zones (areas) of high seismic hazard take into account the requirements contained in government architectural, urban planning and construction standards regulating these issues.

Normative documents on construction pricing shall be used if the construction is financed by public funds and by funds of organizations with state participation (quasi-public sector entities).

In accordance with the Kazakhstan-2050 strategy and the National Plan – 100 Specific Steps to Implement Five Institutional Reforms, Kazakhstan is currently:

- implementing a phased transition to the system of European codes to replace outdated building codes and regulations; and
- introducing an input method to estimate construction costs on the basis of the real market value of materials, products, equipment and labour.

Construction-related procedures

The Law on Architectural, Town-planning and Construction Activity (Article 68) defines the main requirements regarding construction procedures. Procedures, terms of registration and the issuance of documents required for the construction of new objects and the modification of existing ones are established by the Rules for Housing Development and Licensing Procedures in the Construction Sector.⁸⁸

Customers (individuals or legal entities) intending to construct an object are required to obtain a decision granting the right to a land parcel from the local district/city executive authorities (with the exception of construction on land parcels owned by customers). In accordance with the Land Code of the Republic of Kazakhstan (2003), it is prohibited to allocate land parcels for construction projects if there are no draft detailed plans or master plans for human settlements (or substitutionary development schemes for human settlements with up to 5,000 people).

Land parcels for individual housing construction may be allocated at sites equipped with water and electricity supply networks. In human settlements where there is no centralized water supply, such land parcels may be allocated only if there are power supply networks. Land parcels of 0.10 hectares for individual housing construction are granted to citizens free of charge for their private ownership.

Land parcels may be used by the owners or land users for development (including communications-laying, engineering preparation of the site, improvement, planting and other types of site development) only in accordance with approved construction project documents. Project design and estimate documents shall contain spatial-planning, design, manufacturing, engineering, environmental, economic, energy-saving and other solutions, as well as estimated costs of construction, engineering preparation, and improvement activities.

A construction project shall be developed on the basis of a decision granting the right to a land parcel, a customer-approved design assignment, technical specifications for access to engineering support facilities and utility services, and the requirements of an architectural and planning assignment issued to the customer by LEAs, as well as the requirements of government standards for architecture, urban planning and construction activities.

The prepared project design and estimate documents shall be submitted for adjustment, comprehensive non-departmental examination and approval in accordance with the requirements established by government regulations.

Project design and estimate documents, which are not used to start construction activities for three or more years after they were produced, are considered outdated and can be used for construction only after a new examination and re-approval, as required by law.

⁸⁸ The latest version of the Rules for Housing Development and Licensing Procedures in the Construction Sector was approved by Order of the MoNE of the Republic of Kazakhstan No. 750 of 30 November 2015.

Upon agreement with LEAs, a customer (an owner) may construct an individual residential house without project documents using sketches (sketch projects), with the exception of construction in zones of high seismic hazard or other special geological (hydrogeological) and geotechnical conditions requiring special design solutions and measures to implement them. In the capital, the city of Astana, and in areas of high seismic hazard or other geological (hydrogeological) and hydrotechnical conditions, individual houses are constructed in accordance with project documents, which are subject to mandatory examination.

Project documents are examined to evaluate the quality of the projects, the compliance of design solutions to the provisions of source design documents prescribed by legislation, and the compliance of design solutions and calculations with the requirements of planning and technical regulations, rules and regulations of governmental and intergovernmental normative documents.

Comprehensive non-departmental examination of construction projects is carried out by expert organizations, and is performed by experts attested in relevant sections (parts) of feasibility studies or design and estimate documentation. The state monopoly includes a comprehensive non-departmental examination of projects (feasibility studies and design and estimate documentation) for the construction of new industrial buildings and structures classified as potentially hazardous construction projects, as well as new technically and/or technologically complex objects, their complexes, engineering and transport communications, regardless of the sources of financing.

The examination of projects for the construction of technically simple objects is not mandatory; this includes individual houses (except for individual houses in the city of Astana) funded without the contribution of the budgetary funds or other forms of public investment.

Prior to the commencement of construction and installation activities, the customer is obliged to notify government architectural and construction inspecting authorities of such activities.

The construction process is inspected and supervised by architectural and construction authorities.

Upon its completion, the object shall be accepted into service if there is a statement of its compliance with the approved project, and a document certifying the quality of construction works and the compliance of such works with the approved project. Acceptance of the completed object shall be recorded in an act, which is to be approved by the customer. The act of acceptance of the completed object shall be signed by the customer, contractor (primary contractor), and technical and architectural supervisors.

The owner (customer) shall independently accept completed, technically simple objects, including individual houses and other buildings designed for the personal use of citizens. This rule shall not apply to the acceptance into service of individual residential houses constructed at the expense of public investment or with their contribution, or individual residential houses constructed in areas of high seismic hazard or areas with other special geological (hydrogeological) or geotechnical conditions.

The act of acceptance of the constructed object by the owner is to be mandatorily registered with local architecture and urban development executive authorities. The approved act of acceptance of the constructed object is the basis for its registration of rights to immovable property with an official registration authority.

Inspection and supervision

The construction project owner shall organize the technical supervision of the construction activities (independently or with the assistance of engineering companies) and the designer's supervision by the developers of the project documentation under a contract with the customer.

State architectural and construction inspection shall be provided by:

- an authorized agency for architecture, urban development and construction (Construction, Housing and Communal Services and Land Management Committee of the Ministry for Investments and Development), which also monitors the activities of LEAs performing architecture, urban planning, and construction control functions and ensuring government architectural and construction inspection; and
- local architecture and urban planning executive authorities within their supervisory responsibilities.

The functions of government architectural and construction inspection are exercised by the State Architecture and Construction Inspection, in-house experts of the national authorized authority on architecture, urban planning and construction and LEAs.

The State Architecture and Construction Inspection consists of:

- a structural unit of the national authorized authority on architecture, urban planning and construction; and
- a LEA of a region, a city of national significance, or the capital, which ensures government architectural and construction inspection of the quality of constructed objects.

The functions of government architectural and construction inspection (state construction inspectors) are as follows:

- to monitor objects under construction (reconstruction, expansion, retrofitting, overhaul) and those put into operation;
- to apply measures required by law with respect to legal entities and officials who committed non-correctable violations or failed to correct violations within the prescribed standard deadlines;
- to monitor the activities of organizations providing technical and architectural supervision; and
- to oversee the organization and implementation of technical and designer's inspections by customers (owners) at construction sites.

Government architectural and construction control takes the form of technical inspection as well as other forms. The inspections are carried out in accordance with the Entrepreneurial Code of the Republic of Kazakhstan.

Government architectural and construction inspection shall not inspect the construction of individual houses and other technically simple buildings designed for private use by citizens, with the exception of construction in zones of high seismic hazard or areas with other special geological (hydrogeological) and geotechnical conditions requiring special design solutions and measures to implement them, individual houses constructed in the capital, and those constructed at the expense of budget funds.

According to an expert opinion⁸⁹, in practice, when there is a significant share of objects with a normal risk rating and there is a lack of inspectors of the government architectural and construction inspection, the government control is carried out primarily through the examination of documents and information requested from customers, contractors and representatives of designer's and technical inspection agencies. Therefore, the quality of control depends upon the reliability of the provided information. Some experts suggest that it would be important to make designer's and technical inspection independent from the customer, as well as to determine liability mechanisms for each party of the construction activities (architects, designers, builders, engineers, engineering and construction organizations) with regard to the customer prior to the expiration of the guarantee period.

Licensing

In accordance with legislation, individuals and legal entities must have relevant licenses to develop pre-project and project (design) documentation, and to carry out construction and installation works.

The licenses take into account the qualification requirements for persons engaged in design, construction and installation activities, depending on the criticality rating of the design and construction objects. Licenses specify the criticality rating of objects, which may be designed or constructed by licensees.

The licensing of architectural, urban planning and construction activities is carried out by LEAs of regions, and the cities of Astana and Almaty, which are responsible for architectural and construction inspection.

Administrative barriers in the construction sector

In recent years, much has been done to remove administrative barriers in the construction sector. An easier procedure of allocating land parcels for housing construction, including individual housing construction, was introduced. Land parcels are allocated to citizens and legal entities under the "single window" principle through Government for Citizens or the e-government web portal.

To ensure access to land parcels for housing construction under the Nurly Zher State Housing Construction Program, it was stipulated that local authorities should:

- make an inspection of existing land parcels suitable for large-scale construction;
- identify priority areas for the large-scale construction of residential buildings in line with the approved master plans and detailed planning projects;
- complete the preliminary preparation of land parcels; and
- ensure free access to information on the availability of land parcels.

To reduce developers' expenses, land parcels allocated for housing construction should be equipped with engineering and utility infrastructure, including heat, water, gas and electricity supply networks, telephone networks, sewerage (sanitation), engineering structures, internal roads and driveways, prior to the construction of residential houses. Engineering and utility infrastructures are designed and constructed at the expense of the national and local budgets.

⁸⁹ Akanov E. Analysis of the current system for monitoring the compliance with the legal acts and normative technical documents in the construction sector. UNDP/GEF project, Energy-Efficient Design and Construction of Residential Buildings, (Astana, 2011).

In accordance with the Kazakhstan-2050 strategy and the National Plan – “100 Specific Steps to Implement Five Institutional Reforms”, the legislation was amended, and a “single-window” principle was implemented for construction permits, and the terms required to obtain permits in LEAs were reduced. Construction permission documents are obtained through Government for citizens or the e-government web portal. The new regulations identify three key stages and deadlines for obtaining design and construction approval documents:

- *the issuance of an architectural and planning assignment*: the time required for the issuance of design approval documents has been more than halved, from 40 to 15-17 working days, depending on the complexity of the object;
- *the approval of a sketch project*: the time required for the approval of a sketch project has been reduced from 60 to 10-15 working days, depending on the complexity of the project; and
- *the issuance of a construction permit*: the procedure of the issuance of construction permits (in paper form) is replaced by notifications of the commencement of construction filed by customers to the government architectural and construction inspecting agencies (electronically) through the e-government portal. If customers have all preliminary permission documents, projects and examination findings, they have the right to proceed with the construction of the object immediately upon filing the notification.

As a result of the reforms in the construction sector, Kazakhstan was ranked 22nd in the Doing Business 2017 report, a surge from 152nd position in 2015.

In line with the objective to phase-out the state monopoly regarding examining pre-project and project documentation, some necessary amendments were made to the legislation; rules were approved for the accreditation of expert organizations (2015); and a Chamber of Accredited Expert Organizations was established. According to the results over ten months in 2016, 69 organizations were accredited to make an expert examination of projects; they examined 4,700 projects, and issued 1,774 conclusions. It is planned that 90 per cent of projects will be examined by private agencies by 2020. The state expert inspection will cover only unique, technically and technologically sophisticated objects.

B. HOUSING DEMAND AND SUPPLY

According to the information provided in the Nurlı Zher State Housing Construction Program, demand for residential housing significantly exceeds supply. This can be seen indirectly in the housing availability indicator, which was at 21 m² per person in 2015 and 21.4 m² per person in 2016. It is lower than in Russia (23.4 m²), Poland (25 m²), the People’s Republic of China (32 m²), and Germany (39 m²).

According to statistics⁹⁰, the period between 2006 and 2013 saw an annual construction rate of about 400 m² of housing per 1,000 persons of the resident population, and in 2014 and 2015 this figure increased to 434.7 m² and 509.6 m², respectively, and in 2016 it was 590.8 m². It is believed that it is necessary to construct approximately 1 m² of housing per inhabitant per year to fundamentally improve housing availability in one generation. Thus, Kazakhstan will need to nearly double the volume of housing construction.

⁹⁰ Republic of Kazakhstan, Committee on Statistics of the Ministry of National Economy, Statistical Compendium *Investment and Construction Activities in the Republic of Kazakhstan, 2011-2015*, (Astana, 2016). Republic of Kazakhstan, Committee on Statistics of the Ministry of National Economy, Statistical Compendium *Housing and communal services, 2012-2016*, (Astana, 2017).

The ability to meet the current housing demand on the primary market is significantly constrained by the low purchasing capacity of the population with regard to the cost of housing offered by private developers. According to the statistics provided in the Nurly Zher Programme, housing prices on the primary market increased by 1.3 times in 2016 as compared to 2013: from KZT 189,100 to KZT 248,200 per m². The highest prices can be found in Astana (KZT 339,800), Atyrau (KZT 326,300), Almaty (KZT 304,500), and Aktau (KZT 297,100); and the prices are the lowest in Taldykorgan and Zhezkazgan, approximately KZT 90,000 per m². New luxury and higher comfort housing is available to a small percentage of the population with high income. This demand has almost been satisfied. According to local experts, in the past two to three years, private developers have been having difficulties in selling completed houses and are taking steps to divide larger apartments into smaller ones to make them more affordable.

The 2011 research found that about 70 per cent of the economically active population are not able to purchase housing on the market even under relatively mild mortgage conditions (a period of 15 years, at 12 per cent per annum). Therefore, state programmes have been aimed at addressing the challenges of improving housing affordability for the population. Budgetary funds and finances from quasi-governmental organizations are used to construct economy-class housing (housing in the 3rd and 4th classes of comfort, with limited floor area and fixed cost). Such construction activities provide housing to the participants of the housing savings system, as well as to citizens on the waiting lists of LEAs who do not belong to socially vulnerable groups of the population. Such housing is available to citizens whose incomes are sufficient to repay a housing loan or redeem provided rental housing within the prescribed period (up to 15-20 years).

Budgetary funds are also used to construct housing for socially vulnerable groups of citizens registered in the files of LEAs; such housing is provided for rent without the right of redemption (social housing from the public housing stock). However, the volumes of social housing construction cannot not fully satisfy the housing needs of such citizens. Even the capital, which has the largest volume of housing construction, cannot yet provide housing to the eligible citizens registered 10 years ago.

Given the fact that the Government's efforts to construct rental and mortgage housing still cannot satisfy the housing needs of low-income urban dwellers who do not belong to socially vulnerable groups, and do not address the needs of rural dwellers, individual housing construction is considered to be the most feasible way to meet housing needs. In urban human settlements, especially in large cities, this method is constrained by the lack of urban land parcels for individual housing construction, while in rural areas it is constrained by law provisions stipulating that LEAs should firstly provide land parcels for individual housing construction with the communal infrastructure. It can be expected that individual residential houses, especially in rural areas, will be more affordable for the population due to the annual planned allocation of funds from the national budget (under the Nurly Zher Programme) to LEAs to assure the construction of water and electricity networks at around 40,000 land parcels designated for individual housing construction.

C. PUBLIC AND PRIVATE HOUSING CONSTRUCTION

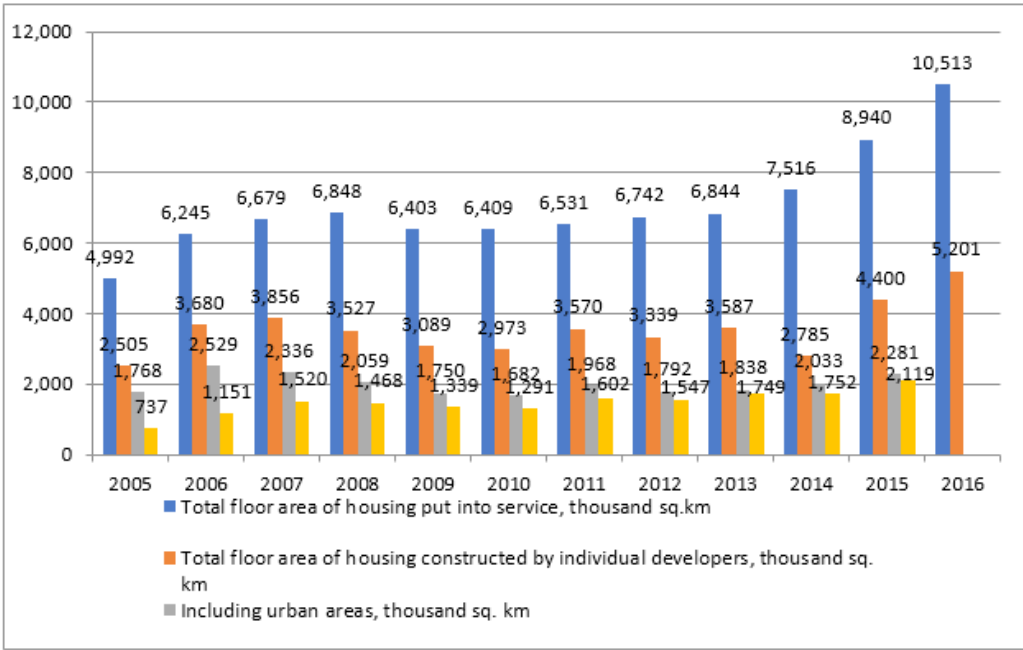
Because of the crisis and the drastic decrease of state participation in housing construction financing, Kazakhstan saw a significant decline in housing construction from 1991 to 1999. The annual volume of housing put into service during this period decreased from 6.13 million m² in 1991 to 1.11 million m² in 1999 (18 per cent of the 1991 level). Since 2000, the volume of

housing construction has gradually begun to increase due to the construction of multi-apartment buildings by private developers and the construction of residential houses by individual developers. However, up until 2006, the annual volume of housing put into service was below the 1991 level.

According to statistics⁹¹, 6.2-6.8 million m² of housing were put into service annually between 2006 and 2013, which is 2-12 per cent higher than the 1991 level. The volume of housing put into service significantly increased in 2014 and 2015, amounting to 7.5 million m² and 8.9 million m² of housing per year, respectively (see Figure 8).

The Nurdy Zher Programme aims to increase housing provision up to 22 m² by 2020. If such levels of housing provision and the predicted population of Kazakhstan by 2031 (i.e., 24 million people) are maintained, the annual volume of housing put into operation between 2016 and 2030 should be at least 12 million m². The Nurdy Zher Programme aims to put into operation over 10 million m² a year between 2017 and 2021 through the use of all sources of finance. In 2016, 10.53 million m² of housing was put into operation (17.6 per cent more than in 2015), including 5.2 million m² contributed by individual developers.⁹²

Figure 8
Housing put into operation between 2005 and 2015



Source: *Investment and Construction Activities in the Republic of Kazakhstan, 2011-2015*, Statistical Compendium, the Committee on Statistics of the MoNE of the Republic of Kazakhstan, Astana, 2016. *Housing and communal services, 2012-2016*, Statistical Compendium, the Committee on Statistics of the MoNE, Astana, 2017.

⁹¹ Republic of Kazakhstan, Committee on Statistics of the Ministry of National Economy, Statistical Compendium *Investment and Construction Activities in the Republic of Kazakhstan, 2011-2015*, (Astana, 2016).

⁹² Republic of Kazakhstan, Committee on Statistics of the Ministry of National Economy, Statistical Compendium *Housing and communal services, 2012-2016*, (Astana, 2017).

From 2005 to the present day, housing construction is supported through the allocation of a considerable amount of budget funds under public housing programmes, and infrastructure and construction industry development programmes. Since 2005, 7.3 million m² of housing have been constructed at the expense of government investments, which made it possible to provide housing to more than 105,000 citizens⁹³. The share of government agencies in housing construction decreased from 25.9 per cent (in 2005) to between 12.6 and 18.4 per cent in the subsequent period. In 2015, government developers accounted for 16.2 per cent of the total floor area of housing put into operation.

In addition to direct financing of housing construction, budget funds are used to promote private investments in housing construction. Between 2005 and 2015, out of 74.15 million m² of housing put into operation, 62.23 million m² (83.9 per cent of the total housing volume) were constructed at the expense of private financing. Individual developers accounted for the largest share of private investment; 38.31 million m² of housing were put into operation at their expense in this period (51.67 per cent of total housing put into operation).

The share of housing constructed by individual developers in various years ranged from 46.4 per cent to 58.9 per cent of housing put into operation. In 2015, individual developers accounted for 49.2 per cent of the total volume of housing put into operation; in 2016, it was 49.5 per cent. It is noteworthy that individual housing construction in rural areas was noticeably behind such construction in urban areas up until 2013 (see Figure 8), which indicates poorer housing availability for rural residents. In 2015, the volumes of individual housing construction in urban and rural areas became almost equal (2.28 and 2.12 million m², respectively).

Picture 3
Cottage town in Astana, an example of modern manor development



Photo by: Alexander Belyi.

⁹³ The Nurly Zher Housing Construction Programme.

D. CONSTRUCTION MATERIALS AND HOUSING CONSTRUCTION TECHNOLOGIES

The first public housing programmes showed that the private construction industry, established in 1970-1980, is able to satisfy only a fraction of the needs of the construction industry and, as a consequence, imported products account for a substantial share of the market. The technologies for manufacturing domestic construction materials are outdated, and production facilities are functionally obsolete. The domestic machine-building industry is underdeveloped, and there are virtually no plants manufacturing load lifting and construction machinery, mechanical handling equipment, technological equipment, sanitary wares, and glass. It was concluded that, to increase housing construction and to shorten the time taken, as well as to reduce the costs of housing, it is necessary to ensure the industrialization of the construction process and to organize the manufacturing of domestic modern and efficient construction materials, products, and components.

In 2010, Kazakhstan approved the Programme of the Development of Construction Industry and Manufacturing of Building Materials in the Republic of Kazakhstan for 2010-2014.⁹⁴ One of its objectives was to meet the needs of the home market through the use of domestic construction materials by more than 80 per cent by 2014. The programme was aimed to include:

- construction of new cement plants and modernization of existing ones;
- construction of plants producing sanitary-technical and facing ceramics and glassworks;
- modernization of existing concrete products plants and construction of new concrete products plants manufacturing a new generation of components for the prefabricated and frame-monolithic construction of multi-family residential buildings with the improved design of flats, matching brick and monolithic buildings in appearance and performance properties.

Financial support for the construction and reconstruction of building industry enterprises has been entrusted to the Joint Stock Company Sovereign Wealth Fund “Samruk-Kazyna” (credit, leasing, equity participation).

The State provides a number of measures to stimulate the domestic manufacturing of construction materials and structures, such as the use of technical specifications of domestic products in model projects, the construction of multi-family and individual houses, and long-term contracts for the supply of manufactured construction products under government programmes. With respect to housing construction under the Nurly Zher Programme for the citizens registered in akimats, and for the depositors of the Housing Construction Savings Bank, priority is given to projects that use products manufactured by domestic plants. Standard projects of individual housing construction will also focus upon the structures manufactured by domestic plants.

⁹⁴ The Program of the Development of the Construction Industry and the Construction Materials Operations of the Republic of Kazakhstan for 2010-2014 was approved by Resolution of the Government of the Republic of Kazakhstan No. 1004 of 30 September 2010.

Picture 4
Serial 9-storey block sections in Stepnogorsk (Akmola region)



Photo by: Alexander Belyi.