

System of Regulatory Instruments relating to
protection of the natural environment
INTERIM INSTRUCTION OF THE PROCEDURE FOR THE CONDUCT OF AN
ENVIRONMENTAL IMPACT ASSESSMENT (EIA) OF A PLANNED
ECONOMIC ACTIVITY IN THE REPUBLIC OF KAZAKHSTAN
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Annex 1

Procedure for a regional environmental impact assessment
of a planned economic activity at different stages
of the elaboration of the architectural and
urban planning documentation

Stage and level of documentation on EIA of planned and economic activity and range of measures for protection of environment	Stage of preparation and elaboration of project documentation in urban planning and sectoral planning and design	Documentation flow procedure					
		Public hearings		Environmental impact study		Adoption of decisions	
		Procedure for acquainting public with documentation.	Findings and reaction of commissioner and project developer.	Level of environmental impact assessment.	Findings and reaction of commissioner and developer of project.	Level and organs of power and administration adopting decisions.	Decisions and recommendations.
1	2	3	4	5	6	7	8
EIA of planned economic activity.	Feasibility study of construction of facility, in light of selected site, drawing up of site selection in accordance with ratified feasibility study option.	Statement of environmental impact (including environmental changes and social consequences) to be submitted for consideration of local representative organs and by public meetings at all levels, village (aul) - district (municipal) - regional.	On the basis of summaries of materials from public hearings, decision to be adopted on rejection of plan or on improvements to planning decisions.	State environmental impact assessment services at level commensurate with significance of facility. Need to determine how for a conducted EIA is and its consistency with planning decisions.	Fine tuning of feasibility study in light of comments by State environmental impact assessment service and preparation of materials for purposes of drawing up land allocation deed, contract for utilization of natural resources.	District, regional administration.	Issue (drawing up) of land allocation deed, conclusion of contract for utilization of natural resources, including limits on utilization of natural resources and consolidated parameters for discharges into water bodies, emissions of waste waters and gross waste disposal quantities.

Stage and level of documentation on EIA of planned and economic activity and range of measures for protection of environment.	Stage of preparation and development of project documentation relating to specific facilities and types of economic activity.	Documentation flow procedure					
		Public hearings		Environmental impact study		Adoption of decisions	
		Procedure for acquainting public with documentation.	Findings and reaction of commissioner and project developer.	Manner of conduct of environmental impact assessment.	Findings and reaction of commissioner and developer of project.	Level and organs of power and administration adopting decisions.	Decisions and recommendations.
1	2	3	4	5	6	7	8
Section on protection of the environment (comprehensive range of nature protection measures).	Draft, working draft.	Not conducted.	Not required.	State EIA conducted only in event of significant changes in components of production or technological processes (provided for by previously approved feasibility study), altering nature of effect on environment.	In accordance with finding of impact assessment, EIA to be fine tuned or revised and repeat public hearings conducted.	Regional administration of environment and biological resources, Ministry of Environment and Biological Resources, specially empowered environmental protection bodies. New decisions by organs of power and administration shall only be taken in event of irresolvable differences in system. Commissioner (initiator of economic activity) - planner - population (those expressing its interests - organs of local self government, public associations).	Permit for special utilization of natural resources in accordance with instruction in force, with identification of specific technological lines, production methods, impact sources.

Suggested set of materials for an environmental review

The materials should comprise:

For architectural and urban planning facilities	Specific construction facilities
<ol style="list-style-type: none"> 1. Brief physical geographical description of the territory, availability and utilization of natural raw materials. 2. Description of system for settlement of population within the territory - inhabited localities, size of population. 3. Main areas of economic utilization of the territory - specialization of industry and agriculture, distribution of economic facilities through the territory. 4. Brief description of transport and social infrastructure. 5. Main environmental problem areas, identified at time of consideration (on basis of information in published materials and mass media). 6. Name possible courses of action for overcoming environmental sticking-points suggested by developers. 	<ol style="list-style-type: none"> 1. Description of natural conditions of area where facility is to be sited: <ul style="list-style-type: none"> - Availability or distance to water body (water course); - Ground; - Soils; - Natural vegetation (greenbelts). 2. Description of occupied or adjacent agricultural land. 3. Location in relation to residential areas and other industrial facilities and social amenities. 4. Description of adjacent industrial facilities, transport links, summarized assessment of their possible impact on environment. 5. Summarized presumed assessment of impact of planned facility on environment - types of impact, cumulative effect in addition to existing impacts, emergence of new impacts. 6. Main suggested decisions for limitation or utilization of negative effects caused by new facility (types of economic activity).

Suggested set of materials for a preliminary environmental impact assessment of a planned economic activity

The materials should comprise:

Location

1. Information on the location and area of land appropriated for temporary and permanent use.
2. Information on the natural environment, on the social and economic features of the area³ from the point of view of urban planning, notably:
 - Land and regional features of the area, description of its terrain;
 - Information on the State of the natural environment, and propogenic disruption of its components, particular construction conditions (whether there is any frozen ground, seismic activity or other natural phenomena and processes);
 - Description of the natural value of the area, of its historical and cultural significance, whether there are any specially protected features;
 - Materials relating to the socio-economic and demographic features of the area;
 - Urban planning and economic utilization of the area.

Possible impact of planned activity on natural environment

1. Description of the planned activity - resource requirements (water, land, biological, material and labour resources) in the course of construction and operation of the facility, provision of transport, information on possibility of linking facility with existing engineering and communication grids, technological level of facility.
2. _____ description, with indication of components, of impact of facility under normal operating regime and in accident situations (sources, types, level and area of impact, including type, composition and

³ The scope, composition and adequacy of the information shall be determined in accordance with the specific nature and scope of the planned activity and the complexity of the natural conditions.

approximate volume of pollutants released into the air, water, soil, of wastes - type, volume and level of toxicity).

Preliminary assessment of changes to natural environment resulting from implementation of planned activity

1. Possible changes in the natural environments during the implementation of the planned activity (under normal operating regime and in accident situations) and their consequences for the population.
2. Planned nature protection measures designed for the conservation, sanitation and enhancement of the natural environment.

Justification of siting of facility, selection of option with compliance for socio-economic and environmental interests of local population

1. The determination of the resistance of the natural environment to possible impacts from the planned economic activity.
2. Assessment of damage caused to the natural environment.

Recommendations for subsequent stage of development of project documentation

1. Set of supplementary observations of the State of components of the natural environment (in the absence or insufficiency of original information).
2. Proposals on organizing the conduct of special research to determine the consequences of the impact of the planned facility.

Suggested set of materials for an environmental impact assessment (EIA) of a planned economic activity

An environmental impact assessment, accompanying the project materials, should contain:

- Detailed information on the natural conditions of the area and the State of its components;
- Assessment of the impact of the facility on the natural environment and the living conditions of the population;
- Component-based analysis of changes in the State of the natural environment and of the processes taking place in nature in the area affected by the facility;
- Assessment of the environmental risk of planned project decisions, including the likelihood of accident situations;
- Range of nature protection measures to prevent the negative impact of economic and other activities and for the conservation and also sanitation and enhancement of the natural environment;
- Programme of work for the organization of monitoring of the State of the natural environment during the construction and operation of the facility and the decommissioning of the facility.

The environmental substantiation of an activity described in a feasibility study should be conducted during the construction and the operation of the planned facility for economic and other activities, and the following materials on components of the natural environment should be included as part of the EIA:

Air

Description of current State of the air (radiation background, list of pollutants emitted into the atmospheric air, with an indication of their TLV, OBUV, concentration of pollutants, level of electromagnetic and noise impact.

1.3. The instruction has been elaborated in the light of the International Convention on Environmental Impact Assessment in Transboundary Contacts (adopted by the countries of the European Economic Commission on 25 February 1991 in Finland), the recommendations of the World Bank on the question of environmental impact assessments in the planning system of Central and Eastern Europe and the countries of the Commonwealth of Independent States (Geneva, 1992) and on the basis of the Guidelines on the procedure for the conduct of an environmental impact assessment in the selection of the site, the elaboration of feasibility studies and construction (reconstruction, expansion, and modernization) projects for economic facilities and complexes, the interim instruction on the environmental substantiation of economic and replanning and planning materials (annexes 4, 5, 6 and 7) of the Ministry of the Environment and the utilization of natural resources of the Russian Federation (Moscow, 1992).

1.4. The principle purposes for the conduct of an EIA shall be to determine the economic, environmental and social consequences of the various economic and management decisions under consideration, to elaborate recommendations for the prevention of degradation of the environment or on ways of reducing to a minimum adverse impacts on that environment.

2. TERMS AND DEFINITIONS

2.1. An environmental impact assessment (EIA) comprises the following:

- The identification, analysis, assessment and stock-taking in project decisions, of the presumed effects of a planned economic activity, of the changes which those effects will cause to the environment, and also of the consequences for society;
- A comparison of the results of social and environmental assessments of all feasible alternatives to the planned economic activity and the adoption of decisions on the selection of the optimal variant or the rejection of the implementation of the project;
- A structure within which the results of an EIA procedure maybe presented in the course of the elaboration of a project design at various stages of planning;
- An instrument for the adoption of decisions.

2.2. "Environment", in the conduct of an EIA, shall include the various components of the natural environment (air, water, geological substratum, flora, fauna, etc.); taken in their interrelation and interaction with facilities of the social and production infrastructure (residential and public buildings, enterprises, engineering and transport lines, historical and cultural monuments and others) and so forth.

Depending on the number of facilities involved in the planned economic activity and the areas of land subject to their influence, the impact assessment shall be subdivided into regional and specific assessments.

2.3. A regional EIA shall be an assessment carried out in the event of the planning of activities which are significant in scale (involving more than

one facility) and integrated in nature and which have potential aggregates affects on the environment within the limits of a specific area.

2.4. A specific EIA shall be an assessment conducted for the analysis for plans for new enterprises or other facilities or for the activities of existing enterprises or other facilities, of their potential and actual impact on the environment, both direct and indirect, including possibilities for enhancing the State of the environment.

2.5. An EIA procedure shall be a sequence of organizationally and logically interconnected actions to ensure the environmental well-foundedness of all stages of planning.

2.6. Impact shall be understood to be both an isolated or repeated act, or a constant process involving the release or extraction of any material substance into or from the environment.

2.7. Change shall be understood as a reversible or irreversible change in the components forming the environment or in their combinations.

2.8. Consequence shall be understood as a result of the impact of a planned economic activity and of the changes caused thereby, which are reflected in the social and public sphere.

2.9. Public hearings is a generalized term for a mandatory component of the EIA procedure designed to ensure direct information links and feedback and to guarantee the participation of the population in the adoption of decisions relating to the implementation of any activity affecting the conditions of its existence.

3. PRINCIPLES OF AN EIA

An EIA shall be conducted on the following principles:

- That the social, technical and technological (in the case of a specific EIA), economic and other decisions and indicators of project decisions should be considered in their interconnectedness;
- That there should be alternative project decisions;
- That the EIA may be used at the very earliest stages of the organization of economic activity and planning (beginning with agreements, contracts, etc.) as an instrument for the formation of decisions;
- That information should be accessible to the public at all stages of planning;
- That the commissioner (initiator) of a planned economic activity should be responsible for the consequences of the implementation of projects decisions.

4. STATUS AND PROCEDURE FOR THE IMPLEMENTATION OF AN EIA PROCEDURE

4.1. An EIA procedure should be implemented in effect of all types, without exception, of planned economic activities.

The _____ fullness of an EIA, the scope of the materials used, the level and detail of its scientific research and design work shall depend on the strength of the impact of the planned economic activity.

The conduct of a full-scale EIA shall be mandatory for environmentally hazardous types of economic activity (annex 6). In other cases, the organs of the Central State Environmental Impact Assessment Services shall determine whether or not a full-scale specific EIA shall be conducted on

the results of their consideration of the previous stages of planning. The level of an EIA in respect of regional planning exercises shall be determined in accordance with annex 1.

4.2. The results of an EIA shall be presented in the form of a document corresponding to the stage of its conduct and shall form an essential part of preplanning and planning materials at the level concerned.

The various stages of an EIA designed to ensure that their analysis is consistent and detailed, shall be referred to by the following names (annexes 1 and 2):

- (1) Review of the State of the environment;
- (2) Preliminary impact assessment;
- (3) Impact assessment (EIA), comprising an analysis of the situation that has come into being; proposals relating to a comprehensive range of nature protection measures and forecasts and concluding with a Statement on environmental consequences (SEC).

An EIA for operational facilities, which has been elaborated for the purpose of the conduct of a State environmental impact study of those facilities, shall be conducted before the issuance of special instructions regarding the basic provisions of this interim instruction.

- (4) Environmental protection section.

The scope and analytical depth of each stage (level) are defined in section 5 of the procedure for the conduct of an EIA, set out in annexes 1 and 2.

4.3. Responsibility for ensuring the elaboration and for its submission to the authorities concerned shall rest with the commissioner (initiator) of a planned economic activity, who shall be entitled delegate these functions to his subcontractor (subcontracted organization or specialists in the conduct of EIAs).

4.4. The commissioner shall be obliged to submit, one after the other, the results of the first three stages of an EIA procedure (annexes 1 and 2) for public hearings.

EIA public hearings shall be conducted with a view to keeping the parties concerned informed about a planned activity or a project under development, for the organization of the exchange of existing and subsequent information for the revelation and identification of all possible adverse environmental and other related effects, and also, where necessary, for the purposes of correcting preproject or project documentation.

5. STAGES (LEVELS) OF AN EIA

5.1. The review of the State of the environment shall be a consolidated description of the natural and technology-based (anthropogenic) characteristics of an area of which it is planned to take economic activities or site facilities and which promote, permit, restrict or prohibit the implementation of such plans.

The review shall be carried out on the basis of available in-house research materials or published scientific sources.

5.2. A preliminary EIA of a facility shall determine the main thrusts of changes in environmental components and of the consequences caused

thereby to the living conditions of society. A preliminary EIA shall be conducted with a view to substantiating a planning design, taking into consideration feasible and reasonable alternatives and the selection of the main architectural planning, economic, technological and other engineering project decisions to ensure the necessary conditions for planning purposes.

5.2.1. Depending on the significance of the facility concerned, supplementary materials may be attached, including the modelling and forecasting of the processes and situation for environmental components or of its State as a whole, or a decision shall be adopted on the advisability of continuing to conduct the successive EIA procedures in the light of the attested insignificance of presumed impacts of the planned activities of the environment.

5.2.2. A preliminary EIA shall be carried out on the basis of available scientific and archival materials, without the need to conduct special scientific research and planning and design work.

The nature and strength of the impact of a planned economic activity shall be determined by analogy with those of an operational facilities or on the basis of a specific indicators thrown from State of the art principles for technological and planning approaches. There is no requirement for the calculation of the level of pollution of specific requirements of the natural environment (air, water, soil, etc.).

5.2.3. The main requirement respective to the description of aspects of the environment is for the fullness of its scope, rather than for the fullness of its data, in other words, the description should clearly show all the inadequacies of the available information and should indicate those areas where further specialized research and investigation are required.

Predictive parameters (discharges, releases, areas of land etc.), obtained as a result of the preliminary assessment, shall be indicative in nature only and shall not require ratification as standards for the utilization of natural resources.

5.2.4. The report of a preliminary EIA shall be signed by the commissioner of a planned economic or other activity and shall be considered in the organs of the State environmental impact assessment services as part of the projects to determine the extent to which the consequences of its implementation are consistent with nature protection legislation and the norms and regulations in force, and in the organs of State power and administration (see annexes 1 and 2), for the purposes of the adoption of decisions on the possibility of further planning work.

5.3. An assessment of the impact of the planned economic activity on the environment (the EIA proper) shall be carried out in full scale and shall include the conduct, where necessary, of special scientific research, and projects and design work and surveys which will make possible the accurate description of the existing State of the natural environment, the level of its degradation and the content of harmful substances in its various components. The results obtained should form the basis for environmental monitoring (taking into consideration the calculated parameters for discharges and releases into the environment).

An indication of the materials constituting an EIA as given in annexes 3, 4 and 5.

5.3.1. In the elaboration of a project (or working project) for the construction, reconstruction, modernization or expansion of an operational enterprise, a specific workshop or production centre, an EIA shall be conducted in those cases when the conduct of a feasibility study relating to the construction of these facilities was effected prior to the entry into force of the corresponding instructions (without the conduct of an EIA) or where planning decisions at that stage are significantly different from those adopted in the feasibility study.

An EIA shall be carried out in accordance with this instruction in the event of the elaboration of projects for the construction of new enterprises, the location of which has been specified in their advance planning documentation.

5.3.2. Basic conclusions regarding the possibility of the implementation of planned activities, with due account for probable environmental and other related social and economic consequences of such implementation, shall be set forth in a special section of the explanatory document accompanying the preplanning or preproject documentation, the feasibility study or the project for the construction of a facility, in the form of a Statement on environmental consequences (SEC), which shall be prepared as the final stage of an EIA on the basis of the environmental, social, economic, demographic and other related consequences, identified in the course of the EIA procedure, of the implementation of the planned economic or other activities in the specified and projected future periods.

The SEC shall be attached to the set of basic provisions of the preproject and project documentation submitted for consideration and ratification by the organs of power and administration.

5.3.3. The Statement on environmental consequences should contain the following:

- Basic prerequisites of the commissioner and builder;
- Purpose and substantiation of the need for the planned activity;
- Description of the facility, its main technological processes, and the sources of discharges and releases;
- Conditions for the utilization of natural resources and possible influence of the planned activity on specific components of the environment and the environment as a whole;
- Forecast of the State of the environment and of possible consequences in the social and public sphere (including human public health), taking into consideration the results of the activity of the facility;
- Obligations of the commissioner (initiator of the economic activity) relating to the establishment of favourable living conditions in the process of the construction, operation or decommissioning of the facility.

The format for the Statement of environmental consequences is given in annex 8.

5.4. In the final stages of planning (project, working project), the results and findings of the EIA conducted beforehand shall form the basis for a completion of the section on protection of the environment, which shall include a complete list of the nature protection measures provided for in the submitted project, designed to ensure no more health and hygienic conditions for the work and daily life of the population and to reduce to a minimum the negative impact of the facility (the planned economic activity). An indication shall be given of the assessed cost of the measures and of the intended nature protection effect.

The section shall take into account the requirements of Health Norms and Procedures 1.02.01-85.

6. OBLIGATIONS OF THOSE PARTICIPATING IN THE CONDUCT OF AN EIA

6.1. The obligations of the commissioner shall include organizing the conduct of an EIA as part of the planning process, and also submitting the results of the assessment as part as the full set of documentation to the State control (impact assessment) bodies.

The commissioner shall be responsible for financing all the EIA procedures and for conducting the associated necessary investigations and research, which must be provided for in assessments of the costs of the preparation of preproject and project documentation.

The commissioner shall submit to the developer (subcontractor) available historical information about accompanying environmental and other related effects of the construction and operation of operational facilities, collated through a process of sectoral monitoring, the analysis of the medical and geographical situation and post-project environmental analysis.

In addition, the commissioner shall ensure the organization of necessary contacts with State organs of power, administration and control and with other concerned legal and physical persons, as well as with the media.

6.2. The obligations of the developer (subcontractor) of the preproject and project documentation shall include the conduct of all EIA procedures.

7. RESPONSIBILITY OF THOSE PARTICIPATING IN THE CONDUCT OF AN EIA

7.1. The commissioner shall bear responsibility for ensuring compliance in the implementation of the project design (construction and operation) with all the conditions contained in the results of the EIA, including the requirements of the State control (impact assessment) bodies, as well as for the environmental and other related consequences of the implementation of the project design.

7.2. The developer of preproject and project documentation shall bear responsibility for the accuracy, fullness and quality of the results obtained from the conduct of an EIA.

7.3. The State control (impact assessment) bodies in the area of protection of the environment and the rational utilization of natural resources shall bear responsibility vis-a-vis State organs of power and administration for the competence and objective consideration of the preproject and project documentation containing the results of the EIA.

8. USE OF THIS INSTRUCTION

8.1 This Instruction shall be binding on all ministries, departments, enterprises and organizations, irrespective of their forms of ownership and departmental affiliation (including the facilities and planned activities of the military industrial and defence complex).

The regulatory basis for the conduct of an EIA shall be determined by the norms and rules in force and shall be supplemented by departmental regulatory instruments. The departmental regulatory instruments and guidelines developed for these purposes shall be approved by the Ministry of the Environment and Biological Resources.

8.2. Taking into account the requirements of this Instruction, in the conduct of an EIA in the territory of the Republic of Kazakhstan all the duly established standards, norms and rules, including the regulatory instruments, guidelines, technical and other documents of the former USSR whose validity has been extended, shall apply.

Sources and scale of chemical pollution: for established (normal) operating conditions of the enterprise and maximum load conditions; in the event of possible explosion-related and accidental releases.

Measures to introduce low-waste and non-waste technologies.
Special measures to prevent releases into the atmosphere (extent to which these are consistent with leading Kazakh and foreign experience: and for the elimination of the consequences of possible accidents.

Calculation of expected pollution of the atmosphere taking into account enterprises already in operation, those under construction and those planned for construction (background pollution), analysis of results obtained.

Proposals on successive stages for regulating and establishing maximum admissible emission levels and provisionally approved emission levels (for facilities in operation).

Justification of the accepted area of the sanitary buffer zone⁴, taking into account predicted pollution levels.

Assessment of the effects of pollution and measures to reduce residual pollution of the atmosphere.

Assessment of possible heat, electromagnetic, noise and other types of impact and the consequences of such impacts.

Organization of monitoring of State of the atmosphere.
Elaboration of measures to regulate emissions during periods of

⁴ The sanitary buffer zone must ensure comprehensive protection from pollution, noise, electromagnetic fields, ionizing radiation and other physical effects.

particularly unfavourable meteorological conditions.

Surface waters

Hydrogeographical description of the area

Description of the water facility (with approximation to calculated ranges of water intake) - hydrological and hydrochemical regime, ice and heat characteristics, speed characteristics of waterflow, deposition rates, water course processes, hazardous phenomena: jams, presence of sludge.

Need for economic and other activities in water resources during construction and operation period, quality requirements of utilized water.

Description of water supply source, its economic utilization.

Location of the water intake, its description.

Assessment of intake possibilities (justified in terms of standards and quotas) of quantity of water from surface sources under natural conditions (without need to regulate river flow). Need to organize health protection zones.

Quantity and quality of discharged waste water (with indication of place of discharge, constructive aspects of discharge arrangements and list of pollutants and their concentrations).

Quality and requirements of discharged water (calculation of maximum permissible emissions).

Justification of technical unfeasibility or economic inadvisability of reuse of waste water.

Proposals for attaining maximum admissible emission levels

Assessment of the impact of the planned facility on the water in the course of construction and operation including possible heat pollution of the water body and consequences of the impact of diversion of water on the water ecosystem.

Assessment of changes in the surface flow (liquid and solid) as a result of the replanning of the area and the removal of the plant layer, identification of negative consequences of these changes on the water system of the area.

Assessment of changes in the water course processes related to the laying of pipeline facilities, the construction of bridges, water intake facilities and the identification of negative effects.

Water protection measures, their effectiveness, cost and order of implementation.

Methods of utilizing sediments of purification facilities.

Underground water

Need for underground water resources, water quality requirements.

Hydrogeological parameters and description of water tables.

Description of current State of water tables from which water is drawn (chemical composition, usable reserves, protection status of water tables). Conditions for the safe operation of water tables levels.

Assessment of the impact of a facility during its construction and operation on the quality of underground waters and the likelihood of their pollution.

Analysis of the consequences of possible pollution and depletion

of underground waters.

Justification of measures to protect underground waters from pollution and depletion.

Land (soil and ground)

Description of the soil cover in the area effected by the planned facility area distribution, water-related physical, chemical and biological characteristics, fertility of the main types of soils, mechanical composition of main types of soils and ground.

Description of the effect on the soil cover (topsoil effect) extent of damage, pollution characteristics), including specific features of the pollution of the area by production wastes (type

<p>Ministry of the Environment and Biological Resources of the Republic of Kazakhstan</p>	<p>State regulatory instrument</p>	<p>State regulatory instrument</p>
	<p>System of regulatory instruments for the protection of the natural environment. Interim instruction on the procedure for the conduct of an Environmental Impact Assessment of a planned economic activity</p>	<p>Replaces the Interim Instruction on the Procedure for the Conduct of an Environmental Impact Assessment in the elaboration of feasibility studies (calculations) and of construction plans for facilities and complexes of the national economy, State Committee for natural resources of the USSR, 1990.</p>

1. GENERAL PROVISIONS

1.1. This instruction has been developed to supplement the regulatory instruments and guidelines in force in the Republic of Kazakhstan regulating the drafting of plans and projects on the basis of the requirements of nature protection legislation.

The instruction shall determine the general procedure for the conduct of an environmental impact assessment (EIA) in the preparation and adoption of decisions on the conduct of economic activities at the following stages of their organization, from the elaboration of programmes and regional planning projects to the specific facilities themselves:

Submitted by the State environmental impact assessment service of the Ministry of the Environment and Biological Resources of the Republic of Kazakhstan	Ratified on 30 December 1993	Date of entry into force: 1 April 1994
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- declaration of intent (annex 7), programme for the development of the branch of the economy;
- choice of sight for the facility, plans for the development of the area;
- the elaboration of a feasibility study for the construction (expansion, reconstruction, reprofiling, modernization), as well as for the decommissioning of facilities and complexes, the elaboration of planning decisions for towns and other inhabited localities;
- the elaboration of projects (working projects) for the construction of a facility and detailed plans for major construction projects.

This instruction shall be mandatory, irrespective of the departmental affiliation, forms of ownership, estimated costs and functional designation of the facilities and types of activity in question, unless provided for otherwise by the legislation of the Republic of Kazakhstan.

1.2. The instruction is intended for the initiators of economic activities, those commissioning and elaborating the project and project documentation, the State control (oversight) bodies in the area of protection of the natural environment and the rational utilization of natural resources, sub-units of departmental and extra-departmental expert services, including environmental impact assessment services.

Sources and scale of chemical pollution: for established (normal) operating conditions of the enterprise and maximum load conditions; in the event of possible explosion-related and accidental releases.

Measures to introduce low-waste and non-waste technologies. Special measures

to prevent releases into the atmosphere (extent to which these are consistent with leading Kazakh and foreign experience: and for the elimination of the consequences of possible accidents.

Calculation of expected pollution of the atmosphere taking into account enterprises already in operation, those under construction and those planned for construction (background pollution), analysis of results obtained.

Proposals on successive stages for regulating and establishing maximum admissible emission levels and provisionally approved emission levels (for facilities in operation).

Justification of the accepted area of the sanitary buffer zone⁵, taking into account predicted pollution levels.

Assessment of the effects of pollution and measures to reduce residual pollution of the atmosphere.

Assessment of possible heat, electromagnetic, noise and other types of impact and the consequences of such impacts.

Organization of monitoring of State of the atmosphere. Elaboration of measures to regulate emissions during periods of particularly unfavourable meteorological conditions.

Surface waters

Hydrogeographical description of the area

Description of the water facility (with approximation to calculated ranges of water intake) - hydrological and hydrochemical regime, ice and heat characteristics, speed characteristics of waterflow, deposition rates, water course processes, hazardous phenomena: jams, presence of sludge.

Need for economic and other activities in water resources during construction and operation period, quality requirements of utilized water.

Description of water supply source, its economic utilization.

Location of the water intake, its description.

Assessment of intake possibilities (justified in terms of standards and quotas) of quantity of water from surface sources under natural conditions (without need to regulate river flow). Need to organize health protection

⁵ The sanitary buffer zone must ensure comprehensive protection from pollution, noise, electromagnetic fields, ionizing radiation and other physical effects.

zones.

Quantity and quality of discharged waste water (with indication of place of discharge, constructive aspects of discharge arrangements and list of pollutants and their concentrations).

Quality and requirements of discharged water (calculation of maximum permissible emissions).

Justification of technical unfeasibility or economic inadvisability of reuse of waste water.

Proposals for attaining maximum admissible emission levels

Assessment of the impact of the planned facility on the water in the course of construction and operation including possible heat pollution of the water body and consequences of the impact of diversion of water on the water ecosystem.

Assessment of changes in the surface flow (liquid and solid) as a result of the replanning of the area and the removal of the plant layer, identification of negative consequences of these changes on the water system of the area.

Assessment of changes in the water course processes related to the laying of pipeline facilities, the construction of bridges, water intake facilities and the identification of negative effects.

Water protection measures, their effectiveness, cost and order of implementation.

Methods of utilizing sediments of purification facilities.

Underground water

Need for underground water resources, water quality requirements.

Hydrogeological parameters and description of water tables.

Description of current State of water tables from which water is drawn (chemical composition, usable reserves, protection status of water tables). Conditions for the safe operation of water tables levels.

Assessment of the impact of a facility during its construction and operation on the quality of underground waters and the likelihood of their pollution.

Analysis of the consequences of possible pollution and depletion of underground waters.

Justification of measures to protect underground waters from pollution and depletion.

Land (soil and ground)

Description of the soil cover in the area effected by the planned facility area distribution, water-related physical, chemical and biological characteristics, fertility of the main types of soils, mechanical composition of main types of soils and ground.

Description of the effect on the soil cover (topsoil effect) extent of damage, pollution characteristics), including specific features of the pollution of the area by production wastes (type, hazard category, toxicity, physical State, quantity).

Project decisions relating to the removal, transport and storage of the fertile layer of soil and overburden.

Change in the property of soils and grounds, caused by:

- Replanning of the surface of the area and creation of new forms of relief;
- Activation of natural processes;
- ---- by production wastes and temporary (accompanying) production processes.

Changes in the State of the soil cover and in geochemical processes in the area affected by the facility, taking place in the soil and in the ground, during the operation of the facility, including in accident situations.

Planned measures in the affected area:

- To conserve the soil cover;
- To restore the soil cover and to restore the area to a State suitable for its designated utilization (artificial and biological recultivation).

Measures to treat, utilize and bury all types of wastes.

Subsoil resources

Distribution of mineral and raw-material resources in the area affected by the planned facility (reserves and quality).

Needs of the facility for mineral and raw-material resources during

construction and operation (types, quantities, sources).

Forecast of effect of the extraction of mineral and raw-material resources depending on the various components of the natural environment and on natural resources.

Justification of nature protection measures to regulate the water regime and to utilize damaged areas.

In the process of extracting and processing (widely distributed) minerals, the following materials must be submitted:

- Description of the deposits operated (reserves of minerals ratified by the State Committee for Mineral Resources, that geological features etc.);
- Materials confirming the possibility of the removal and processing of harmful components, and, in the case of the most toxic, methods for their burial;
- Radiation characteristics of the minerals and overburden (in particular, those used in the production of construction materials);
- Recommendations on the composition and siting of the regulatory network of boreholes for the study, monitoring and assessment of the State of rock and underground water in the course of the operation of the facilities of the planned construction project;
- Proposals on how to achieve the maximum possible removal of minerals from the subsoil without lowering the quality of the reserves of minerals in adjacent sections and in the area of their extraction (as a result of flooding, weathering, oxidation, combustion, etc.);
- Justification of the rejection of burial of harmful substances and production wastes, with the submission of the finding of a specialized scientific research organization.

Plant cover⁶

The current State of the plant cover in the area affected by a facility (special distribution, composition, functional significance, productivity of phytocenoses, their natural dynamics, fire hazard, morbidity of rare and endemic species and those entered in the red book.

Description of the impact of the facility and accompanying production processes on the phytocenoses of the area, and on rare and endemic species of plants in the affected area.

⁶ In the event of the siting of a facility in areas that are already built up, the issue of the protection of the plant and animal resources only arises if there are areas of natural vegetation and animal habitats within the area affected by the facility.

Substantiation of the utilization volumes of plant resources.

Changes in the plant cover (species make up, State, productivity of phytocenoses, economic and functional significance, infestation by pests) of the area where the facility operates and consequences of these changes for the life and health of the local population.

Measures to conserve phytocenoses, to enhance their State, to conserve and restore the flora.

Animal resources

Current State of aquatic and terrestrial fauna.

Description of the impact of the facility on the species make up and population size of the fauna, on its genetic stock and migration routes during the course of construction and operation.

Possible changes to animal resources in the area affected by the facility and assessment of the consequences of these changes.

Measures to conserve and restore aquatic and terrestrial fauna.

Social environment

Current social and economic living conditions of the local population, description of labour activities.

Availability of labour resources to the facility during the period of its construction, operation and decommissioning, participation of the local population.

***** In the event of the siting of a facility in areas that are already built up, the issue of the protection of the plant and animal resources only arises if there are areas of natural vegetation and animal habitats within the area affected by the facility.

Sources and scale of chemical pollution: for established (normal) operating conditions of the enterprise and maximum load conditions; in the event of possible explosion-related and accidental releases.

Measures to introduce low-waste and non-waste technologies. Special measures to prevent releases into the atmosphere (extent to which these are consistent with leading Kazakh and foreign experience: and for the elimination of the consequences of possible accidents.

Calculation of expected pollution of the atmosphere taking into account enterprises already in operation, those under construction and those planned for construction (background pollution), analysis of results obtained.

Proposals on successive stages for regulating and establishing maximum admissible emission levels and provisionally approved emission levels (for facilities in operation).

Justification of the accepted area of the sanitary buffer zone^{*****}, taking into account predicted pollution levels.

Assessment of the effects of pollution and measures to reduce residual pollution of the atmosphere.

Assessment of possible heat, electromagnetic, noise and other types of impact and the consequences of such impacts.

Organization of monitoring of State of the atmosphere. Elaboration of measures to regulate emissions during periods of particularly unfavourable meteorological conditions.

***** The sanitary buffer zone must ensure comprehensive protection from pollution, noise, electromagnetic fields, ionizing radiation and other physical effects.

Surface waters

Hydrogeographical description of the area

Description of the water facility (with approximation to calculated ranges of water intake) - hydrological and hydrochemical regime, ice and heat characteristics, speed characteristics of waterflow, deposition rates, water course processes, hazardous phenomena: jams, presence of sludge.

Need for economic and other activities in water resources during construction and operation period, quality requirements of utilized water.

Description of water supply source, its economic utilization.

Location of the water intake, its description.

Assessment of intake possibilities (justified in terms of standards and quotas) of quantity of water from surface sources under natural conditions (without need to regulate river flow). Need to organize health protection zones.

Quantity and quality of discharged waste water (with indication of place of discharge, constructive aspects of discharge arrangements and list of pollutants and their concentrations).

Quality and requirements of discharged water (calculation of maximum permissible emissions).

Justification of technical unfeasibility or economic inadvisability of reuse of waste water.

Proposals for attaining maximum admissible emission levels

Assessment of the impact of the planned facility on the water in the course of construction and operation including possible heat pollution of the water

body and consequences of the impact of diversion of water on the water ecosystem.

Assessment of changes in the surface flow (liquid and solid) as a result of the replanning of the area and the removal of the plant layer, identification of negative consequences of these changes on the water system of the area.

Assessment of changes in the water course processes related to the laying of pipeline facilities, the construction of bridges, water intake facilities and the identification of negative effects.

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Description of the soil cover in the area effected by the planned facility area distribution, water-related physical, chemical and biological characteristics, fertility of the main types of soils, mechanical composition of main types of soils and ground.

Description of the effect on the soil cover (topsoil effect) extent of damage, pollution characteristics), including specific features of the pollution of the area by production wastes (type

Forecast of changes in social and economic living conditions of the local population in the implementation of the planning decisions for the facility (under normal operating conditions of the facility and in the event of possible accident situations).

Health and epidemiological State of the area and forecast of changes in that State as a result of the planned activity.

Measures to regulate social relations during the course of the planned economic activity.

Assessment of the environmental risk of siting the enterprise in the area

Value of the natural systems (functional value, specially protected features).

Resistance of the natural systems (landscapes) to the impact of the facility.

Comprehensive assessment of the consequences of the impact on the environment under normal operating conditions of the facility.

Assessment of the probability of accident situations (taking into account the technological level of the facility and the presence of any hazardous natural phenomena) - sources, types of accident situations, their recurrence, area of

impact.

Forecast of the consequences of accident situations on the natural environment and their danger to the local population.

Assessment of damage to the natural environment and the local population.

Measures to prevent accident situations and to eliminate their consequences.

Integrated assessment of environmental risk.

List of environmentally dangerous types of economic activity

1. Atomic industry (installations designed for the production or enrichment of nuclear fuel or for the collection, disposal and treatment of radioactive wastes).
2. Energy facilities (atomic, hydroelectric and thermal power stations, major installations for the combustion of fuel).
3. Ferrous and non-ferrous metallurgy (installations for the blast furnace and open-hearth production, ferrous and non-ferrous metallurgical enterprises, mechanical engineering and metal working enterprises).
4. Petrochemical enterprises, oil and gas processing.
5. Chemical industry (chemical combines, asbestos, glass, mineral fertilizer, pesticide and other types of production).
6. Microbiological industry.
7. Extraction of minerals (including oil and gas).
8. Transport of oil and gas and their byproducts.

9. Production of cellulose, paper and cardboard.
10. Transport, storage, utilization and burial of toxic and poisonous wastes.
11. Production, storage, transport and destruction of munitions, explosives and rocket fuel.
12. Major storage centres for the storage of oil and petroleum, petro-technical and chemical products, chemical poisons and pesticides.
13. Construction of roads, motorways, long-distance railways, airports with runways exceeding two kilometers in length.
14. Sources of electromagnetic radiation (tv and radio broadcasting stations, radio stations, transformer substations and high-voltage (110 kilo volts and above) electricity lines.
15. Agricultural facilities (livestock complexes, poultry farms, major land-improvement systems).
16. Major water intakes for surface and underground waters.
17. Major dams and reservoirs.

18. Wide-scale logging.

DECLARATION OF INTENT

1. Invest (commissioner)

2. Postal address

3. Location of facility

.....

4. Description of facility (approximate, based on analogous facilities .

.....

Technical and technological data (types and quantities of produced output,
period of operation).....

.....

5. Justification of social and economic necessity for planned activity.

.....

6. Resource requirements (with corresponding justification) in process of
construction and operation:

Land resources

(area of land appropriated for temporary and permanent
use, type of utilization)

Mineral resources

(types, quantity, place of extraction)

Organic resources

(types, quantity, place of harvest)

Water resources

(quantity, required quality, water supply sources)

Biological resources

(type, quantity, sources of obtention)

Labour resources

7. Consumption of materials

.....

(types, quantities, sources for obtention of raw
materials, fuel, energy)

8. Provision of transport (in course of construction and operation)

.....

9. Possible impact of planned activity on natural environments:

Types of impact on components of the natural environment

.....

(types of impact and disruptions, name of polluting ingredients
and their quantity)

Likelihood of accident situations

(likelihood of accidents, scope, duration of effect)

Production wastes

.....

(types, quantity, toxicity, utilization method)

10. Funding sources for planned activity

.....

11. Duration of planned construction

.....

(date for commissioning of first stage)

STATEMENT OF ENVIRONMENTAL CONSEQUENCES^{*****}

.....

(name of the facility)

Investor (commissioner).....

.....

(for and abbreviated name)

Essential data

(postal address, telephone, fax, telex, account number)

Funding sources

(State budget, private investments, foreign investments)

Location of facility

(region, district, inhabited locality or distance

and direction from nearest inhabited locality)

Full name of facility, shortened name, departmental affiliation or indication of

owner

————— Depending on the level of the impact assessment (regional or specific), the area where the facility is located, specific features of the production (urban planning) activity, the set of indicators may be varied provided they reflect all aspects of the impact).

Project materials submitted (full name of documentation).....
.....

(feasibility study, technical and economic decision, project,
working project, general development plan for settlements, detailed
project plan, etc.)

Overall planning organization (name, essential data, full name of Chief engineer
of project)

Description of facility

Calculated area of land to be allocated

Radius and area of health protection zone

(quantity and height in storeys of production buildings)

Planned construction of accompanying social and cultural immunities

Schedule of main products and quantity of production expressed in natural terms

(projected indicators at full capacity)

.....
..... etc.

- Main technological processes 1.
2.
3.

Justification of social and
economic need for planned
activity

Period of planned construction
(first stage, at first
capacity)

Consumption of materials:

1. Types and quantities of raw materials:
 (a) Local 1.
 (b) Imported 2.
2. Technological and energy fuel

3. Electrical energy

(quantity and preliminary confirmation from

supply source)

4. Heat

.....

(quantity and preliminary confirmation from

supply source)

Conditions for the utilization of natural resources and possible
impact of the planned activity on the environment

Atmosphere

List and quantity of pollutants
expected to be released into the
atmosphere:

Aggregate release tonnes/year

Solids tonnes/year

Gaseous tonnes/year

List of main ingredients

constituting releases tonnes/year

Presumed concentrations of

harmful substances at boundary

of health protection zone 1.

2.

Sources of physical impacts, their
intensity and areas of possible
impact:

Electromagnetic radiation

Acoustic effects
Vibration effects

Water environment:

Intake of fresh water:

One-off to fill water circulation
systems cu m
Constant cu m/year

Water supply sources:

Surface units/(cu m/year)
Underground units/(cu m/year)
Water pipes and units/(cu m/year)
cond _____

Quantity of waste waters discharged into natural water bodies and water

courses: cu m/year

Ponds and sinks cu m/year

Into extraneous
drainage systems cu m/year

Concentrations and quantity of main pollutants contained in waste water (by ingredients) mg/l t/year

Concentrations of pollutants, by ingredients, in the nearest place of water utilization (in those cases where waste water is discharged into water bodies or water courses) mg/l

Land

Description of expropriated land:

Area:

For permanent use ha
 For temporary use ha

Including:

_____land ha
 Forest plantations ha
 Disturbed land, requiring recultivation

Including:

Quarries	items/ha
Dumps	items/ha
Sinks (sedimentation ponds, slag and ash dumping calls, tailings etc.)	items/ha
Other	items/ha

Subsoil resources (for ore
mining enterprises and areas):

Type and method of mineral extraction, including construction materials	t (cu m)/year
---	---------------	-------

Integrated nature and effectiveness of utilization of extracted ores (t/year) % of extraction)
--	-------

Main raw materials	1.
	2.

Accompanying components

Quantity of non-ore-bearing
rock and beneficiation wastes,
stored on the surface:

Yearly total t (cu m)

Accumulative total for entire
period of operation of

enterprise t (cu m)

Vegetation:

Types of vegetation subject

to partial or total destruction ha

(grassland, meadows, shrub vegetation,
woody plantations etc.)

Including:

Area of logging in forests ha

Quantity of timber obtained cu m

Pollution of vegetation,
including agricultural crops,
by toxic substances (estimated)

Fauna:

Sources of direct impact on animal
resources, including on aquatic fauna

Impact on protected nature areas (nature
reserves, national parks, sanctuaries)

Production wastes:

Quantity of unutilized wastes
including toxic wastes t/year

Suggested methods for neutralizing
and burial of wastes t/year

Presence of radioactive sources,
assessment of their possible
impact

Likelihood of accident situations:

Potentially hazard technological

lines and facilities:

Likelihood of accident situations

Radius of possible impact

Integrated assessment of environmental
changes caused by impact of facility,
as well as its influence on living
conditions and health of population

Forecast of State of environment and
possible consequences in social and
public sphere based on results of
activity of facility

Obligations of commissioner
(initiator of economic activity)
vis-a-vis creation of favourable
living conditions for population
in course of construction and

operation of facility and its

decommissioning

.....

Annex:

List of organizations and implementing bodies, participating in elaboration of the project documentation and in the conduct of the EIA.

Conclusions of the organizations and departments concerned and of the oversight bodies.

Materials of the public hearings.

When transmitting the Statement on environmental consequences to the authorities responsible for ratifying the project documentation, the finding of the State environmental impact assessment is to be attached.

POSSIBLE PRIMARY SOURCES OF BASELINE DATA FOR COMPLETION
OF THE DIFFERENT SECTIONS (TOPICS) OF AN EIA

Sections	Type of materials	Organizations
1. Air	Climate manuals and meteorological annuals	Kazakh Hydro-meteorological Service
	Review of environmental pollution from available observation points	Kazakh Hydro-meteorological Service
	Processed materials on emission quantities and concentrations of pollutants in inhabited localities	Kazakh Hydro-meteorological Service on Special Commission
	Background concentrations of pollutants	Kazakh Hydro-meteorological Service on Special Commission
	Volumes of maximum permissible discharge standards for the enterprise	Enterprises, in consultation with subunits of the Ministry of Environment and Biological Resources
	Digests of maximum permissible discharge standards for the various inhabitable localities	Local administrations in consultation with subunits of the Ministry of Environment and Biological Resources

2. Water resources	Hydrological manuals and annuals	Kazakh Hydro-meteorological Service
2.1 Surface waters	<p>Annual report on quality of surface and marine waters and effectiveness of water protection measures conducted in the territory of the Republic of Kazakhstan and processed materials on pollution of surface waters</p> <p>Volumes of maximum permissible discharge standards for the various river basins</p> <p>Plans for the integrated utilization of water resources by river basins</p> <p>Plans for water supply and drainage of inhabited localities</p>	<p>Kazakh Hydro-meteorological Service by Special Commission</p> <p>State Committee for Water Resources, organizations, developers</p> <p>Local administrations, in consultation with the Ministry of Environment and Biological Resources and the concern Kazhilkomkhoz (Kazakh Residential and Social Amenities)</p>
2.2 Underground waters	<p>Reports of hydrogeological survey groups, regulatory stations, reports of State Committee for Mineral Reserves Local Committees for ratifying estimates of reserves</p> <p>Mathematical models of dynamics of formation and utilization of underground waters</p>	<p>National and local, geological funds</p> <p>Scientific research institutes and industrial combines of the Ministry of Geology, specialized enterprises and firms on basis of contracts</p>

<p>3. Land resources</p> <p>3.1 Protection of soils</p>	<p>Materials of multi-farm and single-farm land use measures, plans and designs for land management, soil charts, inventories and projects for recultivation of disturbed land</p> <p>Materials on study of the chemical composition of soil pollution</p> <p>Reports of scientific research work by the Institute of Soil Science of the National Academy of Sciences</p> <p>Materials of environmental and geochemical research</p>	<p>Kazgiprozezem, Tselingiprozem State Planning Institutes, local offices of the State Committee for Land Resources</p> <p>Centre for monitoring of environmental pollution of the Kazakh Hydro-meteorological Service, centres for applications of chemical processes in agriculture of the Ministry of Agriculture</p> <p>National Academy of Sciences of the Republic of Kazakhstan</p> <p>Scientific research institutes and industrial subunits of the Ministry of Geology, specialized organizations and enterprises on basis of contracts</p>
<p>3.2 Treatment, utilization, burial of all types of wastes</p>	<p>Sectoral plans and units in architectural and urban planning administration</p> <p>Inventories of wastes</p>	<p>Level with inventories of wastes, local organs of the Ministry of the Environment and Biological Resources, institutes and organizations of the Kazhilkomkhoz concern</p>

<p>4. Subsoil resources</p>	<p>Reports of surveying and geological prospecting work, reports of the State Committee on Mineral Reserves and local committees on mineral reserves ratifying reserves of minerals</p> <p>Projects for the exportation and development of deposits of minerals</p>	<p>National and local geological foundations</p> <p>Planning and technological sectoral institutes</p>
<p>5. Physical impacts</p> <p>5.1 Electro-magnetic impacts</p> <p>5.2 Sound impacts</p> <p>5.3 Vibrations</p> <p>5.4 Corrosion under influence of wandering subsoil currents</p>	<p>Certificates of radio and tv transmitters, radar stations, on-site measurements</p> <p>Calculated indicators, on-site measurements</p> <p>Virtually no systematically prepared materials available</p> <p>Virtually no systematically prepared materials available</p>	<p>Communications enterprises, regional office for radio and tv transmitters of the Ministry of Communications, airports, Ministry of Defence, health and epidemiological service of the Ministry of Health</p> <p>Enterprises, specialized organizations, health and epidemiological service</p> <p>Where necessary, conduct of special research</p> <p>Where necessary, conduct of special research</p>
<p>6. Vegetation cover</p>	<p>Research materials and charts of fodder resources in land use development materials</p> <p>Geobotanical research materials of the Institute of Botany of the National Academy of Sciences, Red Book of the Republic of Kazakhstan</p> <p>Materials of forestry measures</p>	<p>Kazgiprozem State Planning Institute</p> <p>Foundations of the National Academy of Sciences, special research on a contractual basis</p> <p>Kazlesproekat industrial combine, Kazgiproleskhoz Institute</p>

<p>7. Animal resources</p>	<p>Red Book of the Republic of Kazakhstan reports on scientific research work at local levels. No systematically prepared materials available</p>	<p>Institute of Zoology of the National Academy of Sciences, Biological Faculty of the Kazakh State National University conduct of scientific research work on a contractual basis</p>
<p>8. Social environment</p>	<p>State statistical materials, medical statistics</p> <p>Materials of architectural and urban planning (plans and projects for district development, general development plans for cities and settlements), sectoral plans for engineering infrastructure</p> <p>Research materials relating to programmes of the Ministry of Health of the Republic of Kazakhstan, reports on scientific research by specialized organizations</p>	<p>State Committee on Statistics, Medical Statistical Office</p> <p>Ministry of Construction, regional and municipal architectural and urban planning offices, planning institutes</p> <p>Institutes of the Ministry of Health, of the National Academy of Sciences of the Republic of Kazakhstan, health protection centre, health and epidemiological service</p>

Note: The sources for the obtention of baseline data given above are suggestions only and not exhaustive. The submission of data is effected on a contractual basis, which shall not exclude the provision of materials free of charge.