"Official Gazette of the RoS", No. 80/2005

Pursuant to Article 106 of the Law on Planning and Construction ("Official Gazette of the RoS", No. 47/03),

Minister for Capital Investments enacts the following

# RULEBOOK

# on the contents, scope and manner of producing prefeasibility and feasibility studies for the construction of structures

## **I INTRODUCTORY PROVISIONS**

## Article 1.

This Rulebook gives closer instructions for the contents, scope and manner of producing Prefeasibility and Feasibility Studies for the construction of structures.

#### Article 2.

In Prefeasibility Study spatial, environmental, social, financial, market and economic justification of an investment is determined for alternative solutions defined in General Design based on which a planning document can be made as well as the decision on the justification of investing in preparatory works for Preliminary Design and production of Feasibility Study and Preliminary Design.

Feasibility Study sets spatial, environmental, social, financial, market and economic justification of an investment is determined for the selected alternative, elaborated in Preliminary Design, based on which the decision on the justification of investing is made as well as on the initiation of procedures for the issuing of construction approval.

#### Article 3.

Investor provides Terms of References for the production of Prefeasibility and Feasibility Studies. Terms of References contain in particular: objective of the study, legal base for the study, documentation basis for the production of the study, methodological framework, required analyses, manner of presenting the study, procedure of results check, production of software tools and other terms of producing.

#### Article 4.

#### Prefeasibility Study is done for:

- nuclear structures and other structures used for the production of energy, nuclear fuel, radioisotopes, irradiation, storing of radioactive waste materials for scientific research purposes; structures for chemical industry, structures for processing leather and fur, structures for processing Indian rubber, structures for processing pulp and paper and structures for processing nonmetallic minerals; structures within national parks, cultural heritage of national and international significance and structures in their protected surrounding and other protected goods of national and international significance, in accordance with the law; installations and devices for disposal of waste by burning and chemical procedures; structures for production, storing and destroying of harmful substances and waste with the characteristics of harmful substances; airports for public air transport; and mechanized freight and public passenger harbors;
- 2) structures for the production and processing oil and gas, international and main gas pipelines and oil pipelines for transport, gas pipelines of working pressure over 16 bar if passing over the territory of at least two municipalities, storage of oil, gas and oil derivatives of capacity over 500 tons and main and regional hot water lines; interregional and main and regional road structures and connections to main and regional roads; public railway infrastructure structures and connections, regional structures of water supply and sewage, municipal systems for water supply and sewage of waste waters, as well as structures for water treatment; regulating operations on waterways and channels and ship locks which are not a part of hydroelectric system;
- 3) hydroelectric power stations of 10 MVA and more, thermal power stations of 10 MVA and more and transformer substations of 110 kV and more; and telecommunication structures of international or main line significance and telecommunication structures constructed on the territory of two or more municipalities, main capacities inclusive;
- 4) high dams and accumulations filled with water, spoil or ash for which technical observation is prescribed; and regulating operations for the protection of large waters on municipal areas and rural areas bigger than 300 ha.

#### Article 5.

Prefeasibility and Feasibility Study made according to regulations of other countries, or according to methodologies of foreign financial organizations (creditors, banks, etc.) or which is approved by foreign financial institutions can be submitted to review committee for professional control and in original form.

#### Article 6.

For structures for which phased construction and usage, Prefeasibility Study shall contain elements for all stages planned, and Feasibility Study can be done for individual stages as well.

Prefeasibility Study for structures from Article 4 item 3) of this Rulebook shall be made on the level of entire network and Feasibility Study shall be made for entire network or for certain subfunctional parts of the network, or for groups of structures on certain territory which represent technological and organizational unity.

# **II PREFEASIBILITY STUDY**

#### Article 7.

Basis for the production of Prefeasibility Study shall consist of: Spatial Development Strategy of the Republic of Serbia, spatial development schemes, etc., preparatory works and alternative solutions from General Design.

Prefeasibility Study shall contain General Design as well.

#### Article 8.

Prefeasibility Study shall contain specifically:

#### 1. Introduction

- 1) investing objectives (social, economic, other objectives);
- 2) main data on investor and his development opportunities and authors of the Study;
- 3) task for the production of the Study;
- 4) planning period and informational base;
- 5) methodological approach (explanation of applied software tool).

#### 2. Analysis of the existing situation

- 1) spatial location (of structure, corridor, network);
- 2) function (of structure, corridor, network) and utilization degree;
- 3) significance (of structure, corridor, network) in the system.

#### 3. Market aspect – analysis and projection

- for structures listed in Article 4. item 1) of this Rulebook
  - 1) main characteristics of products or services;
  - 2)demand analysis;
  - 3) supply analysis;
  - 4) assessment of possible sale.

#### - for structures listed in Article 4. item 2) of this Rulebook

1) gravitating area;

- 2) main indicators of social economic development;
- 3) generators of flows (passenger, freight, goods, services);
- realized volume of transport and traffic (passenger, freight, goods, services) in total and structured (by branches, means, segments, types of goods and services, motives of travel);
- forecasted volume of transport and traffic for passengers and freight total and structured (by branches, means, segments, types of goods and services, motives of transport and travel);
- 6) assessment of conditions of transport and traffic by alternatives (functional evaluation).
- for structures listed in Article 4. item 3) of this Rulebook
  - 1) gravitating area;
  - 2) flows generators of services and goods;
  - 3) realized volume of services and goods by structure;
  - 4) forecasted volume of goods and services flow total and structured.
- for structures listed in Article 4. item 4) of this Rulebook
  - 1) gravitating area;
  - 2) main characteristics of goods or services;
  - 3) main indicators of social economic development;
  - 4) analysis of demand;
  - 5) analysis of supply;
  - 6) forecasted volume of goods and services flow total and structured;
  - 7) assessment of possible sale.

#### 4. Representation of technological and technical solutions in General Design

- 1) representation of General Design production;
- 2) representation of main elements of General Design;
- representation of technical and technological solutions from General Design (architectural, civil engineering, traffic, technological, mechanical, electrical, etc.);
- 4) graphical representation of alternative solutions;

- 5) planned life cycle of the structure;
- 6) structure and dynamics of necessary investments.

#### 5. Analysis of the purchase market

- 1) specification and description of the necessary input;
- analysis and assessment of possibilities for obtaining necessary inputs (domestic, foreign) – for material and equipment; for raw materials for construction and production;
- 3) forecast of purchase prices.

#### 6. Spatial aspect

- for structures listed in Article 4. item 1) of this Rulebook
  - 1) analysis of location;
  - 2) assessment and selection of location.
- for structures listed in Article 4. items 2) and 3) of this Rulebook
  - 1) harmonization of the adopted alternative with spatial and urbanistic plans;
  - 2) spatial consequences for occupying areas and dividing unities;
  - 3) impacts on special development of the area;
  - 4) preliminary assessment of spatial eligibility.
- for structures listed in Article 4. item 4) of this Rulebook
  - 1) harmonization of the adopted alternative with spatial and urbanistic plans;
  - 2) spatial consequences for occupying areas and separating unities;
  - 3) impacts on special development of the area;
  - 4) preliminary assessment of spatial eligibility;
  - 5) depopulation;
  - 6) employment;
  - 7) safety.

#### 7. Preliminary analysis of environmental impacts

- for structures listed in Article 4. item 1) of this Rulebook
  - 1) analysis of possible environmental impacts;

- 2) proposal of measures for environment protection.
- for structures listed in Article 4. items 1), 2) and 3) of this Rulebook
  - 1) attitude towards natural, cultural and historical goods;
  - 2) impacts on climate;
  - 3) impacts on surface and groundwaters;
  - 4) noise and air pollution;
  - 5) impacts on flora and fauna;
  - 6) impacts on soil;
  - 7) preliminary assessments of environmental eligibility.

#### 8. Financial analysis and assessment

- 1) calculation of necessary investments;
- 2) sources of financing and obligations towards the sources;
- 3) calculation of revenues and costs;
- 4) income statement;
- 5) preliminary financial assessment of project profitability.

#### 9. Social economic analysis and assessment

- 1) economic costs and benefits by alternatives during operation period;
- 2) applied method of economic evaluation;
- 3) direct and indirect (external) social economic effects;
- 4) proposal of optimal alternative;
- 5) stages and phases of project implementation and optimal year for putting into operation;
- 6) preliminary social economic assessment of project profitability.

#### **10.** Analysis of sensitivity and investment risks

- 1) sensitivity to changes of initial parameters;
- 2) sources and scale of risks.

#### **11.** Preliminary analysis of financing resources and engagements

- 1) investor's own funds;
- 2) domestic resources;
- 3) foreign and international resources;
- 4) guarantees and obligations;
- 5) preliminary assessment of financing resources.

#### 12. Preliminary analysis of organizational and staffing opportunities

- 1) organization;
- 2) staffing potentials;
- 3) preliminary assessment of organizational and staffing eligibility.

## 13. Conclusion on Prefeasibility Study

- 1) final considerations;
- 2) Study summary.

## **III FEASIBILITY STUDY**

#### Article 9.

Basis for the production of Feasibility Study shall consist of: preparatory works and Prefeasibility Study with General Design.

Feasibility Study shall contain General Design as well.

#### Article 10.

Feasibility Study for structures listed in Article 4. of this Rulebook shall contain specifically:

#### 1. Data on the purchaser and authors of the Study

#### 2. Introduction

- 1) objectives for producing the Study;
- 2) task for producing the Study;
- 3) main documentation used for producing the Study;
- 4) methodological approach (explanation of the applied licensed software tool);

5) short outline of the results of Prefeasibility Study.

### 3. Objectives and purpose of investing

- 1) social objectives;
- 2) economic objectives;
- 3) other objectives;
- 4) purpose of investing.

## 4. Description of the structure

- 1) location of the structure;
- 2) significance in the system or network;
- 3) function of the structure;
- 4) available technical documentation;
- 5) available plan documentation;
- 6) graphic representation of the structure (site plan, profiles, main layouts and sections taken from Preliminary Design);
- 7) planned life cycle of the structure;
- 8) time for constructing the structure;
- 9) stages in constructing the structure.

#### 5. Analysis of development opportunities of the investor

- 1) name and headquarters of the investor;
- 2) area of business operations;
- 3) representation of development and assessment of the current organization of the investor;
- 4) representation of technological and economic development and assessment of the current situation;
- 6) analysis of the employee structure;
- 7) balances of business operations and assessment of financial eligibility (development program, technology, organization, staff).

#### 6. Methodological bases for producing the Study

- 1) laws and rulebooks;
- 2) coordination with technical documentation;
- 3) ) coordination with plan documentation;
- 4) information system and data sources;
- 5) procedure of defining indicators;
- 6) procedure and method of evaluation.

#### 7. Technical technological solution in Preliminary Design

- 1) process of producing Preliminary Design;
- 2) bases for producing Preliminary Design;
- 3) method and criteria for functional evaluation;
- 4) graphical representation of the structure (site plan, profiles, sections, technological layouts, etc.);
- 5) analysis of possibilities for project realization;
- 6) stages and phases of project construction;
- 7) time schedule for constructing the structure;
- 8) dynamics of investing financial resources, in total and structured/by purpose;
- 9) organization and system for project management;
- 10) revisions and decisions during the production of Preliminary Design.

#### 8. Market aspects

- 1) international market;
- 2) domestic market;
- 3) assessment of market efficiency.

#### 9. Spatial aspects

- 1) harmonization of the adopted alternative with spatial and urbanistic plans;
- 2) consequences of expropriations and depopulation;
- 3) consequences of dividing unities;
- 4) impacts on spatial and urbanistic development of the area in immediate vicinity;

5) assessment of spatial eligibility.

#### **10. Environmental aspects**

- 1) environmental impacts (micro climate, water, air, noise, soil);
- 2) effects of technical measures for environment protection;
- 3) visual pollutions;
- 4) safety;
- 5) assessment of environmental eligibility.

#### **11. Economic costs**

- 1) costs of constructing the structure;
- 2) costs of procuring and installing equipment;
- 3) operation, maintenance and management costs;
- 4) accompanying and additional costs;
- 5) price analysis and accuracy check;
- 6) dynamics of costs;
- 7) costs in national and foreign currencies.

#### 12. Benefits

- 1) revenues;
- 2) direct benefits;
- 3) indirect benefits;
- 4) price analysis for the calculation of benefits and accuracy check;
- 5) dynamics of revenues, direct and indirect benefits;
- 6) revenues and benefits in national and foreign currencies.

#### 13. Financial efficiency with the assessment of profitability and liquidity

- 1) calculation and dynamics of revenues;
- 2) calculation and dynamics of expenditures;
- 3) financial flow of the project;
- 4) project profitability;

- 5) project liquidity;
- 6) assessment of financial efficiency.

## **14. Social economic efficiency**

- 1) calculation and dynamics of direct economic effects (costs and benefits);
- 2) calculation and dynamics of additional economic effects;
- 3) economic flow of the project;
- 4) scale and dynamics of social effects;
- 5) social flow of the project;
- 6) social economic assessment of profitability and efficiency.

## 15. Analysis of sensitivity and investment risks

- 1) sensitivity to changes of financial parameters;
- 2) sensitivity to changes of economic parameters;
- 3) sensitivity to changes of initial elements for price definition (structural sensitivity);
- 4) risk assessment;
- 5) conclusions of sensitivity and risk analysis;

#### 16. Preliminary analysis of financing resources, engagements and dynamics

- 1) scope and dynamics of investor's own funds;
- 2) scope and dynamics of domestic resources with dynamics of funds inflow;
- 3) scope and dynamics of foreign and international resources;
- 4) guarantees by financing sources;
- 5) obligations by financing sources;
- 6) assessment of financing sources.

## 17. Analysis of organizational and staffing opportunities

- 1) external links and contacts;
- 2) organization;
- 3) staffing potentials;

4) assessment of organizational and staffing eligibility.

#### **18.** Conclusion on investment justification

- 1) collective rating of investment justification;
- 2) argumentation of the rating;
- 3) reliability degree of the rating;
- 4) Feasibility Study summary.

#### Article 11.

If during the production of Prefeasibility and Feasibility Study software tools are used for calculation and evaluation, final results shall contain summary and recapitulation of the discussed solutions as well as the description of the selected technology for producing the Study.

## **IV TRANSITIONAL AND FINAL PROVISIONS**

## Article 12.

Production of Prefeasibility and Feasibility Study which started before this Rulebook took effect, shall be continued according to the regulations which were valid up to the date of effect of this Rulebook.

#### Article 13.

On the day when this Rulebook takes effect the Rulebook on the contents and scope of Prefeasibility and Feasibility Study (Official Gazette of the Republic of Serbia, No. 39/99) shall cease to be valid.

#### Article 14.

This Rulebook shall take effect on the eighth day from being published in the Official Gazette of the Republic of Serbia.