

Table of Contents

2.0	POLICY, LEGAL, AND ADMINISTRATIVE FRAMEWORK	1
2.1	Relevant Serbian Government Policies and Institutional Organization	1
2.1.1	Government Policies and Institutional Framework.....	1
2.1.2	Environmental Laws and Regulations	2
2.1.3	Environmental Assessment Procedure in Serbia.....	14
2.1.4	Other Regulatory or Permitting Requirements	23
2.2	Non-Governmental Organizations.....	37
2.3	Relevant International Policies, Procedures, Standards, and Directives	38
2.3.1	Export Development Canada (EDC)	38
2.3.2	IFC/World Bank.....	44
2.3.3	European Union	46
2.3.4	Comparison of Key International Standards/Guidelines.....	50

List of Figures

Figure 2.1	Phases in Object Building according Law on Planning and Construction.....	30
------------	---	----

List of Tables

Table 2.4.1	A Comparison of Serbian, European Union, and IFC/World Bank Ambient Air Quality Guidelines	50
Table 2.4.2	Comparison of International Water Quality Guidelines/Standards.....	52

SECTION 2

POLICY, LEGAL, AND ADMINISTRATIVE FRAMEWORK

2.0 POLICY, LEGAL, AND ADMINISTRATIVE FRAMEWORK

Environmental protection in Serbia is regulated by a considerable number of legal and sub-legal acts at the national level as well as by ratified international treaties. Over the past few years, generally, these regulations have been harmonized as much as possible with contemporary international tendencies and standards, primarily those of the European Union. All proposed legislation must be accompanied by an analysis of the relevance to EU Directives.

Some non-environmental specific legal documents recognise the importance of environment as follows:

1. The Constitution of the Republic of Serbia (“Off. Journal of the Republic of Serbia”, No. 98/06) (hereinafter: “Off. Jour.of RS) stipulates a right to a healthy environment in Article 31: «Man shall have the right to a healthy environment. Every person is bound, in accordance with law, to protect and enhance the human environment. »
2. The Charter on Human and Minority Rights and Civil Liberties (“Off. Journal of the Serbia and Montenegro”, No. 1/03) (hereinafter: “Off. Jour. of SM”) which is the main constitutional act for the state union of Serbia and Montenegro; this is stated in Article 46: “Everyone and the State Union and Member States in particular, shall be responsible for environmental protection. Everyone shall have the right to a healthy environment and to receive timely and full information about its status. Everyone shall be bound to protect and improve the environment.”
3. Competencies and responsibilities of the Republic of Serbia are defined by Article 72 of the Constitution: “The following shall be regulated and provided by the Republic of Serbia: 5. The system of protection and advancement of human environment; protection and promotion of plants and animals; ...”

To implement these obligations and legal documents, Serbia has started strengthening the institutional structure at national, regional and local levels. However, implementation of the many new laws and regulations to improve the country’s environmental management are a major challenge and an area that will need much focus for the years to come.

2.1 Relevant Serbian Government Policies and Institutional Organization

2.1.1 Government Policies and Institutional Framework

This section outlines the current legal framework for environmental management, including the following areas:

- Environmental Framework Law;
- Environmental Impact Assessment (EIA);
- Integrated Pollution Prevention Control (IPPC);
- Water and Waste water;
- Solid waste;
- Air pollution;
- Monitoring;
- Soil protection and land use control;
- Nature protection;
- Environmental liability;
- Health and safety.

2.1.2 Environmental Laws and Regulations

Environmental protection in Serbia is regulated by many republic and municipal laws and by-laws.

Serbian Law on environmental impact assessment (Off. Jour. of RS, No. 135/04 and 36/09) is in the process of being integrated with Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment, as amended by Directive 97/11/EC and by Directive 2003/35/EC ("EIA Directive")

The EIA Directive has been fully transposed in Serbia through the Law on EIA No 135/04 implemented the following: 1) Decree No. 114/2008 that prescribes list I-projects for which an impact assessment is mandatory (required) and list II-projects for which an impact assessment may be required; 2) Regulation 69/2005 on the content of application for determining whether or not EIA is required, and of application for determining scope and content of EIA study.

In November 2008 Decree No. 84/2005 that prescribes list I-projects and list II-projects were amended in order to harmonize with Annex 1 and Annex 2 of Directive 97/11/EC.

In January 2009 the Government of Serbia approved amendments on EIA law; the implementation of these amendments by the parliament is pending.

Implementation Status

Timetable for Implementation	
Actual or estimated date for	Year 10
1. Designating the competent authority/ies (Art. 1.3)	Already implemented
2. Requiring Annex I projects to be subject to EIA (Art. 4.1)	Already implemented
3. Establishing a procedure to decide which Annex II projects require EIA (Art. 4.2)	Already implemented
4. Deciding which information relating to EIA is made available to the public	Already implemented
5. Determining the scope of the information to be provided by the developer (Art. 5)	Already implemented
6. Establishing a procedure for consultation with environmental authorities (Art. 6.1)	Already implemented
7. Establishing a public consultation procedure (Art. 6.2)	Already implemented
8. Establishing arrangements with neighbouring Member States for exchange of information and consultation (Art. 7)	December 2011
9. Requiring results of consultations to be taken into account in the development consent procedure (Art. 8)	Already implemented
10. Establishing measures for notifying the public of the outcome of decisions on applications for development consent (Art. 9)	Already implemented
11. Implementing the amendments introduced by Directive 2003/35/EC	Already implemented
- Full implementation	December 2011

The Ministry of Environment, Province Secretary of environment Vojvodina, and local secretary of environment in municipalities are the authorities responsible for implementation of the Directive.

The projects listed under Annex I of the Directive are all subject to the EIA procedure according to the implementing Decree 114/2008. Projects listed under Annex II determined by Decree 114/2008 as it is regulated by a case-by-case examination using the relevant selection criteria described in Annex III of the Directive.

Information relating to EIA is, generally, made public. For instance, requests and information submitted by the developer are available to the public on the ministry website. As such, the developer may receive comments from consultations and may address the comments before revising the EIA study.

In October 2007 the Law on ratification of ESPOO Convention was adopted. In Bucharest in May 2008 a multilateral agreement was signed between Balkan countries regarding transboundary impact assessment.

There are no protocols or legislations to notify other Member States of projects that may potentially affect them. Legislations regarding exchange of information and consultation is anticipated to be in effect by December 2011.

The timing of full implementation of the EIA Directive is set for December 2011.

IPPC directive 96/61/EC is accepted through Law on Integrated environmental pollution prevention and control (Off. Jour. of RS, No. 135/04). All new facilities should be designed in accordance with Best Available Techniques (BREF) in the Non-Ferrous Metals Industries.

The deadline for submitting requests for issuing permit (Off. Jour. of RS, No. 108/08) for non-ferrous industries is March 2012.

In accordance with NIP there are no changes to laws and regulations of environmental assessment.

GENERAL ENVIRONMENTAL REGULATIONS

The general environmental regulations are comprised of four important laws, such as the following:

Environmental Protection Law which regulates environmental issues in the Republic of Serbia. This law regulates “the integral system of environmental protection which shall ensure the human right to live and develop in healthy environment as well as balanced economy growth and protection of the environment in the Republic” (Article 1). This law serves as the framework for other by-laws and amendments.

The second important law for general environmental regulations is the **Law on Environmental Impact Assessment (EIA)** adopted by the National Assembly of the Republic of Serbia on 21 December 2004. (Off. Jour. of RS”, No. 135/2004, p. 14-18). The Law contains 47 articles divided in to five chapters: basic provisions, impact assessment procedure, supervision, penalty provisions, transitional and final provisions. According to Article 1, “This Law regulates the impact assessment procedure for projects that may have significant effects on the environment, the contents of the Environmental Impact Assessment (EIA) Study, the participation of authorities and organizations

concerned, the public participation, transboundary exchange of information for projects that may have significant impact on the environment of another state, supervision and other issues of relevance to impact assessment.”

The subjects of the impact assessment include planned projects and projects being implemented, changes in technology, reconstruction, the extension of capacity, the termination of operations, and the removal of projects that may have significant impact on the environment. Impact assessments apply to projects in the areas of industry, mining, energy production, transport, tourism, agriculture, forestry, water management, waste management and utility services, as well as for all the projects that are planned in areas with protected natural resources of special value and within the protected zones of cultural resources.

The **Law on Strategic Environmental Assessment (SEA)** (Off. Jour. of the Republic of Serbia”, No. 135/2004, p. 18-23) contains 27 articles, divided into four chapters: basic provisions (Art. 1-4), strategic assessment procedure (Art. 5-24), penalty provisions (Art. 25), transitional and final provisions (Art. 26-27).

This Law regulates “the conditions, methods and procedure according to which the assessment of impact of certain plans and programmes on the environment shall be carried out in order to provide for the environmental protection and improvement of sustainable development through integration of basic principles of environmental protection into the procedure of preparation and adoption of plans and programmes” (Art.1). The subject of strategic assessment, according to the provisions of Article 5 are plans, programmes, grounds in the field of spatial and urban planning or land use, agriculture, forestry, fishing, hunting, energy, industry, transport, waste management, water management, telecommunication, tourism, protection of natural habitats and wild flora and fauna. The framework for obtaining a permit for future developmental projects is prescribed by regulations regarding environmental impact assessment.

This law follows the EU SEA Directive. The UN/ECE protocol on Strategic Environmental Assessment has been signed by Serbia and Montenegro.

The **Law on Integrated Pollution Prevention and Control (IPPC)** (Off. Jour. of RS, No. 135/2004, p. 23-28) regulates “the conditions and procedure of granting of integrated permits for installations and activities that may have adverse effects on human health, environment or material resources, types of activities and installations, supervision and other issues that are of relevance for environmental pollution prevention and control” (art.1).

Article 4 prescribes that “types of activities and installations, for which the integrated permit shall be granted, shall be sorted according to the level of pollution and risk that such activities may have to human health and the environment, including other

technically similar activities that can cause emissions and environmental pollution”. These types of activities and installations relate to both new and existing installations.

Below is a list of all environmental laws and regulations:

1. The Constitution of the Republic of Serbia (Off. Jour. of RS, No. 98/06)
2. Law on environmental protection (Off. Jour. of RS, No. 135/04 and 36/09)
3. Law on environmental impact assessment (Off. Jour. of RS, No. 135/04 and 36/09)
4. Law on environmental protection fond (Off. Jour. of RS, No. 72/09)
5. Law on strategic environmental impact assessment (Off. Jour. of RS, No. 135/04)
6. Law on Integrated environmental pollution prevention and control (Off. Jour. of RS, No. 135/04)
7. Convention on environmental impact assessment in a transboundary context (Off. Jour. of RS, No. 135/04 and 102/07)
8. Regulation of content of Environmental impact assessment (Off. Jour. of RS, No. 69/05)
9. Decree on content and content and manner of managing the information system of environmental protection, methodology, structure, common grounds, categories and levels of data collection, as well as the content of information that are regularly and mandatory presented to the public (Off. Jour. of RS, No. broj 112/09)
10. Decree on establishing the list of projects for which impact assessment is mandatory and the list of projects that may require environmental impact assessment (Off. Jour. of RS, No. 84/05)
11. Regulation of the request content for the necessity of impact assessment and content requirements for determining the scope and content of environmental impact assessment (Off. Jour. of RS, No. 69/05)
12. Regulation of public access procedure, presentation and public discussion of the environmental impacts assessment of (Off. Jour. of RS, No. 69/05)
13. Regulation of the content, format and manner of keeping public records of implemented procedures and adopted decisions on the environmental impacts assessment (Off. Jour. of RS, No. 69/05)

14. Regulation on Technical Commission work for evaluation of environmental impacts assessment (Off. Jour. of RS, No. 69/05)
15. Decree on contents of measures of adaptation of operation of existing facilities or activities by prescribed conditions (Off. Jour. of RS, No. 84/05)
16. Decree on the types of activities and facilities for which integrated permit is issued (Off. Jour. of RS, No. 84/05)
17. Decree on the criteria for determining best available techniques for the implementation of quality standards, as well as for determining the emission limit values in the integrated permit (Off. Jour. of RS, No. 84/05)
18. Decree on establishing the dynamics of submitting requests for issuing integrated permit (Off. Jour. of RS, No. 108/08)
19. Decree on establishing the criteria for determining the status of the endangered environment and priorities for restoration and remediation (Off. Jour. of RS, No. 22/10)
20. National program for environmental protection (Off. Jour. of RS, No. 12/10)
21. Decree on determination of activities which affect the environment (Off. Jour. of RS, No. 109/09)

AIR PROTECTION

The Law on air protection (Off. Jour. of RS, No. 36/09) contains provisions relevant to air pollution. Article 1 of this Law states, “This law regulates the management of air quality and determine measures, how to organize and control the implementation of protection and improvement of air quality as the natural values of public interest that enjoys special protection. The provisions of this Law shall not apply to pollution caused by radioactive materials, industrial accidents and elementary disasters.”

“Companies, other businesses and entrepreneurs who in the performance activities affect or may affect air quality are required to: provide technical measures to prevent or reduce emissions into the air, plan costs of air protection in their investment and production costs, monitor the impact of their activities on air quality; provide other protection measures, in accordance with this law and other laws governing environmental protection” (Article 4.).

Below is a list of all air protection laws and regulations:

1. Law on air protection (Off. Jour. of RS, No. 36/09)

2. Regulations on determining the Program of air quality control in years 2000 and 2001 (Off. Jour. Of RS, No. 19/00)
3. Regulation on limit values, emission measuring methods, selection of sample spots criteria and data collecting (Off. Jour. of RS, No. 54/92, 30/99)
4. Regulations on emission limit values, methods and timeframe for measuring and data collecting (Off. Jour. of RS, 30/97,35/97)
5. Regulation on conditions and requirements for monitoring air quality (Off. Jour. of RS, 11/10)

WATER PROTECTION

The Law on Waters (Off. Jour. of RS, No. 30/10) regulates key areas such as: water protection, protection from harmful impact of waters, use and management of waters as goods of public interests, conditions and method of water management activities, organization and financing of water management activities, and supervision over implementation of the Law. The Law pertains to land water and underground waters including drinking water, thermal and mineral water. The law states that water should be used “in a manner by which natural characteristics of water is not endangered, by which human life and human health are not imperilled, by which plant and animal life are not imperilled as well as natural goods and immovable cultural goods.”

Below is a list of all water protection laws and regulations:

1. Law on waters (Off. Jour. of RS, No. 30/10)
2. Law on water regime (Off. Jour. Of SRJ”, No 59/98, and Off. Jour. of RS, No. 101/05)
3. Regulations on water classification (Off. Jour. of SRS, No. 5/68)
4. Regulations on categorization of water courses (Off. Jour. of SRS, No. 5/68)
5. Regulations on systematic water quality monitoring in year 2000 (Off. Jour. of RS, No. 8/00)
6. Regulations on contents of technical documentation submitted in the process of applying for water resources compliance and water resources permit (Off. Jour. of SRS, No. 3/78)
7. Regulations on the method of determining and maintaining the zones and belts for sanitary protection of potable water supply facilities (Off. Jour. of SRS, No. 33/78)

8. Regulations on harmful substances in waters (Off. Jour. of SRS, No. 3 1/82)
9. Regulations on methods and minimum number of wastewater quality testing (Off. Jour. of SRS, No. 47/83, 13/84)
10. Regulations on conditions for enterprises and other legal persons for performing specific types of superficial and groundwater quality investigations, including wastewater quality investigations (Off. Jour. of SRS, No. 49/90)
11. Regulations on conditions and methods for potable water fluorising (Off. Jour. of RS, No. 6/97)
12. Decree on determining enterprises and other legal persons that fulfil conditions for performing specific types of superficial, groundwater and wastewater quality investigations (Off. Jour. of RS, No. 16/91)
13. Plan on water pollution protection (Off. Jour. of RS, No. 6/91)
14. Guidelines on methods and procedures for determining acquired level of treatment for emitted polluted water (Off. Jour. of SRS, No. 9/67)

SOIL PROTECTION

There are two main laws pertaining to soil protection: 1) **Law on geological investigations** (Off. Jour. of RS, No. 44/95) regulates conditions for geological research and the use of its results must be done, programming of geological research, its financing and inspection. Among other matters, environmental protection is mentioned in Article 2 and in Articles 21-34; 2) **Law on mining** (Off. Jour. of RS, No. 44/95) regulates conditions during mining activity can be done, on ground, underground, on river or lake bed or under it. It does not apply to exploitation of sand, stone or gravel from river beds and / or from natural or man made accumulations;

Below is a list of all soil protection laws and regulations:

1. Law on geological investigations (Off. Jour. of RS, No. 44/95)
2. Law on mining (Off. Jour. of RS, No. 44/95)
3. Law on agricultural land (Off. Jour. of RS, No. 62/06, 65/08, 41/09)
4. Law on agricultural and rural development (Off. Jour. of RS, No. 41/09)
5. Regulations on permitted amounts of hazardous and harmful substances in soil and water for irrigation and methods of their testing (Off. Jour. of RS, No. 23/94)

PROTECTION OF NATURAL RESOURCES

The protection of natural resources is part of EPL (Off. Jour. of RS, No. 135/04 and 36/09). One component of the Law is devoted to “management of natural values” (art.11-32). Based on the EPL, a ten-year Strategy for the Sustainable Use of Natural Resources will be developed to be adhered by specific plans for autonomous regions and local self government units. The new nature protection law will provide a detailed framework for nature management.

The field of nature protection is currently regulated by numerous legal and sublegal acts as listed below:

1. Law on natural (Off. Jour. of RS, No. 36/09)
2. Law on national parks (Off. Jour. of RS, No. 29/93, 44/93, 53/93, 67/93,48/94)
3. Law on forests (Off. Jour. of RS, No. 30/10)
4. Regulation on the control of use and marketing of wild flora and fauna (Off. Jour. of RS, No. 31/05, 45/05);
5. Decision on protecting animal species as natural rarities (Off. Jour. of RS, No. 11/90, 49/91);
6. Regulation of categorization of natural goods (Off. Jour. of RS, No.30/92);
7. Regulation on methods of marking protected natural goods (Off. Jour. of RS, No.30/92, 24/94,17/96);
8. Regulation on the registry of protected areas (Off. Jour. of RS, No.30/92);
9. Regulations on the form for national park supervisor off. ID (Off. Jour. of RS, No. 70/94);
10. Statute of the Institute for the protection of nature of Republic of Serbia (Off. Jour. of RS, No. 59/93, 22/95)

NOISE PROTECTION

The Law on noise protection regulates the subject of environmental protection from noise; conditions of noise protection in the environment; measurement of the noise in the environment; access to information about noise; supervision and other issues of importance to environmental and human health.

Below is a list of all noise protection laws and regulations:

1. The Law on noise protection (Off. Jour. of RS, No. 36/09)
2. Regulations on permitted noise level in the environment (Off. Jour. of RS, No. 54/92)
3. Decree on determining organizations that fulfill conditions for measuring noise in the human environment (Off. Jour. of SRS, No. 1/84, 44/84, 44/87, 51/91)

PROTECTION FROM WASTE AND HARMFUL SUBSTANCES

The most important legislation in this group is Law on waste management regulating “planning and organization of waste management, means for handling of waste during its collection, transport, storage, reuse, treatment and dumping, management of specific kinds of waste, supervision and other questions important for waste management” (art.1).

The Law contains 97 articles divided into 15 chapters: general provisions, basic principles, kinds and classification of waste, planning of waste management, organs and organizations for waste management, liability and obligations in waste management, organization of waste management, management of specific kind of wastes, license for waste management, transboundary transport of waste, information concerning waste and data basis, financing of waste management, supervision, penal provisions, transitional and final provisions. Other laws and bylaws are listed below:

1. Law on waste management (Off. Jour. of RS, 36/09)
2. Strategy of waste management for period 2010-2019. Godine ((Off. Jour. of RS, No. 29/10)
3. Law on chemicals (Off. Jour. of RS, No. 36/09)
4. Regulation on the form required for the issuance the permits for storage, treatment and disposal of waste (Off. Jour. of RS, 72/09)
5. Regulations on conditions and methods of selection, packing and keeping of secondary raw materials (Off. Jour. of RS, 55/01)
6. Regulations on handling waste products of hazardous nature (Off. Jour. of RS, 12/95)
7. Law on explosive substances, inflammable liquids and gases (Off. Jour. of SRS, No. 44/77, 45/85, 18/89, Off. Jour. of RS, No. 53/93,67/93,48/94)
8. Regulations on criteria for determining location and disposition of waste materials deposit sites (Off. Sour. of RS, No. 54/92)

9. Regulations on permitted amounts of hazardous and harmful substances in soil and water for irrigation and methods of their testing (Off. Jour. of RS, No. 23/94)
10. Regulations on methodology for chemical accident risk and environmental pollution assessment preparatory measures and measures for remediation consequences (Off. Jour. of RS, No. 60/94)
11. Regulations on handling waste products of hazardous nature (Off. Jour. of RS, No. 12/95)
12. Decision on establishing the co-ordination team for chemical accidents of a larger scale (Off. Jour. Of RS, No. 47/97)
13. Law on fire protection (Off. Jour. of RS, No. 53/93, 67/93, 48/94, 111/09)
14. Regulation of the content of the policy for accident prevention and content of methodology methodology of the Report on safety and Accident protection plan (Off. Jour. of RS, No. 41/10)

HEALTH AND SAFETY

The Law on Security and Health at Work has been in effect since November 29, 2005 (Off. Jour. of RS, No. 101/05). The new law is in accordance with contemporary tendencies and standards in this field (EU regulations and conventions of International Labour Organization).

The Law is divided in twelve chapters: basic provisions, preventive measures, duties and responsibilities of employers, rights and duties of employee, organization of security and health protection at work, representative of employees for security and health at work, evidence keeping, cooperation and reporting, professional examination and license issuance, Directorate for security and health at work, supervision, penal provisions, transitional and final provisions.

The Law regulates “application and improvement of security and health at work of persons who participate in working processes, as well as other persons present in working environment, aimed at prevention of injuries at work, professional diseases and diseases related to work” (Art. 1).

Rights, duties and responsibilities related to security and health at work defined by this law, are regulated in more detail by collective contract, general act of employer or working contract (Art.3.)

To enable implementation this Law establishes the Directorate for Security and Health at Work as an administrative body within the Ministry of Labour, Employment and Social Affairs.

A certain number of previous bylaws are still in force.

1. The Law on Security and Health at Work (Off. Jour. Of No. 101/05)
2. Law on Health care (Off. Jour. of RS, No. 107/05 i 72/09)
3. Regulation on means for personal protection at work and on personal protective equipment (Off. Jour. of SFRJ, No 35/69);
4. Regulation on equipment and method in giving first aid in organization of rescue service in case of accidente at work (Off. Jour. of SFRJ, No 21/71)
5. Regulation on measures and normative at work on working tools (Off. Jour. of SFRJ, No 18/91);
6. Regulation on measures and normative for protection at work from the noise in working rooms (Off. Jour. of SFRJ, No 21/92).

REGULATIONS ON SPATIAL ORGANISATION AND CONSTRUCTION

Law on the Spatial Plan of the Republic of Serbia (Off. Jour. of RS, No. 13/96), was adopted in 1996 by the Republican Assembly, as a strategic development document for the period of 1996-2010. The document contains basic rules concerning long term spatial organization and spatial use in Serbia. According to this document, the territory of the Republic has been divided into ten regions.

For each of these regions special environmental measures were planned, based upon the characteristics and the state of the environment. Specially protected zones with natural values and protection of cultural heritage sites have also been established at the national level by this Law.

1. Law on Planning and Construction (Off. Jour. of RS, No. 72/09 and 81/09)
2. Law on spatial plan for Republic of Serbia (Off. Jour. of RS, No. 13/96)
3. Law on special conditions for granting building permits and utilization permits for certain facilities (Off. Jour. of RS, No. 16/97)
4. Energy Law (Off. Jour. of RS, No. 84/04)
5. Law on general product safety (Off. Jour. of RS, No. 41/09)
6. Law on standardization (Off. Jour. of RS, No. 36/09)
7. The decision on the development of the Regional Spatial Plan Timok, Off. Jour. of RS, No. 15/2009)

2.1.3 Environmental Assessment Procedure in Serbia

The environmental impact assessment law (Off. Jour. of RS, No. 135/2004) regulates the impact assessment procedure for projects that may have significant effects on the environment, the contents of the Environmental Impact Assessment (EIA) Study, the participation of authorities and organisations concerned, the public participation, transboundary exchange of information for projects that may have significant impact on the environment of another state, supervision and other issues of relevance to impact assessment.

Subject of the impact assessment

Impact assessment projects include: planned projects and projects being implemented, changes in technology, reconstruction, the extension of capacity, the termination of operations, and the removal of projects that may have significant impact on the environment.

These are also projects that have not had an EIA Study conducted, and do not have a construction or utilisation permit (hereinafter: impact assessment of the current status).

Impact assessments shall be conducted for projects in the fields of industry, mining, energy production, transport, tourism, agriculture, forestry, water management, waste management and utility services, as well as for all the projects that are planned in areas with protected natural resources of special value and within the protected zones of immobile cultural resources.

Projects requiring impact assessment

The Government of the Republic of Serbia shall prescribe:

1. A list of projects for which an impact assessment is mandatory;
2. A list of projects for which an impact assessment may be required.

The obligation to obtain the impact assessment approval:

A developer may not commence the project implementation without having previously completed the impact assessment procedure and obtained the approval of the EIA Study from the competent authority.

Impact assessment procedure

The impact assessment procedure is composed for the following phases that are further discussed below:

1. The decision on the need for an impact assessment;

2. The definition of the content and scope of an impact assessment;
3. The decision on the approval for an EIA Study.

Collecting data, information and documentation

Upon the developer's request, the competent authorities, other authorities and organisations shall provide the necessary data, information and documentation of significance to the identification and assessment of potential direct and indirect effects of the project on the environment within 15 days from the receipt of such a request.

1. Decision on the need for an impact assessment

The application for a decision on the need for an impact assessment

The developer of a project that may require an impact assessment shall submit an application to the competent authority for a decision on the need for an impact assessment.

The application for an impact assessment shall contain: the description of the site; the outline of project characteristics; the description of potential effects on the environment of the project; other data and documentation.

Checking the completeness of the application for a decision on the need for an impact assessment

When the application for a decision on the need for an impact assessment is incomplete, the competent authority shall request additional data, information and documentation from the project developer and set the time limits for their submission.

Decision making on the application for a decision on the need for an impact assessment

The competent authority shall inform the authorities, organisations, and public concerned about the submitted application for a decision on the need for an impact assessment within ten days from the date of receipt of the complete application. The notice shall contain in particular the information on the following: the project developer; the title, type and site of the planned project; the place and time when it will be possible to obtain the insight into the data, information and documentation contained in the project developer's application; the nature of the decision to be made by the authority on the submitted application; the title and address of the competent authority.

The project developer, the authorities and organisations, and the public concerned may submit their opinions within ten days from when the notice is received.

The competent authority will decide on the application within 15 days from the expiration period, taking into account the opinions of the authorities, organisations and the public concerned.

The right to appeal

The developer and the public concerned are entitled to file a complaint against the decision of the competent authority on the application for a decision on the need for an impact assessment.

The complaint shall be submitted to the competent authority of the second instance in accordance with the law regulating environmental protection.

The competent authority of the second instance shall decide on the complaint within 20 days from the date of receipt of the complaint.

2. Decision on the scope and content of the EIA Study

The application for a decision on the scope and content of the EIA Study

The developer of a project that is subject to a mandatory impact assessment, and of a project for which the competent authority has determined that an impact assessment is required, shall submit the application for a decision on the scope and content of the EIA Study.

The application for a decision on the scope and content of the EIA Study shall contain:

1. Data on the project developer;
2. Description of the project;
3. Outline of the main alternatives that have been studied;
4. Description of the environmental elements likely to be affected;
5. Description of likely significant adverse effects of the project;
6. Description of measures envisaged to prevent, reduce and eliminate any
7. significant adverse effects;
8. A non-technical summary of data listed in points 2) to 6);
9. Data on potential difficulties encountered by the project developer in the process of collection of data and documentation;
10. Other data, information and documentation.

Decision on the application

The competent authority shall inform the authorities, organisations, and the public concerned about the application within ten days upon the receipt of the application for a decision on the scope and content of the EIA Study.

The authorities, organisations and the public concerned may submit their opinions on the application within 20 days from the date of receipt of notice.

Within 15 days from the expiry period, the competent authority shall make a decision on the scope and content of the EIA Study, taking into account the opinions of the authorities, organizations and the public concerned.

The competent authority shall deliver the decision to the developer and inform the authorities, organisations and the public concerned about such decision within three days from the date on which the decision was made.

4. Decision on the EIA Study approval

The application for the EIA Study approval

The project developer shall submit to the competent authority the application for the EIA Study approval (hereinafter: approval application) together with the EIA Study.

If the competent authority has decided on the scope and content of the EIA Study, the project developer shall submit the application for an approval within one year from the date of receipt of the final decision on the scope and content of the EIA Study.

Content of the EIA Study

The EIA Study shall contain the following mandatory data, information and documents:

1. Data on project developer;
2. Description of the planned project site;
3. Description of the project;
4. Outline of the main alternatives studied by the project developer;
5. Outline of the environmental status at the site and its close vicinity (micro-location and macro-location);
6. Description of likely significant effects of the project on the environment;
7. The environmental impact assessment in cases of accidents;

8. Description of measures envisaged to prevent, reduce and, if possible, eliminate any significant adverse effects on the environment;
9. A program of monitoring of impact on the environment;
10. The short non-technical summary of data listed in points 2) to 9);
11. Data on technical shortcomings, absence of the appropriate expertise and skills or, impossibility of obtaining the appropriate data. The conditions and approval of other competent authorities and organisations obtained in accordance with special laws shall be attached to the EIA Study.

The EIA Study shall contain the basic data on the following: persons who participated in its elaboration, responsible person, and date of completion, signature of the responsible person and validation of the signature by the seal of the authorized organisation that conducted the Study.

The obligation to conduct the EIA Study in the project realization permit or approval procedure

The EIA Study will be an integral part of the documentation necessary to obtain a permit or approval for commencement of the project (construction, execution of works, changes in technology, changes of activities and other activities).

The EIA Study elaboration authorization

The EIA Study may be carried out by legal persons and entrepreneurs who are inscribed in the appropriate register for the execution of planning and engineering activities, and the implementation of studies and analyses.

Public consultation, presentation and debate on the EIA Study

The competent authority will make the EIA Study available to public and arrange for a public presentation and debate regarding the Study.

Within seven days from the date of receipt of the application for the EIA Study approval, the competent authority shall inform the project developer, the authorities, organisations and the public concerned about the time and venue for public consultation, presentation and debate on the EIA Study.

Public debate may not be held sooner than 20 days from the date when the public was informed.

The project developer shall participate in the public presentation and debate on the EIA Study. The Minister can inform the public of the procedure for public consultation, presentation and debate.

Modifications and amendments to the EIA Study

Within 15 days from the completion of the public debate, the competent authority shall deliver to the project developer the report on the consultations, with proposals for modifications and amendments to the EIA Study based on the opinions of the authorities, organisations and the public concerned.

Technical Commission

The competent authority shall establish a Technical Commission for the purpose of the EIA Study evaluation. The Chairman of the Technical Commission shall be selected from the employees or appointed persons of the competent authority.

Members of the Technical Commission may be persons with a university education corresponding to the profile, namely the field, and with the appropriate professional grade, appointed from: The employees or appointed persons of the competent authority; The employees or appointed persons of the authorities and organisations concerned; Independent experts.

The EIA Study evaluation procedure

The Technical Commission shall evaluate the EIA Study, together with a report on the consultations of the authorities, organisations and the public concerned and the report on the completed impact assessment procedure. This is to evaluate the suitability of the measures envisaged to prevent potential effects, reduce or eliminate the likely harmful effects of the project on the environment at the specific site and its vicinity during the construction and operation of the project, in cases of accidents, and upon the termination of the project operation.

The Chairman may invite to the session of the Commission the project developer, those who elaborated the EIA Study as well as the representatives of the competent authorities and organisations that issued the conditions, authorisations and opinions in the previous procedure.

The Technical Commission may demand that the project developer make certain modifications and amendments to the submitted EIA Study within a certain time limit.

The Technical Commission shall submit the report with the evaluation of the EIA Study and the proposed decision to the competent authority within 30 days from when the documentation from the competent authority is received.

Decision on the EIA Study approval

The competent authority will make a decision granting the approval of the EIA Study or the refusal of the application for approval of the EIA Study, based on the completed EIA

procedure and the report of the Technical Commission. The decision shall be delivered to the project developer within ten days from when the report is received. The decision granting the approval of the EIA Study shall outline specifically the conditions and measures, which should be undertaken to prevent, reduce or eliminate the adverse effects on the environment.

Information for the authorities, organisations and the public concerned

The competent authority shall inform the authorities, organisations and the public concerned about its decision to grant the approval for the EIA Study or to refuse the application for approval within ten days from the date of the decision. The notice shall contain: The content of the decision; the main reasons for the decision; The most important measures that the project developer shall undertake in order to prevent, reduce or eliminate adverse effects.

Providing documentation for a review

The competent authority will provide for a review the complete documentation relating to the impact assessment procedure to the authorities, organisations, and the public concerned within 15 days from the date of receipt of their written request.

The documents classified as business, official or state secrets shall be excluded from the obligation of public disclosure.

The business, official or state secret classification mentioned above of this Article shall not prevent the disclosure of data relating to emissions, risks from accidents, monitoring results and inspection surveys.

The EIA Study updating

The project developer will execute the project implementation within two years of the approval of the EIA Study. Upon the expiry of the period referred and upon the project developer's request, the competent authority may adopt a decision to request the elaboration of the the new EIA Study or to update the existing EIA Study.

4. Methods of public information

The competent authority shall inform the public about its decisions. by publishing it in at least one local paper in each of the official languages of each territory that may be affected by the planned project or activity. The competent authority shall inform the authorities and organizations of the document.

5. Assessment of impact of the current status on the environment

The developers of the built projects that are subject to impact assessment under the provisions of this Law that have not obtained the required construction or utilisation permits, shall submit an application for approval of the Study of impact of the current status on the existing environment (hereinafter referred to as: the Study of the current status) or an application for a decision on the need for implementation of a Study of the current status. The Study of the current status shall be conducted on the basis of the design of the constructed facility and on the basis of the measurement and testing of particular environmental elements. The content of this Study shall be conducted in accordance with the provisions of this Law with regards to the EIA Study. The competent authority shall decide on the need for a Study of the current status and granting approval for the Study of the current status or a refusal of the application, in compliance with the provisions of this law.

6. Checking the fulfilment of conditions contained in the EIA Study approval

The Technical Inspection Commission for projects that have been granted the EIA Study approval will determine whether the conditions contained in the decision of the approval have been fulfilled, in accordance with the law regulating construction works. The competent authority shall appoint the person(s) who will execute the work of the Technical Inspection Commission. The utilisation permit will not be issued if the conditions contained in the EIA Study have not been fulfilled.

7. Information relating to potential transboundary impacts

When a planned project may have a significant impact on the environment of another state, or when another state in could be significantly threatened requests the information, the Ministry shall submit to the states concerned within the shortest possible period, at the latest while notifying its own public information on: The project, together with all available information on its possible effects; The nature of the decision that may be adopted; The period within which the state concerned may give notice of its intention to participate in the impact assessment procedure. The Ministry shall inform the state concerned, about the decision to grant or refuse the application for approval of the EIA Study. Information submitted should contain important items such as: contents of the decision and conditions that were set out, the main reasons that were the basis for the decision including the reasons for the acceptance or refusal of the opinions obtained from the authorities, organisations and the public concerned and, where necessary, on the most important measures that the project developer must undertake in order to prevent, reduce or eliminate the averse effects on the environment. The Ministry shall inform the public about the obtained information on transboundary effects of the proposed project of another state. The Ministry shall take into account the opinions of the

public concerned when submitting the opinion to the competent authority of the state concerned.

8. Expenditures of the project developer

The project developer shall cover the costs of the EIA Study, along with modifications, amendments, and updates, the costs of the Study of the current status, and the costs related to the information and public participation proceedings in the impact assessment process, and the work of the Technical Commission.

9. Public Register

The competent authority shall maintain the records of the EIA procedures and decisions on a public registry. The Minister shall determine the content, format and method of maintaining the registry.

Supervision

The Ministry shall supervise the enforcement of the provisions and by-laws of this Law. The Ministry shall implement supervisory inspections through environmental inspectors.

Rights and duties of the inspector

The environmental inspector shall have the right and obligation to determine the following: If the obligation to submit an application for the EIA Study approval for projects referred in this Law has been fulfilled; If the obligation to submit an application for a decision on the need for an impact assessment for the projects; If the developer's obligations contained in the decision granting the approval of the EIA Study have been fulfilled; If the obligations of the developer of the constructed project has submitted an application for a decision on the need for the Study of the current status, and an application for approval of the Study of the current status; If the obligations of the developer of the constructed project contained in the approval for the Study of the current status have been fulfilled.

Powers of the environmental inspector

The environmental inspector shall have the power to: Order the execution of the EIA Study; Order the implementation of the Study of the current status; Prohibit project construction until the approval of the current status is obtained; Order the fulfilment of conditions and the undertaking of measures set forth in the decision granting the approval for the EIA Study and the decision for granting the approval for the Study of the current status; Prohibit the execution of activities until the fulfilment of conditions and the undertaking of measures determines in the decision granting the approval for the EIA Study and the decision granting approval of the Study of the current status; File charges against the legal person and responsible person of the legal person for economic

offences committed in accordance with the provisions of this Law; File charges against natural persons and the responsible person for offences committed in accordance with the provisions of this Law.

Co-operation between the competent inspection and other authorities

If the inspector finds during the execution of the inspection supervision that other laws have been violated, he or she shall inform the authorities competent for the enforcement of such laws without delay.

Delegation of the inspection supervision tasks to local authorities

The Autonomous Province and the local self-government unit are entrusted with the inspection supervision tasks relating to the enforcement of the provisions of this Law for projects that are under the responsibility of the competent authority of the Autonomous Province and of the local selfgovernment with respect to the impact assessment process.

Penalty provisions. Economic offences

The legal person-project developer shall be fined from 150.000 to 3.000.000 dinars for each economic offence if he/she:

Starts project construction without the obtained approval of the competent authority for the EIA Study; Fails to fulfil the conditions or undertake measures contained in the decision granting approval of the EIA Study; Fails to obtain the approval of the competent authority for the Study of the current status.

2.1.4 Other Regulatory or Permitting Requirements

INTEGRAL PERMIT (IPPC)

Law on integrated environmental pollution prevention and control is published in the “Off. Jour. of RS”, No. 135/2004.

This Law regulates the conditions and procedure of granting of integrated permits for installations and activities that may have adverse effects on human health, environment or material resources, types of activities and installations, supervision and other issues that are of relevance for environmental pollution prevention and control.

Principles of integrated pollution prevention and control

Basic principles of integrated pollution prevention and control are as follows:

- 1) **Precautionary principle** – each activity has to be carried out in such a way that it does not cause any significant pollution, that emissions at the

very source of pollution causing air, water and soil pollution are prevented or reduced, that the use of un-renewable natural resources and energy is prevented or reduced, that waste generating is prevented or reduced and that the risk to human health, environment and material resources is minimized. Precaution principle is implemented through environmental impact assessment, risk assessment and use of the best available techniques. Absence of scientific reliability cannot be the reason for failure to undertake measures of integrated environmental pollution prevention and control in cases of possible significant impact on the environment.

- 2) **Principle of integration and co-ordination** – Integrated approach to permit granting is a harmonized procedure of permit granting involving more than one competent authority undertaking measures for the efficient and integrated approach to this procedure. The complete joint co-ordination of the competent authorities in the permit granting procedure and setting of conditions shall enable the accomplishment of the highest practically possible level of environmental protection on the whole.
- 3) **Principle of sustainable development** – Aiming at accomplishment of better sustainable balance between human activities and social-economic development, on one hand, and resources and nature renewal capacities on the other, the regime of integrated pollution prevention and control is provided through granting of permits, setting of conditions for sustainable use of natural resources, raw materials and energy.

The un-renewable natural resources shall be used under the conditions providing for their long-term and rational use. Sustainable waste management means more efficient use of resources, reduction of waste quantity and handling waste in the way contributing to fulfillment of objectives of sustainable development.

- 4) **Principle of hierarchy in waste management** –Waste management hierarchy is the order of priorities in waste management practices composed of prevention and reduction of waste production or reduction of use of resources and reduction of quantities and/or dangerous characteristics of generated waste; reuse or use of products for the same or some other purpose; recycling or waste treatment aimed at obtaining of raw materials for production of the same or some other products; utilization, or use of waste values (composting, energy return etc.).

- 5) **“Polluter pays” principle** – The polluter has to cover full costs of consequences of his activities or the costs arising from threats to the environment that include costs of imposing threats and risks to the environment and costs of remediation of damages caused to the environment or of returning the site into the satisfactory conditions as far as environmental conditions are concerned upon closing of the installation or termination of activities.
- 6) **Principle of public character of work** – Aiming at informing public about the operations of the installations and their possible impact on the environment, as well as aiming at providing complete openness/transparency of the permit granting procedure, the public has to have access to information relating to applications for permits for new installations or for substantial changes in operation of the installations, elaboration of draft permit, decision on granting of permit and each of its renewals, as well as to the relevant data obtained through monitoring.

Types of activities and installations, that the integrated permit shall be granted for, shall be sorted according to the level of pollution and risk that such activities may have to human health and the environment, including other technically similar activities that can cause emissions and environmental pollution.

Competent Authority

The Ministry responsible for environmental shall grant the permit in accordance with this Law for installations or activities for which the permit or consent for construction and commencement of operation or execution of activities were issued by other competent Ministry.

The operators shall obtain the permit for the operation of installation and execution of activities from the competent authority. The permit shall authorize:

1. The operation of new installations and execution of activities;
2. The operation and substantial changes in operation or functioning of the existing installations. The operator shall submit to the competent authority the permit granting application, which shall contain the data related to the following in particular:
 - a The installation and its activities;
 - b The raw and auxiliary materials, other substances and energy used in or generated by the installation;

- c The sources of emissions from the installation;
- d The conditions typical for the site where the installation is located;
- e The nature and quantity of foreseeable emissions from the installation into water, air and soil;
- f The identified significant impact of the emissions on the environment and possibilities of causing impact at a long range distance;
- g The proposed technology and other techniques for preventing or, where this is not possible, reducing emissions;
- h The best available techniques implemented or planned to be implemented by the operator of a new or the existing installation in order to prevent or reduce pollution;
- i Measures for prevention and removal of waste generated by operation of the installation;
- j Measures for the efficient energy consumption;
- k Measures planned to monitor the emissions into the environment;
- l Review of the main alternatives reconsidered by the operator;
- m Non-technical summary of data that are the basis for the application;
- n Other measures planned in compliance with the regulations.

The competent authority shall inform authorities and organizations responsible for agriculture, water management, forestry, planning, construction, transport, energy, mining, protection of cultural resources, nature protection and other issues, as well as local self-government authorities in the territory of which the activity is planned or the installation is located and public concerned on submission of application within five days from the date of receipt of a complete permit granting application. On the request of other authorities and organizations, the competent authority shall deliver the copy of the permit granting application and make available the appropriate documentation.

On the request of the public concerned the competent authority shall deliver the copy of the permit granting application.

The Chairman of the Technical Commission shall be appointed among the employees or elected persons of the competent authority. Members of the Technical Commission can be selected among persons with the appropriate profile of university education, namely branch of specialization and the corresponding professional results.

The Technical Commission shall consider the operator's application and the attached documentation, draft permit, opinions of other authorities and organizations and the public opinions.

The Technical Commission shall consider the following in particular:

The Environmental Impact Assessment Study or the analysis of impact of the current status on the environment. The expected local and wider impact of operation of the installation on the environment; Implementation of the best available techniques; The expected economic and social consequences and changes of the status of the environment on concrete location, as well as the expected impact on human health and life of the population;

The permit shall contain conditions relating to:

1. Implementation of the best available techniques or other technical requirements and measures;
2. Measures contained in the environmental impact assessment study or study of the current status;
3. Emission limit values for pollutants determined for the relevant installation;
4. Measures necessary for air, water and soil protection;
5. Measures relating to management of waste generated during the operation of the installation;
6. Measures relating to reduction of noise and vibrations;
7. Measures relating to the efficient energy consumption;
8. Requirements relating to monitoring of emission with:
 - The specified methodology;
 - The defined frequency of measuring;
 - The defined rules for interpretation of results;
 - The set obligation to submit the data to the competent authority;
9. Measures for prevention of accidents and elimination of their consequences;
10. Reduction of pollution, including the transboundary pollution of the environment;

11. Measures planned for commencement of operation, for momentary stoppages in cases of disruption in functioning of the installations as well as for the termination of operations;
12. Undertaking of measures of protection of the environment after the final termination of activities aimed at avoiding the risk of pollution and returning of the site into the satisfactory status;
13. Method and frequency of reporting and scope of data contained in the report that shall be submitted to the competent authority in accordance with the regulations;
14. Results of the review of conditions and obligations set by the permit; and
15. Other specific requirements.

Where an environmental quality standard requires stricter conditions than those achievable by the use of the best available techniques, the permit shall contain additional measures providing for implementation of these standards.

The issued permit is subject to reconsideration at least twice during its validity.

The competent authority shall keep the Register of the permits granted, as a part of environmental information system. The Register of the permits granted is available to public.

Rulebook on contents and form of integrated permit (“Off. jour. of RS”, No 30/06 establishes in detail the contents and form of integrated permit.

Regulation on the contents, presentation and completing the integrated permit issuance application form („Off. Jour. of RS“, No 30/06) prescribes in more detail the contents, presentation and instructions on completing the integrated permit issuance application form, as well as other issues pertinent to submitting applications.

Use of the Best Available Techniques

All new installations shall apply the BAT documents in accordance with the IPPC Directive. For existing installations situations when the production process requires the use of BAT should be described and the time necessary for BAT application justified. If BAT are not required, state the reasons and describe the possible action plan in regard to BAT.

For each operational process a description of the level up to which the technology is in conformity with the BAT (as determined by the IPPC Directive and the EU Reference Note) should be provided and / or a description of the Action plan on how to achieve the BAT level defined in the BAT documents or the prescribed limit emission values. If the

EU Reference Notes are not available, the BAT documents from other countries may be used (Denmark, Ireland, etc.).

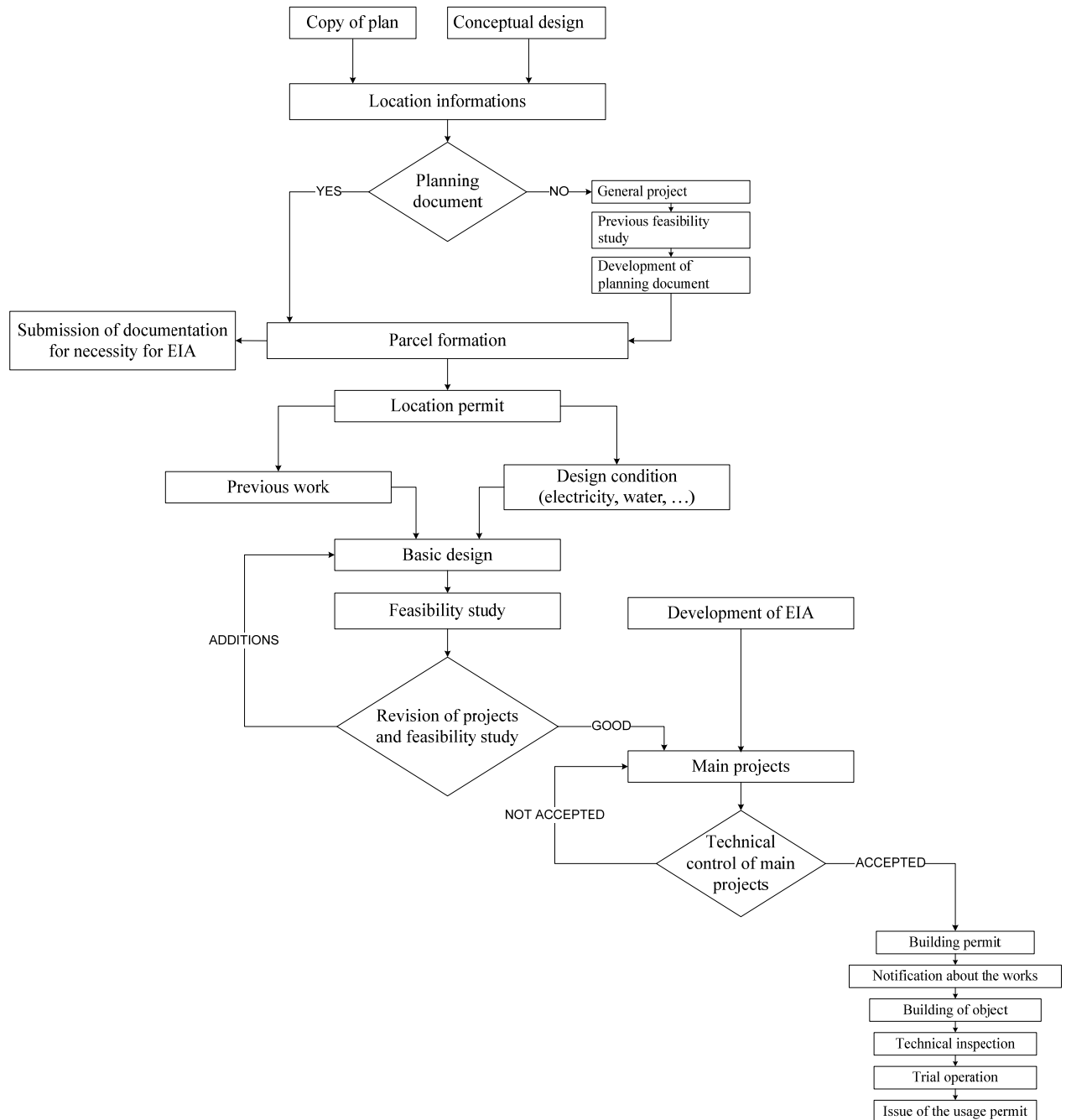
Law on planning and construction (*“Off. Jour. of the RS”, No. 72/2009*)

This Law regulates: the conditions and modalities of spatial planning and development, the development and use of buildable land and the construction of facilities; carrying out supervision over the application of this Law and supervisory inspections; other issues of significance in the development of space, landscaping and use of buildable land, and the construction of facilities.

The provisions of this Law do not apply to the construction of facilities which in terms of the Law governing affairs of defense are considered military facilities.

Object building is executed through several phases, as presented in Fig.2.1.

Figure Error! No text of specified style in document..1 Phases in Object Building according Law on Planning and Construction



Information on a location includes data on possibilities and limitations of building on the land registry lot, based on the planning document.

A copy of the lot plan and draft plan must be submitted with a request for issuing information on a location. Information on a location is issued by the agency responsible for issuing location permits within eight days from the day of filing a request, on payment of compensation for true costs of issuing this information.

Location permits are issued by resolution, for facilities for which building permits are issued by this Law, and which have all the conditions and data required for preparing the technical documents, in compliance with the valid planning document.

The following must be submitted with the request for issuing a location permit:

- 1) A copy of the lot plan;
- 2) Excerpt from the land registry of underground installations;
- 3) Proof of right of ownership

The request for issuing a location permit must contain data on the facility to be built, and especially: the planned layout, type and purpose of facility, technical characteristics, etc.

If the agency responsible for issuing location permits determines that prescribed documents were not submitted with the request for issuing a location permit, it will inform the applicant about it within eight days from the day of submitting the application.

If the planning documents do not include all the conditions and data for the preparation of the technical documents, the responsible agency will acquire them in the line of duty, at expense of the Investor. Agencies, i.e. organizations authorized to issue such conditions and data are obliged to act within 30 days following the request of the responsible agency.

Before submitting a request for the issuing of a location permit, a buildable lot is formed.

The location permit includes all conditions and data necessary for the preparation of the construction documents, and particularly:

- 1) Data on the Investor;
- 2) Number and surface area of the land registry lot;
- 3) Rules of building construction;
- 4) Conditions for connecting to a roadway, utility or other infrastructure;

- 5) Data on existing facilities which need to be removed;
- 6) Other conditions in compliance with special Laws.

The responsible agency is obliged to issue a location permit within 15 days from the day of submission of a regular application, i.e. from the gathering of conditions and data which it gathers in the line of duty.

The agency responsible for issuing location permits maintains an official record of location permits issued, and a list of issued location permits is also announced in electronic form, and may be accessed over the Internet. The validity of the resolution on the location permit expires if the Investor fails to submit a request for the issuing of a building permit within two years from the commencement day of validity of the location permit.

Before starting preparation of the technical documentation necessary for the construction of facility previous feasibility studies and feasibility studies are made, based on the results of preliminary work. For the construction of facilities referred to in Article 133 of this Law, for which the location permit can be issued based on the planning document, it is not necessary to prepare the previous feasibility study with the general project.

Previous work, depending on the type and characteristics of the facility, comprises investigation and preparation of analyses and projects, and other expert material; procurement of information which analyze and elaborate geological engineering, technical, hydrological, meteorological, urban, technical, technological, economic, energy, seismic, water supply and traffic conditions; conditions for fire protection and the protection of the environment, as well as other conditions which effect the construction and use of a certain facility.

The **previous feasibility study** enables the determination especially of the spatial, ecological, social financial, market and economic justification of the investment for the various solutions defined by the general project, based on which the planning document is prepared, and the decision made on the feasibility of investing into previous work for the preliminary design and the feasibility study. The previous feasibility study contains the general project.

The **feasibility study** particularly determines the spatial, ecological, social, financial, market and economic justification of the investment into the chosen solution, elaborated by the preliminary design, based on which it is decided about the feasibility of the investment. The feasibility study contains the preliminary design.

The preparation of the previous feasibility study and feasibility study can be done by a company or other legal entity entered into the appropriate register for performing

activities of design and engineering and which fulfill conditions concerning the expert staff.

The technical documentation for construction and reconstruction of a facility is made as a general project, preliminary project, main project, performing project and the project of the constructed facility.

The **general project** contains particularly the data about the macro location of the facility, general disposition of the facility, technical and technological concept of the facility, the method of providing the infrastructure, the possible options for the spatial and technical solutions, from the point of fitting into the space, the natural conditions, the effect on the environment, geological engineering and technical characteristics of the land from the aspect of determining the general concept and justifiability of construction of the facility, investigation work made for the preparation of the preliminary project, the protection of natural and immovable cultural property, the functionality and rationality of the project.

The **preliminary project** contains the situational solution and the data about the micro location of the facility, the functional, construction and representational properties of the facility, the technical and technological and exploitation characteristics of the facility, the geological engineering and technical properties of the terrain and soil with preliminary calculations of stability and safety of the facility, the decision about the founding of the facility, the technical, technological and organizational elements of construction of the facility, the measures for the prevention or reduction of negative influences on the environment, the preliminary project of the infrastructure, comparative analysis of alternative technical solutions in view of the properties of the soil, functionality, stability, and estimate of the influence on the environment, natural and immovable cultural property, rationality of the construction, costs of construction, transport, maintenance, energy provision and other costs.

The main project is prepared for the requirements of construction of the facility and procurement of the building permit. The main project specifically contains:

- 1) The situation solution;
- 2) Detailed geology engineering and technical conditions for construction of the facility;
- 3) Geodetic base;
- 4) Data about the functional, constructive and shape properties of the facility;

- 5) The elaboration of the technical and technological properties of the facility with the equipment and installations.
- 6) The calculation of the building structures, stability and safety of the facility;
- 7) The founding solution of the facility;
- 8) The data of the necessary geodetic work during construction;
- 9) The technical solution of the infrastructure with the method of connection and regulation the free surfaces;
- 10) The conditions for the protection of facilities and adjacent facilities;
- 11) The technical, technological and organizational solutions for the construction of the facility;
- 12) Elaboration of the measures for prevention or reduction of negative influences on the environment through the appropriate technological process;
- 13) The costs of construction and maintenance of the facility;
- 14) Other projects, studies and data depending on the use of the facility.

The main project must contain the statement by the authorized designer and technical control supervisor, in which it is confirmed that the main project is prepared in accordance with the location permit and the rules of the profession. The investor is obliged to obtain the approval of the main project from agencies or organizations, when this is stipulated by the conditions contained in the location permit.

The technical documentation for the construction of a facility can be prepared by a company or other legal entity, or a contractor which are entered into the appropriate register for the preparation of technical documentation.

The main project is subject to technical inspection. The technical inspection of the main project specially comprises the control of compatibility: with all the conditions and regulations contained in the location permit, with the Law and other regulations, with the technical norms, standards and quality norms, as well as with all parts of the technical documentation; compatibility of the project with the results of the previous studies; assessment of the appropriate soil for founding of the facility; check of the validity and accuracy of the technical and technological solutions and the construction solution of the facility; stability and safety; rationality of the project materials; effect on the environment and the adjacent facilities.

The general project and the preliminary project, the previous feasibility study and the feasibility study is subject to review (professional inspection) by a commission formed by the minister authorized for tasks in construction (hereinafter: review commission). The professional inspection is concerned with the concept of the facility, particularly from the aspect of: adequacy of the location in view of the type and use of the facility; the conditions for construction of the facility in view of the application of measures for the protection of the environment; the seismic, geological and technical, traffic and other conditions; the provision of energy conditions in comparison with the type of planned energy sources; the technical and technological properties of the facility; the technical, technological and organizational solutions for construction of the facility; up-datedness of the technical solutions and compatibility with the development programs in this field, as well as other prescribed conditions for the construction of the facility. The review commission delivers the report to the investor with measures which must be applied when preparing the main project.

The building permit for the construction of a facility is issued by the ministry. With the request for the issue of the building permit it is necessary to submit the following:

- 1) the location permit;
- 2) the main project in three copies, with the report about the performed technical inspection;
- 3) proof of ownership, or right of lease of the construction land;
- 4) proof of settlement of relations concerning the payment of the construction land development fee;
- 5) the proof of effected payment of the administrative tax.

The building permit contains, specifically, information about:

- 1) the investor;
- 2) the facility whose construction is being permitted, with data about the dimensions, number of floors, total area and estimate of the value of the facility;
- 3) land register lot on which the facility is being built;
- 4) the existing facility which is being demolished, or is being reconstructed;
- 5) the validity date of the building permit and term in which the construction has to be completed;
- 6) the documentation on the basis of which it is issued;

If before construction of the facility it is necessary to remove the existing facility or part of it, the removal is ordered in the building permit.

The authorized agency delivers one copy of the decision about the building permit to the inspection which carries out the supervision over the construction of the facility.

The investor is obliged to notify the agency which issued the building permit and the authorized construction inspector of the start of construction of the facility, eight days before starting execution of the work.

The construction of the facility, or execution of works can be carried out by a company or other legal entity, or contractor, which are entered into the appropriate register for construction of facilities, or completion of work (hereinafter: contractor).

The investor provides professional supervision during construction of the facility and execution of the work for which was issued the building permit.

The suitability of the building for use is determined by the technical inspection. The technical inspection of the facility is carried out after completion of the construction of the facility, completion of all the work prescribed by the building permit and main project, or after completion of part of the facility for which the usage permit can be issued in accordance with this law, within 30 days from the date of receipt of the request for performance of the technical inspection of the facility. The technical inspection can also be performed at the same time with the execution of work, upon request by the investor, if the performance of the technical inspection would not be possible after completion of the construction of the facility.

If, for the purpose of determining the suitability of the facility for use, it is necessary to carry out previous examinations and inspection of the installations, appliances, plants, stability and safety of the facility, appliances and plants for the protection of the environment, appliances for protection against fire, or other examinations, or if it is prescribed by the technical documentation, the commission for the technical examination, a company or other legal entity which is entrusted to carry out the technical examination can propose to the authorized agency to allow the trial operation of the facility, if they determine that conditions are fulfilled for it. The decision about allowing trial operation of the facility determines the duration of trial operation, which cannot be longer than one year, as well as the obligation of the investor to follow the results of trial operation and after the trial operation ends submits the results to the authorized agency.

The facility can be used after previously obtaining the usage permit. The agency authorized for issuing the building permit issues, by decision, the usage permit, within seven days from the date of the findings of the commission for the technical examination, by which it is determined that the facility is suitable for use. The usage

permit contains also the warranty period for the facility and for certain types of work which are determined by a separate law.

2.2 Non-Governmental Organizations

There are many environmental non-governmental organizations in Serbia. Most of NGOs were established during the 1990s, concentrating on environmental awareness raising, environmental education and information dissemination.

In the following table NGOs from municipality of Bor are listed with their main goals.

NGO	Activities
<i>Ecological movement of Bor</i>	Deals with all residents of municipality of Bor, main goals are raising of environmental awareness, cleaning and management of town and village, with special emphasis on preserving natural resources in vicinity of Bor. Also in their field of interest are initiatives, appeals and protests in order to protect the environment. They work through public meetings, public debates, informing, organizing of volunteer activities.
<i>eko-agenda 7/1935</i>	Activities of this group are mainly focused on residents of villages in Bor surroundings affected by mining and metallurgical activities. Main goals are raising of ecological awareness, sanitation of consequences of environmental pollution, advocacy of measures and policies for environmental protection, development of local communities. Organizes public debates, protest rallies, sends initiatives, appeals, protest, etc.
<i>Young researcher organization in Bor</i>	This group is active over 3 decades in Bor and Eastern Serbia. Main goals are development of ecological awareness, ecological education and scientific and research work in field of environmental protection and preservation of natural values, protection of bio- and geo-diversity, volunteer activities on cleaning and managing of environmentally endangered, but preserved sites in vicinity of Bor, advocacy of measures and policies for environmental protection and sustainable development of local communities. Focus is mainly on young people. Realize research project, preparation of environmental documentation, Media Campaigns, seminars, public debates, scientific meetings.
<i>Association for Bor development</i>	For main goal this group has sustainable development of local communities, advocacy of different measures and policies of sustainable development, especially for environmental protection. Focused groups are all citizens, with emphasis on women, young people and villagers. Realize projects, volunteer activities and public works, advisory activities, etc.
<i>Skaut organization</i>	Among different goals have development of ecological awareness and education, especially young people. Main focus of this group are mainly young people, working through camps, volunteer activities of cleaning, reforestation, promotion actions.
<i>Association Grupa 55</i>	For main goal have sustainable development of local community, regarding preservation of environment, development of tourist potential and prosperity of local community. Their focus are all residents of Bor municipality, their work is performed through public debates, round tables, projects and public work.
<i>Association of engineers and technicians</i>	This is a professional organization with aim of affirmation of science, research and increase of scientific knowledge and information. Operates public debates, scientific manifestations, suggestions of technological solutions, seminars, etc.

NGO	Activities
<i>Associations of fisherman (several)</i>	Main goals is protection of rivers and preservation of fish fond. Organize actions of rivers and lake cleaning from waste control of water quality, etc.
<i>Association of hunters</i>	Main goal is preservation of forests and other areas with wildlife. Organize action of forest cleaning, forestation.
<i>Alpinist organizations</i>	Main goal is raising of ecological awareness and preservation of mountains in vicinity of Bor, sustainable development of alpine tourism. Works trough actions of cleaning and alpine sport activities.

The Serbia office of the Regional Environmental Centre (REC) for Central and Eastern Europe was established in Belgrade in May 1998.

2.3 Relevant International Policies, Procedures, Standards, and Directives

2.3.1 Export Development Canada (EDC)

EDC Environmental Review Directive

The following provides a brief outline of Economic Development Canada's (EDC) Environmental Review Directive that applies to the review and approval of funding for this Project.

General

The Environmental Review Directive sets out the process by which EDC will, before entering into a transaction that is related to a project, determine whether the project is likely to have adverse environmental effects despite the implementation of mitigation measures and, if so, whether EDC is justified in entering into the transaction.

The directive requires EDC to categorize relevant projects on the basis of their potential adverse environmental effects; and categorization determines the nature and extent of environmental information that will be required by EDC in conducting its environmental review of the project, as well as the extent of that review.

Where the directive requires that EDC conduct an environmental review of a project, EDC will use international standards as benchmarks. The directive establishes grounds upon which EDC is justified in entering into a transaction related to a project where that project, despite the implementation of mitigation measures, is likely to have adverse environmental effects.

Scope of Directive

This directive applies in all instances in which EDC is considering exercising its powers under section 10 or 23 of the *Export Development Act* by entering into a transaction that has, as applicable, a repayment term or coverage period of two years or more and a value of more than SDR 10 million and that is related to a project. A transaction is related to a project if, in EDC's opinion, it is:

- i. in respect of goods or services purchased or to be purchased (or with respect to which rights of use are otherwise acquired), by a project sponsor, project company or an entity with prime responsibility for project design, development and construction, for use in a particular identified project;
- ii. an equity transaction in respect of a particular identified project or a political risk insurance transaction in respect of a particular identified project (other than a political risk insurance transaction referred to in clause (iii));
- iii. a political risk insurance transaction or financing transaction in respect of a) an equity investment or loan made by or on behalf of a project sponsor in or to a particular identified project or, b) a loan to a project company or to a project sponsor in respect of a particular identified project; and
- iv. entered into by EDC solely for the purpose of promoting procurement of Canadian goods or services by a project sponsor, project company or other entity with prime responsibility for project design, development and construction, for use in a particular identified project; provided, however, that a transaction is not related to a project if EDC enters into it for purposes one of which is (a) to support the purchase of Canadian goods or services that will not be used in a particular identified project, or (b) to support or develop Canadian capacity (1) to engage in Canada's export trade other than by means of a particular identified project, or (2) to respond to an international business opportunity other than a particular identified project, or (c) to promote procurement of Canadian goods or services that will not be used in a particular identified project.

Project Categorization

In respect of each transaction to which this directive applies, EDC will categorize the related project on the basis of the extent of the project's potential adverse environmental effects, which categorization will determine the nature and extent of environmental information that will be required by EDC in conducting its environmental review of the project, as well as the extent of that review. EDC's categorization of a project into one of the following three categories will reflect EDC's evaluation of the most appropriate category for the project in question. Where an international financial institution (IFI) has categorized a project, EDC may take into account such categorization in EDC's own

categorization of such project. Where EDC determines that its categorization of any project is inappropriate, EDC will re-categorize the project.

Category A

EDC categorizes a project such as the proposed Smelter/Acid Plant Modernization and Reconstruction Project as a Category A when EDC considers that the project is likely to have significant adverse environmental effects that are sensitive, diverse, or unprecedented. These effects may affect an area broader than the sites or facilities subject to the physical works, and may be irreversible.

1. Category A - Environmental Impact Assessment Reporting

The scope and level of detail of a Category A - EIA should be commensurate with the project's potential impacts. The EIA report should include the following items (not necessarily in the order shown):

- Executive Summary: concisely discusses significant findings and recommended actions.
- Policy, Legal and Administrative Framework: discusses the policy, legal, and administrative framework within which the EIA is carried out.
- Project Description: describes the proposed project and its geographic, ecological, social, and temporal context, including any offsite investments that may be required (e.g.: dedicated pipelines, access roads, power plants, water supply, housing, and raw material and product storage facilities). Indicates the need for any resettlement or social development plan. Normally includes a map showing the project site and the project's area of influence.
- Baseline Data: assesses the dimensions of the study area and describes relevant physical, biological, and socio-economic conditions, including any changes anticipated before the project commences. Also takes into account current and proposed development activities within the project area but not directly connected to the project. Data should be relevant to decisions about project location, design, operation, or mitigatory measures. The section indicates accuracy, reliability and sources of the data.
- Environmental Impacts: predicts and assesses the project's likely positive and negative impacts, in quantitative terms to the extent possible. Identifies mitigation measures and any residual negative impacts that cannot be mitigated. Explores opportunities for environmental enhancement. Identifies and estimates the extent and quality of available data, key data gaps, and uncertainties associated with predictions, and specifies topics that do not require further attention.

- Analysis of Alternatives: systematically compares feasible alternatives to the proposed project site, technology, design and operation including the "without project" situation in terms of their potential environmental impacts; the feasibility of mitigating these impacts; their capital and recurrent costs, their suitability under the local conditions; and their institutional, training and monitoring requirements. For each of the alternatives, quantifies the environmental impacts to the extent possible, and attaches economic values where feasible. States the basis for selecting the particular project design proposed and justifies recommended emission levels and approaches to pollution prevention and abatement.
- Environmental Management Plan: describes mitigation, monitoring and institutional measures to be taken during construction and operation to eliminate adverse impacts, offset them, or reduce them to acceptable levels.
- Consultation: Record of consultation meetings, including consultations for obtaining the informed views of the affected people, local non-governmental organizations and regulatory agencies. EDC expects that for each Category A project public consultations with affected parties, if any, will be held in the host country, and that the results of these consultations will have been taken into account in the environmental assessment of the project. EDC's expectations regarding the nature, scope and extent of public consultation will take into account the political, legal, and cultural context of the host country.

3. Other Environmental Assessment Instruments for Category A Projects

Although the environmental impact assessment for a Category A project is normally addressed in the form of an environmental impact assessment (EIA), it may also be supplemented by other environmental assessment (EA) instruments such as those identified below:

- Environmental Audit means an instrument to determine the nature and extent of all environmental areas of concern at an existing facility. The audit identifies and justifies appropriate measures to mitigate the areas of concern, estimates the cost of the measures, and recommends a schedule for implementing them. For certain projects, the EA report may consist of an environmental audit alone; in other cases, the audit is part of the EA documentation;
- Environmental Management Plan (EMP) means an instrument that details (a) the measures to be taken during the implementation and operation of a project to eliminate or offset adverse environmental effects, or to reduce them to acceptable levels; and (b) the actions needed to implement these measures. The

EMP is an integral part of Category A EAs (irrespective of other instruments used). EAs for Category B projects may also result in an EMP;

- Hazard Assessment means an instrument for identifying, analyzing, and controlling hazards associated with the presence of dangerous materials and conditions at a project site;
- Environmental Risk Assessment means an instrument for estimating the probability of harm occurring from the presence of dangerous conditions or materials at a project site;
- Corrective Action Plan (CAP) means an instrument which, in the case of existing operations, plant modernizations, privatizations and corporate investment programs, may be required to address remediation or corrective action to bring facilities into compliance with international standards. The CAP should also provide details of an implementation schedule and costs;
- Resettlement Action Plan (RAP) is an instrument specifying the procedures to be followed and actions to be taken by a project sponsor or other responsible entity to mitigate adverse effects, compensate losses, and provide development benefits to persons and communities affected by a project;
- Permits means an instrument consisting of a permit, license or authorization issued in connection with a project by authorities the standards of which are satisfactory to EDC, provided that the permit is only used as an EA instrument in association with an existing EIA report for a project.

The RTB Bor Smelter Modernization and Reconstruction Project is designated as Category A project since as per Annex 2 of the EDC Directive it falls within the - Illustrative List of Category A Projects and Sensitive Sectors and Areas under item 4 that deals with *“Integrated works for the initial smelting of cast iron and steel; installations for the production of non-ferrous metals crude metals from ore, concentrates or secondary raw materials by metallurgical, chemical or electrolytic processes”*.

Environmental Review Information Requirements

The information EDC will require in connection with its environmental review of a project will vary depending upon the category into which the project has been classified by EDC.

In all cases, the submission to EDC of existing documentation is encouraged to improve the efficiency of the review process and minimize duplication of effort. Where an environmental analysis of a project has been conducted by an IFI, EDC may consider such IFI's environmental analysis of the project in conducting its own review.

Where a project is located in any of Canada, France, Germany, Italy, Japan, the United Kingdom or the United States of America and EDC is satisfied that the project has been designed in compliance with host country environmental requirements, EDC may determine that it requires no additional environmental information in respect of the project beyond that required for categorization.

Where EDC determines that it is unable to obtain sufficient environmental assessment information to conduct its environmental review of a project, EDC will decline to enter into a transaction related to such project.

Category A projects

For Category A projects, EDC will require a copy of the EIA report (or comparable EA instrument reports) or elements thereof in order to assist EDC in identifying and assessing potential adverse environmental effects associated with the project.

If the environmental assessment for a Category A project has been completed by an employee(s) of the project sponsor or project company, or an employee(s) of any affiliate thereof, EDC will require, prior to the time it enters into a transaction related to the project, that independent expertise acceptable to EDC be engaged to review such environmental assessment for potentially significant problems in the analysis.

Evaluation and Decision

In conducting environmental reviews, EDC will benchmark projects against one or more relevant environmental standards and guidelines published by the World Bank Group, the European Bank for Reconstruction and Development, the Asian Development Bank, the African Development Bank and the Inter-American Development Bank, any applicable safeguard policies published by the World Bank Group, or any higher international recognized environmental standards such as European Community standards. EDC will require any adverse gaps EDC identifies between the standards to which the project has been designed and the international standards selected by EDC to be explained to EDC's satisfaction.

The environmental assessment information provided must demonstrate, to EDC's satisfaction, that the project in respect of which EDC is conducting a review has been designed to comply with host country environmental requirements, such as any applicable provisions for local consultation, licenses, permits and other regulatory approvals.

On the basis of its environmental review, EDC will come to a conclusion as to whether or not a project is likely to have adverse environmental effects despite the implementation of mitigation measures. In the event that EDC has completed its environmental review and is of the view that a project is likely to have adverse environmental effects despite

the implementation of mitigation measures, EDC will determine whether, despite these effects, EDC is justified in entering into a transaction in respect of such project.

Grounds which in EDC's view justify providing support to a project that has adverse environmental effects despite mitigation measures include:

- the adverse environmental effects, taking into account mitigation measures, associated with the project are not in EDC's view significant;
- EDC's satisfaction that the project is designed to meet or exceed internationally recognized good practices, guidelines or standards;
- the project represents an opportunity to improve environmental conditions in the host country above base-line conditions; or
- the project provides the opportunity to transfer environmentally sound technologies, services and knowledge to, or for the benefit of, the host country.

Where EDC determines that it is justified in entering into a transaction related to a project that is likely to have adverse environmental effects despite the implementation of mitigation measures, EDC may (but need not) enter into the transaction.

Where EDC determines that it is not justified in entering into a transaction related to a project that is likely to have adverse environmental effects despite the implementation of mitigation measures, EDC will decline to enter into the transaction.

Covenants and Monitoring

Compliance by a project with host country laws and regulations will normally be confirmed through warranties and representations.

Where EDC imposes conditions upon its support to a project which require monitoring, EDC will ensure procedures are in place to:

- (i) conduct such monitoring, and
- (ii) take such action as it deems appropriate in the event of non-compliance with such conditions.

2.3.2 IFC/World Bank

Policy on Social and Environmental Sustainability

The International Finance Corporation (IFC) strives for positive development outcomes in the private sector projects it finances in emerging markets. An important component of positive development outcomes is the social and environmental sustainability of projects,

which IFC expects to achieve by applying a comprehensive set of social and environmental performance standards.

Through its Policy on Social and Environmental Sustainability (the Sustainability Policy), IFC puts into practice its commitment to social and environmental sustainability. This commitment is based on IFC's mission and mandate and is translated successful outcomes through a series of performance standards listed below:

For this EIA project consideration has been given to the following IFC policy documents:

1. International Finance Corporation, Policy on Social & Environmental Sustainability, April 30, 2006;
2. International Finance Corporation Performance Standard 1, Social and Environmental Assessment and Management Systems, April 30, 2006.
3. International Finance Corporation, Guidance Note 1: Social and Environmental Assessment and Management Systems, July 31, 2007

IFC Environmental, Health and Safety Guidelines

IFC is a member of the World Bank Group. IFC vision is that people should have the opportunity to escape poverty and improve their lives. IFC provides investments and advisory services to build the private sector in developing countries.

IFC have page that contains the most updated versions of the World Bank Group Environmental, Health, and Safety Guidelines (known as the "EHS Guidelines"). The EHS Guidelines were developed as part of a two and a half year review process that ended in 2007. They are intended to be living documents and will be updated on a regular basis going forward.

The EHS Guidelines are technical reference documents with general and industry-specific examples of Good International Industry Practice (GIIP), as defined in IFC's Performance Standard 3 on Pollution Prevention and Abatement. Reference to the EHS Guidelines by IFC clients is required under Performance Standard 3. IFC uses the EHS Guidelines as a technical source of information during project appraisal activities, as described in IFC's Environmental and Social Review Procedure.

The EHS Guidelines contain the performance levels and measures that are normally acceptable to IFC and are generally considered to be achievable in new facilities at reasonable costs by existing technology. For IFC-financed projects, application of the EHS Guidelines to existing facilities may involve the establishment of site-specific targets with an appropriate timetable for achieving them. The environmental assessment process may recommend alternative (higher or lower) levels or measures, which, if acceptable to IFC, become project- or site-specific requirements.

When host country regulations differ from the levels and measures presented in the EHS Guidelines, projects are expected to achieve whichever is more stringent. If less stringent levels or measures are appropriate in view of specific project circumstances, a full and detailed justification for any proposed alternatives is needed as part of the site-specific environmental assessment. This justification should demonstrate that the choice for any alternate performance levels is protective of human health and the environment.

The Environmental, Health, and Safety (EHS) Guidelines are technical reference documents with general and industry-specific examples of Good International Industry Practice (GIIP)¹. When one or more members of the World Bank Group are involved in a project, these EHS Guidelines are applied as required by their respective policies and standards. These General EHS Guidelines are designed to be used together with the relevant Industry Sector

EHS Guidelines which provide guidance to users on EHS issues in specific industry sectors. For complex projects, use of multiple industry-sector guidelines may be necessary. A complete list of industry-sector guidelines can be found at:

www.ifc.org/ifcext/enviro.nsf/Content/EnvironmentalGuidelines.

For subject project two most important guidelines are:

1. Environmental, Health, and Safety Guidelines - General ehs guidelines introduction
2. Environmental, Health, and Safety Guidelines – Base metal smelting and refining

2.3.3 European Union

An overview of the EU legislation and requirements applicable to the RTB Bor Group has been performed, in order to define the future legislative context within which the restructuring programme has to be developed.

EU standards applicable for each impacted media are described in the following sections.

The Air Quality Framework Directive covers the revision of previously existing legislation and the introduction of new air quality standards for previously unregulated air pollutants, setting the timetable for the development of daughter directives on a range of pollutants. The list of atmospheric pollutants to be considered includes sulphur dioxide, nitrogen dioxide, particulate matter, lead and ozone – pollutants governed by already existing ambient air quality objectives- and benzene, carbon monoxide, polyaromatic hydrocarbons, cadmium, arsenic, nickel and mercury.

The Council Decision 97/101/EC introduces a reciprocal exchange of information and data relating to the networks and stations set up in the Member States to measure air pollution and the air quality measurements taken by those stations. The information exchange relates to the pollutants listed in Annex I of Directive 96/62/EC.

The Framework Directive was followed by “daughter directives”, which set the numerical limit values, or in the case of ozone, target values for each of the identified pollutants, in order to harmonize monitoring strategies, measuring methods, calibration and quality assessment methods throughout the EU and to provide good public information.

In particular, the Directive 1999/30/EC sets the limit values for NO_x, SO₂, Pb and PM₁₀ in ambient air and states that up-to-date information on ambient concentrations of the contaminants shall routinely be made available to the public. With regard to the deadline application of the limit values, the limit values for NO_x for the protection of vegetation must be met by 2001, the health limit values for SO₂ and PM₁₀ must be met by 2005, while the other health limit values for NO₂ and Pb must be met by 2010. The Directive 2000/69/EC establishes limit values for concentrations of benzene and carbon monoxide in ambient air and requires to assess concentrations of those pollutants in ambient air on the basis of common methods and criteria, as well as to obtain adequate information on concentrations of benzene and carbon monoxide and ensure that it is made available to the public. The limit value for carbon monoxide must be met by 2005, while the limit value for benzene must be met by 2010 unless an extension is granted.

The Directive 2002/3/EC sets long-term objectives equivalent to the World Health Organization’s (WHO) new guideline values and target values for ozone in ambient air to be attained where possible by 2010. These targets follow Directive 2001/81/EC on national emission ceilings. The directive includes also improved and more detailed requirements to monitor and assess ozone concentrations and to inform citizens about the actual pollution load. It sets alert thresholds and requires Member States’ authorities to take short-term action if exceeded.

Following EU Directives/Regulations have been considered:

- Council Directive 80/68/EEC on the protection of groundwater against pollution caused by certain dangerous substances

-Commission Communication “Towards a Thematic Strategy for Soil Protection” (COM(2002) 179 - C5-0328/2002 - 2002/2172(COS)).

As far as the soil quality is concerned, it has to be noted that no regulatory requirement has been yet set up at the European level.

In response to concerns about the degradation of soils, the European Commission published in April 2002 a Communication "Towards a Thematic Strategy for Soil

Protection". This Communication outlined the first steps that lead to the development of a Thematic Strategy to protect soils in the European Union. The strategy is one of the seven 'thematic strategies' foreseen under the EU's 6th Environment Action Programme. With regard to the protection of groundwater, the Directive 80/68/EEC is aimed to prevent the pollution of groundwater by substances belonging to the families and groups of substances in lists I or II in the Annex. Member States shall prevent the introduction into groundwater of substances in list I and limit the introduction into groundwater of substances in list II so as to avoid pollution of this water by these substances. List I includes those substances with high risk of toxicity, persistence and bioaccumulation (such as mercury, cadmium, mineral oils and hydrocarbons, cyanides, carcinogenic substances, etc.), while List II contains substances, which could have a harmful effect on groundwater (such as zinc, copper, nickel, chrome, lead, selenium, arsenic, biocides, etc.).

Water Quality

No absolute limits are set for water abstraction or consumption at the European level. As far as the water quality is concerned, the following two Directives define quality standards:

- Council Directive 98/83/EC on the quality of water intended for human consumption (Drinking Water Directive - DWD).
- Directive 76/160/EEC concerning the Quality of Bathing Water (1976 Bathing Water Directive).
- The Drinking Water Directive concerns the quality of water intended for human consumption. Based on WHO guidelines for drinking water, the DWD sets standards for the most common substances, a total of 48 microbiological and chemical parameters, which can be found in drinking water.(for details the Table 5.10 of the directive).
 - Council Directive 1999/31/EC on the landfill of waste (EU Landfill Directive).
 - Directive 75/439/EEC on the disposal of waste oils (Waste Oil Directive).
- Waste from extractive industries is subject to the general provisions of the Waste Framework Directive. More importantly, facilities for the disposal of waste from the extractive industries are also covered by the Landfill Directive (1999/31/EC).

- The Waste Framework Directive lays down basic obligations with respect to waste management, aimed to ensure that it does not cause any risk to water, air, soil, and the natural environment, nor any nuisance to the public (e.g. due to noise, odours, or degradation of places of special natural interest). Specifically, the Directive states that uncontrolled dumping or disposal of waste is prohibited and waste treatment operations is allowed under a permit and periodical recording.
- The Landfill Directive requires that:
- Sites will be classified into one of three categories: hazardous, nonhazardous or inert according to the type of waste they will receive;
- Hazardous liquids, flammable, corrosive, explosive, oxidising and infectious wastes are banned from landfill from July 2002;
 - Non hazardous liquids will be banned from landfill between 2004 and 2007;
 - Co-disposal of hazardous and non-hazardous waste will be banned from landfill from 16 July 2004;
 - Waste will be required to be treated prior to landfilling;

The Hazardous Waste Directive provides the definition of hazardous waste, promotes environmentally-sound management of hazardous waste, and imposed specific controls to the handling and disposal of hazardous waste. The classification into hazardous and non hazardous waste is based on the system for the classification and labelling of dangerous substances and preparations, which ensures the application of similar principles over their whole life cycle. The properties which render waste hazardous are laid down in the Directive and are further specified by the Waste List Decision 2000/532/EC as last amended by Decision 2001/573/EC.

Furthermore, the Communication sets out three priority actions envisaged to improve the safety of mines:

1. an amendment of the Seveso II Directive to include in its scope mineral processing of ores and, in particular, tailings ponds or dams used in connection with such mineral processing of ores;
2. a Best Available Techniques reference document (BREF) describing the Best Available Techniques of waste management to reduce everyday pollution and to prevent or mitigate accidents in the mining sector; and

3. a legislative initiative on the management of mining waste in order to help prevent environmental damage.

In 2003 the Commission has presented a proposal for a Directive to regulate the management of waste from the extractive industries (mining and quarrying). The proposal seeks to introduce EU-wide rules designed to prevent water and soil pollution from long-term storage of waste in tailings ponds, waste heaps, etc. The proposal lists conditions to be attached to operating permits to waste management facilities, to ensure that sufficient environmental and safety measures are met. Among them, waste has to be classified before disposal and the method of management tailored to its particular characteristic; a closure plan is required as part of the operating plan as well as a proper monitoring during both the operational and postclosure phases.

2.3.4 Comparison of Key International Standards/Guidelines

The following provides a comparison of the key international guidelines or standards pertinent to air and water quality that are considered in the Environmental Impact Assessment, and in developing the engineering design for the new smelter, acid plant, and waste water treatment plant.

Table 2.3.1 A Comparison of Serbian, European Union, and IFC/World Bank Ambient Air Quality Guidelines

Parameter	Serbian ⁽¹⁾	European Union Legislation	IFC/World Bank
Soot			
Annual Average	30/50 ⁽¹³⁾	40 ⁽³⁾	50
Maximum 1-hour	-/150 ⁽¹³⁾		
Maximum 24-hour Average	40/50 ⁽¹³⁾	50 ⁽⁴⁾	70
98 percentile	50/150 ⁽¹³⁾		
Total Suspended Particles			
Annual Average	40/70 ⁽¹³⁾		
Maximum 24-hour Average	70/120 ⁽¹³⁾		
98 percentile	100/200 ⁽¹³⁾		
Nitrogen Oxides, as NO₂			
Annual Average	50/60 ⁽¹³⁾	40 ⁽⁵⁾	-
Maximum 1-hour	85/150 ⁽¹³⁾	200 ⁽⁶⁾	
Maximum 24-hour Average	70/85 ⁽¹³⁾		150
98 percentile	85/150 ⁽¹³⁾		
Sulfur Dioxide			
Annual Average	30/50 ⁽¹³⁾		50
Maximum 1-hour	150/350 ⁽¹³⁾	350 ⁽⁷⁾	
Maximum 24-hour Average	100/125 ⁽¹⁵⁾	125 ⁽⁸⁾	125
98 percentile	150/350 ⁽¹³⁾		

EIA Study – New Smelter and Sulphuric Acid Plant Project

Parameter	Serbian ⁽¹⁾	European Union Legislation	IFC/World Bank
Lead - Annual average	1 ⁽¹⁴⁾	0.5 ⁽⁹⁾	
Benzene - Annual average	5	5 ⁽¹¹⁾	
Manganese - Annual average	1 ⁽¹⁴⁾		
Chromium - Annual average	0.3 ng/m ³ ⁽¹⁴⁾		
Cadmium - Annual average	10 ng/m ³ ⁽¹⁴⁾	5 ng/m ³ ⁽¹²⁾	
Arsenic - Annual average	6 ng/m ³	6 ng/m ³ ⁽¹²⁾	
Nickel - Annual average	20 ng/m ³	20 ng/m ³ ⁽¹²⁾	
Benzo(a)pyrene - Annual average	1 ng/m ³	1 ng/m ³ ⁽¹²⁾	

(1) Serbian legislation

(2) IFC/World Bank - General Environmental Guidelines.

(3) Directive 1999/30/EC.

(4) Directive 1999/30/EC. Not to be exceeded more than 35 times per calendar year.

(5) Directive 1999/30/EC. A limit of 60 µg/m³ (50%) must be met on the 19 July 1999, reducing on 1 January 2001 and every 12 months thereafter by equal annual percentages to reach 0% (40 µg/m³) by 1 January 2010.

(6) Directive 1999/30/EC. Not to be exceeded more than 18 times per calendar year. A limit of 300 µg/m³ (50%) must be met on the 19 July 1999, reducing on 1 January 2001 and every 12 months thereafter by equal annual percentages to reach 0% (200 µg/m³) by 1 January 2010.

(7) Directive 1999/30/EC. Not to be exceeded more than 24 times per calendar year.

(8) Directive 1999/30/EC. Not to be exceeded more than 3 times per calendar year.

(9) Directive 1999/30/EC. The limit is applicable since the 1st January 2005. The application can be postponed up to 2010 for areas in the vicinity of specific point sources.

(10) Directive 1999/30/EC.

(11) Directive 2000/69/EC.

(12) Directive 2004/107/EC sets "target values" for Arsenic, Cadmium, Nickel and benzo(a)pyrene. Target values are set on the total content in the PM₁₀ fraction averaged over a calendar year. Target values shall be met by 31 December 2012.

Table 2.3.2 Comparison of International Water Quality Guidelines/Standards

Parameter Units in mg/L except as noted.	Effluent				Water Supply	
	Serbian Dangerous Particles (1)	IFC Effluent Guidelines Mining Sector (2)	Canada MMLER (3)	Ontario MISA MMS (4)	WHO Drinking Water (5)	Ontario PWQO (6)
Physical Chemical						
pH (units)	6-9	6-9	6	6 - 9.5	6.5 - 9.5	6.5 - 8.5
Phenols	0.03	0.5				
Total Suspended Solids	20	50	25	15	-	
COD		150				
BOD ₅		50				
Oil and Grease		10				
Chloride				na	250	na
Fluoride	5				1.5	
Sulphate				na	500	na
Temperature		< 3deg C difference				
Al ₂ O ₃						
CaO						
MgO						
Total Cyanide (CNT)	0.1	1		1		
Cyanide Free (Cnfree)		0.1				0.005
Cyanide WAD (Cnwad)		0.6				
Nutrients						
Nitrate-N	15				11	16
Nitrite-N	0.5					
Ammonia-N					-	0.02
Phosphate (PO ₄)						.02 (P)
Phosphorus (P)						
Total Ammonia (NH ₃ -NH ₄ -N)						
Total Hardness (as CaCO ₃)	5					
Total Alkalinity (as CaCO ₃)						
Acidity (as CaCO ₃)						
Metals						
Aluminum (Al)					0.1 - 0.2	0.075
Antimony (Sb)					0.02	0.02
Arsenic (As)	0.05	0.1	0.5	0.5	0.01	0.005

Table 2.3.2 Comparison of International Water Quality Guidelines/Standards

Barium (Ba)					0.7	
Beryllium (Be)						.011 - 1.1
Bismuth (Bi)						
Boron (B)					0.5	0.2
Cadmium (Cd)	0.1	0.05			0.003	.0001- .0005
Calcium (diss.) (Ca)						
Chromium, Total (Cr)					0.05	0.0099
Chromium six-valent	0.1	0.1				
Chromium three-valent	0.5					
Cobalt (Co)				0.3	-	
Copper (Cu)	0.1	0.3	0.3		2	.001 - .005
Iron (Fe)	1	2			0.3	0.3
Lead (Pb)		0.2	0.2	0.2	0.01	.005 - .025
Lithium (Li)						
Magnesium (diss.) (Mg)						
Manganese (Mn)					0.4	
Mercury (Hg)	0.001	0.002			0.006	0.0002
Molybdenum (Mo)					0.07	0.04
Nickel (Ni)	0.01		0.5	0.5	0.02	0.025
Potassium (diss.) (K)						
Radium 226 (Ra226)			10.0 pCi/L			0.1
Selenium (Se)	0,01				0.01	0.0001
Silicon (Si)						
Silver (Ag)					0.1	
Sodium (diss.) (Na)						
Strontium (Sr)						
Thallium (Tl)						
Tin (Sn)					-	
Titanium (Ti)						
Uranium (U)					0.015	0.005
Vanadium (V)	0.5				-	0.006
Yttrium (Y)						
Zinc (Zn)	1	0.5	0.5	0.5	3	0.02

NOTES:

1. Rule Book on Dangerous Particle Matters (Pollutants) in waters. The Rule Book was published in "Official Gazette of SRS", no. 31/82. IFC
2. Effluent Guidelines for the Mining Sector, Published December 2007
3. Canadian Metal Mining Liquid Effluent Regulations
4. Ontario Municipal and Industrial Abatement Strategy (MISA) Mine Metal Standards (MMS) (under ONTARIO REGULATION 560/94 Effluent Monitoring And Effluent Limits — Metal Mining Sector)
5. World Health Drinking Water Standards
6. Ontario Provincial Water Quality Objectives