CZECH UNIVERSITY OF LIFE SIENCES

PRAGUE

FACULTY OF TECHNOLOGY

The evaluation of EIA/SEA processes carried out in the Czech Republic focused on o road transport

DIPLOMA THESIS

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University:	Czech University of Life Sciences Prague	Faculty:	Engineering
Department:	Vehicles and Ground Transport	Course's year:	2007/2008

SETTING of THESIS

Student: **Iveta Vonšovská**

Specialization: Technology and Environmental Engineering

Title of thesis: The evaluation of EIA/SEA processes carried out in the Czech Republic focused on a road transport.

Directives of conduct:

Aim of thesis:

The main aim of the theses is to describe EIA/SEA processes and their application in the Czech Republic focused on a road transport. On the base of processes evaluation to propose a new methodology of assessment linked with scientific methods.

Thesis's syllabus:

1. EIA/SEA assessment
2. Scientific methods usrd in EIA/SEA assessment
3. The evaluation of carried out EIA/SEA road transport assessments in the Czech Republic
4. The Proposal of methodology

Methodology:

1. The description of EIA/SEA processes in Czech Republic, legislation, nowadays methods used for impact assessment in EIA/SEA
2. Possible scientific methods used in EIA/SEA proccesses
3. Study and obtaining data from different EIA/SEA focused on a road transport
4. The proposal of a new assessment methodology linked with scientific methods

Thesis' range: 40-50 pages

The list of recommended special literature:

CHRIS WOOD: Environmental Impact Assessment: A Comparative Review (Hardcover), Prentice Hall; 2 edition (30 Jul 2002), ISBN-10: 058236969X, ISBN-13: 978-0582369696, 432 p.

GLASSON J. -THERIVEL R. – CHADWICK A.: Introduction to Environmental Impact Assessment, Taylor & Francis Ltd; N.e edition (1 Feb 2005), ISBN-10: 0415338379, ISBN-13: 978-0415338370, 512 p.

ZÁKON 100/2001 Sb. o posuzování vlivů na životní prostředí ve znění zákona č. 93/2004 Sb. 163/2006 Sb. a 186/2006 Sb.

http://www.eiatraining.com/mm5/merchant.mvc?Screen=CTGY&Store_Code=ET&Category_Code=EB0 (17.1.2008)

http://www.eps.cz/php/index.php?cat=programy&art=evropske-pravo-pripady-eia (17.1.2008)

The supervisor of thesis: Ing. Miroslav Růžička, CSc.

The date of thesis's setting: 30.11.2007

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ČESKÁ ZEMĚDĚLSKÁ UNIVERZITA V PRAZE -3- TECHNICKÁ FAKULTA

Doc.Ing. Boleslav Kadleček, CSc. Prof. Ing. Jiří Klíma, CSc.

Head of Department Dean of Faculty

Prague 17th. January 2008

Declaration on word of honour

I declare that I have done this Diploma thesis titled „The evaluation of EIA/SEA processes carried out in the Czech Republic focused on o road transport“ just on my own. I had used just those sources of information, which are listed in the literature enclosed at the end of the thesis.

In Prague, of the day 1.4.2009 ……

Iveta Vonšovská

Acknowledgement

I would like to thank to Ing. Miroslav Růžička, CSc., supervisor of this diploma work who provided me with expert advices and supplied me with many tips and ideas.

Abstract:

This diploma thesis is focused onto the evaluation of EIA/SEA processes carried out in the Czech Republic focused on o road transport. The main focus was put on Environmental Impact Assessment in the Czech Republic.

The broadest part of this thesis is applied to the description of the metodology of the EIA, because on the basis of this study I try to propose the methodology that could be used in the Czech Republic in the future.

The most consumption of time was the reading, comparing, evaluating EIA reports. I try to find the most important environmental indicators that described the expected impacts on the environment.

Key words: environement, pollution, environmental indicators, Environmental Impact Assessmetn (EIA), Strategic environmental assessment (SEA), transport, roads, law, Act, methodoly, methods

Content:

Introduction

Civilization has brought people many advantages but its products also pollute and damage the environment in which we live. Many of the things that we have done are good, but many, many more are not good for the Earth. In big cities, cars and buses have polluted the air. Many people have very bad health problems. Factories have also polluted the land and the water. As a result, many rivers and lakes are now dead. Around the Earth, there is a special type of oxygen called “ozone” (O3). Ozone is important because it stops ultraviolet radiation from the sun. Aerosol sprays and factories destroy ozone and they have made a very big hole in the ozone layer. This means that too much ultraviolet radiation now enters the Earth. Carbon dioxide (CO2) in the air has increased a lot. (CO2 comes from burning oil, coal, and wood.) This has formed a “blanket” around the Earth. The heat from the sun cannot escape and so the temperature is rising (the “green house effect”). This means that the level of the sea is rising and climate is changing. All over the world, people have cut down millions of trees. As a result, many types of animals and plants are now disapearing. Trees are also important because they help to produce oxygen and control the climate.

These problems are very serious for our future, but we can do something now. In many places, they have already taken action to improve the environment. There are many ways how we can protect the environment and one of them is to avoid the problems of air, water and land pollution.

Over the last three decades there has been a remarkable growth of interest in environmental issues – in sustainability and the better management of development in harmony with the environment. Associated with this growth of inerest has been the introduction of new legislation, such as the Europran Commission, that seeks to influence the relationalship between development and the environement. [9]

Environmental Impact Assessment (EIA) is one of the most important tools employed in contemporary environmental management. Presenting the component activities of EIA within a coherent methodological framework, Environmental Impact Assessment: A Methodological Approach with a rigorous

grounding in EIA theory, including biophysical, social, strategic and cumulative assessment activities, and examines the crucial role, and limitations, of the science of EIA. Deliberately designed to be relevant world-wide, I focuse on the common skills and generic aspects of EIA that underpin all impact assessment work, independent of country or jurisdiction, such as screening and scoping, impact identification, public involvement, prediction and monitoring, evaluation, and quality control. The variety of approaches are identified along with their associated strengths and weaknesses, enabling potential, new and experienced practitioners to make informed choices and to improve their working practices through a better understanding of EIA activity. [5]

The ultimate aim of this thesis is to find better procedure of EIA as a particular form of problem-solving with varied methodological requirements.

The aim of the diploma thesis

The main aim of my thesis is to understand the topic of EIA / SEA. I would like to describe the methodology, procedures, and laws generally and I try to explain the importance of the EIA / SEA. The Environmental Impact assessment of the Czech Republic has its origin in the European Union. I would like to target the process of EIA / SEA in the Czech Republic and I will be more specific in this task.

First of all I start to study the literature of EIA / SEA. Then I look on EIA reports concerning the transportation. I will find out the main environmental indicators, which the authors of these reports described. I make an idea of what EIA means in CZ. On the basis of the study of methods used in other countries I suggest the optimal steps for the solution of EIA reports.

Partial targets:

1. Describe the Environmental Impact assessment and Strategical environmental assessment
    a. Find the difference between EIA and SEA
2. Study the methodology used in EIA / SEA
    a. Be more concrete in EIA, because of study of EIA reports
    b. Seek the methods used in other countries
3. Describe the EIA in the Czech republic
    a. Study EIA reports of transportation
    b. Study law of EIA in the Czech republic
    c. Summarize the methodology and environmental indicators used in EIA reports
4. Propose the new methodology in the Czech republic

1 EIA/SEA assessment

1.1 EIA assessment Overview

Environmental impact assessment is a planning and management tool that provides environmental managers and decision makers with a way to predict and reduce the environmental impacts of a proposed development project or activity, on just about any scale. Realistically, it is expected that increasing economic development and population growth will result in some environmental degradation. Notwithstanding, EIA gives countries more of an opportunity to select and understand the types and degree of environmental impacts that they are willing to accept as development continues. Environmental or public health disasters can be prevented, and potentially environmentally damaging activities such as industrial development can be contained within specifically zoned areas thereby allowing other areas to remain unharmed.

The outcome of an EIA assists government decision makers, environmental managers and local communities to determine whether a project should be implemented, and in what form. EIA cannot make a final decision, but it is an essential tool for those that do. Some characteristics of EIA are included in Table 1.

EIA is both a decision-making process and a proactive management tool. It is structured to anticipate, analyse and disclose the ecological consequences associated with proposed activities. The aim of EIA is to balance the environmental interest in the larger context of social and economic development. Overall, EIA seeks to ensure that potential problems are foreseen and addressed at an early stage in a project’s planning and design.

The assessment report should provide information on the environmental, social and economic changes that would result from the proposed activity. This information, when presented to decision makers and the project’s planners, can be used to shape the project such that its expected benefits can be achieved withoutcausing serious environmental degradation. An accurate EIA can greatly

influence where and how a project is sited, the project's size, the technologies employed and the area served or affected by the project.

Specifically, an EIA accomplishes the following:

- Identifies the sources of environmental impacts from the project (both during initial construction and during operation) and examines valued environmental components (VEC) which could potentially be impacted
- Predicts the likely environmental impacts of projects on the identified VECs using methods that are quantitative, qualitative or a combination of the two
- Finds ways to reduce the unacceptable impacts and enhance the positive contributions of the project by recommending mitigation measures or by exploring alternatives, such as a change in the capacity, technology, design, or site location
- Presents to decision makers and other concerned parties the results of impact identification, prediction and assessment with options of suggested measures of mitigation and monitoring. [22]

Table 1: Some basic characteristics of EIA

PURPOSE
– Ensure the wise use of natural resources
– Assist in pursuing wise development by evaluating alternatives, improving proposal design and enhancing social aspects of the project
– Evaluate the rationale behind the proposed development.
– Identify measures for eliminating or reducing potential impacts
– Enable informed decision making
OBJECTIVES
– Ensure that potential environmental effects are considered before decisions are made
– Promote sustainable development
– Contain adverse environmental effects within known, specific boundaries
– Provide opportunity for public involvement in the decision-making process
IMPORTANT ELEMENTS
– Should apply to all types of activity (projects, policies and programs)
– Consideration of changes over various time and spatial scales
– Consideration of social and cultural viewpoints in addition to scientific opinions
– Identify and communicate potential impacts to concerned people and encourage thoughtful discussion and problem solving
BENEFITS
– Promotes better planning and leads to more responsible decision-making
– Increases likelihood of public acceptance of controversial projects
– Saves time and money in the long run: reduces approval time and the need for corrective action

It is important to mention that while EIA generally starts at the individual project level, it also can be implemented beyond that. The same principles that guide the assessment of environmental impacts for a single project are used to determine broader cumulative impacts to the environment as is done in undertaking a cumulative effects assessment (CEA). Cumulative impacts are those impacts that are likely to arise from one project in combination with other projects that already have been (or will be) carried out. The individual impacts might be small, but when added together, they could conceivably have widespread adverse environmental effects. In addition, EIA principles can be used to evaluate the effectiveness of a particular environmental policy or resource management strategy as part of a strategic environmental assessment (SEA). The SEA will be covered in greater detail in next chapters.

1.2 Brief history of EIA

Environmental impact assessment was originally conceived in the late 1960s as a policy and management tool for both planning and decision making. It was expected to assist in the identification, prediction and potential reduction of foreseeable environmental consequences of proposed projects or other development activities. EIA took some time to be acknowledged as a legitimate planning tool as it was initially viewed as a hindrance to economic development.

Two significant pieces of legislation were adopted that lent great credibility to the EIA process. In 1969, the United States enacted the National Environmental Policy Act (NEPA), which mandated EIA for a number of project types. NEPA basically launched EIA into worldwide use as a number of countries adopted their own impact assessment guidelines during the 1970s through the 1990s. New Zealand's Resource Management Act of 1990 was also pivotal in the acceptance of EIA as a legitimate planning tool, as it was the first piece of legislation to address the principle of sustainable use of natural resources. Due in large part to the broad acceptance of these two seminal pieces of legislation, many countries have followed suit in adopting their own EIA legislation which requires assessments of certain types of projects and activities while embracing sustainable development principles. EIA was acknowledged as a requirement of many countries' natural resource development policies. [1]

The process of environmental impact assessment – the EIA (Environmental Impact Assessment) process was introduced in the Czech republic in 1992, legislated by the Environmental Impact Assessment Act 244/1992 Coll. on environmental impact assessment, as amended. This legislation was enacted before the dissolution of the Federation of Czech and Slovak Republics in 1993, but it was subsequently adopted by the independent Czech republic. The legislation is given in full in European Bank for Reconstruction and Development (1994). It was based in part on the European Community's Directive 85/337/EEC. This law defined environmental impact assessment and the activities for which it was required. These activities include projected construction work, construction changes, and changes in utilization, operations and technologies, developmental concepts and programmes. It also established the state bodies responsible for administration of the environmental impact assessment process. In that time, this law constituted an important element in the system of preventive environmental protection instruments in 1992 and was simultaneously an important component of environmental policy. [7,4, 28]

In the sphere of assessment of plans, this Act was replaced from January 1, 2002 by the new Act 100/2001 Coll., on environmental impact assessment and amending some related acts, which reflected trends in the legislation of the European Union in this area. It is a modern legal form in which the EIA process is more effective in the Czech Republic by introducing the fact-finding procedure, well timed public involvement in the process, and concretizing the rules for inter-assessment projects. Act 93/2004 Coll. took effect on 1. 5. 2004; among others, this law modified the assessment of environmental impacts and also cancelled the previously valid Act 244/1992 Coll., concerning the assessment of the impacts of developmental plans and programs on the environment. At the same time it established that the assessment of developmental plans and programs established before this law came into effect shall be completed according to Act 244/1992 Coll. With regard to the large range in the degree of completion of individual cases, most of the plans were assessed in 2004 according to the original law, Act 244/1992 Coll. [7, 28]

The laws of the Czech Republic are based on legilslation of European Community. The most important legislation in the environmental impact assessment is a Council Directive on the assessment of the effects of certain public and private projects on the environment, No. 85/337/EHS which was updated by Council Directive 97/11/EC. According to this Directive the effects of public and private projects are evaluated on the environment, which may have a significant impact on the environment. This Directive was transposed into Czech legislation, specifically in the Act No. 100/2001 Coll. There is another direction of European Parliament and Council Directive 2003/35/EC. [7]

The EU Member States have to transpose this Directive until 25 June 2005. The purpose of this Directive is the extension of public participation in these processes. Furthermore, I would like to mention important international agreements. First agreement is Aarhus Convention. The exact name is the Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters. This Convention was ratified in the Czech Republic. The ratification means for Czech citizens a right of access to environmental information; it is also the possibility to express opinions to the project objectives in time. Today, people can express one's opinion of prepared policies and plans affecting the environment, and there is also the possibility to seek redress in case of refusal or failure of information of these conditions, the public can participate in this process. The Aarhus Convention is a new kind of environmental agreement. It links environmental rights and human rights. It acknowledges that we owe an obligation to future generations. Public participation in the specific process provided for in Article 6 of the Aarhus Convention, which is very important provision. It says that must be provided for public participation at the stage where all the options and alternatives are still open and when such participation may be even more effective. If the EIA process is executed in accordance with the requirements of the Act number 93/2004 Coll. on the environmental impact assessment, the requirements of the Aarhus Convention are also fulfilled.

The other convention called Espoo Convention, the exact name is the Convention on environmental impact assessment beyond national boundaries,

the procedures defined in the field of transnational environmental impact assessment, it is already ratified by the Czech Republic and provides for an area of the right people to be informed about plan and participate in the EIA process, even if the intention is realized on the territory of another State. Espoo Convention Requirements are covered by Title 2, Law No 100/2001 Coll. and there is described the way in which it should be proceeded inter-assessment projects. [7]

1.3 Legal requirements for EIA in the Czech Republic

1.3.1 Overview of legislation

The objects of compulsory assessment consist of plans for constructions, activities and technologies listed in Annexes No. 1 of Act No. 100/2001 Coll. and changes therein in accord with Article 4 (1) (c). The Ministry of the Environment in accordance with the provisions of Article 21 or the regional authority in accord with the provisions of Article 22 of this Act provides for assessment of these plans. Objects of compulsory assessment consist also plans listed in Act No. 100/2001 Coll., Article 10(a) and Land-Use Planning Documentation, assessment of which is carried out in accordance with the provision of Article 10(i) of the Construction Act. [28]

1.3.2 EU legislation

The EIA Directive (EU legislation) on Environmental Impact Assessment of the effects of projects on the environment was introduced in 1985 and was amended in 1997. Member States have to transpose the amended EIA Directive by 14 March 1999 at the latest.

The EIA procedure ensures that environmental consequences of projects are identified and assessed before authorisation is given. The public can give its opinion and all results are taken into account in the authorisation procedure of the project. The public is informed of the decision afterwards.

The EIA Directive outlines which project categories shall be made subject to an EIA, which procedure shall be followed and the content of the assessment.

Following the signature of the Aarhus Convention by the Community on 25 June 1998, the Community adopted in May 2003 Directive 2003/35/EC amending amongst others the EIA Directive. This Directive intends to align the provisions on public participation in accordance with the Aarhus Convention on public participation in decision-making and access to justice in environmental matters.

The purpose of the SEA-Directive is to ensure that environmental consequences of certain plans and programmes are identified and assessed during their preparation and before their adoption. The public and environmental authorities can give their opinion and all results are integrated and taken into account in the course of the planning procedure. This will help to achieve the goal of sustainable development.

The Commission adopted in 1996 a Proposal for a Directive on Environmental Assessment of certain plans and programmes. This Proposal was amended by the Commission in 1999. In December 1999 the Environment Ministers reached a political agreement on a common text for the future Directive (the common position). The common position was formally adopted on 30/03/2000. [32]

1.4 SEA assessment Overview

Strategic environmental assessment (SEA) has emerged in the last few years as a term for tools which aim to integrate environmental considerations into proposed laws, policies, plans and programmes. However, in one form or another, SEA has been in place for some time. The preparation of legislative and programmatic Environmental Impact Statements has been an integral element of US practice under the National Environmental Protection Act (NEPA) 1969. Other SEA-type approaches reflect an extension of EIA trends, including area-wide and regional assessments, and policy-level reviews as part of public inquiries and environmental reviews.

There is no internationally agreed definition of SEA, but the interpretation offered by Sadler and Verheem (1996) is among those which are widely quoted:

“SEA is a systematic process for evaluating the environmental consequences of proposed policy, plan or programme initiatives in order to ensure they are fully

included and appropriately addressed at the earliest appropriate stage of decision-making on par with economic and social considerations".

Interest and debate about SEA is growing rapidly. There are many differing opinions about its nature and scope. One school of opinion holds that that SEA should focus mainly on environmental issues, another takes the view that it should provide a sustainability focus and cover social and economic aspects as well environmental ones. It is also argued that SEA at the policy level requires a different methodological approach to SEA at the programme and plan level. However, there is broad consensus that there can be no one 'blueprint' approach to SEA and approaches will need to be developed and tailored to suit conditions, institutional realities and political circumstances in individual countries. [24]

1.5 Brief history of SEA

Strategic Environmental Assessment (SEA) is a modern tool for the optimization of plans, programs and policies, in terms of possible effects on the environment.

National SEA systems are formed from the beginning of the 90th years in most of developed OECD countries (especially Canada, New Zealand, Netherlands, Great Britain). The European Union adopted Directive 2001/41/EC on assessment of the effects of certain plans and programs on the environment in 2001.

In the Czech Republic the assessment of the effects of concepts on the environment has carried out since 1992. The EIA process (assessment of projects) and the SEA process (assessment of concepts) are governed by the Act No. 100/2001 Coll. on the environmental impact assessment and amending some related acts (Act on environmental impact assessment). The Act was amended by Act No 93/2004 Coll., Act No 163/2006 Coll., 186/2006 Coll. and 216/2007 Coll. (26)

The Act on Environmental Impact Assessment No. 244/1992 Coll. belonged to very progressive laws in the field of environment in the period of its creation. In the day-to-day use of this Act the following drawbacks have been identified:

- Determining which projects are to be subject to assessments (screening);
- Scope and subject of the reporting (scoping);
- Limited public participation in the assessment procedure;
- International negotiations do not work;
- Strategic EIA to assess the policy concepts are not used.

These drawbacks and evolution of knowledge led to the elaboration and ratification of the Act on Environmental Impact Assessment No. 100/2001 Coll., which entered into force on 1st January 2002. This Act splits environment impact assessment into two parts:

- Assessment of buildings, activities and technologies (modified in new act No. 100/2001 Coll.)
- Impact assessment of developing policies and plans (modified in original act No. 244/1992 Coll.)

The new law No. 93/2004 Coll. entered into force on 1st May 2004. This new law transposed the Directive 2001/42/EC of the European Parliament and of the Council. The new law also replaced and upgraded old act No. 244/1992 Coll. The most important modification are: force of spreading to the other sector (agriculture, forestry, fishery, hunting, energetics, act.), force of screening and assess of spatial planning). The Czech legislation on EIA and SEA procedure is now in compliance with the European legislation. [15]

International standard for the strategic assessment is the above-mentioned Directive of the European Parliament and Council Decision No 2001/42/EC as well as the Protocol on Strategic Environmental Assessment. [26]

1.6 Comparison of EIA and SEA assessment

Most practitioners view SEA as a decision-aiding rather than a decision-making process (like EIA) - a tool for forward planning to be flexibly applied at various stages of the policy-making cycle. Under this broad perspective, SEA encompasses assessments of both broad policy initiatives and more concrete programmes and plans that have physical and spatial references (e.g. town and regional plans, regional development programmes). With this scope of coverage

one problem becomes readily apparent. The methodologies to be applied at the opposite ends of the decision-making spectrum differ markedly.

However, the principles of EIA apply at all levels. Table 2 compares EIA and the evolving process(es) of SEA.

Table 2: EIA and SEA Compared

EIA	SEA
Represents an end Brings closure to an issue or undertaking	**Leads to a strategy** A means to an end
Goals and objektive are predetermined EIA predicts the potential outcomes of an already predermined option	**Set in context of broader vision, goals and objectives** Examines strategie to accomplish particular goals and objectives
Forecasts Predicts and assesses the libely outcomes of a specific undertaking	**Backcasts, then forecasts** Determines a range of options based on a vision, and then forecasts the libely outcomes of each option.
Asks „ What the impacts of our option?“ „Option alternatives „ versus“alternative options Alternative are often limited to issues of technical design Management emphasis on mitigating libely negative outcomes	**Asks „What is the preferred option?“** „Alternativs options“ versus „option alternatives“ Broader range of alternatives at an early stage Minimize negative outcomes by selecting the „ lest negative“ alternative at an early stage
Project – specific Assessment of a particular proposed undertaking Assesses direct impacts and benefits	**Not project-specific** Focus is on alternatives, opportunities, regions and sectors Assesses cumulative impacts and identifies implications and issues for sustainable development
Reactive An option is chosen and the EIA is designed to react to, or assess, that particular option Definitive: well.defined beginning (project propasal) and end (decision to proceed or not) to the assessment of a single undertaking	**Proactive** Creates and examines alternatives leasing to the preferred option On demand: a process that ca be implemented at any time should strategic choices not be meeting specific visions and objectives, or should new visions, goals, and objectives develop
Narrow focus and highly detailed Focus and higly detailed Focus is on a predetermined alternative option Assessment is f˙generally technical, often quantitive and highly detailed Focuses on the mitigation of impacts Focuses on project specific impacts	**Broad focus and low level of detail** Focus is on a broad set of alternatives. Focus broadens noviny upscale from programs, plans and policie to alternative Assessment is broad,usually non-technical and qualitative Focuses on maintaining a chosen level of environmental quality Creates a framework against which impacts and benefits can be measured

2 Scientific methods used in EIA/SEA assessment

2.1 Methodology [5]

Since the formalization of EIA in the USA in 1970, large body of literature has grown up dealing with the methodologies, methods and techniques of EIA. Zhere are many specific metods and techniques the are discussed in many scientifin books dealing with EIA and SEA.

It is possible to distinguish four approaches to methodology in the EIA literature:

1. Those approaches which equate EIA methodology with specific activities within EIA – task-oriented methodologies.
2. Those approaches which equate EIA methodology with the main activities or components of the overall EIA study – component methodologies.
3. Those approaches which equate EIA methodology with the main activities or components of the overall EIA study, but consider it possible to develop a perspective methodology – integrated methodologies.
4. Those approaches which equate EIA methodology with the overall EIA study, but recognize the need for a flexible approach to designing methodologies to suit specifi circumstances – adaptive methodologies.

Task-oriented methodologies

The main characteristic of this approach is the equating of EIA methodologies with one or more of the main tasks of EIA:

- impact identifiacation
- prediction
- evaluation
- communication

That is, the term “methodology” is used to refer to specific methods for carrying out those tasks.

Component methodologies

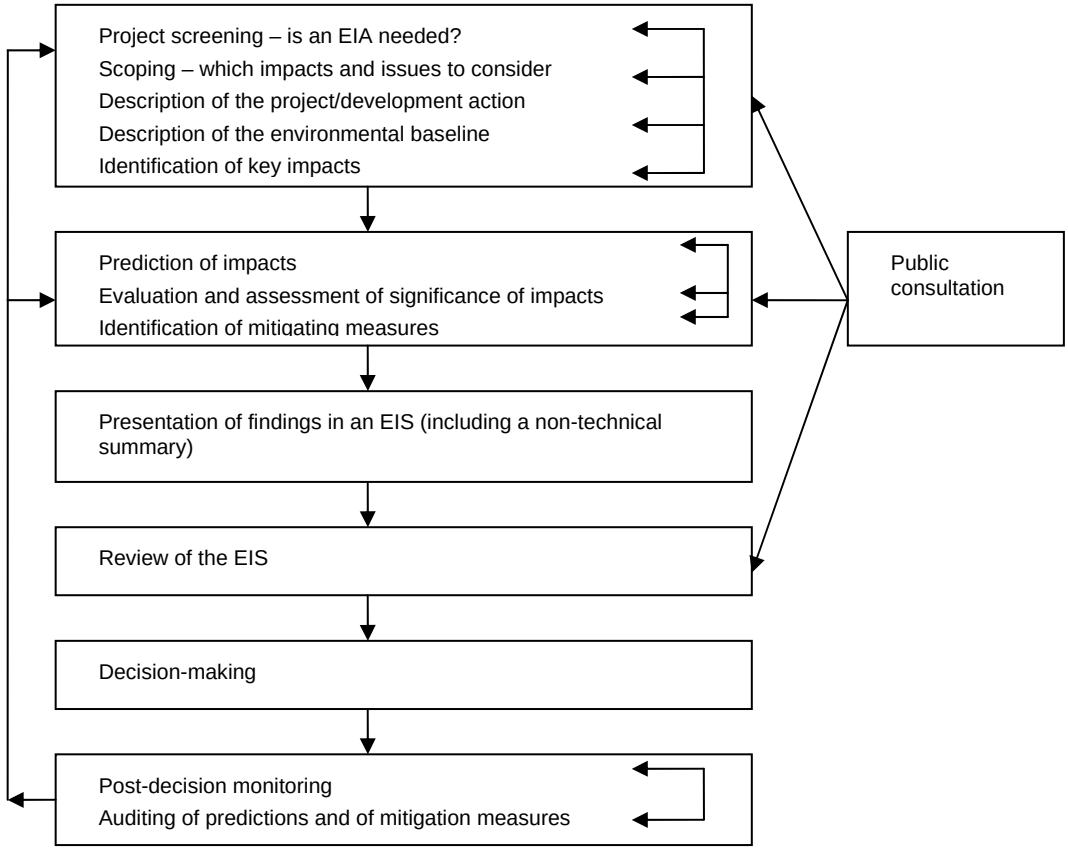
The approach is simply to identify the essential phases or stages of the EIA process in a functional sense, together with some degree of elaboration about the nature of the activity associated with each phase.

Rosenberg et al. (1981) outline a scientific approach to EIA in which the following activities are identified:

- Definition of scientific objectives
- Backround preparation Identification of main impacts
- Prediciton of effects Recommendations Monitoring and assessment.

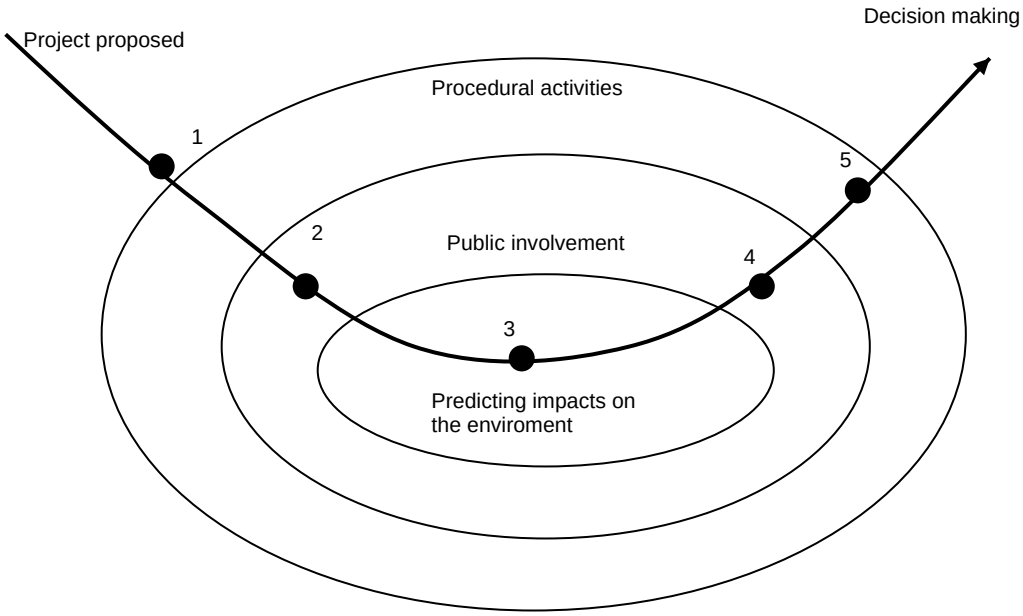
Glasson, Therivel and Chadwick (1994) identify the main steps in the EIA process and present these as a flow diagram (Figure 1), although they also emphasize the iterative or cyclical nature of the EIA process.

Figure 1 The EIA process (redrawn from Glasson, 1994)



Morgan and Memom (1993) use a simple model of the EIA process to emphasize to core importance of impact prediction, and the critical role of public involvement in the overall process (Figure 2)

Figure 2 The component activities of EIA (redrawn from Morgan and Memom 1993)



There are many other, similar categorizations of the component activities of EIA. Those described here are enough to demonstrate the degree of similarity, but also the differences, that exist between the various contributions.

Intagrated Methodologies

Methodologies in this category share the basic characteristic of the previous group, in breaking EIA down into its component activities. However, many of these attempts have aimed to develop structured methodologies, with defined approaches and method for each main phase, that together constitute an integrated methodology for EIA.

These approaches tend to simplify the impact identification and impact prediction phases a great deal, and one would be left at the end of either process with little substantive information about the actual nature of environmental changes likely to occur as a result of a given proposal. For example, there is no guidance on how to focus attention on specific environmental components or

processes. Nor is there provision for laboratory of field studies to provide real data for impact prediction purposes.

Adaptive methodologies

The impetus for this approach has come from a number of areas, the need to be flexible in developing approaches to an EIA study ha been recognized for many years. The environmental scientists forced attention back to the need for structured, rational, rigorous, and focused EIA methodologies, which at the same time had to be designed for the particular study situation, as with any piece of applied science research.

A second impetus came from the related area of resource management. The efforts were to improve the management of natural resources. The process led through and initial emphasis on computer modeling to a broader approach involving interaction between the resource managers, policy-adviser and the scientists. This approach, Adaptive Enviromental Assessment and Management (AEAM), facilitated the education of all groups and the exploration of possible management policies through modeling and discussion. AEAM has had a great influence on approaches to EIA.

2.2 Public involvement

EIA systems make provision for some type of public involvement. This term includes public consultation (or dialogue) and public participation, which is a more interactive and intensive process of stakeholder engagement. Most EIA processes are undertaken through consultation rather than participation. At a minimum, public involvement must provide an opportunity for those directly affected by a proposal to express their views regarding the proposal and its environmental and social impacts.

The purpose of public involvement is to:

- inform the stakeholders about the proposal and its likely effects;
- canvass their inputs, views and concerns; and
- take account of the information and views of the public in the EIA and decision making.

The key objectives of public involvement are to:

- obtain local and traditional knowledge that may be useful for decision-making;
- facilitate consideration of alternatives, mitigation measures and tradeoffs;
- ensure that important impacts are not overlooked and benefits are maximised;
- reduce conflict through the early identification of contentious issues;
- provide an opportunity for the public to influence project design in a positive manner (thereby creating a sense of ownership of the proposal);
- improve transparency and accountability of decision-making; and
- increase public confidence in the EIA process.

Many benefits are concrete, such as improvements to project design. Other benefits are intangible and incidental and flow from taking part in the process. For example, as participants see their ideas are helping to improve proposals, they gain confidence and self-esteem by exchanging ideas and information with others who have different values and views.

The range of stakeholders involved in an EIA typically includes:

- the people, individuals, groups and communities who are affected by the proposal;
- the proponent and other project beneficiaries;
- government agencies;
- NGOs and interest groups; and
- others, such as donors, the private sector, academics etc. [23]

Table 3: Level and forms of public involvement (Adapted from Bass et al (1995))

Level	Form of involvement
Informing	One way flow of information from the proponent to the public
Consulting	Two way flow of information between the proponent and the public with opportunities for the public to express views on the proposal
Participating	Interactive exchange between the proponent and the public encompassing shared analysis and agenda setting and the development of understood and agreed positions on the proposal and its impacts
Negotiating	Face to face discussion between the proponent and key stakeholders to build consensus and reach a mutually acceptable resolution of issues, for example on a package of impact mitigation and compensation measures.

2.3 Screening

Screening is the first key decision of the EIA process. Some type of screening procedure is necessary because of the large number of projects and activities that are potentially subject to EIA. The purpose of screening is to determine whether a proposal requires an EIA or not. A screening is a systematic approach to documenting the environmental effects of a proposed project and determining the need to eliminate or minimize the adverse effects, to modify the project plan or to recommend further assessment through mediation or an assessment by a review panel.

A certain level of basic information about the proposal and its location is required for this purpose. The majority of proposals may have few or no impacts and will be screened out of the EIA process. A smaller number of proposals will require further assessment. Only a limited number of proposals, usually major projects, will warrant a full EIA because they are known or considered to have potentially significant adverse impacts on the environment; for example, on human health and safety, rare or endangered species, protected areas, fragile or valued ecosystems, biological diversity, air and water quality, or the lifestyle and livelihood of local communities. [23]

2.3.1 Screenig procedure

The requirements for screening and the procedure to be followed are often defined in the applicable EIA law (100/2001 Coll.) or regulations. In many cases, the proposals to which EIA applies are listed in an annex (). Usually, the proponent is responsible for carrying out screening, although this is done by the competent authority in some EIA systems. Whatever the requirements, screening should occur as early as possible in the development of the proposal so that the proponent and other participants are aware of the EIA obligations.

Specific methods used in screening include:

- legal (or policy) definition of proposals to which EIA does or does not apply;
- inclusion list of projects (with or without thresholds) for which an EIA is automatically required; exclusion list of activities which do not require

EIA because they are insignificant or are exempt by law (e.g. national security or emergency activities); and

- criteria for case-by-case screening of proposals to identify those requiring an EIA because of their potentially significant environmental effects. [23]

2.4 Scoping

Scoping is a critical, early step in the preparation of an EIA. The scoping process identifies the issues that are likely to be of most importance during the EIA and eliminates those that are of little concern. Scoping ensures that EIA studies are focused on the significant effects and time and money are not wasted on unnecessary investigations.

Scoping refers to the early, open and interactive process of determining the major issues and impacts that will be important in decision-making on the proposal, and need to be addressed in an EIA. The requirements and procedures established for this purpose differ from country to country. In many EIA systems, the involvement of the public, as well as the competent authority and other responsible government agencies, is an integral part of the scoping process. Public input helps to ensure that important issues are not overlooked when preparing initiating the EIA study.

Typically, scoping begins after the completion of the screening process. However, these stages may overlap to some degree. Essentially, scoping takes forward the preliminary determination of significance made in screening to the next stage of resolution and determining which issues and impacts are significant and require further study. In doing so, the scoping process places limits on the information to be gathered and analysed in an EIA and focuses the approach to be taken.

The following public involvement methods are used in the conduct of scoping:

- notification/invitation for public comment and written submissions;
- consultation with the various stakeholders;
- public and community meetings; and
- issues workshops and facilitated discussion.

Although scoping is a distinct, early process within EIA, the significant effects continue to be re-interpreted throughout an EIA study, the decision-making process and project implementation and monitoring. Unforeseen issues that require further consideration may arise in any of these phases. The work undertaken for an EIA study on a particular issue may uncover further questions, some of which may become contentious. In some cases, earlier guidance may need to be revisited, for example relating to data collection and analysis or the criteria used to interpret the significance of effects. [23]

2.5 Impact analysis

Early EIAs focused only or primarily on impacts on the natural or biophysical environment (such as effects on air and water quality, flora and fauna, noise levels, climate and hydrological systems). However, over time, increased consideration has been given to social, health and economic impacts. This trend has been driven partly by public involvement in the EIA process. It is reflected by the evolving definition of the term an environment in EIA legislation, guidance and practice.

In many EIA systems, a broad definition of an environment is adopted. This can include effects on:

- human health and safety;
- flora, fauna, ecosystems and biological diversity;
- soil, water, air, climate and landscape;
- use of land, natural resources and raw materials;
- protected areas and designated sites of scientific, historical and cultural significance;
- heritage, recreation and amenity assets; and
- livelihood, lifestyle and well being of those affected by a proposal.

Impact identification begins during screening and continues through scoping, which identifies the key issues and classifies them into impact categories for further study. In the next phase, the likely impacts are analysed in greater detail in accordance with terms of reference specifically established for this purpose.

Impact prediction or forecasting is a technical exercise. It utilises physical, biological, socio-economic and cultural data to estimate the likely characteristics and parameters of impacts (e.g. magnitude, spatial occurrence etc.). A range of methods and techniques may be employed. These can be a continuum from simple methods for impact identification to advanced methods, often involving the application of mathematical models. The most common formal methods used for impact identification are:

- checklists;
- matrices;
- networks;
- overlays and geographic information systems (GIS);
- expert systems; and
- professional judgement

2.5.1 Characteristics of environmental impact

The characteristics of environmental impacts vary. Typical parameters to be taken into account in impact prediction and decision-making include:

- nature (positive, negative, direct, indirect, cumulative);
- magnitude (severe, moderate, low);
- extent/location (area/volume covered, distribution);
- timing (during construction, operation, decommissioning, immediate, delayed, rate of change);
- duration (short term, long term, intermittent, continuous);
- reversibility/irreversibility;
- likelihood (probability, uncertainty or confidence in the prediction); and
- significance (local, regional, global). [23]

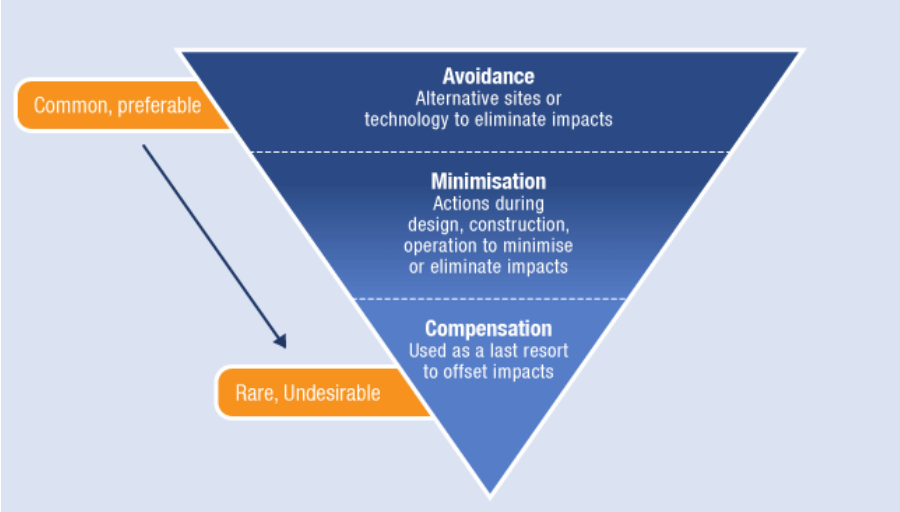
2.6 Mitigation and Impact Management

Mitigation is a critical component of the EIA process. It aims to prevent adverse impacts from happening and to keep those that do occur within an acceptable level. Opportunities for impact mitigation will occur throughout the project cycle.

In figure 3 below, the elements of mitigation are organised into a hierarchy of actions:

- first, avoid adverse impacts as far as possible by use of preventative measures;
- second, minimise or reduce adverse impacts to as low as practicable levels; and
- third, remedy or compensate for adverse residual impacts, which are unavoidable and cannot be reduced further.

Figure 2 The elements of mitigation



An EIA report contains predictions about the environmental impacts of proposals and recommendations for their mitigation and management. The report is essentially a discretionary planning document. Usually, a separate project approval sets the terms and conditions with which the proponent must comply.

An environmental management plan (EMP), also referred to as an impact management plan, is usually prepared as part of EIA reporting. It translates recommended mitigation and monitoring measures into specific actions that will be carried out by the proponent. Depending upon particular requirements, the plan may be included in, or appended to, the EIA report or may be a separate document. The EMP will need to be adjusted to the terms and conditions specified in any project approval. It will then form the basis for impact management during project construction and operation. [23]

2.7 EIA/SEA reporting

A number of different names are used for the report that is prepared on the findings of the EIA process. The generic term is “EIA report”. Despite the different names, EIA reports have the same basic purpose, approach and structure.

Usually, the proponent is responsible for the preparation of the EIA report. The information contained in the report should meet the terms of reference established at the scoping stage of the EIA process. The terms of reference set out the information that is to be submitted to the decision-making body or responsible authority.

In many countries, the information to be included in an EIA report is specified in legislation, procedure or guidance. Alternatively, the format may be established by custom or reference to the World Banks sample outline of an EIA report. Typically, the content of an EIA report will be prepared in accordance with specific terms of reference established during the scoping process. It may also include additional issues and other matters that have emerged as a result of EIA studies and need to be taken into account in decision-making.

An EIA report typically includes many or all of the following headings and items:

- executive or non-technical summary (which may be used as a public communication document);
- statement of the need for, and objectives of, the proposal;
- reference to applicable legislative, regulatory and policy frameworks;
- description of the proposal and how it will be implemented (construction, operation and decommissioning);
- comparison of the proposal and the alternatives to it (including the no action alternative);
- description of the project setting, including the relationship to other proposals, current land-uses and relevant policies and plans for the area;
- description of baseline conditions and trends (biophysical, socioeconomic etc), identifying any changes anticipated prior to project implementation;

- review of the public consultation process, the views and concerns expressed by stakeholders and the way these have been taken into account;
- consideration of the main impacts (positive and adverse) that are identified as likely to result from the proposal, their predicted characteristics (e.g. magnitude, occurrence, timing, etc.) proposed mitigation measures, the residual effects and any uncertainties and limitations of data and analysis;
- evaluation of the significance of the residual impacts, preferably for each alternative, with an identification of the best practicable environmental option;
- an environmental management plan that identifies how proposed mitigation and monitoring measures will be translated into specific actions as part of impact management*; and
- appendices containing supporting technical information, description of methods used to collect and analyse data, list of references, etc.

An EIA report should be complete, easily understood, objective, factual and internally consistent. These objectives are difficult to achieve in a process that involves many contributors working to tight deadlines. Usually, EIA reports are the product of a team of consultants and specialists. Most proposals have a number of different types of potential impacts (biophysical, socio-economic, health, etc) and their analysis requires a range of expertise. The EIA report is a statement of the likely impacts of a proposal and how these can be mitigated and managed. It is a decision document, not a compendium of technical information. [23]

2.8 Review of EIA Quality

The purpose of review is to assure the completeness and quality of the information gathered in an EIA. When undertaken as a formal step, it acts as a final check on the quality of the EIA report submitted to obtain a project authorisation. Often, this process leads to a requirement for additional information on potential impacts, mitigation measures or other aspects.

Key objectives of EIA review are to:

- assess the adequacy and quality of an EIA report;
- take account of public comment;

- determine if the information is sufficient for a final decision to be made; and
- identify, as necessary, the deficiencies that must be addressed before the report can be submitted.

In many EIA systems, the review stage is the major opportunity for public involvement. However, the arrangements for this purpose vary considerably from country to country.

There are a number of steps can help to achieve good practice in the review of EIA reports. First you need to establish a framework for the EIA review, including the following steps (and will be covered in more detail on this page):

- set the scale/depth of the review;
- select reviewer(s);
- use input from public involvement; and
- identify review criteria and aspects to be considered.

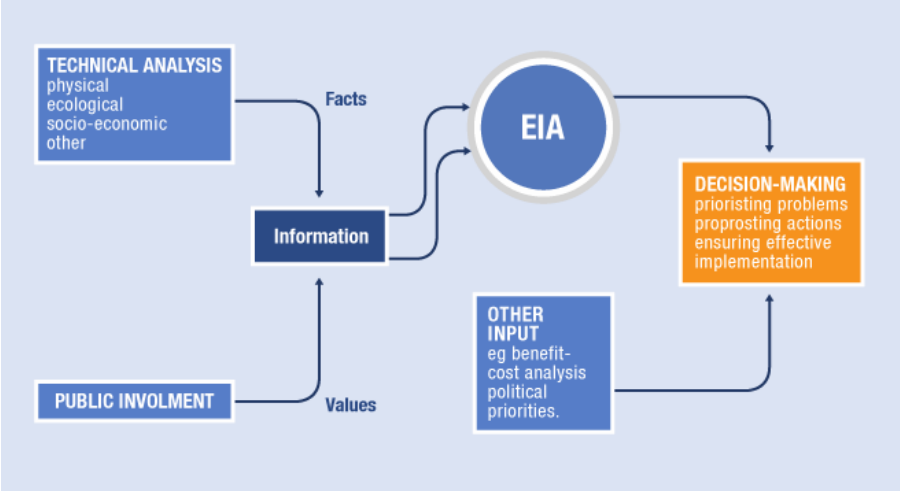
Once you have established this framework for review, you will then need to undertake and report the review, which involves the following steps (and will be covered in more detail on the next page);

- carrying out the review;
- determine how to remedy any deficiencies; and
- report the findings.

2.9 Decision – making

EIA is part of a larger process of decision-making to approve a major proposal. This process is shown in the figure below. It results in a political decision, which is based on information from a number of different sources and involves making a large number of trade-offs. A balance must be struck between the benefits and costs; their environmental, economic and social elements must be weighed, and uncertainties and arguments over the significance of risks and impacts must be addressed. [23]

Figure 3 EIA as a part of decision making process



The factors that will be important in the final approval of a proposal include:

- findings of significant impact contained in the EIA report;
- inputs from economic and social appraisals; and
- other external pressures or political inputs to decision-making.

2.10 Implementation and monitoring (Follow up)

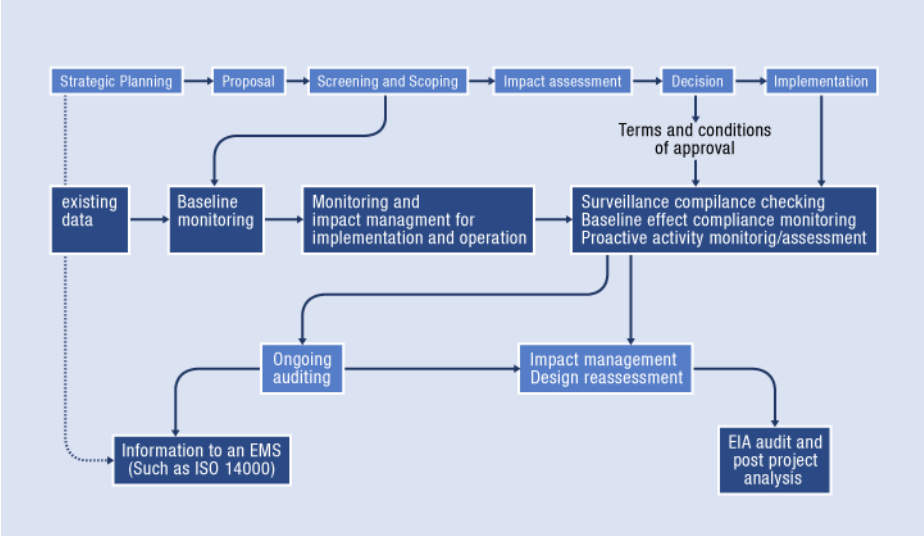
Key objectives of EIA implementation and follow up are to:

- confirm that the conditions of project approval are implemented satisfactorily;
- verify that impacts are within predicted or permitted limits;
- take action to manage unanticipated impacts or other unforeseen changes;
- ensure that environmental benefits are maximised through good practice; and
- learn from experience in order to improve EIA process and practice.

The role and contribution of EIA implementation and follow up are shown in figure above. It illustrates:

- the relationship of EIA implementation and follow up to other stages of the EIA process;
- the stages at which monitoring, auditing and evaluation are typically undertaken; and
- the results and benefits that can be gained from their use.

Figure 4 The role and position of monitoring and management in EIA



The figure also illustrates the importance of early identification of follow up requirements and measures, beginning at the stage of screening and scoping, and adding to them as new information becomes available. Increasingly, the preparation of an environmental management plan (EMP) provides the blueprint for carrying out EIA implementation and follow up. An EMP should include a schedule of actions for this purpose, identify protocols for impact management in the event of unforeseen events and specify the arrangements for the use of surveillance, monitoring, auditing and other procedures.

The key terms of EIA implementation and follow up are:

Surveillance and supervision Surveillance of the implementation of EIA terms and conditions can be undertaken by regular or periodic site inspections to check on compliance, observe progress and discuss issues. Supervision implies a more intensive direction of the environmental performance of on-site activities, ensuring they are carried out in accordance with the environmental management plan and/or contract specifications.

Monitoring - refers to the collection of data through a series of repetitive measurements of environmental parameters (or, more generally, to a process of systematic observation). The main types of EIA monitoring activities are:

- Baseline monitoring the measurement of environmental parameters during a pre-project period for the purpose of determining the range of

variation of the system and establishing reference points against which changes can be measured.

- Effects monitoring the measurement of environmental parameters during project construction and implementation to detect changes which are attributable to the project.
- Compliance monitoring the periodic sampling or continuous measurement of environmental parameters to ensure that regulatory requirements and standards are being met.

Auditing - is a term borrowed from accounting to describe a systematic process of examining, documenting and verifying that EIA procedures and outcomes correspond to objectives and requirements. This process can be undertaken during and/or after project construction, and draws upon surveillance reports and monitoring data. The main types of EIA related audits are:

- Implementation audits to verify that EIA implementation met the conditions of project approval.
- Impact audits to determine the impact of the project and the accuracy of EIA predictions.
- Compliance audits to verify that project impacts complied with environmental standards and regulatory requirements.
- Effectiveness or policy audits to check the feasibility of mitigation measures and the consistency of EIA practice.

Evaluation - Ex-post evaluation involves a policy-oriented review of the effectiveness and performance of the EIA process. It is concerned with the overall balance sheet of an EIA, looking at what it achieved, which aspects were influential, and how the process could be improved. The guiding concepts are:

- Effectiveness the extent to which the EIA process has achieved its purpose(s). Depending on how these are defined, an effectiveness review can be conducted against the terms of reference, the information provided to decision-makers or principles and criteria of EIA good practice.
- Performance the success of the EIA process as measured by its outcomes and results, e.g. the environmental benefits achieved or the effectiveness of mitigation in avoiding or reducing impacts. Surveillance, monitoring and auditing data are necessary for this purpose.

Post project analysis - Usually, a post-project analysis is undertaken once the project has been constructed and is about to enter the operational phase. The term implies a focus on project specific EIA experience, e.g. in relation to dams,

highways, waste disposal sites or power generation. In this context, post-project analysis can include aspects of effectiveness and performance review, using impact and mitigation data from surveillance, monitoring and auditing. [23]

2.11 Comparison of EIA and SEA procedural steps

I go through the whole methodology of Environmental Impact Assessment. My aim was to describe every method used in this assessment. The chapter is really extensive and now I want to show that the Strategic environmental assessment has the same components of the whole process but different levels of detail.

SEA

1. Screening to determine whether the policy, plan, or program requires a formal SEA at this stage of the planning process.
2. Scoping to determine the coverage and level of detail of the SEA.
3. Proponent carries out an assessment of the proposed action, modifying the propsal, where considered desirable, in the light of the SEA findigs.
4. Proponent prepares the SEA report on the finalized draft of the proposed action and submits it in support of the application for approval of the action by appropriate kompetent autority.
5. SEA report is made available fo other environmental authorities and the public fo information and to obtain thein comments.
6. Competent autority takes all relevant information, including the SEA report and the consulation findings, into account in reaching a decision on the proposed action.
7. Arrangements are made, as required, for monitoring the implementation of the action and of its environmental impacts and to undertake and further environmnetal assessments.

EIA

1. Screening to determine whether the project requires formal EIA.
2. Scoping to determine the coverage and level of detail of the EIA

3. Developer carries out an assessment of the proposed project, modifying the propsal, where considered desirable, in the light of the EIA findings.
4. Developer prepares the EIA report on the finalized draft of the proposed project and submits it in support of the application for authoriaztion to the kompetent autority.
5. EIA report is made available to environmental authorities and the public for information and to obtain thein comments
6. Kompetent autority takes all relevant information, including the EIA report and the consulation findings, into account in reaching a decision on the proposed project.
7. Arrangements are made, as required, for monitoring the implementation of the project and of its environmental impacts.

3 The evaluation of carried out EIA/SEA road transport assessment in the Czech Republic

3.1 The description of the evaluation

In this chapter I would like to describe my work on the evaluation of EIA/SEA road transport assessment in the Czech Republic. First of all I started to study the EIA/SEA assessment and I aimed to EIA reports placed on the CENIA websites. The reports involve two main types of road issue:

1. The Road – a construction of new roads, a rebuilding of existing roads, …
2. The Parking place - a construction of new parking places, a rebuilding of existing parking places, …

The total number of first type of reports was 101 reports and the total number of second type of reports was 50. There are tables of the evaluation at the end of this thesis in the section List of appendices. In the following text I will etch in the evaluation of the reports, main aims of my work and results.

Road transport as part of economical development and its ever growing demands on ccupation of land callfor impact assessment on particular components of environment.

The next part of this chapter is concerned with ensuring that content requirements for EIA reports are achieved in EIA systems. The chapter then discusses EIA reports preparation requirements in EIA systems and puts forward a set of evaluation criteria. These criteria are used to assist in the review of EIA report preparation procedures and practice in the Czech Republic. [8]

3.1.1 About Environmental Impact Assessment in Czech Republic

Environmental Impact Assessment (EIA) in the Czech Republic is defined as an action for comprehensive and systematic investigation of the expected effects of proposed projects on environment, above all thein negative ecological impacts.

From the prognosis of environmental quality changes it is possible to devone conditions for optimal alternatives, which are the best combination of economic, social and ecological costs and benefits. The respect of building function in transport system, which have to fulfil relevant trafficengineering criteria, stays the basic factor at the same time.

The environmental impact assessment in the Czech Republic (hereinafter referred to as the EIA and SEA processes) is regulated by Act No. 100/2001 Coll., on Environmental Impact Assessment, as amended, which superseded the original Act No. 244/1992 Coll.

The environmental impact assessment of projects and concepts is based on a systematic investigation and assessment of their possible impacts on the environment. The purpose of the environmental impact assessment is to provide a comprehensive identification, description and evaluation of the expected impact of upcoming projects and concepts on the environment and public health from all important aspects. The objective of the process is to mitigate environmental impact the implementation might have.

The EIA process provides an assessment of buildings, activities and technologies specified in Annex No. 1 to the above Act. Projects assessed within the EIA process include for instance buildings, roads, shop floors, mineral extraction, operating facilities – both newly built and redeveloped (i.e. enlargement, technology changes, capacity increase, etc.)

The EIA is performed before the approval and implementation of a relevant project. The authorising body (such as the Building control department) may not approve a project until an EIA conclusion has been provided.

The SEA process includes concepts specified in Section 3, letter b), and Section 10a, subsection 1) of the Act. The SEA process provides the assessment of a concept at the national (development concepts and programmes), regional (area development plans of big territorial units) and local levels (municipal plans).

EIA and SEA want to achieve:

- To identify, describe and evaluate expected environmental impact of projects and concepts under preparation from all relevant aspects,

- to mitigate the adverse environmental impact of project implementation,
- for high quality EIA and SEA it is essential to take into account the viewpoints and comments of other parties involved in the EIA process (the relevant local self-governing authorities, expert institutions, NGOs, public)
- to clarify the “compatibility” of projects with the requirements of environmental and public health protection and, last but not least, the requirements of an efficient use of the territory applying an expert attitude. [27]

3.2 EIA and SEA Information Systems

Pursuant to Act No. 100/2001 Coll., on Environmental Impact Assessment, the EIA Information System of the Czech Republic helps the authorities designated to assess the environmental impact in compliance with the Act on Environmental Impact Assessment. The system registers business intentions which are assessed and publishes documents related to the process of environmental impact assessment on the Internet as required by the Act on Environmental Impact Assessment.

The information system is used to register activities assessed pursuant to the Act of the Czech National Council No. 244/1992 Coll., which started to be assessed prior to the effect of Act No. 100/2001 Coll. This system will remain in operation as the assessment started prior to the effect of Act No. 100/2001 Coll., on Environmental Impact Assessment and on amendment of related acts, shall be finished in compliance with Act No. 244/1992 Coll., as amended.

Pursuant to Act No. 100/2001 Coll., on Environmental Impact Assessment, the SEA Information System helps the authorities designated to assess the environmental impact in the area of SEA. It registers assessed concepts (national level), regional planning documentation of large regions (regional level) and regional planning documentation of municipalities (local level) and publishes documents made during the assessment of concepts, as required by law.

The EIA and SEA information systems can be accessed on the website of the Ministry of the Environment. The system also includes a list of authorised persons and a section containing regulations relating to the environmental impact assessment.

Information regarding the processes that are in progress is published on official notice boards of the relevant self-governing units (regional councils, municipal councils), in local newspapers and on the Internet. Thanks to the EIA/SEA information systems the public can follow the assessment procedure of new projects and concepts.

The EIA information system (project database) and the SEA information system (concept database) are central for the whole Czech Republic. Relevant authorities are obligated to publish documents in the systems, as stipulated by law.

The information systems also include lists of entities authorised to provide documents and expert opinions, a summary of the legislation related to the assessment process including explanations, and provide other notifications. [27]

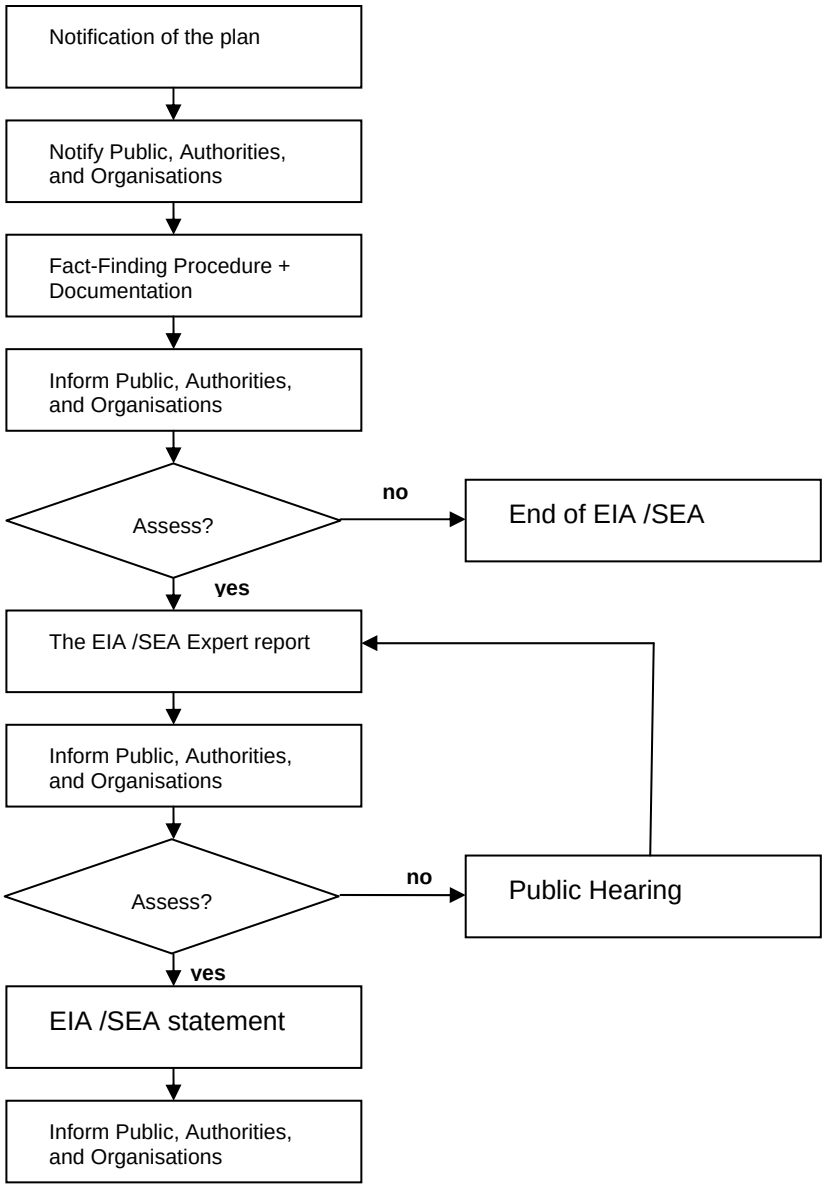
3.3 The EIA process

The process of strategic environmental impact assessment is based on systematic examination and assessment of the potential environmental impact. The purpose of this is to determine, describe and carry out comprehensive evaluation of the expected impacts of prepared plans of the environment and public health in all the decisive contexts. The process is intended to reduce the detrimental environmental impacts of the evaluated plan. The results of the process are employed as a professional basis for subsequent decision-making processes on a permit for the plan. [28]

Figure 5 Procedure scheme of SEA in the Czech Republic [15]

No. of steps	Name of steps	General steps of plan	Process chart of SEA	Public participation
1.	ANNOUNCEMENT	Statement about concept and announcement processing	ANNOUNCEMENT PROCESSING	Publication of announcement
2.	SCREENING	Processing of concept framework	PROCESSING OF OBJECT AND SCOPE OF CONCEPTION	Publication of screening process
3.	PROCESS OF ENVIRONMENT IMPACT ASSESSMENT - EVALUATION	Initialisation work on concept proposal	CHOOSING OF SEA COMPILER	Publication of SEA compiler
4.		Study of interest area/sector	ASSESSMENT OF STUDY OF INTEREST AREA/SECTOR	Publication and comments
5.		Proposal of strategic targets and priorities for interest area/sector	ASSESSMENT OF ENVIRONMENT PRESERVATION OBJECT	Publication and comments, public workshop
6.		Proposal of steps and activities for interest area/sector	ASSESS OF PROPOSED STEPS, CONCEPT ACTIVITIES	Publication and comments, public workshop
7.		Proposal of implementation and monitoring of concept	ASSESS OF IMPLEMENTATION AND MONITORING OF CONCEPT	Publication and comments
8.	DRAFT OF CONCEPT	Processing of final draft of concept	ELABORATION OF SEA DOCUMENTATION	Publication and public discussion concerning to draft of concept and SEA documentation
9.	STATEMENT OF CONCEPT PROPOSAL	Delivery of worked documentation to proposer	DELIVERY OF SEA DOCUMENTATION TO PROPOSER	Publication of SEA documentation and the statement
10.	PUBLICATION, RESPECT OF STATEMENT AND COMMENTS	Approval of concept and the statement of the state bodies		Publication
11.	MONITORING AND ANALYSIS OF COCEPT UP TO ENVIRONMENT AND HEALTH	Implementation and monitoring of effects	MONITORING OF EFFECTS UP TO UP TO ENVIRONMENT AND HEALTH	Publication of effects

Figure 6 The flow chart of the EIA / SEA procedure in the Czech republic



3.4 The quality of EIA documents

If the treatment of the environmental impacts of alternatives is at the heart of the environmental impact statement, the EIS is itself at the heart of the EIA process. There can be no meaningful EIA without the preparation of a report or reports documenting the findings relating to the predicted impacts of the proposal upon the environment. Canter (1996) suggested that the preparation of EIA reports is perhaps the most important activity in EIA, as their findings are utilized by decision-makers, government agencies and public alike. In effect, the EIA report is the face of the EIA process. Despite an enormous literature on EIA

methods, few jurisdictions specify how the findings presented in EIA reports should be derived. They do, normally specify the minimum content of the EIA report and frequently indicate procedures which must be followed in the preparation of the report (for example. The making available of information by the relevant authorities). [8]

The reports are more or less very similar because the companies compiling the reports must formilze the whole process of working according to the Law. I monitor the main Environmental indicators that were included in the EIA reports. I wrote down the indicators and seek them in particural reports.

From my point of view the reports are high-quality. The documents can prepare only experts which have permission to make it. Lists of persons who are holders of authorisation to prepare documentation and expert reports are regularly published in the Bulletin of the Ministry of the Environment.

But the whole procedure of EIA /SEA in the Czech Republic is very simply compared with other countries in the Europien Union and not only these, but other countries from all over the world.

The steps of procedure of EIA [10]

Notification

The person who intends to implement a plan (notifier) shall be obliged to submit a notification of the plan to the relavant authority. The requisites of the notification are laid down in Annex No. 3 to the Act 100. If the plan is involved that is subject to assessement pursuant to Annex No. 1 to the Act, the notifier must always give an indication of the studied main variants and key reasons for its choice in relation to the environmental impact.

If the notification contains the requisites, the relevant authority shall, within 10 working days of obtaining the notification, send a copy thereof for a viewpoint to the affected administrative authorities and affected territorial self-governing units. Within the same period of time shall provide for making public of information on the notification and shall further publish the textual part of the notification on the Internet. Every person may send his (her) written opinion on the notification to the

relevant authority within 20 days of the day of making public of information on the notification.

Fact-Finding Procedure

The objective of the fact-finding procedure is to refine information the should be included in the documentation on the environmental impact, in relation to

a. The nature of the specific plan or kind of plan,
b. Environmental factors tha could be affected by implementing the plan,
c. The current state of knowledge and assessment methods.

The fact-finding procedure shall be commenced and carried out on the basis of notification and the viewpoints obtained theron, and pursuant to the points of view and factors. After completing the fact-finding procedure, the relevant authority shall immediately send the written conclusions to the notifier, the affected administrative authorities and affected territorial self.governing units and shall publish it. If a notification was submitted with requisites purusuant to Annex No. 4 and the relevant authority did not obtain any justified negative viewpoint therefon, it may lay down in the conclusion that documentation need not be prepared and the notification shall be considered to constitute the documentation. Otherwise, on the basis of the viewpoint, the relevant authority shall lay down in its conclusion how the notification should be prepared so that it can replace documentation.

Documentation

On the basis of the notification, viewpoints on the notification and the conclusion to the fact-finding procedure, the notifier shall provide for preparation of documents. The requisites of the documentation are set forth in Annex No. 4 to the Act. The follow-up procedure is very similar to the notification – sendig the documentation for a viewpoint to the affected administrative authorities and affected territorial self-governing units, publishing always at least the textual part of the documentation on the Inerent.

The Expert report

The relevant authority shall provide for preparation of the expert report on the basis of an agreement with a person authorized therefore. The person preparing the expert report shall this report on the basis of the documentation or notification and all the viewpoints submitted thereon. The requisites of the expert report are set forth in Annex No. 5 the Act. A person who participated in preparing the notification or documentation may not participate in any way in preparation of the expert report. On the basis of recommendations of the person preparing the expert report, the relevant authority may return this documentation to the notifier for reworking or supplementing.

The person preparing the expert report shall send the expert report to the relevant authority. If the expert report conatins the requisites, the relevant authority shall send it to the notifier, the affected administrative authoriies and affected territorial self-governing units. It shall publish the expert report on the Internet and ensure that information on the expert report on the plan is published.

Every person shall be entitled to send the relevant authority a written viewpoint or to express an opinion thereon at the public hearing. If relevant authority obtained a negative viewpoint on the documentation or expert report, it shall provide for a public hearing of the expert report and simultaneously of the documentation. The person preparing the expert report shall deal with received written viewpoints on the expert report and the viewpoints raised during the public hearing and, if appropriate, modify the draft statement on the basis of these viewpoints.

Statement on the Enviromental Impact Assessment of Implementing the Plan (the Draft conception)

On the basis of the documentation or notification, expert report and public hearing and the viewpoints submitted thereon, if appropriate, the relevant authority shall issue a statement on environmental impact assessment of the plan. The requisites of the statement are set forth in Annex No. 6 to the Act. The relevant authority shall send the statement to the notifier, affected administrative authorities and affected territorial self-governing units. It shall publish the

statement on the Internet and shall ensure that it is made available to the public. The statement shall be a basic expert document for issuing a decision or measure pursuant to special regulations. The statement shall be submitted by the notifier as one of the basic documents for related procedures or processes pursuant to special regulations.

Preliminary Hearing

If so requested by the notifier or submitter prior to submitting the notification, the relevant authority and the affected administrative authorities shall be obliged to discuss the proposed plan or conception with the notifier or submitter and deliver to him (her) the results of a preliminary hearing with other affected administrative authorities, affected territorial self-governing units and, if appropriate, with other entities.

Publication of information on Documents Obtained during the Assessment and on Public Hearing

a. The relevant authority shall ensure that information is published on
b. The notification and when and where it may be perused,
c. The place and time of holding the public hearing pursuant to the Act
d. Returning documentation for reworking or supplementing
e. The documentation and on when and where it may be perused,
f. The expert report and on when and where it may be perused,
g. The notification of a conception and when and where it may be perused
h. The draft conception and when and where it may be perused,
i. The consultation within transboundary assessment.

The relevant authority shall also ensure that the conclusion of the fact-findig procedure, the statement and statement on a conception are published.

The Public Hearing

The relevant authority shall be obliged to publish information on the public hearing. The relevant authority may terminate the publich hearing in case of

failure to participate on the part of the notifier or person preparing the documentation or expert report. The relevant authority shall draw up minutes of the public hearing, which shall contain in particular information on participation and the conclusions of the hearing, and shall also prepare a complete stenographic recording or audio-recording thereof.

Scope of the Assessment

The assessment shall comprise the impacts on public health and the impacts on the environemnet including impacts on fauna and flora, ecological systems, the soil, the geological environment, water, air, climate and landscape, natural resources, tangible property and cultural monuments, delimited by special regulations and on the mutual interaction and connections between them.

3.5 Comparison

The format of reports appears from the Law. 100 The subject of the assessment pursuant to this Act are plans set forth in Annex No. 1, Category I, which shall always be subject to assessment and plans set fourth in Annex No. 1, Category II, if so laid down in a fact-finding procedure pursuant to § 7.

The proposals that are always subjected to EIA are identified in an Annex to the Act. In the field of transport infrastructure the following are mandatory EIA projects:

- New railways longer than 1 km;
- Airports with a runway longer than 2100 m;
- New constructions, widening and re-making of motorways;
- New constructions, reconstruction and re-making of roads unlisted in previous point, with four or more traffic lanes, longer than 10 km;
- Waterways including weirs and other floodgates and
- Loading and unloading points for inland shipping with displacement over 1,350 tons.

Other proposals that require screening procedures to be applied are also listed in an Annex. [15]

The assessment includes deteriming, description, assessment and evaluation of expected direct and indirect environmental impacts of implementing or not implementing the plan. The environmental impacts of the plan are assessed on relation to the state of the environment in the affected territory at the time of submitting notification of the plan. In assessing a plan, the impact on the environment shall be assessed for its preparation, implementation, operation and termination, including the results of liquidation therof, as appropritate, and also decontamination or reclaiming of the area, if the obligation of decontamination or reclaiming is laid down by a special regulation. Both normal operations and the possibility of accidents shall be assessed. Assessment of plans shall also include a proposal for measures to prevent detrimental impacts on the environment through implementation of the plan, to prevent, reduce, mitigate or minimize such impacts, or to increase the favourable impacts on the environment of implementing the plan, including evaluation to the expected effects of the proposed measures.

Final main results:

- quantitative indicators are used mainly for emissions, landtake and noise
- impacts are often only described, any quantitative indicator is not used
- several impacts (e.g. from chain of causalities) are not mentioned within these EIAs
- comparison of variants is subjective (only preferred by author report)

3.5.1 Description of Environmental Indicators

The starting point is to consider the evaluation of transport infrastructure options from the viewpoint of sustainable development. This requires the explicit consideration of environmental, economic and social aspects in a single framework. Within the development of this framework the focus is on the environmental impacts of traffic and transport infrastructure, distinguishing between global environmental impacts (for example related to climate change

and use of resources); impacts on fauna and flora); and impacts on the human environment (such as health effects, noise nuisance and safety).

Indicators describe the condition of the system to be evaluated. They are the ’measuring rods’ to quantify the impacts. At least one indicator should be defined for each relevant impact, which ideally would directly reflect the extent of the impact it represents. In support of the decision-making process, indicators may also be used in more specific ways, for example to define targets, limits or standards. There is quite a variety in existing definitions and specifications of the more detailed types of impacts and indicators. Therefore, the identification and evaluation of existing typologies, definitions and assessment methods is very difficult to describe.

Impacts relate to all relevant, positive or negative, intended and unintended effects brought about by transport infrastructure planning options. Indicators are used to express these effects in quantitative terms. In particular, the indicators could serve as the measuring rods to determine whether desired objectives are achieved by the plans or programs considered.

Table 4 provides an overview of the more general effects, referred to as ’source effects’ (listed on the vertical axis) of transport infrastructure in relation to the more specific impacts to be potentially considered (shown on the horizontal axis).

Table 4: Overview of potentially relevant impacts (COST 350)

Effects of transport infrastructure	Environmental impacts		Social impacts	Economic impacts
	Related to natural environment	Related to human environment		
Global adverse effects				
Climate change	x	x	x	x
Ozone depletation				
Non-renewable energy consumpti				
Use of material resources				
Regional / local adverse effects				
Air pollution	x	x		x
Water pollution	x	x		x
Soil pollution	x	x		x
Waste production	x	x		x
Noise muisance / vibration	x	x		x
Traffic accidents	x	x		x
Barrier effects / land fragment	x	x		x
Land uptake	x			x
Soil erosion	x			x
Hydrologic / hydraulic risks	x	x		x
Landscape, visual effects, aesthetics, cultural heritage		x		x
Other direct effects			x	x
Indirect effects			x	x
Distributional effects			x	

For this purpose, the source effects of transport infrastructure have been distinguished within a number of 'effect groups' as follows:

- Global adverse effects: these are the adverse effects which are basically non-area specific (such as climate change and resource use).
- Regional/local adverse effects: adverse effects which are area or location specific (such as pollution, noise, safety and spatial effects).
- Other direct effects: these include the immediate effects of the improvement or expansion of transport infrastructure in terms of enhanced accessibility and mobility (such as time and cost savings).
- Indirect effects: the indirect, positive and negative impacts following from transport infrastructure availability and capacity such as: improvement of development potential; employment opportunity; but also depreciation of property values.

- Distributional effects: effects related to the distribution of positive and negative impacts across the population of different impact areas, or across various groups and layers of society.

It was concluded that the impact assessment methods to be developed for SEA should, where relevant and possible, be consistent with EIA. For certain impacts/indicators this could lead to a situation where in SEA and EIA the same definitions and assessment principles could be applied at different scales and different levels of detail. Clearly, the advantage of such a situation would be that further methodological developments in the Cost Action could draw upon the knowledge and experiences from the EIA history.

Emissions of relevant air and water and soil pollutants, waste production, noise and traffic accidents all relate to traffic volumes (vehicle-km) and vehicle characteristics (emission factors, life cycles, safety characteristics). Barrier effects, land uptake, soil erosion, hydrologic and hydraulic risks follow from the location, alignment, configuration and technical characteristics of planning options (e.g. tunnels or fly-overs versus ground level infrastructure). Land uptake is also directly related to specific dimensions (length and width) of infrastructure. Visual effects are related to infrastructure height.

The actual impacts of these types of effects also strongly relate to the characteristics of the natural and human environment in affected zones, in terms of e.g. flora, fauna, habitats, population, houses, human activities, etc. Obviously, the first order and more sophisticated assessment of these types of impacts and indicators according to existing methods all require a degree of area or location specific information that may or may not be available at the planning levels considered. [29]

4 The Proposal of methodology

4.1 The Act

The Environmental Assessment Act is the legal basis for the public environmental assessment process.

The Act should set out the responsibilities and procedures for carrying out the environmental assessments of projects which involve government decision making. A number of regulations should be established under the Act. [20]

Concepts and developing plans are regulated by the new Act No. 93/2004 Coll. with the “Guideline for Environmental Assessment for Conception” entered into force on 1st May 2004.

The objective of this new legislation was the creation and unification of relationships between EIA and SEA both at a national and international level. The procedure for SEA has similar procedures to that of EIA and is summarised on the attached diagram. [15]

4.2 Institutional and Regulatory Framework

In the context of the Act, the term government authority refers to a government body (e.g., a department or agency) that may have expertise or a mandate relevant to a proposed project. Ministers, departments, departmental corporations and agencies of the Government of Czech republic are state authorities.

There are the environmental regulations with various significant responsibilities relating to environmental protection and improvement. The basic idea is to reinforce the need for the sector to plan, protect and enhance prudently the environmental resources for a better environment.

The need to control new installations or projects with capacity to degrade the environment was also identified. The government should adopt a strategy that guarantees an integrated holistic and systemic view of environmental issues that leads to prior environmental assessment of proposed activities.

Environmental impact assessment (EIA) should be one of the most rigorous tools of environmental protection that should minimaze the negative impacts of planned projects. A common sense of the EIA process can be expressed in such a way that it should lead to obtain objective evidence for determining whether the proposed project in a particular locality is allowed (with regard to the level of its current and projected load). If it is allowed, the possible options and particular conditions should be used.

In practice, this essential task of the EIA process often fails in the Czech Republic. There are many causes; many of them are related to wrong fulfilling of the requirements of the poor "EIA Directive". Examples are such projects with assessment in parts instead of complex (typical in particular for the transport construction), disregarded the effects of simultaneous exposure to different projects or inadequate assessment of alternaties.

In addition to these major shortcomings related to the requirements of the Directive in practice occur and more. A number of years old projects with outdated statemants are often aloowed. [33]

4.3 Environmental Impact Assessment System

The principal legislation is The Act No. 100/2001 Coll. and 93/2004 Coll., which made EIA mandatory for both public and private sectors for all development projects. It has three goals how these are to be achieved. The goals are:

- Before any person or authority takes a decision to undertake or authorize the undertaking of any activity that may likely or significantly affect the environment, prior consideration of its environmental effects should first be taken.
- To promote the implementation of appropriate procedures to realize the above goal.
- To seek the encouragement of the development of reciprocal procedures for notification, information exchange and consultation in

activities likely to have significant trans-state (boundary) environmental effects.

The minimum requirement of an EIA report includes not only the description of the activity, potential affected environment, practical alternative, and assessment of likely or potential environmental impacts, but also identification and description of the mitigation measures, indication of gaps in knowledge, notification of trans-state adverse environmental effects (if any) and a brief non-technical summary of all the above information.

Impartial and written decisions indicating mitigation measures based on a detailed examination of environmental effects identified in the environmental impact assessment (after an opportunity within an appropriate period had been given to the stakeholders and the public for their comments) is made available to interested person(s) or group(s). It provides, where necessary, that potentially affected States or Local Government Areas are notified.

4.4 Process and procedural framework

The EIA process is the various stages a project undergoes from proposal to approval for implementation, resulting in the issuing of an Environmental Impact Statement (EIS) and certificate.

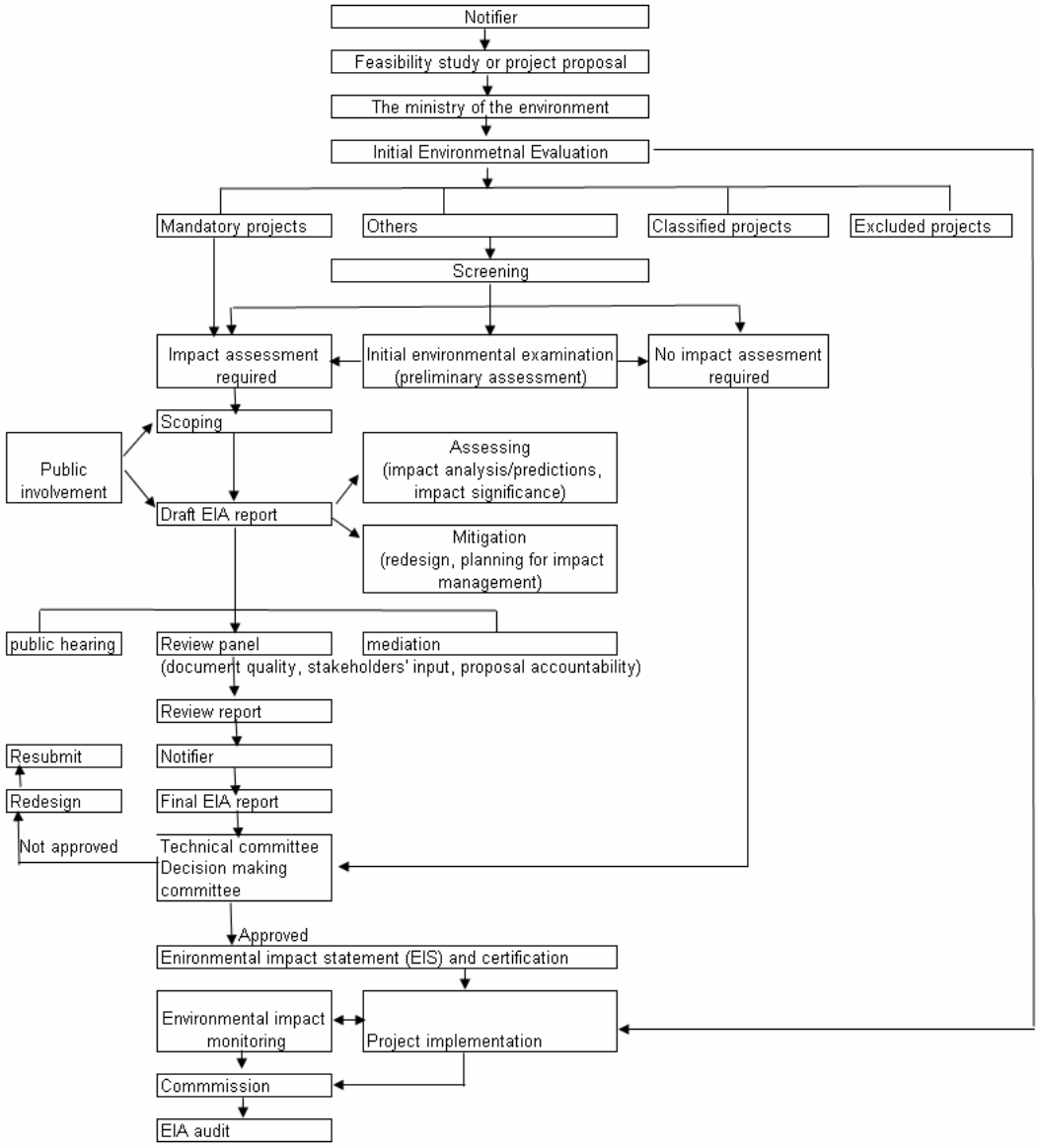
The term encompasses several stages:

- determining if environmental laws/regulations have been triggered;
- screening a project for potential environmental effects;
- scoping to determine the spatial and temporary dimension of environmental effects;
- carrying out detailed base line studies to determine the environmental condition prior to project implementation;
- preparing a detailed assessment report;
- carrying out a panel review of the EIA report if this is necessary; and
- obtaining authorization/approval, where appropriate.

According to the studied literature The Procedural Guidelines show practical steps from project conception to commissioning (see Figure 7). The steps are:

- project proposal
- initial environmental examination (IEE)/preliminary assessment
- screening
- scoping
- EIA study
- review
- decision making
- monitoring, and
- auditing.

Figure 7: Flow chart of EIA procedures



The proponent initiates the process in writing to the responsible officer. A notification form is duly completed with all relevant information on the proposal. Using the criteria of:

- magnitude – probable severity of each potential impact;
- prevalence/extent and scope – extent to which the impact may eventually extend;
- duration and frequency – is activity short term, long term or intermittent;
- risks – probability of serious environmental effects;
- significance/importance – value attached to a specified area; and
- mitigation – measures available for associated and potential environmental effects

The authority does internal screening to determine the project's category under the mandatory study activities list.

Where no adverse environmental effects exist, the EIA is issued and the project commences with appropriate mitigation and monitoring measures. The screening report is sent to the proponent for scoping and the preparation of Terms of Reference (ToR). The ToR embodies the scope of the proposed EIA study and this is examined and the scope of the study defined accordingly by the government authority. The proponent carries out the study, generally using consultants, and the draft EIA report is submitted to the responsible officer. For this draft report to be complete it must as an annex record the results of public participation in a public form.

The government authority concludes evaluation of the draft and determination of the review method which it communicates to the proponent in writing. The four methods are:

- In-house review.
- Panel review (sitting may be public).
- Public review – an elaborate display of the report for some period of time with appropriate display venues chosen for the convenience of the

public stakeholders and communities. Through newspaper advertisement the government authority invites interested groups /persons to participate.

- Mediation.

After this part follows review process, review comments are furnished to the proponent. In this review stage, the public participates only when the government authority is chosen method of review guarantees its participation.

The final EIA report, addressing and proffering answers to review comments, is submitted within some period of time to the responsible officer. At this early stage, and on mutual agreement, the government authority and the proponent set conditions establishing a follow-up program (mitigation, compliance and monitoring plan), a monitoring strategy and audit procedure. A ‘no project’ decision is communicated to the proponent if the review comments are adverse and/or improperly addressed in the final report and the final EIA report is unsatisfactory. The decision-making body is the the government authority technical committee.

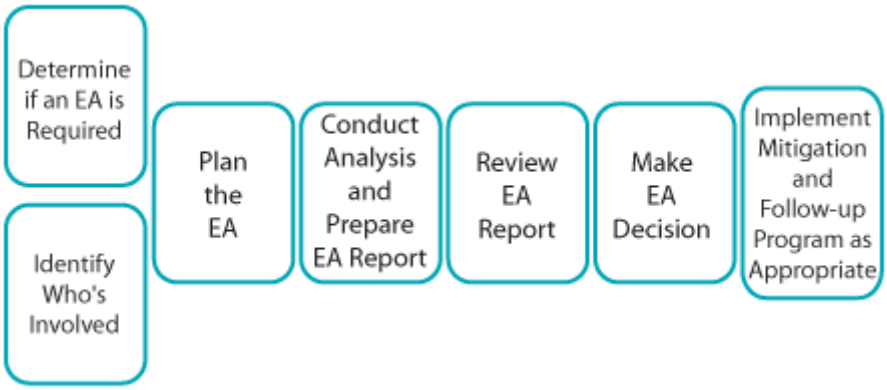
After the receipt of a final EIA report which has been adjudged as satisfactory, the committee approves and issues the Environmental Impact Statement (EIS) followed by certification by the responsible officer complete with appropriate conditions and with a validity period. Armed with the certificate, the proponent commences the project subject to the conditions and specifications contained in the EIS. If the project is not commissioned within the validity period on the certificate a revised and updated EIA report becomes necessary for revalidation.

The progress of the project is monitored to ensure compliance with all conditions and mitigation measures. Environmental audit, assessing both positive and negative impacts of the project, is carried out periodically.

The EIA study team usually is a multi-disciplinary panel of experts and the report is prepared using a systematic, interdisciplinary approach incorporating all relevant analytical disciplines to provide meaningful and factual data, information and analyses. The presentation of data should be clear and concise, yet include all facts necessary to permit independent evaluation and appraisal of both the

beneficial and adverse environmental effects of alternative actions. The detail provided should be commensurate with the extent and expected impact of the action and the amount of information required at the particular level of decision-making. [33]

Figure 8 The main steps of EIA



1. Determine if an environmental assessment is required - A government authority determines whether it has a responsibility to ensure that an environmental assessment is conducted.

2. Identify who's involved - The responsible party, called a responsible authority:

- notifies other federal parties to determine whether they may have responsibilities to ensure the conduct of an environmental assessment
- contributes expert information

3. Plan the environmental assessment - The responsible authority(ies) determine how the environmental assessment will be conducted. For example, they identify the:

- scope of the proposed project
- scope of the factors that must be considered in the environmental assessment
- time lines

4. Conduct the analysis and prepare the environmental assessment report - One or more qualified environmental assessment practitioners identify the

potential environmental effects and measures to mitigate those effects. The findings are presented in a written report.

5. Review environmental assessment report - The responsible authority(ies) reviews the report for adequacy and accuracy, and may have others review the report as well.

6. Make environmental assessment decision - Based on the findings of the report, the responsible authority(ies) decides whether adverse environmental effects are likely to be significant. This decision is taken into account when determining whether the proposed project should proceed.

7. Implement mitigation and follow-up program, as appropriate - If the proposal is to be carried out, the mitigation measures identified in the report are incorporated into the design plans and implemented with the project. Where required or appropriate, a follow-up program is also designed and implemented to verify that the environmental assessment was accurate and the mitigative measures were effective. [20]

4.4.1 EIA report preparation [8]

Virtually every EIA system possesses a requirement that an EIA report must describe the proposed action and the environment affected, forecast the significant impacts likely to result from the implementation of the action, and present a non- technical summary. There is also generally a provision that EIA reports contain other material, such as discussion of the alternatives considered and of mitigation measures. The preparation of this information requires the use of wide variety of methods and techniques.

The EIA process is cyclical and the nature of the action is continually refined as its design progresses. Design work is costly and, because approval is not certain when EIA is undertaken, there is a temptation for the proponent to prepare EIA reports on the basis of designs which are insufficiently detailed to allow forecast to be prepared with accuracy. The decision-making and environmental authorities, however, should be seeking a realistic estimate of impacts which ma necessitate more detailed design (and more expense) than the proponent originally contemplated. Whatever degree of detail is finally determined

to be appropriate, the EIA report represents no more than a record of the impacts forecast to arise form the proposal as developed at a particular point in time. Because the impacts arising from the proposal are likely to change throughout its development, this record should be made as late as possible, i.e. it should represent the nature of the proposal immediately prior to the submission of the EIA report rather than at the initial design phase.

Additional information may need to be gathered by observation and measurement, but only after the purpose of this information has been carefully considered. In addition to having a clear objective in EIA report preparation, any specific pre-project baseline studies should also provide the basis for post-project monitoring. Data on the existing environment should, of course, be collected early enough to use it as an input into the design process. Only information directly relevant to the forecasting of impacts should be included in the EIA report and, even then, much of it may be most appropriately presented in the form of appendices. Information on the likely magnitude of the impacts of the proposed action on the environment should be presented in the EIA report in as precise, objective and value-free manner as possible. Clearly, it is necessary to distinguish between the nature, extent and magnitude of an impact (for example, forecast dust levels will vary with distance from the source and disappear when emission cease).

4.5 Recommendations

The Czech Republic has taken serious steps to develop effective environmental strategies by the promulgation of the EIA Act and all the procedural guidelines.

To be relevant the regulators (administrators) should be better supported and, for effective compliance monitoring and enforcement, stiffer sanctions and penalties should be prescribed and strictly adhered to. These way environmental requirements will be met and maintained. Compliance should be tied to renewal of licenses and consents and proponents should ensure that staffs are highly motivated with adequate equipment and capacity building programs vigorously pursued not only by the administrators but also the proponents. The

administrators should invest more in capacity building, staff motivation and provision of conducive work environments together with the necessary facilities. The government in this regard should make funds available to the secretariat. Otherwise, they become exposed to monetary inducements leaving compliance in the hands of the proponent. This is unhealthy. With basic knowledge of their responsibilities they could become more efficient and effective in improving the quality of EIA report.

Public participation is not statutorily protected yet current realities have encouraged public involvement as the communities have become aware of the need to protect the environment. Though largely illiterate and poor, and thereby vulnerable to monetary inducement in the hands of unscrupulous proponents, nevertheless their knowledge of the locality can enhance the process. In this regard the law should be reviewed.

There will be prompting a demand for a repeat of the EIA study by the proponent, with its attendant resources wastes. The illiterate public, left to the mercy of the proponent, is misled. The proponent should provide assurance that the required regulations are met, using concepts of self-regulation, goal-setting and negotiated agreements to complement prescriptive legislation.

The efforts of the environmental NGOs ought to be stepped up in the area of continuous capacity building of their members so that they can participate efficiently and meaningfully in public forums thereby enhancing the quality of the EIA report and the decisions taken arising from them.

The Ministry of Justice in conjunction with the States, environmental NGOs and interested groups and companies, should develop an integrated, co-ordinated and comprehensive legislation on the environment, removing rivalries, bureaucratic bottlenecks and areas of overlapping, duplication and confusion. [16]

Proposed indicator structure should address every participant of assessment processes by its unique access. EIA/SEA or other tools (directives, legislation, regulations, programmes) should be used not only in stage of planning

(preparatory) and stage of approval transport elements use but in transport operation as well.

EIA/SEA should have strict rules for evaluating transport that includes every possible impact under specific conditions (non existing impacts should be explicitly denied). Assessing methods of transport project variants should eliminate subjective access as much as possible (mathematical, statistical methods etc.);

Important point of use of EST indicators for planning and decision making includes in advance prepared procedures (methodic guide) that can lead decision makers to independent results. The use of computing methods (prepared software) for impacts evaluation is recommended for different participants, transport stages (time&space) and EIA/SEA procedures.

5 Conclusion

My diploma thesis topic was the evaluation of EIA/SEA processes carried out in the Czech Republic focused on a road transport. The aim of the thesis was to describe the Environmental Impact Assessment and the Strategical Environmental Assessment in the Czech Republic and analyse the process of the EIA reports focused on a road transport.

Before actual processing of the Diploma thesis it was necessary to recognize well the topic of EIA /SEA. The literature overview summarizes basic terms and laws related to the environmental impact assessment. Without knowledge the process, procedures, and methodology of EIA / SEA there would be impossible to define satisfactory results. It was necessary to study literature to ensure to do suggestion without them I would not be able to finalize the thesis.

In the theoretical part there was introduce EIA /SEA processes generally with history overview. There was more information about mainly EIA methodology in the second chapter. I followed all required steps to create EIA procedure and the result of this procedure is the EIA report.

The content of the practical part was a research of EIA reports focused on a road transport. For the research were used some methods. Results of these methods formed background data for conclusion and recommendation which are summed in chapter five.

To reach the objective of the thesis I evaluated the EIA process by monitoring of 150 diffrenet EIA reports according to environmental indicators. The objective is to find the best methodology acceptable for the Czech Republic when assessing the laws, literature and procedural guidelines. During my research and assessment I followed the directions and recommendations specified in EU and Czech laws concerned with environment.

It is resulted that quantitative indicators are used mainly for emissions, landtake and noise and the siginficant impacts are often only described. There is no sophisticated study or research. Any quantitative indicator is not used. The comparison of alterntives is subjective (only preferred by an author of report).

It is recommended that EIA/SEA or other tools (directives, legislation, regulations, and programmes) should be used not only in stage of planning (preparatory) and stage of approval transport elements use but in transport operation as well. The use of computing methods (prepared software) for impacts evaluation is recommended for different participants, transport stages (time&space) and EIA/SEA procedures.

The public participation is very important part of EIA process; people have become aware of the need to protect the environment.

These recommendations are based on the study the nature of EIA /SEA in the Czech Republic and also other countries over the world. To follow these recommendations is the first step to achieve high quality of EIA reports; the next step is evaluation of all aspects of the reports according to specifications. I assessed differences between countries to find out which processes of EIA will be most suitable. Unfortunately, it was not possible to assess accurately effectiveness of the processes so I only used the available information based on the study.

List of tables

List of pictures

List of used literature

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List of apendices

Apendix 1: Road projects

	EIA - CODE	Project title	Specification	Type	Emissions Air	Climate	Water	Soil pollution	Safety/ hazards	Noise and vibration	Waste	Land use	Description of natural conditions	Fauna, flora, ecosystem	Landscape	Archeology/Cultural Heritage	Sources of raw materials	Special impacts on	Something more	Company (Employer)	Year	Name of author	Cooperation
	XXX820	Komunikace R43 varianta úseku dálnice D1 - Kuřim	new motorway, length 9 km	documentation	NOx, O3	descr.	descr.	descr.	descr.	study													
	6XX852	Brno Velký městský okruh (VMO) Žabovřeská		documentation																			
1	PAK329	Modernizace silnice II/357 Vysoké Mýto - Choceň	communication, a repair of a drainage systems, construction of the	documentation	no change,Nox, benzene,SO2,CO, PM10	descr.	descr.	descr.	descr.	tatní bez po	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		Synthesia, a.s., oddělení životního prostředí	leden 08	Pozděna Petr Ing.	
2	HKK396	Přeložka silnice III/31910 Rokytnice v Orlických horách	the road construction of communications and buildings, the restoration of	documentation	Nox,CO,benzene,benzo(a)pyrene,PM10,TZL,suspended particulate matter □	descr.	descr.	descr.		study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	záření radioa	EKOTEAM	březen 08	Ludvík Vladimír RNDr.	
3	ZLK362	Silnice II/497 Šarovy - Březolupy	adjustment of direction and speed management infrastructure	documentation	Nox,benzo(a)pyrene,PM10,TZL,	descr.	descr.	descr.	descr.	study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		DOPRAVOPROJEKT Ostrava spol. s r. o.	únor 08	Ing. Aleš Hanslík, Ing. Petr Gřunděl	NENÍ ZPRACOVÁNO AUTOR
4	MSK1047	Silnice I/11 Opava, severní obchvat-západní část	of the Northern bypass of the town Opava	documentation	CO, NOx, NO2, PM10, C_6H_6, $C_{20}H_{12}$	descr.	descr.	descr.	descr.	study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		Paciorková - EPRO	březen 08	Paciorková Jarmila Ing.	spol.s r.o. EnviRoad s.r.o.
5	VYS328	Rekonstrukce silnice II/152 Jaroměřice – Hrotovice – hranice kraje, 1.stavba	reconstruction of road 2 359 m	documentation	suspended particles (PM10),SO2, NO2, Benzo(a)pyrene		descr.	descr.	descr.	study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		DOPRAVOPROJEKT Ostrava spol. s r. o.	únor 08	Ing. Radana Piechová, Ing. Petr Gřunděl	NENÍ ZPRACOVÁNO AUTOR
6	OLK368	Silnice I/55, Přerov - průtah centrem	road construction 826 m	documentation	benzene,PM10, Nox	descr.	descr.	descr.	descr.	study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		MOTT MACDONALD Praha, spol. s r.o.	leden 08	Marek Přemysl RNDr.	
7	ULK415	Silnice I/27 Žiželice - MÚK R6 Kolešov	road construction 25,3 km.	documentation	Nox, CO,SO2,Ben	descr.	descr.	descr.		study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		EIA SERVIS, s.r.o.	listopad 07	Vyhnálek Vojtěch RNDr.,CSc.	
8	HKK388	Přeložka silnice II/286 – Jičín Robousy – Valdice	implementation of relocation of the road 3.4 km	documentation	benzene,PM10, Nox	descr.	descr.	descr.	descr.	study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	záření radioa	EMPLA, spol s r.o.	prosinec 2007 - leden 200	Plachý Vladimír Ing.	
9	ZLK370	Silnice II/487: Ústí u Vsetína - Huslenky	road reconstruction 6 km	documentation	NOX a NO2,PM10,secondary dust, S	descr.	descr.	descr.	descr.	study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		DOPRAVOPROJEKT Ostrava spol. s r. o.	březen 07	Ing. Aleš Hanslík, Ing. Petr Gřunděl	NENÍ ZPRACOVÁNO AUTOR
10	PAK312	Modernizace silnice II/315 Loučky - Hrádek	road reconstruction 8,13 km	documentation	NOX a CO,tzl,SO2,	descr.	descr.	descr.	descr.	study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		DAVOS Ing. Dalibor Vostal	říjen 07	Vostal Dalibor Ing.	
11	MSK913	Rekonstrukce silnice III/48415 v úseku Zlatník - Vísalaje	road reconstruction 3,220 km	documentation	NOX a NO2,SO2, Benzo(a)pyrene		desr.	descr.	descr.	study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		Ing. Jarmila Paciorková - EPRO	srpen 07	Paciorková Jarmila Ing.	Dopravoprojekt Ostrava, spol.s r.o. Ing.Radim Seibert, AZ
12	HKK387	Silnice II/284 – Lázně Bělohrad – Vidoň, zesílení vozovky a úprava směrového	gain ground and change direction routing 4,2 km	documentation	NOX a CO,PM10, benzene		desr.	descr.	descr.	study	descr.	descr.		descr.	descr.	descr.	descr.	descr.		RNDr. Tomáš Bajer, ECO-ENVI-CONSULT	leden 08	Bajer Tomáš RNDr.,CSc.	
13	MZP208	Exit 4 D1 a dopravní připojení Západní komerční zóny Průhonice (ZKZP)	The construction of highway overpass intersection on highway D1	documentation	NO2, PM10	descr.	descr.	descr.		study	descr.	descr.		descr.	descr.	descr.	descr.	descr.		KPZ-Mgr. M. Pondělíček	prosinec 2007 - leden 200	Pondělíček Michael Mgr.	
14	ZLK359	Silnice II/492: Zádveřice – Horní Lhota	reconstruction of existing roads	documentation	NOX a NO2,PM10, Benzo(a)pyrene,benzene	descr.	descr.	descr.	descr.	study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		Vysplan s.r.o.	leden 08	Ing. Aleš Hanslík, Ing. Petr Gřunděl	NENÍ ZPRACOVÁNO AUTOR
15	ZLK367	Silnice I/35 Zubří, křižovatka se silnicí III/01877	reconstruction and modification of the existing junction with the relocation of	documentation	PM10,benzo(a)pyrene	descr.	descr.	descr.	descr.	study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		RNDr. Zuzana Kadlecová	únor 08	Kadlecová Zuzana RNDr.	
16	MSK1002	Silnice R48 Rybí – MÚK Rychaltice – doprovodná komunikace MÚK Borovec –	motorway.	documentation	NOX a NO2,PM10, benzene	descr.	descr.	descr.	descr.	study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		Ing. Jarmila Paciorková - EPRO	leden 08	Paciorková Jarmila Ing.	Dopravoprojekt Ostrava, spol.s r.o. TESO Ostrava, spol. s r.o.
17	MZP204	Výstavba rychlostní silnice R 4 v úseku Háje - Milín	Výstavba rychlostní silnice 4,008 km.	documentation	CO,NOX, NO2,PM10, benzene,B(a)P		descr.	descr.	descr.	study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		Atelier T-plan, s.r.o	leden 08	Krajíček Libor RNDr.	
18	STC772	Silnice I/16 Vavřineč-R10	building bypasses residential services, relaying Košátecký creek, repair the existing 29	documentation	CO,NOX, CxHy, PM10,	descr.	descr.	descr.		study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		EKOLA group, spol. s r.o.	listopad 07	Ládyš Libor Ing.	
19	VYS323	Přeložka silnice I/23 Vladislav – obchvat	relaying roads 11.7 km	documentation	SO2,CO,NOX, NO2, PM10,org.látky	descr.	descr.	descr.		study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		AMEC s.r.o	červenec - listopad 2007	Mynář Petr Ing.	
20	ULK391	Obnovení silnice III/2565, Most - Mariánské Radčice	restore the communication link cities 5.69035 km. □	documentation	CO,SO2,NOX, CxHy, PM10,benzene	descr.	descr.	descr.		study	descr.	descr.	descr.	descr.	descr.	descr.	descr.			ECOCONSULT PONS Ing. Stanislav Štýs DrSc.	září 07	Štýs Stanislav Ing.,DrSc.	
21	PAK324	Modernizace silnice II/315, Hrádek - Ústí nad Orlicí	Modernization of the road in the overall length of 2.912 kilometers. □	documentation	TZL, SO2,Nox, CO	descr.	descr.	descr.	descr.	study	descr.	descr.	descr.	descr.	descr.	descr.	descr.		radioaktivní	Davos Ing. Dalibor Vostal	prosinec 2007 - leden 200	Vostal Dalibor Ing.	
22	VYS321	Přeložka silnice I/34, západní obchvat Pelhřimova	new bypass road, part of the building relaying 4428 +1823 km	documentation	CO,NO2,NOX, CxHy, PM10,	descr.	descr.	descr.	descr.	study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	radioaktivní	HBH Projekt, spol. s r.o.	listopad 07	Šikula Tomáš Mgr.	
23	JHC334	Silnice I/29 Písek - Záhoří	construction of the road 6 km	documentation	Nox, CO,SO2,benzene	descr.	descr.	descr.		study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		EIA SERVIS, s.r.o.	listopad 07	Vyhnálek Vojtěch RNDr.,CSc.	
24	ULK389	Silnice II/263 - stoupací pruh Líska	rozšíření stávající komunikace o stoupací pruh v délce 1,531 km	documentation	NO2, PM10, benzene, benzo (a)pyrene	descr.	descr.	descr.	descr.	study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		NORTHGEO-RNDr. Jiří Starý	listopad 07	Starý Jiří RNDr.	
25	HKK373	II/281 Sobotka – přeložka silnice	expansion of existing traffic on the standpipe strip of 1531 km relaying the road,	documentation	Nox, Co,PM10,benzene	descr.	descr.	descr.	descr.	study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		RNDr. Tomáš Bajer, ECO-ENVI-CONSULT	prosinec 07	Bajer Tomáš RNDr.,CSc.	
26	MZP199	Rychlostní silnice R49, stavba 4902.1 Fryšták - Lípa, 1. etapa	Construction ryhlostní road 1.7 km □	documentation	Nox, NO, benzene, PM10	descr.	descr.	descr.	descr.	study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	záření radioa	EKOLA group, spol. s r.o.	prosinec 07	Ládyš Libor Ing.	
27	STC408	Silnice I/18 Příbram, jihovýchodní obchvat	intersection with the communication link 4 km, linking communications 5.7	documentation	Nox, CO, CxHX, Pb, O3,PP.SO2,heavy metals, CO2	descr.	descr.	descr.		study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		SUDOP PRAHA, a.s.	březen 06	Hladká Kateřina Ing.,Ph.D.	
28	MZP080	Přeložka silnice I/13 v úseku Ostrov - Smilov	construction of new road length: od12, 348 km to 13,196 km □	documentation	NO2 a benzene	descr.	descr.	descr.		study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		Athos-co, s.r.o., Praha	duben 05	Vyhlas Zbyněk Ing.	
29	STC237	Silnice I/9+I/16 Mělník, obchvat 1.-4. etapa	bypass the city in a new 5 km route □	documentation	CO, NO_x	descr.	descr.	descr.	descr.	study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	micita,turisti	Pragoprojekt, a.s.	listopad 04	Čapek Ondřej Ing.	
30	OV8065	Přeložka silnice I/11 a I/44 v úseku Postřelmov - Rapotín	New čtyřpruhové road 14,580 km, overpass intersection, relocation of road □	documentation	CO,NOx, NO2, suspended particles (PM10), benzene (C6H6) a benzo(a)pyrene	descr.	descr.	descr.	descr.	study	descr.	descr.	descr.	descr.	descr	descr.	descr.	descr.	záření radioa	HBH Projekt, spol. s r.o.	srpen 07	Šikula Tomáš Mgr.	
31	PLK117	Silnice I/27 v úseku Třemošná - hranice kraje	construction of road 32.5 km □	documentation	NOx CO SO2 PM10 benzene, formaldehyde	descr.	descr.	descr.		study	descr.	descr.	descr.	descr.	descr	descr.	descr.	descr.		EIA SERVIS, s.r.o.	červenec 04	HBH Projekt, spol. s r.o.	
32	VYS317	Rekonstrukce silnice II/360 ul. Rafaelova, Třebíč - Pocoucov	relaying the road II. Classes of 1880 m.	documentation	PM10,benzo(a)pyrene,CO2, benzene	descr.	descr.	descr.	descr.	study	descr.	descr.		descr.	descr	descr.	descr.	descr.		Vysplan s.r.o.	prosinec 07	Ing. Aleš Hanslík, Ing. Petr Gřunděl	
33	MZP118	Rychlostní silnice R43 v úseku Kuřim - Svitávka	New čtyřproudové road speed 20.8 km, relaying silnice5, 9 km, □	documentation	CO,NOX,NO2,PM10,C6H6,C20H12	descr.	descr.	descr.	descr.	study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	záření radioa	HBH Projekt, spol. s r.o.	leden 06	EIA SERVIS, s.r.o.	
34	ULK398	Obchvat silnice I/13 Klášterec nad Ohří	Bypass road 4.8 km	documentation	NOX CO benzene PM10	descr.	descr.	descr.		study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	záření radioa	RNDr. Růžička- ochrana životního prostředí	říjen 07	Růžička Jaroslav RNDr.	
35	ZLK282	Silnice II/490: Zlín, propojení I/49 - R49, 2. úsek	2.086 km of roads linking □	documentation	Pm10,NO2,benzene,benzo(a)pyrene	descr.	descr.	descr.		study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		Ecological Consulting, a.s.	květen 07	Bosák Jaroslav Bc.,RNDr.	
36	MSK929	Silnice I/58 Mošnov - obchvat	construction of bypass village Mosnov 3.740 km □	documentation	Pm10,NO2,benzene,benzo(a)pyrene	descr.	descr.	descr.		study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		ENVI TRADE, s.r.o.	říjen 07	Vavrečková Jitka Ing.	
37	KVK315	Pohraniční stráže, Velká Hleďsebe	Reconstruction delay	documentation		descr.	descr.	descr.		study	descr.	descr.	descr.	descr.	descr.			descr.	velmi zkráce	Vodohospodá□ské stavby	srpen 07	Ing. Jana □ezníková	NENÍ ZPRACOVÁNO AUTOR
38	JHC128	Silnice I/29 a I/19 Písek - Tábor	reconstruction of the road 35.365 km	documentation	PM10* benzene Nox	descr.	descr.	descr.		study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		EIA SERVIS, s.r.o.	listopad 05	Vyhnálek Vojtěch RNDr.,CSc.	
39	MZP191	Rychlostní silnice R35, stavba 5507 Babice - Staré Město; prodloužení platnosti	Construction of new motorway 8.250 km.	documentation	Nox,CO,benzene,No2	descr.	descr.	descr.	descr.	study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	záření radiok	EKOLA group, spol. s r.o.	listopad 07	Ládyš Libor Ing.	
40	JHM548	Silnice Uhřice - Úsobrno	construction of new roads with a total length of 2284 km.	documentation	dust, NOx, SOx, CO	descr.	descr.	descr.		study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	záření radiok	DAVOS Ing. Dalibor Vostal	leden 06	Vostal Dalibor Ing.	
41	PAK305	Modernizace silnice II/315 Lanškroun - Tatenice	upgrading roads 351.57 m □	documentation	Nox,CO,benzene,No2	descr.	descr.	descr.	descr.	study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		Synthesia, a.s., oddělení životního prostředí	říjen 07	Pozděna Petr Ing.	
42	STC724	Silnice II/335 Říčany, Solná stezka	New roads II. of 3.273 km □	documentation	NO2,benzene C6H6,suspended particles PM10	descr.	descr.	descr.	descr.	study	descr.	descr.	descr.	descr.	descr.	descr.	descr.		záření radiok	GET, s.r.o.	září 07	Zemancová Monika Ing.	
43	JHC290	Silnice I/29 v úseku Písek - Kbelnice	New communication of 10.0 km " □	documentation	No2,PM10,benzene	descr.	descr.	descr.		study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		EKOTEAM	říjen 06	Ludvík Vladimír RNDr.	
44	PLK661	Silnice I/20 Plzeň, úsek Sládkova-Na Roudné	modernization of road 5 km □	documentation	TZL, SO2,Nox, Co	descr.	descr.	descr.		study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		Ing. Zuzana Toniková - ENVI-TON	prosinec 06	Toniková Zuzana Ing.	
45	PAK301	Modernizace silnice II/315 Choceň - Loučky	reconstruction of the road upgrading in the overall length of 3588 km. □	documentation	TZL SO2 CO Nox	descr.	descr.	descr.	descr.	study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	záření radiok	DaVOS Ing. Dalibor Vostal	červenec 07	Vostal Dalibor Ing.	
46	LBK270	Silnice I/15 Kravaře - obchvat	total length of road considered relocation (bypass) is 2.64 km. □	documentation	No2,PM10,benzene	descr.	descr.	descr.		study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		EVERNIA, s.r.o.	červen 05	Anděl Petr RNDr.,CSc.	
47	OLK334	Silnice I/55, MÚK s ČD Přerov - Předmostí	Reconstruction of roads 550 □	documentation	PM10, SO2, NO2, NO, NOx, O3 a C	descr.	descr.	descr.	descr.	study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		Ing. Jarmila Paciorková - EPRO	září 07	Paciorková Jarmila Ing.	
48	HKK351	II/300 Ktelová Lhota – modernizace silnice – 2. etapa MPK s III/30815 v k.ú.	small circular junction on average 30 m in addition carried out relaying route	documentation	nitrogen oxides (NOx) nitrogen dioxide (NO2) sulfur dioxide (SO2)	descr.	descr.	descr.		study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		RNDr. Tomáš Bajer, ECO-ENVI-CONSULT	září 07	Bajer Tomáš RNDr.,CSc.	
49	STC695	Silnice I/18 Příbram, jihovýchodní obchvat 2. část	section of the building represents a communication link 5.7 km □	documentation	No2, PM10,Nox	descr.	descr.	descr.		study	descr.	descr.		descr.	descr.	descr.	descr.	descr.		SUDOP PRAHA, a.s.	červenec 07	Hladká Kateřina Ing.,Ph.D.	
50	JHM534	Silnice I/43 Letovice - Rozhraní	reconstruction of roads 4.780 km □	documentation	PM10, NO2, NO, NOx, a CO.	descr.	descr.	descr.	descr.	study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		AMEC s.r.o	srpen 07	Mynář Petr Ing.	
51	KVK304	Rozšíření silnice III/1987 ve Stráži nad Ohří	about 50 m	documentation						study										KV engineering spol. s r.o.	srpen 07	Kateřina Wernerová	NENÍ ZPRACOVÁNO AUTOR
52	JHM512	Silnice I/53 Znojmo - Lechovice	Reconstruction of roads 7192 m □	documentation	PM10, NO2	descr.	descr.	descr.	descr.	study	descr.	scr.	descr.	descr.	descr.	descr.	descr.	descr.		AMEC s.r.o	červenec 07	Mynář Petr Ing.	
53	JHM503	Silnice I/53 Lechovice - Pohořelice	Reconstruction of roads in length of 20 km, □	documentation	PM10, NO2	descr.	descr.	descr.		study		descr.	descr.	descr.	descr.	descr.	descr.	descr.		AMEC s.r.o	červenec 07	Mynář Petr Ing.	
54	JHC312	Silnice II/156 Nové Hrady-Vyšné-státní hranice	reconstruction of the road 8.7 km	documentation	CO, Nox,	descr.	descr.	descr.	descr.	study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	randové rizik	EIA Consulting Darina Remenárová	srpen 07	Remenárová Darina RNDr.	
55	JHM515	Přeložka silnice I/43 v úseku Česká - Kuřim	New 5.1 km, relaying roads 5.9 + 1.5 km □	documentation	CO, Nox, NO2, PM10, C6H6,C20H12	descr.	descr.	descr.	descr.	study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	záření radiok	HBH Projekt, spol. s r.o.	červenec 07	Šikula Tomáš Mgr.	
56	PLK1225	Přeštice - úprava silnice I/27	modification of the existing transit road I/27 city Přeštice	documentation	Nox, So2	descr.	descr.	descr.		study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	záření radiok	Ing. Miroslava Tycová	srpen 07	Tycová Miroslava Ing.	
57	HKK332	Přeložka silnice II/308 - Kladská ulice	relocation is a new building roads with a total length of 0.610 km □	documentation	PM10, NO2,	descr.	descr.	descr.		study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		EKOTEAM	červenec 07	Ludvík Vladimír RNDr.	
58	MSK818	nad Ostravicí - průtah, rekonstrukce silnice km 0,000 - 1,150	Ostravicí - delays, road reconstruction km 0000 - 1150 □	documentation	Pm10,NO2,benzene,benze(a)pyrene , CO, NOX	descr.	descr.	descr.	descr.	study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		Ing. Jarmila Paciorková - EPRO	červen 07	Paciorková Jarmila Ing.	Ostrava EnviRoad, s.r.o. TESO spol. s r.o.
59	VYS299	Přeložka silnice I/38, úsek Jihlava – Moravské Budějovice	This is the relocation of the road I/38 to new routes in one variant in the active section	documentation	No2Nox,PM10, benzene	descr.	descr.	descr.		study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		EKOTEAM	říjen 06	Ludvík Vladimír RNDr.	
60	MSK836	Silnice II/442 Horejší Kunčice-Kuzberk, rekonstrukce komunikace	reconstruction of roads 3 320.20 m	documentation	Co,No2,Nox,SO2, PM10, benzene, benzo (a)pyrene	descr.	descr.	descr.	descr.	study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		Ing. Jarmila Paciorková - EPRO	květen 07	Paciorková Jarmila Ing.	Dopravní projektování Ostrava
61	JHC292	Stavba přeložky silnice III/14539 (přes ulici M. Horákové do ulice	čtyřpruhová communication communication category length 670 m □	documentation	SO2 PM 10 NO2 CO CxHy benzene	descr.	descr.	descr.		study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		EIA SERVIS, s.r.o.	červen 07	Vyhnálek Vojtěch RNDr.,CSc.	
62	JHM490	Silnice II/427 Moravský Písek - průtah, III.stavba, km 0,000 - 0,700	repair roads, elongation 0 - 0.7 km, the newly proposed junction □	documentation	suspended particles, SO2, Nox, CO, Org.látky	descr.	descr.	descr,	descr,	study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		AMEC s.r.o	červen 07	Postbiegl Stanislav Ing.	
63	MSK800	Silnice II/478 - Ostrava, ul. Nová Krmelínská	New route road 1.16 km □	documentation	dust (TZL) sulfur dioxide (SO2) nitrogen dioxide (NO2) nitrogen oxides (NOx)	descr.	descr.	descr.	descr.	study	descr.	descr.	descr.	descr.	descr	descr.	descr.	descr.		Ing. Jarmila Paciorková - EPRO	květen 07	Paciorková Jarmila Ing.	SHD akciová společnost, Ostrava (dokumentace pro územní řízení, 05/2007) Ing.Petr Fiedler, Háj ve
64	ZLK298	Silnice I/35 Rožnov pod Radhoštěm, křižovatka	reconstruction of existing roads in intravilánu, 1356 m	documentation	oxides, NOx, nitrogen dioxide NO2, suspended particles PM10, benzene and	descr.	descr.	descr.		study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	záření radioa	RNDr. Zuzana Kadlecová	červen 07	Kadlecová Zuzana RNDr.	
65	MSK807	Investiční příprava Průmyslové zóny Mošnov - Rekonstrukce příjezdové	Reconstruction of roads 1 156 m □	documentation	carbon monoxide (CO) nitrogen oxides (NOx), hydrocarbons (CxHy), sulfur dioxide	descr.	descr.	descr.	descr.	study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	záření radioa	Technoprojekt, a.s.	červen 07	Beneš Josef Ing.	
66	PLK1101	II/205 Nová Hospoda - přeložka silnice	implementation of the relocation of roads and connecting local roads is	documentation	emitting nitrogen oxides NOx, carbon monoxide CO, hydrocarbons	descr.	descr.	descr.		study	descr.	descr.	descr.	descr.	descr	descr.	descr.	descr.	záření radioa	Ing. Miroslava Tycová	červen 07	Tycová Miroslava Ing.	
67	MSK797	Přeložka silnice II/461 v Opavě – jižní obchvat	construction of the Southern bypass Opavy in the new route, including links to	documentation	So2,CO,NOX, NO2,PM10	descr.	descr.	descr.	descr.	study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		Ing. Jarmila Paciorková - EPRO	červen 07	Paciorková Jarmila Ing.	Dopravoprojekt Ostrava spol.s r.o. EnviRoad s.r.o.
68	VYS292	Změna vedení trasy stávající silnice II/353 Jihlava - Žďár nad Sázavou, úsek D1 -	bypass is a new linear traffic building, the entire length of 2910 km □	documentation	suspended particles PM10 NO2	descr.	descr.	descr.	descr.	study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		ENVING, spol. s r.o.	červen 07	Vondráček Ladislav Ing.	
69	VYS283	Rozšíření silnice č. II/353, úsek křižovatka Štěpánovice – křižovatka na Vacenovice	repair of roads 1.688 km □	documentation	PM10, no2, Nox, benzene	descr.	descr.	descr.	descr.	study	descr.	descr.	descr.	descr.	desrc.	descr.	descr.	descr.		DOPRAVOPROJEKT Ostrava spol. s r. o.	duben 07	Markéta Myšková	NENÍ ZPRACOVÁNO AUTOR
70	PLK1030	Propojení silnice I/21-průmyslová zóna v Plané u Mariánských Lázní	improving communication links industrial zone	documentation			descr.	descr.	descr.						desc					EKOLOGIAM, Mar. Lázně	duben 07	RNDr. Karel Nykles	
71	MSK721	Silnice II/462 Jelenice - Lesní Albrechtice	change roads 1.452 km □	documentation	NO2, NOX, SO2,PM10,CO, benz(a)pyrene	descr.	descr.	descr.	descr.	study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		Ing. Jarmila Paciorková - EPRO	květen 07	Paciorková Jarmila Ing.	Dopravoprojekt Ostrava spol.s r.o. AZ GEO, Ing.Seibert
72	MSK695	Silnice II/462 Vítkov - Větřkovice	change roads 3.610 km □	documentation	NO2,Nox,SO2,PM10,B(a)P,CO,benzen	descr.	descr.	descr.	descr.	study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		Ing. Jarmila Paciorková - EPRO	duben 07	Paciorková Jarmila Ing.	Dopravoprojekt Ostrava spol.s r.o. AZ GEO, Ing.Seibert
73	MSK703	Silnice I/58 Příbor - Skotnice	construction roads 2.850 km □	documentation	solid emissions NOx SO2	descr.	descr.	descr.	descr.	study	descr.	descr.	desrc.	descr.	descr.	descr.	descr.	descr.		Ing. Jarmila Paciorková - EPRO	duben 07	Paciorková Jarmila Ing.	SHD akciová společnost, Ostrava (rozpracovaná dokumentace pro územní
74	MSK574	Silnice II/478 Ostrava - prodloužená ulice Mostní I. etapa	construction roads 1.300 km □	documentation	dust (TZL) sulfur dioxide (SO2) nitrogen dioxide (NO2)	descr.	descr.	descr.	descr.	study	descr.	descr.	desrc.	descr.	descr.	descr.	descr.	descr.	studie emisí	Ing. Jarmila Paciorková - EPRO	říjen 06	Paciorková Jarmila Ing.	SHD akciová společnost, Ostrava (dokumentace pro územní řízení, 06/2006)
75	JHC243	Silnice II/173 - Obchvat Blatná	construction of bypass road The relocation of 3.2 km " □	documentation	not processed	descr.	descr.	descr.	descr.	study	descr.	descr.	desrc.	descr.	descr.	descr.	descr.	descr.	záření ionizu	Ing. Musiol, poradenské služby v oblasti ekolog. vč.	březen 07	Musiol Pavel Ing.	
76	MZP162	Rychlostní silnice R35 v úseku Staré Město - Mohelnice	new path speed R35 road 20995 m	documentation	NOx (protection of human health) NOx (ecosystem protection) CO, benzene, PAHs as BaP □	descr.	descr.	descr.	descr.	study	descr.	descr.	desrc.	descr.	descr.	descr.	descr.	descr.		EVERNIA, s.r.o.	červen 05	Anděl Petr RNDr.,CSc.	
77	ZLK262	Silnice II/150: křižovatka se silnicí III/4389 – Hranice okresů Km – Vs, silnice	reconstruction of existing roads 2901 + 3 315 + 1 812 + 223	documentation	no change	descr.	descr.	descr.	descr.	study	descr.	descr.	desrc.	descr.	descr.	descr.	descr.	descr.		VEGI, s.r.o.	duben 07	Hrouzek Stanislav Ing.	
78	JHC247	Silnice I/19 Tábor - hranice kraje Vysočina	Construction of road 15.7 km □	documentation	OA TNV T NOx CO SO2 Total hydrocarbons Benzene □	descr.	descr.	descr.		study	descr.	descr.	desrc.	descr.	descr.	descr.	descr.	descr.		EIA SERVIS, s.r.o.	listopad 06	Vyhnálek Vojtěch RNDr.,CSc.	
79	ULK305	Silnice I/13 Bílina, obchvat	New roads 7 700 m □	documentation	NOx CO SO2 CxHy suspended particles	descr.	descr.	descr.	descr.	study	descr.	descr.	desrc.	descr.	descr.	descr.	descr.	descr.		Ing.Alexandr Mertl-Ekologické inženýrství	říjen 06	Mertl Alexandr Ing.	
80	MZP063	Silnice R35 v úseku Úlibice - Hradec Králové	construction of highway roads 36.408 km □	documentation	Nox,CO,PM10,SO2,CxHy, BZN,FMA	descr.	descr.	descr.		study	descr.	descr.	desrc.	descr.	descr.	descr.	descr.	descr.		ATEM - Ateliér ekologických modelů, s.r.o.	červen 04	Píša Václav Ing.,CSc.	
81	JHM416	Rekonstrukce silnice II/382 Popůvky - Ostrovačice (Kývalka)	reconstruction of roads in length of 2.6 km □	documentation	carbon monoxide, nitrogen oxides, sulfur oxides, solid particles, benzene, xylene, lead. □	descr.	descr.	descr.		study	descr.	descr.	desrc.	descr.	descr.	descr.	descr.	descr.	záření radioa	DAVOS Ing. Dalibor Vostal	březen 07	Vostal Dalibor Ing.	
82	PAK236	Přeložka silnice I/36 v úseku Lázně Bohdaneč - D11	road builds finishing D11 highway and connects the highway to the city	documentation	NOx, CO, solid particles and in small quantities the hydrocarbons, NO2, benzene	descr.	descr.	descr.		study	descr.	descr.	desrc.	descr.	descr.	descr.	descr.	descr.	seismická a	Athos-co, s.r.o., Praha	listopad 06	Vyhlas Zbyněk Ing.	
83	PLK696	Přeložka silnice III/2045 Všeruby	Overall length is the relocation of approximately 2,700 m.	documentation	NOx, CO, hydrocarbons, suspended particulate matter	descr.	descr.	descr.		study	descr.	descr.	desrc.	descr.	descr.	descr.	descr.	descr.	záření radioa	Ing. Miroslava Tycová	leden 07	Tycová Miroslava Ing.	
84	ZLK243	Silnice II/491: Zlín, Štípa	reconstruction of existing communications 436.83 m □	documentation	evaluation of unprocessed, no change □	descr.	descr.	descr.	descr.	study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	záření radioa	RNDr. Zuzana Kadlecová	únor 07	Kadlecová Zuzana RNDr.	
85	JHM378	Silnice III/4314, křižovatka II/430 - Luleč	construction work for the current roads 1.061 km " □	documentation			descr.				descr.	descr.	descr.					descr.	velmi krátké		leden 07	Jan Olejníček	
86	MSK452	Silnice I/58 Ostrava - prodloužená Místecká, III. stavba	reconstruction of the road 497 m □	documentation					descr.	study	descr.	descr.					descr.				leden 07	Ivo Bílý	
87	STC550	Kostelec u Křížků - rekonstrukce silnice III/10113	reconstruction of the road of 0.400 km	documentation	NO2, benzene, benzo (a) pyrene, suspended PM10	descr.	descr.	descr.		descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	záření západ	TRANSCONSULT, s.r.o	prosinec 06	Novotný Mojmír Ing.	
88	JHC202	Přeložka silnice I/39 u obce Přísečná	new construction of transport of 1.623	documentation	CO benzene benzo–pyrene	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	záření radioa	ochrana životního prostředí G-servis Praha spol. s r.o	říjen 06	Růžička Jaroslav RNDr.	
89	MZP148	Rychlostní silnice R43 v úseku Svitávka - Staré Město	New čtyřproudové road speed 40.4 km, due to relocation, overpass intersection □	documentation	CO,NOX,NO2,PM10,C6H6,C20H12	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	záření radioa	HBH Projekt, spol. s r.o.	říjen 06	Šikula Tomáš Mgr.	
90	STC529	Silnice II/245 Čelákovice, obchvat	New bypass 1.9 km □	documentation	Nox,PM10, benzene	descr.	descr.	descr.	descr.	study	descr.	descr.	descr.	descr.	des	descr.	descr.	descr.	radonové rizi	Pragoprojekt, a.s.	listopad 06	Čapek Ondřej Ing.	
91	MZP143	Rychlostní silnice R49, stavba 4903 Lípa - Pozděchov	construction of roads 12,500 m □	documentation	CO, **Nox**,CxHy,PM10	descr.	descr.	descr.	descr.	study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	záření radioa	EKOLA group, spol. s r.o.	září 06	Ládyš Libor Ing.	
92	MZP142	Rychlostní silnice R49, stavba 4902.2 Fryšták - Lípa (2. etapa)	construction of road 13 500 m □	documentation	CO, **Nox**,CxHy,PM10	descr.	descr.	descr.	descr.	study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	záření radioa	EKOLA group, spol. s r.o.	září 06	Ládyš Libor Ing.	
93	STC533	Silnice R4 - obchvat Milína	expansion of existing dvoupruhové approximately 1.600 km	documentation	PM10 NOx benzene	descr.	descr.	descr		study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		Atelier T-plan, s.r.o	listopad 06	Krajíček Libor RNDr.	
94	MZP145	Rychlostní silnice R49, stavba 4905 Horní Lideč - hranice ČR/SR (Střelná)	construction of 5546 m length	documentation	CO, **Nox**,CxHy,PM10	descr.	descr.	descr	descr.	study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	záření radioa	EKOLA group, spol. s r.o.	září 06	Ládyš Libor Ing.	
95	STC230	Silnice I/27 v úseku hranice kraje - křižovatka se silnicí I/6	construction of the road about 12.5 km □	documentation	NOx CO SO2 PM10 Total Hydrocarbons Benzene Formaldehyde □	descr.	descr.	descr.		study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		EIA SERVIS, s.r.o.	červenec 04	Vyhnálek Vojtěch RNDr.,CSc.	
96	MSK376	Silnice II/469, ulice 17. listopadu - okružní křižovatka	reconstruction of the road 300 m □	documentation	slightly positive and insignificant □	descr.	descr.	descr.		study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		G-Consult, spol. s r.o.	listopad 06	Tížková Věra RNDr.	
97	OLK239	Přeložka silnice I/46 Týneček - Šternberk	New čtyřpruhé roads 7.185 km	documentation	CO, Nox, NO2, PM10, C6H6,C20H12	descr.	descr.	descr.		study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		HBH Projekt, spol. s r.o.	říjen 06	Šikula Tomáš Mgr.	
98	VYS238	Rekonstrukce silnice II/405 v úseku Příseka - Brtnice	reconstruction of roads 2.353 km □	documentation	suspended particles (PM10) NO2,	descr.	descr.	descr.	descr.	study	descr.	descr.					descr.	descr.	*	ENVING, spol. s r.o.	říjen 06	Lepka Miroslav Ing.	
99	VYS236	Rozšíření silnice II/405, úsek Brtnice - Zašovice	reconstruction of roads 4.871 km	documentation	(PM10) NO2 NOx	descr.	descr.	descr.	descr.	study	descr.	descr.					descr.			ENVING, spol. s r.o.	říjen 06	Lepka Miroslav Ing.	
100	LBK200	Silnice I/65 Rychnov u Jablonce nad Nisou - MÚK	level junction will be replaced by a ring, bus stops will be relocated, + relocation	documentation	Nox, CO, CyHy,SO2	descr.	descr.	descr.	descr.	study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	turistika rado	Pragoprojekt, a.s.	říjen 06	Čapek Ondřej Ing.	
101	VYS235	Havlíčkův Brod-Okrouhlice, úprava směrových oblouků	reconstruction of roads 836.2 m	documentation	Nox, CO, CyHy,SO2	descr.	descr.	descr.	descr.	study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	záření	Petr Obst - G.L.I.	listopad 06	Obst Petr RNDr.	

Apendix 2: Parking projects

	EIA - CODE	Project title	Specification	Type	Emissions Air	Climate	Water	Soil pollution	Safety/ hazards	Noise and vibration	Waste	Land use	Description of natural conditions, Geology	Fauna, flora, ecosystem	Landscape	gy/Cultural Heritage	Sources of raw materials	impacts on populati	Something more	Company (Employer)	Year	Name of author	Cooperation
1	JHM602	cz v Pohořelicích, III. etapa - rozšíření parkoviště	The number of parking spaces: 60 Parking area: 1,075.9 m2	oznámení	descr. Charaktenstika není	descr.	descr.	descr.	descr.	study	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		Mgr. Jakub Bucek	březen 08	Mgr. Jakub Bucek Ing. Jaromír Pokor	není zpracováno autorizov
2	OV6073	cesty a výbudování parkoviště s víceúčelovou plochou v Hlinsku u	167, of which 14 persons physically ostižené Parking spaces for buses 4	oznámení	CO benzene PM10	descr.	descr.	descr.	descr.	study	descr.	descr.	descr.	descr	descr.	descr.	descr.	descr.		RNDr. Irena Dvořáková	březen 08	Dvořáková Irena RN	Jana Kydlíčková
3	PLK552	Sportovní areál a parkoviště zimního stadionu Plzeň-Košutka	total area of the construction project is approximately 2.43 hectares (or 24 312 m2). ¤	oznámení	descr. The characteristic is not processed	descr.	descr.	descr.	descr.	study	descr.	descr.	descr.	descr	descr.	descr.	descr.	descr.	elektromag	Environment Work	listopad 06	Kydlíček Jiří Ing.	
4	PLK575	Parkoviště Hořehledy	people with reduced mobility, and possibly another 6 points in front of the building on land the city ¤	oznámení	descr. The characteristic is not processed	descr.	descr.	descr.		study	descr.	descr.	descr.	descr	descr.	descr.	descr.	descr.	září ení radi	Ing. Miroslava Tycová	listopad 06	Tycová Miroslava Ing.	
5	MSK1036	Krnov, parkoviště Rooseveltova- Petrovická	127 parking spaces on the surface 1530 m2. ¤	oznámení	descr. The characteristic is not processed	descr.	descr.	descr.	descr.	study	descr.	descr.	descr.	descr	descr.	descr.	descr.	descr.	seismicita, eroze		listopad 07	Ing. Petr Barandovs	není zpracováno autorizov
6	LBK294	Parkoviště firmy Jablotron	235 parking spaces for passenger cars ¤	oznámení								descr.					descr.		velice krát	Jablotron s.r.o.	březen 08	Ing. Jiří Hübner,	není zpracováno autorizov
7	STC842	Skladový areál a parkoviště Senohraby		oznámení																ECO-ENVI-CONSULT, Jičín	červenec 07	Bajer, CSc. Ing. Martin Šára	
8	PLK1306	Nové parkovací plochy v areálu PZ ŠKODA-parkoviště 24	hard surface 4809 m2 ¤	oznámení	CO, Nox, NO2, CxHy, PM10, benzene, B(a)P	descr.	descr.	descr.	descr.	study	descr.	descr.	descr.	descr	descr.	descr.	descr.	descr.		RNDr. Naděžda Pízová - EKOBÁZE	březen 08	Pízová Naděžda RNDr.	
9	JHM592	Siemens Drásov, parkoviště pro osobní automobily	number of parking spaces on the ground: 136 parking spaces for OA, 6 510 m2 ¤	oznámení	NOx CO organic material	descr.	descr.	descr.	descr.	study	descr.	descr.	descr.	descr	descr.	descr.	descr.	descr.		Ing.Alexandr Mertl-Ekologické inženýrství	únor 08	Mertl Alexandr Ing.	
10	MSK995	nádrže, vodovod z Husího potoka a předpokládané parkoviště ve sportovním	140 parking spaces (3,200 m2).	oznámení	CO2, benzene Pm10	descr.	descr.	descr.		study	descr.	descr.	descr.	descr	descr.		descr.			Technické služby ochrany ovzduší Ostrava, spol. s r.o.	prosinec 07	Obal Libor Ing.	
11	PHA466	Veřejné parkoviště Kytlická, Praha 9, k. ú. Prosek	parking lot with 29 parking places, compensation for disturbance ¤	oznámení	nitrogen oxides PM10* benzene	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr	descr.	descr.	descr.	descr.		Star, a.s.	srpen 07	Ambrožová Kateřina Ing.	
12	PHA021	Dočasné parkoviště Štěpařská, k.ú. Hlubočepy	367 parking spaces, of which 19 for the disabled, parking area with its own communication is 10590 m2 ¤	oznámení	NOx NO2 dust (PM10)	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr	descr.	descr.		descr.		DHV CR, spol s r.o.	září 02	Sulek Bohumil Ing., CSc.	
13	STC718	Parkoviště a příjezdová komunikace Na Podole - Beroun	communication + walkways and bicycle path. The total construction area is 12 078 m2. Parking spaces is proposed 152 + 3	oznámení	NO_x	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr	descr.	descr.	descr.	descr.		Darina Remenárová	srpen 07	Remenárová Darina RNDr.	
14	PLK1258	Parkoviště sever PZ Škoda	implementation parking area with 115 car parking spaces in the area of the plant damage Pilsen	oznámení	CO,NO,PM10, NO2,CxHy, benzene,BaP	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr	descr.	descr.	descr.	descr.		Ing. Jiří Plašil - zeměd	září 07	Plašil Jiří Ing.	
15	MSK905	Parkoviště Nad Terasou v Havířově - Podlesí	spaces of which for disabled 5 provides Dlouhá No. 27 parking spaces	oznámení	NO2., benzene, benzoapyren	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr	descr.	descr.	descr.	descr.		Ing. Jarmila Paciorkov	červenec 07	Paciorková Jarmila Ing.	
16	PAK289	FOXCONN – NOVÝ POLYGON, Rozšíření parkoviště sever	the left and right part of the new parking spaces passenger cars and buses to transport	oznámení	nitrogen dioxide (NO2) sulfur dioxide (SO2) carbon monoxide (CO)	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr	descr.	descr.	descr.	descr.		RNDr. Tomáš Bajer, E	srpen 07	Bajer Tomáš RNDr., CSc.	
17	PHA424	Praha, rozšíření parkoviště, č. parc. 871/1, k.ú. Libuš, Praha - Libuš	International School Prague, 42 parking spaces OA, 2 parking spaces	oznámení	sulfur dioxide carbon monoxide benzene PM	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr	descr.	descr.	descr.	descr.		EPOS – AZ, s.r.o.	červenec 07	Nezpracováno autorizovanou osobou	
18	STC693	výrobků, Přístavba skladu hořlavých látek a rozšíření parkoviště o 25 stání	warehouse, warehouse Extension of flammable substances and expansion of 25 parking spaces. The total capacity for	oznámení								descr.							velmi stru	AEROCAN CZ s.r.o	srpen 07	Nezpracováno autorizovanou osobou	
19	MSK874	Výstavba parkoviště - ul. 1. máje F-M, Místek	vehicles in the group of 24 oblique standing, including the access road entrance and exit to the parking lot of	oznámení	emise neměřitelné							nedojde							nebudou ž	Ing Lumír Janík, Pod S	srpen 07	* Nezpracováno autorizovanou osobou	
20	HKK342	Parkoviště v ul. Formánkova Hradec Králové	opposite the extension of an existing parking areas reached number 42 pcs parking spaces. * ¤	oznámení	SO2 (µg/m3) NO2 (µg/m3) PM10 (µg/m3) C	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.			VIAPROJEKT s.r.o. H	srpen 07	* Nezpracováno autorizovanou osobou	
21	MSK849	Parkoviště pro 20 + 35 osobních automobilů	Parking for 20 cars + 35 ¤	oznámení	descr.						descr.	descr.			descr.	descr.				Ing., Mgr. Vlastimil Sedláček	červenec 07	* Nezpracováno autorizovanou osobou	
22	OV7053	Parkoviště v areálu Univerzity obrany na ul. Jana Babáka	construction of two parking lots with 119 and 106 parking places and their connection to the infrastructure: ¤	oznámení	descr.	descr.	descr.		descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		Společnost pro životní	červenec 07	Blinová Ludmila Ing.	Ing. Yvona Lacinová
23	PLK1193	administrativní budova ProMinent Systems, s.r.o. Blovice	Built-up area halls ... 1 305 m2 Number of parking spaces the new parking ... 12	oznámení		descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	září ení radi	Environment Work	červenec 07	Kydlíček Jiří Ing.	Jan Kydlíček, Mgr. Ondřej Kydlíček
24	JHM499	Komunikace a parkoviště na ul. Dvorská, Blansko	Communications: cca 171 m, the pedestrian traffic: cca 67 mA parking: 57 seats, of which 3 OTP ¤	oznámení				descr.		descr.		descr.					descr.				červenec 07	* Nezpracováno autorizovanou osobou	
25	KVK265	Parkoviště na 25 parkovacích stání v k.ú Cheb	Parking 25 parking spaces in k.ú. Cheb ¤	oznámení								není							vlivy nevýznamné			* Nezpracováno autorizovanou osobou	
26	VYS287	Výrobní hala J3 a parkoviště, k.ú. Antonínův Důl	number of parking spaces 38	oznámení	CO CxHy SO2	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.			AMEC s.r.o	červenec 07	Postbiegl Stanislav	Ing. Věra Hermíková Ing. Eva Mandulová Edita Ondráčková
27	MSK833	Parkoviště pro osobní automobily (Veřovice)	47 places for passenger cars and 2 buses, approximately 2000 m2 ¤	oznámení	descr.			descr.			descr.	descr.					descr.			Ing. Anežka Gromanov	červen 07	* Nezpracováno autorizovanou osobou	
28	PHA417	autosalónu LEXUS Praha, parc.č. 2401/11, k.ú. Stodůlky	nové navrhované parkoviště s 98 místy pro stání vřetně obslužné komunikace představuje pouze cca 19 % plochy (930 m²) z celkové rozlohy pozemku 2401/1 (4969 m²), ostatní plocha o výměře 4039 m² je navržena k zatravnění.		=, PM10, benzene			descr.		descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	nízkové ge	Bioprofit, s.r.o.	červen 07	Mgr. Jan Čepelík	
29	MSK784	Vytvoření nového parkoviště	construction is to build a new parking lot for 15 parking spaces on the area 472 m2 ¤	oznámení	NO2, NOx, SO2	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	září ení radi	Bc. Nikol Ondriašová	květen 07	* Nezpracováno autorizovanou osobou	
30	MSK776	Parkoviště pro restauraci v suterénu obchodního domu IQ	(8x2, 5x5, 0 m + 1x3, 5x2, 5x5, 0 m), including repair of existing access road and frame modifications zatravněné area. ¤	oznámení	descr.						descr.	descr.						descr.		Ing. Josef Kvasnička	červen 07	* Nezpracováno autorizovanou osobou	
31	VYS291	Prodejna potravin a parkoviště na ulici Pražská, Třebíč	Land area: 6900 m2, total number of parking spaces: 80 (including 5 for disabled persons) ¤	oznámení	kg / year of SO2 kg / year NOx kg / year of CO	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		AMEC s.r.o	květen 07	Mynář Petr Ing.	Ing. Eva Mandulová Ing. Jan Opavský
32	JHM471	Parkoviště ve dvoře budov, Masarykovo nám. 5 a 6, Hodonín	vehicles in Group 1 subgroup O1 (small and medium-sized cars), of which 4 provides for persons with	oznámení	Nitrogen dioxide Carbon monoxide PM10, SO2	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		Ing. Ladislav Vašíček	červen 07	Vašíček Ladislav Ing.	
33	MSK734	území Karviné - parkoviště u budovy Policie ČR na p.č. 3399/13 v Karviné - Novém	for cars (42 parking spaces), building a communications service in a width of 5.5	oznámení	(NO2, NOx)(SO2)(PM10).	descr.	descr.	descr.		descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		G-Consult, spol. s r.o.	květen 07	Tížková Věra RNDr.	
34	MSK724	Lichnov včetně terénních úprav na pozz. p.č. 296/1, 297/1, 297/2, 223	parking in the number of six parking spaces for passenger cars and one stall for persons with reduced mobility. ¤	oznámení	no change			descr.		descr.	descr.	descr.			descr.	descr.	descr.	descr.	září ení radi	Michal Pokorný	květen 07	* Nezpracováno autorizovanou osobou	
35	PLK1037	Úprava vnitrobloku Plzeň-Divadelní ul. 3., parkoviště	addressing land communication links to the existing section of local roads in the	oznámení	NOX SO2 and suspended particulate matter ¤	descr.		descr.		descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		Ing. Miroslava Tycová	červen 07	Tycová Miroslava Ing.	
36	MSK718	Místek, na pozemcích p.č. 1750/1, 1750/2, 1750/3, 5142/3	(2.25 * 4.5 m), including repair of the housing access road (dl.60, 0 m N 3,5 m), communication and handling area for	oznámení	negligible emissions						descr.	descr.						descr.		Ing.Lumír Janík	květen 07	* Nezpracováno autorizovanou osobou	
37	HKK296	Parkoviště Lesní hřbitov, Malšovice, Hradec Králové	s vytvořením celkem 97 parkovacích míst pro osobní automobily a 2 parkovací místa pro autobusy;	oznámení	SO2 NO2 PM10 CO Nox		descr.		descr.	descr.	descr.	descr.	descr.			descr.	descr.			Ing. Pavel Tomíška	květen 07	* Nezpracováno autorizovanou osobou	
38	PHA383	Plocha dočasného parkoviště se zázemím, parc.č. 873/62, Praha - Libuš	with the creation of 97 parking spaces for passenger cars and 2 parking spaces for buses. ¤	oznámení	NO2	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	září ení radi	Václav Benedikt	duben 07	* Nezpracováno autorizovanou osobou	
39	ZLK274	Hulín, ul. Záhlinická 1059, rekonstrukce a přístavba, parkoviště	pnumber of parking spaces: 19	oznámení	SO2: NOx: CO:	descr.	descr.	descr.		descr.		descr.	descr.	descr.	descr.	descr.	descr.	descr.		Ing. Alexandr Mertl - E	květen 07	Mertl Alexandr Ing.	Ing. Petr Mynář Brno Mgr. Tomáš Chudárek Brno
40	PLK980	parkoviště a podzemní garáže Plzeň, p.p.č. 11700/1, k.ú. Plzeň	parking lot with 33 parking stanie and 6 garážovými stanie v 1 PP plant. ¤	oznámení	SO2 NOX	descr.	descr.	descr.		descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	radioaktiv ní, elektroma		Ing. Miroslava Tycová	květen 07	Tycová Miroslava Ing.	
41	MSK671	Parkoviště u Školy v Kozlovicích včetně úpravy sjezdu	Longitudinal parking spaces, including the adjacent sidewalk	oznámení	zmínka emeise						descr.	není					nejsou			Ing. Zdeněk Loup	květen 07	* Nezpracováno aut	Ing. Barbora Marenčáková
42	JHM440	včetně příjezdové komunikace, zpevněných ploch a parkoviště pro	The enlargement of the area businesses UKO - S, as. New Hall of půdorysných measuring 28.3 x 45.2 m	oznámení	emise		descr.			zmínka	descr.	descr.				descr.	descr.			S-PROJEKTING s. r.	duben 07	* Nezpracováno autorizovanou osobou	
43	MSK592	Parkoviště u areálu KES, spol. s r.o., Vratimov	Parking capacity will be 66 cars ¤	oznámení	PM10 BaP ¤	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	radioaktiv ní, elektroma		Ing Kiszová Radmila -	zen-duben 20	Kiszová Radmila Ing.	
44	MSK598	Úprava účelové komunikace p.p.č. 2997/9 a parkoviště na p.č. 2997/2	117 parking spaces of which 6 points for disabled	oznámení							descr.	nedojde				descr.	descr.			VS projekt s.r.o., Ing. Miroslav Škupník v zastoupení ¤	duben 07	* Nezpracováno autorizovanou osobou	
45	MSK560	Autokomplex Kravaře - parkoviště	completion of parking for 25 vehicles	oznámení	emise zanedbatelné	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	září ení radioaktivní, elektromagnet		únor 07	Žídková Pavla Ing.	
46	MSK566	Parkoviště na sídlišti Pod lesem, Odry	Parking Area 1 - is proposed 15 parking spaces Parking 2 - is proposed 19 parking spaces	oznámení	emissions will not change			descr.				není předpoklad	descr.					není potřeba	září ení není		březen 07	* Nezpracováno autorizovanou osobou	
47	JHM414	Objekt "D" - parkoviště	Number of parking spaces: 51 (47 +4 ZTP)	oznámení	emissions	descr.	descr.	descr.		descr.		descr.			descr.	descr.	descr.			Ing. arch. Tomáš Zlámal ATELIER ZLÁMAL	březen 07	* Nezpracováno autorizovanou osobou	
48	JHM401	Velkokapacitní záchytné parkoviště pro dálkovou dopravu TIR, D1 - 227,7 km	cars, 73 outdoor parking spaces for lorries and trucks,	oznámení	Solids (PM10) Nitrogen dioxide Benzene	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		ENVING, spol. s r.o.	únor 07	Lepka Miroslav Ing.	
49	PLK834	TECHMANIA Plzeň - zpevněné plochy, parkoviště	69 parking spaces for cars cars, including 3 parking spaces for disabled citizens.	oznámení	negligible emissions	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	září ení radi	Ing. Vladimír Krivka	březen 07	* Nezpracováno aut	Karel Macán – projekční kancelář dopravních staveb,
50	MSK516	PRIMUS - parkoviště	sro Parking will be capacity of 122 parking spaces for cars (of which 7 will be parking reserved for	oznámení	STUDIESO2 NO2 PM10	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		Hutní projekt Frýdek -	únor 07	Bury Daniela Ing.	s.r.o. – Ing. Milan Čihala Ing. Jaroslav Vrána – AVAP
51	MSK480	Model Obaly a.s. - hala HKS, sklady, komunikace, parkoviště, ČOV	extension of existing parking spaces on a closed business parking lot around 70 seats,	oznámení	TZL SO2 NOx CO Corg	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.	descr.		Žídková Pavla Ing.,	únor 07		