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## EIA and SEA processes in NWM in the Czech Republic

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<b>RE</b>	Restricted to a group specified by the partners of the ARGONA project	
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## FOREWORD

Work Package 1 of the ARGONA project deals with policy-making structures in order to clarify the legal and structural frameworks within which processes of transparency and participation take place. Work Package 5 deals with the evaluation, testing and application of participatory approaches in order to demonstrate how structured frameworks for transparency and participation can be designed for practical working arrangements. Both these work packages include environmental impact assessment (EIA) and strategic environmental assessment (SEA) in their scope. This report, which deals with the EIA and SEA processes in nuclear waste management in the Czech Republic, has been produced within Work Package 5 by its lead contractor Nuclear Research Institute Rez plc. In addition to a detailed description of the Czech EIA and SEA procedures it concerns generic aspects of the application of environmental law, such as the right to information, public participation and access to justice. This report is to be duly taken in account in the finalization of Work Package 1 with its report on “Policy making structures in the EU and participating countries” as EIA and SEA processes are essential elements of these structures.

Kjell Andersson

Karita Research, ARGONA Project manager

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# 1. INTRODUCTION

In the Czech Republic, provisions for EIA process (plans assessment) and SEA process (conceptions assessment) at the policy level were established in the first EIA Act No. 244/1992 Coll. of the Czech National Council. Article 14 of this Act laid down the basic provisions for environmental assessment of ‘development conceptions’ that are submitted to or approved by central administrative authorities in the sectors of energy, transport, agriculture, waste management, mining and processing of minerals, recreation and tourism. The EIA Act identified the National Water Management Plan and regional land use plans as belonging to the “conceptions” that needed to undergo assessment. Otherwise, the generic term “conception” was neither defined in this Act nor in any other generally applicable legislation, although it was widely understood to refer to strategies, policies, plans or programmes.

Important changes in SEA and EIA provision are contained in Act No.100/2001 Coll. on Environmental Impact Assessment, as amended by Act No. 93/2004 Coll. Consolidated Version. This Act is fully in conformity with the Directive 2001/42/EC of European Parliament and of the Council on the Assessment of the Effects of Certain Plans and Programmes on the Environment. The new procedural requirements for SEA/EIA laid down in this Act are more extensive and detailed than those contained in the first EIA Act (244/1992 Coll.). They still apply to policies and strategies as well as to plans and programmes as required under Article 3 of the SEA Directive 2001/42/EC.

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.

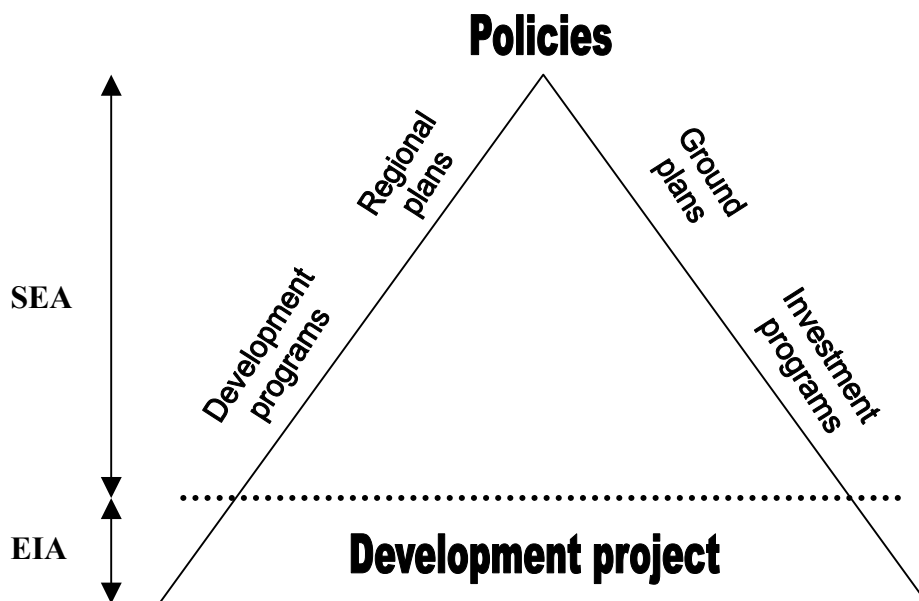
Lists of persons who are holders of authorisation to prepare documentation and expert reports are regularly published in the Bulletin of the Ministry of Environment.

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## 2. OBJECTS OF EIA AND SEA PROCESS

Within the scope of EIA process, 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 compliance with Article 4 (1) (c). The Ministry of Environment in compliance with the provisions of Article 21 or the regional authority in compliance with the provisions of Article 22 of this Act provides for assessment of these plans. Within the frame of SEA process, the objects of compulsory assessment comprise also conceptions 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.

Different subjects of assessment for EIA and SEA:



### **3. PROCEDURAL REQUIREMENTS FOR EIA IN ACT NO.100/2001 COLL.**

**The manner of EIA of a plan (Article 5)** – The impact on the environment shall be assessed for its preparation, implementation, operation and termination, including the results of liquidation thereof, as appropriate, and also decontamination or reclaiming of the area, if the obligation of decontamination or reclaiming is laid down by special regulation. Both normal operation and the possibility of accidents shall be assessed.

**Notification of the plan (Art. 6)** – The notifier has to submit a notification in printed and/or electronic form to the relevant authority. If the plan is proposed in the territory of several regions, the notifier has to send the notification to the Ministry of the Environment. In this case, the Ministry shall decide which regional authority is competent to carry out the assessment and shall immediately send the notification for further elaboration. Relevant authority has to make public the information on the notification. Within the same period of time, it has to send a copy of notification for a viewpoint to the affected administrative authorities and affected territorial self-governing units (i.e. regions, municipalities, communities). Anyone may send written comments on the notification to the relevant authority within 20 days of its publication.

**Fact-Finding procedure (Art.7)** – The objective of the fact-finding procedure is to elaborate information that should be included in the documentation on the environmental impact. The relevant authority shall carry out the fact-finding procedure on the basis of the notification, obtained comments and the criteria set out in Annex 1 to the Act. The fact-finding procedure has to be completed within 30 days of the date of publishing the notification. The relevant authority shall immediately send the written conclusion to the notifier and shall publish it. In the conclusion, the relevant authority must propose the preparation of variant approaches to the plan, which shall generally differ in the location, capacity, technology employed or moment of implementation, if the implementation of thereof is demonstrably useful and technically feasible.

**Documentation (Art. 8)** – On the basis of the notification, viewpoints on the notification and the conclusion to the fact-finding procedure, the notifier has to provide for preparation of documents in written form in required number of copies and in the electronic form. If the relevant authority concludes that the documentation does not contain the requisites on the basis of this Act, it shall return such documentation within 10 days of the date of delivery thereof to the notifier. If it is to the contrary, the authority has to send the documentation for a

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viewpoint to affected administrative authorities and territorial self-governing units. Within the same period of time, it shall ensure that information on the documentation is made public. Every person may submit a viewpoint on the documentation to the relevant authority in writing within 30 days of the date when information on the documentation is made public. On the basis of the obtained viewpoint on the documentation, the authority may return the documentation within 40 days of the date when the information is made public to notifier for supplementing and reworking, together with specification of the required requisites.

**The Expert Report (Art. 9)** – The relevant authority has to appoint an authorised person for preparation of the expert report. The person preparing the expert report has to prepare this review on the basis of the documentation or notification and all viewpoints submitted thereon. The period for preparing the expert report must not exceed 60 days from the date when the documentation was delivered to the person preparing the expert report. This period of time may be exceeded in justified and especially in complex cases, however, maximum by another 30 days. The person preparing the expert report must not rework or supplement the documentation under examination. Authorised person has to send the expert report to the relevant authority in agreed number of copies, at the agreed time and in the agreed form. The relevant authority has to send it within 10 working days of the date of its receipt to the notifier, the affected administrative authorities and affected 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. Anyone may send the relevant authority a written viewpoint within a period of 30 days of the date when the information thereon is published or express an opinion thereon at the public hearing. If the relevant authority obtained a negative viewpoint on the documentation or expert report, it shall provide for a public hearing of expert report and simultaneously of documentation. The person preparing the expert report has to deal with received written viewpoints on the expert report and the viewpoints arisen during the public hearing and, if appropriate, he has to modify the draft statement on the basis of these viewpoints.

**Statement on the EIA of Implementing the Plan (Art.10)** – On the basis of the documentation or notification, expert report and public hearing and the viewpoint submitted thereon, if appropriate, the relevant authority shall issue a statement on environmental impact assessment of the plan within 30 days of the date of expiration of term for submitting viewpoints on the expert report. Within 7 working days of issuing the statement, the relevant authority has to send the statement to the notifier, affected administrative authorities and territorial self-governing units. Simultaneously it has to publish the statement on the Internet and ensure that it is made available to the public. The statement shall be a basic expert

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document for issuing a decision or measure pursuant to special regulations. The statement shall be submitted by notifier as one of the basic documents for related procedures or processes pursuant to special regulations. In the absence of statement, it shall not be possible to issue a decision or measure required for implementing or carrying out the plan in any administrative or other procedure pursuant to special regulations. In such procedures, the relevant authority shall be the affected administrative authority. An administrative authority that issues a decision or measure shall include, in its decision or measure, requirements for protection of the environment set forth in the statement, if set forth therein, or it shall state in its decision or measure the reasons why it did not do so or did so only partly.

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#### **4. PROCEDURAL REQUIREMENTS FOR SEA IN THE EIA ACT NO.100/2001 COLL.**

**Notification of a Conception (Article 10c)** – The submitter has to send the notification in printed and electronic form to the SEA relevant authority (Ministry of Environment for national and regional conceptions and the Regional Authorities for local conceptions). SEA relevant authority makes the notification publicly available through the national information system for SEA and forwards it to possibly concerned authorities (state authorities, regions and municipalities). Anyone may send written comments on the notification to the SEA relevant authority within 20 days of its publication.

**Fact-finding (Screening and Scoping) Procedure (Art. 10d)** – Fact-finding procedure determines the need for SEA. If SEA is required, it also specifies the scope for SEA report, advises of practical arrangement for carrying out SEA within elaboration of the conception, stipulates requirements for elaboration of alternatives of the conception and defines the detailed arrangement for public participation. The SEA relevant authority carries out the fact-finding procedure on the basis of the notification, obtained comments and the criteria set out in Annex 8 to the Act. The fact-finding procedure has to be completed by written conclusion within 35 days of the date of publishing the notification. If the assessment is not required, the SEA relevant authority has to stipulate the reasons for this decision in the conclusion of the fact-finding procedure. The SEA relevant authority has to send the conclusion of the fact-finding procedure immediately to the submitter and to the authorities concerned and make it publicly available.

**Procedure of SEA (Art. 10e)** – The submitter has to appoint an SEA expert (person who is authorised to elaborate SEA/EIA) within 30 days of the date of receipt of the conclusion of the fact-finding procedure and inform the relevant authority, which shall immediately publish this information on the SEA system. The submitter has to cooperate with the SEA expert in preparing the evaluation (especially by providing all relevant documents that generated within elaboration of the conception). The appointed SEA expert is responsible for the complete and objective elaboration of the SEA report (the content of the SEA report is stipulated in Annex 9 of the Act). The SEA expert may require information essential for the elaboration of the SEA report from the applicant, the SEA relevant authority and other possibly concerned authorities, which are obliged to provide the requested information in the necessary extent.

**Draft Conception (Art. 10f)** – The submitter has to send the draft conception and SEA report (which should be an integral part of the conception) to the SEA relevant authority in printed

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and electronic form. The SEA relevant authority has to verify, whether the SEA report is prepared pursuant to the requirements of the Act (Annex 9). If so, the SEA relevant authority sends the draft conception and SEA report to the authorities concerned and makes it publicly available. Every person may send written comments on the draft conception and SEA report to the SEA relevant authority. The submitter of the conception has to organize the public hearing. The information on the place and time of the public hearing have to be published on the official notice board of the applicant, national information system for SEA and in at least one other way usual in the affected territory (e.g. in the press). The minutes from the public hearing have to be made publicly available and sent to the SEA relevant authority by the submitter.

**Statement on the Draft Conception (Art. 10g)** – SEA relevant authority shall issue (taking into account the draft conception including SEA report, comments and viewpoints received, and the public hearing) a statement on the assessment of impact on the environment and public health by implementing conception within 30 days from the date of public hearing. The relevant authority may state disagreement with the draft conception from the point of view of potential negative impacts on the environment and public health. It may furthermore propose new information or parts should be added, or, if appropriate, propose compensation measures and measures for monitoring impacts on the environment and public health. The viewpoint is sent to the submitter, concerned authorities and is made publicly available. The conception cannot be approved without the statement on the conception. The approving authority shall be obliged to take the requirements and conditions resulting from the statement on the conception into account. If this statement contains requirements and conditions and these are not included or only partly included in the conception (as approved), the approving authority shall be obliged to justify it and make this justification publicly available.

**SEA follow up (Art. 10h)** – The submitter has to provide for monitoring and analysis of actual effects of the conception implementation on environment and health. When the submitter finds significant unforeseen effects, he has to:

- ensure mitigation and compensation measures;
- notify SEA relevant authority and authorities concerned, and
- decide about modifications of the conception.

Authorities concerned have to monitor the actual effects of the conception implementation on the environment and health and can submit request for modification of the conception to the approving authority.

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## 5. 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 coming into force of Act No. 100/2001 Coll., on Environmental Impact Assessment Act and related Acts as amended, and 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 conceptions (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 conceptions, as required by law.

The EIA and SEA information systems can be accessed on the website of the [Ministry of the Environment](#) and the [Portal of the Public Administration](#). 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, 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 conceptions. The EIA information system (project database) and the SEA information system (conception 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.

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## 6. PUBLIC PARTICIPATION INTO EIA/SEA PROCESS

There are increasing attempts to apply direct democracy in the area of the environment; this entails participation of individuals in decision-making processes (participation in administrative procedures, holding of a referendum, SEA and EIA). Decision-making should be moved as close as possible to those who are directly affected by the intended activity (the principle of subsidiarity). Therefore major groups of citizens were identified. These groups are as follows: NGOs, women, children and youth, minorities, local and regional governments, employees and their organisations, entrepreneurs, trade and industry, the academic community and farmers.

However, it is necessary to state that effective decision-making presumes a certain minimum qualification and must be rational. This is also connected with the development of human resources in the area of protection of the environment, which means not only preparation of professionals and administrators, but also broad environmental education and public awareness. This necessitates broad access of the public to information related to the environment and human health. This approach is frequently unacceptably limited with reference to business secrecy, etc.

### 6.1 INSTRUMENTS OF PUBLIC PARTICIPATION

The main instruments for public participation at a national level consist in legislative measures and also “soft instruments” (without the nature of legislative measures).

Soft instruments include particularly the institute of the referendum and local referendum, the institute of the ombudsman, the possibility of making comments on the part of the public in the areas of creation of economic and legislative instruments, subsidy policy, etc.

Environmental law and law in general (administrative law) in its valid form already contain all three instruments - the **procedural triad** - on the basis of which the Aarhus Convention is constructed.

- 1) The first instrument of this triad is the right to information, which is an essential component of the right to the environment (according to Article 35 (2) of the Charter of Fundamental Rights and Freedoms “Every one has the right to timely and complete information on the state of the environment and natural resources”) and is also a necessary precondition for qualified use of the other two instruments of public participation – participation in decision-making and access to justice. The basis of the right to

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information is contained in the general law on free access to information and the special law on the right to information on the environment.

- 2) In particular, public participation in the decision-making of administrative authorities is included in the general regulations of administrative law. The Act No. 500/2004 Coll., on administrative proceedings (the Code of Administrative Procedure) assigns the position of participant to those whose rights, interests protected by law or obligations are involved in the procedure, those whose rights, interests protected by law or obligations could be directly affected (or who so states, however, only until it is demonstrated otherwise) and, finally, those for whom the position of participant is recognised by a special legal regulation. The Building Act and also the Act on Integrated Prevention, Act on Protection of Nature and the Landscape, etc. are such special regulations. In addition, the legal regulations regulate public participation in the creation of acts of administrative law, which are not issued in the form of an administrative decision, and also in creation of documents prepared by obliged persons under the supervision of the public administration (e.g. safety report pursuant to the Act on Prevention of Major Accidents). These regulations include particularly the Construction Act (land-use planning documents), Act on Environmental Impact Assessment (viewpoint), Act on Strategic Environmental Impact Assessment (viewpoint), etc.
- 3) The third pillar in the procedural triad (access to justice) is provided by the new legislation on administrative justice, contained in the Code of Administrative Justice. In the framework of administrative justice, the courts decide on suits against decisions of the administrative authorities, on protection against inactivity of the administrative authorities and on protection against illegal intervention of an administrative authority (and on suits on competence).

Provision for public participation in the creation of conceptions, plans and decisions was by the year 2001 inadequate in the Czech Republic and was based on several provisions of the Construction Code, primarily for EIA, SEA, IPPC, protection of nature and the landscape and both Acts on access to information. Amendment of Act on Environmental Impact Assessment No.100/2001 Coll. and new Construction Act No.183/2006 Coll. adjusted these processes into full accordance with the EC Directives and with the Espoo and Aarhus Conventions and it became possible to not only criticize local, regional and national conceptions, but also to participate in their creation.

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## **6.2 THE IMPORTANT PARTS OF PUBLIC PARTICIPATION IN EIA/SEA PROCESS**

The important parts of public participation within the frame of EIA/SEA process are:

- Access of public to the information;
- Active and continuous information of public;
- Public hearing;
- Quality settlement of public suggestions;
- Identification of target groups at the very beginning of SEA process;
- Analysis of requirements for various information, which should be submitted to different groups;
- Information on EIA/SEA process and practical experiences.

The basic requirements concerning the methods and procedures of public examination, publication, information, and viewpoints are given in Articles 16 and 17 of the Act No. 100/2001 Coll., and furthermore in the Article 4 of the Regulation No. 457/2001 Coll., of the Ministry of Environment.

An initial public workshop is organised at the beginning of the SEA process to present the proposed approach and timetable. All relevant policy and SEA documents are published on the web for comment to the SEA team. Other relevant information (e.g. invitation to the public workshops) is sent by email directly to all municipalities within region (about 350) and key stakeholders such as industrial companies, NGOs, etc. (identified at the beginning of the SEA process).

After the SEA report is completed, a second public workshop is organised to present the results and outputs of the assessment and solicit comments.

### **A) Public hearing in EIA process**

The relevant authority shall provide a public hearing if obtained a negative viewpoint on the documentation or expert report. A public hearing is also required for plan with cross-border effects.

The public hearing must be held at the least 5 days after the expiry of the period of time for stating a viewpoint on the expert report and information about the place and holding must be published at least 5 days in advance. Public hearing should be directed

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democratically – all participants must have the opportunity to express their views and comments and all questions must be answered.

The relevant authority shall draw up minutes of the public hearing, which shall contain in particular information on participation and the conclusions of hearing, and shall also prepare a complete stenographic recording or audio-recording thereof. The relevant authority shall be obliged to send the minutes of the public hearing to the notifier, the affected administrative authorities and the affected territorial self-governing units and to publish them on the Internet.

## **B) Public hearing in SEA process**

The submitter is always obliged to ensure public hearing on the draft conception and its evaluation in the SEA process.

Information about the place and holding must be published at least 10 days in advance. The public hearing on the draft conception may not be held prior to the expiration 30 days of the date of submitting the draft conception to the relevant authority.

The submitter, the person preparing the evaluation of environment impacts and the relevant authority must be present on the public hearing.

The submitter shall be obliged to send the minutes taken on this public hearing to the relevant authority at the least 5 days of date of holding the public hearing and publish it on the Internet at the same time.

*The public hearing should be held in the afternoon. Everyone who participates, should have the opportunity to comment - a suitable room, the sound system, an independent moderator, the submitter and the SEA expert must have reserved time for their presentations but most of the time should be devoted to comments and discussion.*

## **7. EIA/SEA PROCESSES IN NUCLEAR WASTE MANAGEMENT**

SEA/EIA process, according to the Act No.18/1997 Coll. on Peaceful Utilisation of Nuclear Energy and Ionising Radiation (the Atomic Act) and Related Acts as Amended, is applied mainly in process of license authorisation for siting and construction of ionising radiation sources or RAW repositories, reconstruction or other changes affecting nuclear safety, radiation protection, physical protection and emergency preparedness of a nuclear installation and for particular stages of decommissioning of a nuclear installation. The State Office for Nuclear Safety (Office) issues these licenses.

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An environmental impact assessment under the Act No 100/2001 Coll., on Environmental Impact Assessment, and on Alteration of Some Related Acts, is a prerequisite for a license issue as stipulated in the Article 13 (4) of Atomic Act.

In administrative proceedings, the Office shall conduct independently of the proceedings of any other administrative body and the applicant shall be the only participant in the proceedings.

However, licenses issued by the Office do not substitute licenses or authorisations issued by other administrative bodies under specific regulations as, e.g.: Act No. 50/1976 Coll., on Land Planning and Construction Regulations (the Construction Act), in the reading of subsequent regulations, Act No. 21/1997 Coll., on Control of Importation and Exportation of Goods and Technologies Subject to International Control Regimes, Act No. 44/1988 Coll., on Protection and Use of Mineral Resources (the Mining Act), in reading of subsequent regulations, Act of the Czech National Council No. 61/1988 Coll., in the reading of subsequent regulations. Thus the administrative proceedings under these specific regulations provide for the public participation into decision-making process on the siting and construction of ionising radiation sources or RAW repositories act.

## ***7.1 HISTORICAL ASPECTS OF NWM IN THE CZECH REPUBLIC***

Originally, the problem of SNF was solved by bilateral agreements so that SNF was taken over free of charge by the then Soviet Union (SNF was, *inter alia*, one of the raw materials for the production of nuclear weapons). However, after 1988 the Soviet party began to apply economically unacceptable conditions for the importation of SNF from Czech NPPs (at that time NPP Bohunice and NPP Dukovany). Subsequently, the original bilateral agreements in this field have been abolished. States depending on the transportation of SNF into Russia (Hungary, Bulgaria, Slovakia, and Finland) started to build their own storage capacities. In this situation CEZ plc (Czech Power Plants Inc.) first contacted the management of the electric power producers with available storage capacity for SNF in Germany, Italy, Finland, Belgium, and Sweden. However, the reply from all these states was negative. (Note: I can only point out the demonstrations against the transportation of SNF to Gorleben in the territory of Germany, in which more than 30 ths. ecological activists took part).

In this situation, also the possible SNF reprocessing in United Kingdom or France, where large SNF reprocessing plants were under operation, was taken into consideration. This reprocessing turned out to be economically extremely unfavourable. However, along to the economic viewpoint, there are also other reasons making reprocessing unfavourable. The

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most important reason emerges from the requirement that the SNF owner should take over the highly radioactive waste from reprocessing (the so-called ashes) for permanent disposal. Hence, for this type of waste it will be necessary to build an interim storage facility and subsequently also the permanent repository.

The advantage of SNF storage consists predominantly in the possibility of its potential use in NPPs of a new type, e.g., ADTT. The interim storage is thus the worldwide solution of SNF handling. Repositories of SNF (i.e., localities for permanent and final disposal of SNF without the possibility of retrieving) are so far under construction in the United States and Sweden, perhaps also in Russia. However, nowhere they are in operation.

In this situation CEZ had no other option but to build the first interim storage of SNF (ISSF) as there was a real danger that, after fully exploiting the capacity of cooling pools in the main production units in 1985 the NPP Dukovany should have been decommissioned.

## ***7.2 EXAMPLES OF SEA AND EIA PROCESSES IN NWM***

Currently, there is very little experience with EIA/SEA process in accordance with the new legal framework - Act No. 100/2001 Coll. Virtually in all cases of plans and conceptions assessment in the field of nuclear waste management, environmental impact assessment has been carried out according to requirements of previous Act No. 244/1992 Coll. of the Czech National Council.

### **7.2.1 First interim store of spent fuel in NPP Dukovany (ISSF)**

Historically, ISSF Dukovany was the very first facility in the Czech Republic subjected to the EIA process. The intention met with high opposition of local population and NGOs. Immediately after making public the plans for building an interim store in NPP Dukovany, NGO Hnutí DUHA launched its first large campaign. By the end of April 1992 Hnutí DUHA organized its first large public event – a march from Dukovany to Rouchovany. About 200 local inhabitants took part in the march. Afterwards a petition had been formulated with which the activists visited all the houses in all communities in the vicinity to prove that a majority of population does not want any interim store.

In this ambiance the Government entered into the process and its negotiations with the mayors terminated in a compromise. In its Decision No. 213/1992 Coll. the Government undertook to limit the interim store capacity to only 600 tons. Moreover, the Ministry of Environment signed an agreement with CEZ that the plan of the interim store construction

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will be assessed according to the new Act No. 244/1992 Coll. of the Czech National Council, on the Environment Impact Assessment. This agreement was rather valuable, as at the moment of the beginning of the land use procedure this Act did not yet come into force. The attempts to test the new Act in practice and to involve the local population was behind the whole approach.

The legally prescribed public hearing of the EIA report took place on 29 October 1992 in the community of Rouchovany. About 600 people participated in it, including a number of civic activists directly from the NPP locality, and also the representatives of the Hnutí DUHA, Greenpeace, and also representatives of Austrian population. During this hearing the minimum environmental effects of the dry ISSF in containers have been proved.

The interim store operation and its decommissioning ended on 8 March 2006.

## **7.2.2 The spent fuel store in NPP Dukovany**

The basic function of the spent nuclear fuel (SNF) store Dukovany is to provide for the acceptance, handling, and long-term storage and retrieval of the spent nuclear fuel from the VVER-440 nuclear reactors operated in the NPP Dukovany. Storing capacity of SNF store in Dukovany – i.e., 133 packing sets for 1340 tons of HM (heavy metals) – will be sufficient for the storage of all spent fuel produced in the NPP Dukovany (the storing capacity of the interim store under operation is already fully exploited) up to the moment of decommissioning all four reactors of NPP Dukovany.

According to the Atomic Act No. 18/1997 Coll., as amended, the spent nuclear fuel store is a nuclear facility. All steps of its preparation, construction, operation, and liquidation are subjected to supervision by the State Office of Nuclear Safety, which represents a time-consuming licensing process. According to the Act No. 100/2001 Coll. (on the environmental impact assessment) the spent nuclear fuel store is classified in the most strictly controlled groups of intentions (Category I, Column A) and it is also subjected to a time-consuming assessment of environmental impacts. This is why the preparation of such a construction from the feasibility study to its putting into operation took about ten years.

In connection with the planning and construction of SNF store Dukovany the following principal steps had been accomplished:

- elaboration of the environmental impact assessment of SNF store Dukovany documentation,

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- elaboration of an expert opinion on the environmental impact assessment of SNF store Dukovany,
- public hearing of the environmental impact assessment of SNF store Dukovany (June 1999),
- issuing of the Czech Ministry of Environment approval (November 1999),
- elaboration of the Safety Assignment Report in connection with submitting the application for issuing the permit for the construction siting (May – June 1998)
- issuing the permit of SONS (the State Office for Nuclear Safety) for siting the construction in the premises of NPP Dukovany (December 1999),
- issuing of the land use permit (May 2000),
- choice of the SNF store Dukovany designer,
- choice of the packing sets supplier for the first period of the SNF store Dukovany operation,
- elaboration of the Preliminary safety report in connection with submitting the application for issuing the permit for the construction of SNF store Dukovany (December 2001),
- issuing of SONS permit for the construction of SNF store Dukovany in the premises of NPP Dukovany (October 2002),
- issuing of the construction permit (May 2003)
- onset of the SNF store Dukovany construction (April 2004)
- completion of the construction and approval for use by the local construction authority (February 2006)
- issuing the SONS permit for the period of putting the SNF store Dukovany into operation (November 2006)
- onset of the period of putting SNF store Dukovany into operation (test run) on 22 December 2006.

### **7.2.3 The spent fuel store in NPP Temelin**

Operation of the spent fuel store in NPP Temelin should start in 2014. It should contain up to 1370 tons of materials, i.e. the production of both Temelin units within 30 years. At present the spent fuel is stored directly in the reactor pool. The interim store should be operated for about 60 years. In the SNF store Temelin the spent nuclear fuel will be stored in

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dry packing sets for transportation and storage. The following steps have been accomplished in connection with the environmental assessment of the SNF store Temelin:

- **Submitting the information on the intention** of siting the SNF store in the premises of NPP Temelin to the Czech Ministry of Environment (July 2003). As to the existing agreements the Czech Ministry of Environment immediately informed its Austrian and German partners and started the Environmental Impact Assessment (EIA) process. On 25 August 2003 the Austrian party announced that with respect to the potential negative impacts in the case of an accident or terrorist act it claims the participation of Austria in the EIA process according to the Act No. 100/2001 Coll. and the Espoo Agreement on the assessment of environmental impacts exceeding beyond the state borders. Furthermore, it announced that it had already taken all steps towards the involvement of Austrian public according to §6 Section 3 of the Act mentioned above. It also announced that it will submit its viewpoint along with the viewpoint of the Austrian public. On 18 October 2003 the Ministry informed the Austrian party on acceptance of its requirement on the international assessment of this intention. It was thus the first international assessment of a construction in the territory of the Czech Republic.
- **Conclusions of the so-called rogatory procedure** have been issued by the Ministry of Environment on 5 December 2003. On the basis of the executed rogatory procedure the respective authority concluded that the documentation on the Environmental Impact Assessment of the intention (henceforth only “documentation”) according to the Appendix No. 4 to the Act No. 100/2001 Coll. should be elaborated predominantly with respect to the following issues:
  - to specify the individual types of possible packing sets used together with the description of their technical data and properties;
  - to present a detailed analysis of emergency and possible accidents during operation and their possible impacts on the environment;
  - to evaluate the possible risks and consequences of a terrorist attack, connected, e.g., with a crash of a large transport aircraft;
  - to evaluate comprehensively the synergic and cumulative effects in the case of the SNF store accident or NPP accident to each other and to the nearby environment;
  - to describe and make more precise the construction details of the spent nuclear fuel store, to specify on what standards the constructions plans of the planned structure are based;
  - to supplement and precisely describe the waste sources of the intended construction, the amounts and handling methods with wastes originating during the construction and

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operation of the store, to describe in details and supplement the amounts and handling methods with wastes originating after the construction lifetime expiration;

- to describe and make more precise the subsequent utilization or termination of operation of the interim store after expiration of its lifetime, including also the measures in the case that at the time of its taking out of operation the final repository of spent nuclear fuel will not yet be available;
- to explain the possibilities of the potential extension of the interim store;
- to evaluate the negative effects of low doses of the radioactive radiation on human health;
- to take into account and elaborate all demands for supplementing, remarks, and conditions contained in the submitted viewpoints.

The rogatory procedure conclusions do not substitute the viewpoints of the respective authorities of state administration and the respective permits according to special regulations.

- **Elaboration of documentation concerning the environmental impact assessment of the intention to construct the SNF store in the premises of the NPP Temelin** (EIA documentation) and its submission to the Czech Ministry of Environment (July 2004). The EIA documentation was made public and was distributed to all respective authorities and territorial self-governing units for comments. It was also published on Internet so that general public could make its comments to it (e.g., on the web pages of the Czech Ecological Institute, [www.ceu.cz/eia/is](http://www.ceu.cz/eia/is) and on the Ministry of Environment pages [www.env.cz/EIA](http://www.env.cz/EIA)).
- **Public examination of the EIA documentation** – according to the law, up to September 2004 everyone was entitled to send his comments and viewpoint in written form to the Czech Ministry of Environment.
- **Elaboration of a report to the intention to siting SNF store in the NPP Temelin and its environmental impacts and its submission to the Czech Ministry of Environment** (May 2004). The author of the report had in its report to cope with 110 comments to the documentation comprising 30 topics. On the basis of the worked out expert opinion the Ministry of Environment had been recommended to issue an approving viewpoint to the intention. However, at the same time 65 conditions in eight project topics have been specified to the operator. Moreover, several expert opinions have been worked out for the author of the report on the possible impacts of the store beyond the state borders. On the

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basis of these expert opinions it could be stated that the impacts of the intention do not extend beyond the state borders.

- **The international public hearing on the environmental impact of the SNF store Temelin** was held on 24 August 2005 in Ceske Budejovice. Along to the Czech participants also the participants from Austria and Germany sat directly on the stage of the theatre hall of the House of Culture Metropol in Ceske Budejovice. In the auditorium were another twenty Austrian citizens and the representatives of Upper Austria, Lower Austria and of the Federal Land Salzburg. The Czech general public was represented by the representatives of communities, state authorities, antinuclear organizations, and also of the Temelin community, in the territory of which the store construction is being prepared, and about one hundred of other Czech participants, interested in this topic. All of them had the possibility to present their comments in the discussion.

This opportunity was used by 8 Czech and 3 foreign participants of the general public. All of them obtained immediately a reply from the present experts. Prior to the comments of the general public a five-hour discussion was held, in which the following authors presented their contributions: the author of the EIA documentation, the author of the expert opinion concerning the intention to build the SNF store Temelin, the head of the group designing the spent fuel store (on behalf of the applicant, i.e., CEZ plc), and others. In the second part of the public hearing most of the time available had been used by the representatives of the Austrian Federal Ministry for Water, Atmosphere, and Agriculture and of the German Federal Office for the Protection against Radiation. In their very long presentations they presented their minutely elaborated viewpoints that could be summarized into two issues: terrorism, i.e., first of all the problems concerning a crash of a large aircraft on the store and the decision on the actual type of the container. Subsequently, the Czech experts tried to answer all the questions of the representatives of Austria and Germany, both honestly and in detail. Hence, the following main topics were discussed:

- description of the project of the construction of the spent nuclear fuel store in the premises of NPP Temelin;
- the procedure of treating the comments and their incorporation into the expert opinion on the intention of building the spent nuclear fuel store in NPP Temelin;
- the possible trans-border environmental impacts of the spent nuclear fuel store;
- possibility of an accident or terrorist attack;
- problems with determining the actual type of a container

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The whole public hearing took about eight hours, with about three hours of the public discussion

- **Issuing of the approving viewpoint of the Czech Ministry of Environment** (23 November 2005)
- **Issuing of the State Office of Nuclear Safety decision**, approving the company CEZ plc, for the siting the SNF store on the estates of Krtenov cadastre, plot No. 180/1, Brezi at Tyn nad Vltavou cadastre, plot No. 1053/1, and Temelinec cadastre, plot No. 1044/3, South Bohemia Region (29 December 2005). Several ecological and civic organizations protested against the SONS decision. However, the Supreme Administrative Court decided that civic organizations cannot interlope into the authorization decisions of SONS. The Court based its decision on the reading of the Atomic Act No. 18/1997 Coll. According to this decision the civic organizations are not participants of similar proceedings and they cannot directly intervene into them. The ecological activists intend to submit a complaint to the Constitutional Court.
- **Issuing of the land use decision of the Department of Territorial Planning and Investments of the Regional Office (DTPI RO) of the South Bohemian Region** on the siting of the “Spent Nuclear Fuel Store in the premises of NPP Temelin” on the land estates, plot No. 180/1 in the Krtenov cadastre, plot No. 1053/1 in the Brezi at Tyn nad Vltavou cadastre, and plot No. 1044/3 in the Temelinec cadastre (25 October 2006). The ecological activists from the South Bohemian civic organizations made an appeal against this decision. Following the appeal of the ecological activists and cancellation of the land use decision, the Ministry of Local Development renegotiated this decision. By the end of August 2007 it issued the same verdict. Several ecological organizations and Mr. Josef Vesely, the owner of a plot adjacent to the plot for the interim store, appealed again against this verdict. The date of the building beginning is thus not yet determined.
- The communities in a five-kilometer area around the NPP Temelin obtained for their positive attitude towards the interim store a subsidy from the power-station company ČEZ. Altogether 6 communities obtained 50 million Czech crowns.

#### 7.2.4 Project of deep geological repository

The project of the deep geological repository has to be assessed according to the Czech EIA Act. The EIA documentation that was carried out within the reference project should identify environmental influences of the project that can be expected and the set of data that will be necessary for a proper environment impact assessment. But these data have

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been collected according to the requirements of the former EIA Act No. 244/1992 Coll. of the Czech National Council.

The direct ingest of drinking water from the close underground spring was identified as the utmost risk. The next research and development works will be therefore orientated especially to all issues pertinent to this risk.

## **7.2.5 Conception of radioactive waste management in the Czech Republic**

The Conception of Radioactive Waste and Spent Nuclear Fuel Management (Conception hereinafter) is a fundamental document formulating the government and state authority strategy for the period up to approximately 2025 (affecting policy up to the end of the 21st century), concerning the radioactive waste and spent nuclear fuel producers. The Conception puts forward solutions to provide for the disposal of waste in compliance with requirements for the protection of human health and the environment without excessively transferring any of the current impacts of nuclear energy and ionising radiation utilisation to future generations.

The Conception has been prepared in compliance with energy policy approved by Government Decree No. 50 of 12 January 2000; preparation of the Conception was required, amongst other reasons in connection with preparations for the Czech Republic's accession to the European Union and in connection with the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management adopted under the auspices of the International Atomic Energy Agency, which was signed by the Czech Republic in 1997.

The objectives of the Conception are as follows:

- To determine strategically justified, scientifically, technically, environmentally, financially and socially acceptable principles for radioactive waste and spent nuclear fuel management in the Czech Republic;
- To develop a basic system framework for the decision-making of those authorities and organizations responsible for radioactive waste or spent nuclear fuel management in the Czech Republic;
- To communicate in straightforward way information concerning the long-term management of radioactive waste and spent nuclear fuel to organizations involved in this field and to the general public.

The Conception proposed here is based on an analysis of current developments and professional forecasts of future trends in the peaceful employment of nuclear energy and

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ionising radiation. It is based on fifty years of experience of Czech organisations involved in the disposal of radioactive waste and on proven practice, as well as on a modern and complex system of legal regulations that make it possible to perform individual activities in a safe way and contain sufficient control mechanisms relevant to present-day conditions and into the future. The Conception also takes into account experience and best practice in radioactive waste management in other countries. The Conception respects strategic government policy including: Energy Policy, and former Government resolutions on state environmental policy.

The Conception applies to the activities of numerous interest groups and organisations, including:

- The Czech Government and state authorities in general
- The State Office for Nuclear Safety
- The Radioactive Waste Repository Authority and its supervisory Board (RAWRA)
- Generators of Radioactive Waste and Spent Nuclear Fuel
- Institutions Involved in the Development of Methods for the Disposal of Radioactive Waste and Spent Nuclear Fuel
- The General Public

The general public attitude towards the radioactive wastes and thus also to the Conception of their management can be subdivided into several basic groups:

- a citizen as beneficiary of the outcomes of activities generating RAW
- a citizen as an object of RAW negative impacts on the environment
- a citizen as a participant in decisions concerning the RAW management

The general public could and can participate on the Conception and accomplishment of the individual subsequent steps in compliance with the valid legislation as follows:

- a) at the level of political decisions by means of the democratic system of his representatives
- b) at the level of the *Conception* and *Assessment* evaluation by participating according to the Act No. 244/1992 Coll.
- c) at the level of the execution of selected constructions (particularly of the deep repository) by participating in the assessment of the environmental impacts of these constructions according to the Act No. 100/2001 Coll. (the EIA process).
- d) at the level of the preparation of the territorial plans and within the framework of the land-use and building procedures according to the Construction Act.

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The following steps have been executed concerning the environmental impacts assessment of this conception:

- Ministry of Industry and Trade presented (submitted) the Conception of the Radioactive Waste Management to the general public for comments – August 2001.
- Simultaneously with the Conception preparation the company EVERNIA, Ltd worked out the environmental impact assessment of this Conception according to the Act No. 224/1992 Coll. – November 2001.
- The public hearing of this Conception and of its environmental impact assessment was held on 18 September 2001 in Prague.
- A seminar on the topics of the Conception and its assessment was held in the Senate of the Czech Republic on 25 September 2001.
- It was concluded that no comments, either in the public hearing on 18 September 2001 or in the seminar in the Senate of the Czech Republic, had been presented that were not properly answered and that would challenge the proposed Conception and Assessment.
- Settlement of the general public comments to the Conception.
  
- At the end of the assessment procedure the Ministry of Environment issued on 20 November 2001 a negative viewpoint. It was substantiated as follows:
  - the Conception does not contain the factual measures for the radioactive waste and spent nuclear fuel management and all its possible variants
  - the idea of the permanently sustainable development as one of the prerequisites of the environmentally acceptable development strategies should constitute an inseparable and integral part of the Conception of the management with radioactive waste and spent nuclear fuel
  - from the point of view of the permanently sustainable development the Conception does not comply particularly with the Principle of Preliminary Caution and with the Principle of Prevention, it does not correspond to the Principle of Economic Responsibility.
- In spite of the negative viewpoint of the Ministry of Environment the Government of the Czech Republic approved the proposed Conception.

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## 8. DEFINITION OF CONCEPTS

Affected administrative authority – It shall be an administrative authority, which defends interests protected by special regulations and the administrative area of which constitutes at least part of affected territory and the Czech Environmental Inspection.

Affected territory – It shall be the territory the environment and population of which should be significant affected by the implementation of the plan or conception

Conception – It shall be strategies, policies, plans or programs prepared or farmed out by a public administration authority and subsequently approved or submitted for approval by a public administration authority.

Notifier – The person who intends to implement a plan. The notifier submits a notification of the plan to the relevant authority.

Plan – It shall be a construction work, activity and technology as set forth in Annex No.1 of Act No.100/2001 Coll.

Public hearing – The process in which interested parties and any other persons who may be affected have the opportunity to make submissions, ask questions or register objections to plan or conception.

Relevant authority – It shall be the Ministry of the Environment or regional authority in delegated jurisdiction in the territorial administrative area of which the plan is proposed or for the territorial administrative area of which the conception is being prepared.

SEA expert – The person authorised to prepare the evaluation of environmental impacts

Submitter – The person submitting a suggestion for the preparation of conception to the relevant authorities.

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