# ANSWERS TO QUESTIONS ON NATIONAL REPORT OF THE SLOVAK REPUBLIC



COMPILED ACCORDING TO THE TERMS OF THE JOINT CONVENTION ON THE SAFETY OF SPENT FUEL MANAGEMENT AND ON THE SAFETY OF RADIOACTIVE WASTE MANAGEMENT

> BRATISLAVA APRIL 2006

# Answers to questions on National Report of the Slovak Republic

Slovakia is pleased to present to the State Parties of the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management the Answers to questions received on the National Report of the Slovak Republic compiled according to the terms of the Joint Convention (2005). Slovakia is ready to provide additional explanations to these Answers during the  $2^{nd}$  Review Meeting.

The 1<sup>st</sup> National Report is available at www.ujd.gov.sk (documents).

Joint Convention Questions Posted To Slovakia in 2006

Seq. No	Country	Article	Ref. in National Report
1	France	General	Section K Page 62

Question/ Could Slovakia provide information on the elaboration and validation process applied to the Comment proposed measures mentioned in section K.2 ?

Answer The safety enhancing measures are identified based on:

- operator experience and measures from failure commissions
- feedback from other NPPs of a similar type
- ÚJD SR recommendations and decisions
- recommendations from the IAEA and international missions

The proposed measures are discussed by the plant Technical Committee (TC). Following TC recommendation, they are submitted for approval to the management meeting. Thereafter, a project of changes and modifications is developed, which is submitted pursuant to Act No. 541 to ÚJD SR either for consideration or approval, depending on the nature of the change. Upon issue of ÚJD SR consent or ÚJD SR review, the change and modification implementation phase follows. After the implementation phase completion, the operator is obliged under Act No. 541 to present ÚJD SR a revision of a particular section of the safety analysis report for approval or consideration.

Seq. No	Country	Article	Ref. in National Report
2	Netherlands	General	Annex IV

Question/ Inventories in this Annex are expressed as cubic meters, more information on contents & activity Comment would be useful.

Solid RAW at VVER nuclear power plants - summary activity of drums is only indicated in Answer transport of drums for processing. It is calculated from the values of dose rate and drum weight. Every drum is measured for the dose rate and surface contamination. The dose rates values range between: combustible SRAW - 60 and 1800 microgray/hr active coal - less than 1 microgray/hr solid RAW for high-pressure compaction - 16 and 1000 microgray/hr solid RAW for cementation (SIAL matrices) - 300 and 500 microgray/hr concrete for dying-cul - less than 1 microgray/hr Surface contamination must be less than 0.3 Bq. Summary activity of NPP A-1 solid RAW Beta + Gamma ranges between  $10 e^5 Bg and 10 e^{13} Bg.$ Summary activity of tank concentrates ranges between: NPP V-1 5.9  $e^{6}$  Bg/l and 2.35  $e^{7}$  Bg/l NPP V-2 6.0  $e^4$  Bq/l and 7.67  $e^5$  Bq/l

NPP EMO 1.4  $e^4$  Bq/l and 7.38  $e^5$  Bq/l

Summary activity of liquid RAW at NPP A-1 ranges between: Beta, Gamma 1.3  $e^9$  Bq/l and 3.0  $e^{15}$  Bq/l Alfa 6.6  $e^4$  Bq/l and 2.4  $e^9$  Bq/l

Seq. No Country

Article

3	Austria	Article 1	Section D Annex III	
Question/ What is the current capacity and inventory of the ISFS in terms of number of fuel assemblies? Comment Are projections for the future available? If so, what are they and what scenarios have been assumed concerning NPP operation and decommissioning?				
Answer	Current ISFS capacity is 14 112 fuel ass NPP Bohunice units till the end of their life Mochovce.	emblies. This capacities the capacities and for some	ity is satisfactory for operation of all part of spent fuel from NPP	
Seq. No 4	Country Czech Republic	Article Article 6	Ref. in National Report	
Question/ Comment	Since 2003 are there any further steps rela will accommodate spent fuel from NPP M	ted to the siting of a ochovce?	new spent fuel storage facility that	
Answer	swer No, the decision was postoned. New spent fuel storage for NPP Mochovce will be necessary in 2017.			
Seq. No 5	Country Lithuania	Article Article 6	Ref. in National Report	
Question/ Comment	Is there a procedure in Slovakia of informit what is this procedure?	ng contracting parti	es according sub-article (iv)? If yes,	
<ul> <li>Answer In siting the proposed SF management facilities, assessment of the site and factors affecting safety and information to members of the public are implemented under the relevant provisions of Act No. 24/2006 Coll. on environmental impact assessment. The list of facilities subject to international negotiation in terms of their effects beyond state borders is set out in Annex 13 and the issues concerning the assessment of the proposed facilities' effects transcending state borders are dealt with by Annex 14, 15.</li> <li>In addition there are governmental agreements with all neighbouring countries within which regular meeting are taking place to exchange relevant information. More over article 37 of the EURATOM Treaty is relevant under wich the Member States of the EU are consulted</li> </ul>				
Seq. No 6	Country Czech Republic	Article Article 7	Ref. in National Report	
Question/ The report mentions that UJD became a specialized construction authority according to the Act No. Comment 50/1976 Coll. (Construction Act)." Could the Slovak Republic provide information about collaboration UJD with local construction authorities?				

Answer As regards the construction of nuclear installations, UJD acts as a specialized construction authority and a municipality acts as an affected authority . UJD asks for statements of affected authorities and informs them on beginning of legal proceedings.

Seq. No	Country	Article	Ref. in National Report
7	Germany	Article 8	p. 49

Question/ Do the requirements for periodical safety assessments of spent fuel and radioactive waste

Comment management facilities comprise special measures that refer to the long-term safety of interim storage?

Answer The requirements are described in § 23 Nuclear safety of Atomic Act. The requirements cover whole lifetime (operation as well as decommissioning) of a nuclear installation. The Regulation No. 49/2006 Coll. on periodic safety assessment describes general requirements for periodical safety assessment of nuclear installation (including spent fuel and radioactive waste management facilities).
 Under Art 2 of UUD B condition No. 40/2006 Coll. on periodical safety assessment of nuclear installation.

Under Art. 2 of UJD Regulation No. 49/2006 Coll. on periodic evaluation of nuclear safety "The

licence holder will carry out the first periodic evaluation by the state of the nuclear installation as of the day on which eight years will have expired since the issue of the operation licence", with such evaluation being focused on:

a) comparison of the achieved state of nuclear safety on the nuclear installation with the current nuclear safety requirements and with the best technical practice,

b) verification of cumulative effects of nuclear installation ageing, the impact of both undertaken and envisaged changes to the nuclear installation, operating experience and technical development on nuclear safety,

c) establishment of justified and practical changes to the nuclear installation with a view to maintaining the required high nuclear safety standards or improve them close to those of modern nuclear installations in the world,

d) demonstration that the required nuclear safety standards are secured until the next periodic evaluation or the end of the licence validity.

The assessment is done according to current status of knowledge in the respective field. The special measures that refer to the long-term safety of interim storage are described in the safety report, which is subject to periodical safety assessments.

Seq. No	Country	Article	Ref. in National Report
8	Czech Republic	Article 9	

Question/ As SE-VYZ spent fuel storage facility relies on active operation technologies how does the operator

Comment ensure that adequate safety-related engineering and technical support is available throughout the whole lifetime of the facility

Answer This area is for all lifetime of nuclear facility realized in accordance of Quality Management System (QMS) and in accordance of Schedule for operational control of equipment of Interim Spent Fuel Storage (No. HMG-02/MSVP) (ISFS), witch include controls going out from Regulations of UJD, Individual Programs for Quality control for each equipment (choiced in point of view of nuclear safety), decisions of UJD and Long term monitoring program for building parts and technological systems of ISFS (No. PS M9-R).

For example the seismological reinforce and reconstruction of building constructions and technological systems of interim spent fuel storage facility was done in the framework of reconstruction works of interim spent fuel storage facility in 1997 - 1999.

The condition of civil contruction as well as the condition of technological systems and spent nuclear fuel is monitored through monitoring programs.

Seq. No	Country	Article	Ref. in National Report
9	Czech Republic	Article 11	

Question/ How is ensured a safety of long term storage liquid radioactive waste (concentrates and Comment ionexchangers) from the point of view possible corrosion of storage tanks?

Answer Each tank with concentrate as well as ion exchangers is installed in individual room. Internal walls are coated by stainless steel which creates hermetic tight secondary tank. It is possible to pump outside to another tank of medium from leaked tank or a medium from the room around the tank.

The tanks are made of stainless material. Pursuant to the regulatory, one tank must be empty in order to secure a free capacity corresponding to the capacity of the largest tank in the system. The tanks are controlled by ultrasound measurement of the wall thickness and visual inspection.

Seq. No	Country	Article	Ref. in National Report
10	Czech Republic	Article 11	

Question/ Taking into account possible formation of sludges in storage tanks for liquid radioactive waste, do Comment you have an idea how such sludges will be removed form these tanks and treated and conditioned?

Answer NPP Mochovce uses from the beginning of the liquid RW production the possibility to mixture a volume of the tank with RW concentrate. A volume of each tank is regularly mixed with the help of on bottom lying air collector. According to our experience it is important to keep correct conditions of the tank volume and to prohibit creation of hard sediment of sludge.

The firm Alldeco carried out for NPP V-2 the removal of sludge using a mobile equipment of waste water tanks 1,2TR10B01(2003 to 2004). The produced sludge was solidified into SIAL matrices at the point of formation. Solid waste (solidified sludge) laden drums are stored at the SRAW storage facility, some of the drums have been transferred to SE-VYZ and stored in FCCs. Sludges from ra-concentrate tanks 0TW10B01 to B09 could be removed this way following the full drainage of the tank.

Seq. No	Country	Article	Ref. in National Report
11	France	Article 12	Section H2 Page 53

Question/ Could Slovakia provide information on past practices, related remaining safety issues and Comment remediation programs (schedules, entities involved, financing schemes, final status...)?

- Answer The first phase of NPP A1 decommissioning that should finish in 2007 can be characterised as follows:
  - All spent fuel has been removed from the long-term storage and the liquid waste that represents the highest potential risk has been solidified or stored in new tanks,
  - The majority of liquid operational waste has been conditioned into a form enabling safe disposal,
  - The other radioactive waste has been processed into a form allowing safe disposal or storage,
  - The essential decontamination has been completed aiming to reduce the potential sources of radioactivity leakages.

A project entitled Decontamination of the Primary Circuit of A-1 Nuclear Power Plant (referred to as Project in the following text) was funded by the Phare programme. A Consortium formed by a Slovak company AllDeco s. r. o. from Trnava and Belgoprocess from Belgium was awarded the contract. The work started in May 2004 and was completed within its allocated time in May 2005. The objective of the Project was to perform preparatory work for pre-dismantling decontamination of the primary circuit of NPP A-1 Jaslovské Bohunice in Slovakia. The Project consisted of the following five Tasks:

- Remote monitoring of radiological characteristics and physical survey of the reactor and primary circuit of NPP A-1
- Proposal for the separation of the ractor vessel from the primary circuit
- Proposal for surveillance of the separated reactor vessel during its long term storage
- Detailed design of decontamination procedures for selected parts of the primary circuit of NPP A-1
- Proposal for management of radioactive waste arising from decontamination of the primary circuit of NPP A-1

Seq. No	Country	Article	Ref. in National Report
12	France	Article 12	Section H2 Page 53

Question/ Did Slovakia recently perform a re-evaluation of the impact of the near-surface disposal site? Comment

Answer Under Art. 2 of UJD Regulation No. 49/2006 Coll. on periodic evaluation of nuclear safety "The

licence holder will carry out the first periodic evaluation by the state of the nuclear installation as of the day on which eight years will have expired since the issue of the operation licence", with such evaluation being focused on:

a) comparison of the achieved state of nuclear safety on the nuclear installation with the current nuclear safety requirements and with the best technical practice,

b) verification of cumulative effects of nuclear installation ageing, the impact of both undertaken and envisaged changes to the nuclear installation, operating experience and technical development on nuclear safety,

c) establishment of justified and practical changes to the nuclear installation with a view to maintaining the required high nuclear safety standards or improve them close to those of modern nuclear installations in the world,

d) demonstration that the required nuclear safety standards are secured until the next periodic evaluation or the end of the licence validity.

The national radwaste repository was commissioned in 2001, i.e. the first periodic evaluation will be needed to be carried out in 2009.

Seq. No	Country	Article	Ref. in National Report
13	United States of America	Article 12	53

Question/ The Slovak national report addresses the provisions of Article 12 by referring the reader to the 1st

- Comment National Report reviewed in November 2003, even for those questions based on apparent omissions in that report. Issues were raised at the Country Group 1 session regarding the Slovak report. These included a series of questions regarding elaborating on past practices, the reassessment of the near surface disposal site at Mohovce, and clarification of the "free storage" practice. The areas questioned regarding existing waste management facilities and past practices are not addressed in the 2006 Slovak National Report. Please include this information in the third report and address this comment in your national presentation.
- Answer Under Art. 21 of Act No. 541/2004 Coll. on peaceful uses of nuclear energy (Atomic Act) "All radioactive waste management activities must be directed to their safe disposal". According to the adopted philosophy all operation RAW have to be processed as of the date decommissioning (if possible)?.

All operation RAW that comply with the conditions for disposal at the near-surface disposal site are continuously processed at the Bohunice Processing Centre and disposed of at the Mochovce National Radwaste Repository. Those RAW that would fail to comply therewith will be conditioned and stored at the integral storage facility (under construction) until disposal thereof at the deep geological repository.

Seq. No	Country	Article	Ref. in National Report
14	France	Article 13	Section H3 Page 54

Question/ Existence of guidelines for the evaluation of site-related factors and long-term impact evaluation Comment could be indicated, if any.

Answer Slovakia follows in repository siting the internationally applicable recommendations (IAEA Safety Guides 111-G-3.1, 111-G-4.1 ...). The environmental impact assessment is governed by Act No. 24/2006 Coll. on environmental impact assessment.

Seq. No	Country	Article	Ref. in National Report
15	Denmark	Article 14	

Question/ Is there prepared detailed plans for the construction of the deep geological repository, intended to Comment house radioactive waste, which cannot go into the Mochovce Near Surface Repository? If so, will these plans be presented at the joint convention meeting in 2006?

Answer The deep geological repository development plant was approved at SE, a.s., in 2003. Phase 1 (1996-1998)

- Co-ordination activity
- Design and implementation activities
- Source member, field of near and remote interactions
- Siting
- Safety analyses

Phase 2 (1998-2001)

- Design and implementation activities
- Siting and remote interactions
- Safety analyses.

Phase 3 (reduction in the number of sites and passage from the level of study sites to survey) 2004-2006 (a delay in the execution of this phase occurred because of SE, a.s., restructuring and privatisation).

- Safety analyses
- Geologic-survey works
- Organization-management activities

Phase 4 (selection of a prefered site out of two) 2007-2012

- Safety analyses
- Geologic-survey works

• Organization-management activities

- Definitive selection of the site (planning decision)2012-2015
- Setup of an underground laboratory at the site of the selected deep geological repository and long-term monitoring thereof
   2015-2030
   2030
   deep geological repository development completion
   2037

Deep repository commissioning (obtaining a licence) 2047

Seq. No	Country	Article	Ref. in National Report
16	United States of America	Article 15	54

Question/ The Slovak national report addresses the provisions of Article 15 by referring the reader to the 1st Comment National Report reviewed in November 2003, even for those questions based on apparent omissions in that report. Issues were raised at the Country Group 1 session regarding the Slovak report. These included questions regarding the frequency of safety reviews of spent fuel and waste management facilities and additional information on assessment of post-closure scenarios of near surface disposal. The areas questioned regarding assessment of safety of waste management facilities are not addressed in the 2006 Slovak Report. Please include this information in the third report and address this comment in your national presentation.

Answer Periodic assessments of nuclear safety of nuclear installations must be carried out under the new ÚJD SR Regulation No. 49/2006 Coll. The periodicity is established to 10 years, with the first periodic assessment to be carried out as of the day on which an eight-year period since the operation licence issue expires.

Information on assessment of post-closure scenarios of near surface disposal:

• For the post-closure period, the choice of the scenarios followed NUREG 1199 standards as required by the UJD. Scenarios used for trench repositories were adapted to the vault disposal conditions and extended with scenarios following the violation of barriers

comprising the reinforced concrete containers and concrete structure of the repository.

- <u>The normal evolution scenario</u> assumes severe failure of the top cover of the repository after the institutional control period (300 years) so that infiltrating water saturates the repository and gradual degradation of the waste packages occurs. The released radionuclides are assumed to migrate through the bottom clay layer and to be transported via the aquifer to a stream and then to a lake.
- <u>Human intrusion scenarios</u>

*Construction scenarios* - After the institutional control period human activities such as the construction of road and buildings are supposed to take place on the site

*Residence scenario.* This scenario is considered to be only applicable to simple dwelling (maximum foundation depth 4 m, surface  $10m \ge 120m2$ ) built on the site with the waste and material excavated for the foundations spread around the house.

Seq. No	Country	Article	Ref. in National Report
17	Czech Republic	Article 16	

Question/ Provide information on operational limits and conditions including waste acceptance criteria for Comment Mochovce disposal facility. Do they cover also criteria for disposal of ion exchange resins and

sludges and if yes in which form.

Answer

L&C for the national radwaste repository were established under safety analyses - POSAR. The limits apply to all RAW from NI operation, i.e. also for ion exchanges. They are divided into:

- 1. Safety limits
  - Maximum radionuclide inventory of radionuclide activities in wastes disposed of
  - Maximum concentration of limited radionuclides in the waste-laden container
  - Configuration of storage of waste-laden containers at the national repository
  - Form of wastes being accepted
  - Contents of undesirable components
  - Strength of cemented products
  - Waste-laden container properties
  - Waste-laden container weight
  - Leachability
- 2. Safe operation limits of conditions
  - Crane travel subsidence
  - Monitoring for water presence at storage box premises
  - Monitoring for water level of drainage system collection tanks
  - Water liquid discharges from the national radwaste repository

Seq. No	Country	Article	Ref. in National Report
18	Denmark	Article 16	

Question/ Which types of disused sealed sources can be deposited in the Mochovce Near Surface Repository – Comment and which should go into the planned deep geological repository?

Answer In line with the current L&C no disused sealed sources are deposited at the Mochovce Near Surface Repository as yet.

New safety analyses are currently prepared that will allow to complete L&C to include the criteria for DSS disposal at the repository.

Seq. No	Country	Article	Ref. in National Report
19	France	Article 16	Section H.5.2 page55

Question/ Following the incident that occurred in Japan in 1997 in the Tokaï bituminization unit, did Slovakia

Comment developed an improvement action plan for the SE-VYZ waste treatment unit?

Answer On the bituminization line, increased attention is paid to physical and chemical properties of radioactive concentrates prior to their bituminization and, if necessary, change in their parameters made to prevent a thermal reaction from getting arisen in the bituminization product.

Seq. No	Country	Article	Ref. in National Report	
20	France	Article 16	Section H6 Page 55	
Question/	Could Slovakia provide more detailed info	ormation on the wast	e acceptance criteria applied to the	
Comment	existing facilities and the related procedure	es?		
Answer	The acceptable criteria are part of the limit other technical documents derived from t the national radwaste repository.	s and conditions (Lo he safety analyses so	&C) of a nuclear installation and of et out in the safety analysis report for	
Seq. No	Country	Article	Ref. in National Report	
21	Hungary	Article 17	H.7.2 p. 56-57	
Question/ Comment	Will the complete monitoring system be op control period?	perated during the p	lanned 300 years of institutional	
Answer	The repository monitoring system will be	operated also over t	he 300-year ICP, however not to the	
	extent it is operated currently and some of	its parts will be mod	dified to match the conditions	
	following the repository closure (gravity w	ater drainage from	the whole area, and the like).	
Seq. No	Country	Article	Ref. in National Report	
22	Slovenia	Article 17	Section H.7.1, p. 56	
Question/ Comment	What is the expected time for maintaining	records about the re	pository?	
Answer	Records on stored RAW will be maintained institutional control period, i.e. 300 years. 53/2006 Coll. laying down particular of re radioactive wastes and spent fuel. The hold institutional control registers data under a institutional control.	ed (in digital and pay This is determined by quirements in the m der of the licence for special regulation ar	per form) as a minimum over the by Art. 13 of UJD Regulation No. anagement of nuclear materials, r closure of the repository and ad maintains them by the end of the	
Seq. No	Country	Article	Ref. in National Report	
23	Sweden	Article 17	H,7, pp. 56-58	
Question/ Comment	Could you please summarise the legal provision issues, relating to i) monitoring, ii) active or requirements, iii) ownership or other legal	visions in Slovakia - or passive institutior issues foreseeing po	if any - governing post-closure nal control such as archive ost-closure events and activities?	
Answer	Legal provisions governing post-closure issues are given by article No. 22 of Atomic act. They are dealing with regulatory safety-related requirements for closure, monitoring, institutional control as well as licensing procedure concerning repository closure. In attachment of Atomic Act the required documentation to be submitted for mentioned activities is introduced. In addition regulations (No. 50/2006 Coll. and No. 53/2006 Coll.) further details are prescribed such as requirements for scope and content of monitoring, actions to be done during active/ passive part of institutional control and necessary corrective measures, documents archiving process, etc. Also there is possibility for regulatory body (directly resulting from act) to put into the closure licence another particular conditions regulating post-closure and institutional control phase.			
Seq. No	Country	Article	Ref. in National Report	
24	France	Article 19	Section E Page 20	

Question/ Could Slovakia clarify the role of the regulatory body regarding the technical review of the safety

Comment related documents and SAR?

Answer Legal and technical review of safety documentation is carried-out primarily by specialised regulatory body staff. In some cases, there is a possibility to take an external cooperation with technical support organisations. Regulations No. 50/2006 Coll. And No. 56/2006 Coll. ares containing provision that operator should submit independent evaluation of the safety documentation.

Seq. No	Country	Article	Ref. in National Report
25	Netherlands	Article 19	Section E

Question/ According to the report the responsibility for radiation protection in the Slovak Republic is divided.

- Comment Different ministries have responsibility for the public, the workers and discharges of radioactive material in air and water. Please explain how this affects the possibility to make homogeneous assessments and statements?
- Answer Whole responsibility for radiation protection, including public and workers exposure and discharges of radioactive material in air and water, belongs only to the Ministry of Health of the Slovak Republic.

The most important for UJD is the competence of supervising the nuclear safety of nuclear installations. For UVZ the most important competence is supervising the sources of ionising radiation.

Besides the principal division of powers in the above-mentioned acts, there exists also interdepartmental agreement on co-operation between the UJD and UVZ, concluded by UJD and Ministry of Health upon the Slovak Government Resolution No. 442/2003 of the 23 June 2003.

The basic principle of co-operation and joint inspections between the UJD and UVZ is to avoid "dual inspections" (obtaining the operator with the same things twice) as well as exchange the information and findings that might be of other authority interest or relevance for inspection. For example, in 2005, three special joint inspections were performed. These inspections were focused on fulfilment of requirements for nuclear and radiation safety according reconstruction of vitrification facility, commissioning of discontinual bituminisation facility and management of contaminated soils. This system of joint inspections was developed due to lack of clear definitions of powers, problems with the existence of dual competency as well as experience during the last period.

Seq. No	Country	Article	Ref. in National Report
26	Slovenia	Article 19	Section E.1.2.2 p.19

Question/ It is reported that the new Act (No.541/2004 Coll) repealed all Regulations issued to date and that Comment new regulations are currently under preparation. Could you please explain the regulation that is at present in force?

Answer The Atomic Act took effect on 1<sup>st</sup> December 2004, under which 13 new regulations were prepared. New regulations took effect on1<sup>st</sup> March 2006. During this transition period requirements from drafts of regulations were applied as conditions of decisions issued by UJD.

Seq. No	Country	Article	Ref. in National Report
27	France	Article 20	Section E Page 19

Question/ It should be indicated here that provisions for decommissioning have to be compulsorily described Comment in the construction, commissioning and operation licensing documentation.

Answer The provisions for decommissioning documentation are primarily described in the articles E.2.1, H.4.1 and H.6.1 of the National Report.

E.2.1 Nuclear safety supervision

Preliminary conceptual decommissioning plan belongs among documentation for licensing construction of a nuclear installation, which will be issued by UJD following written application from the building owner supported with appropriate safety documentation (see H.4.1) under Art.18 of the Atomic Act and under Annex 1 (B) thereof.

Conceptual decommissioning plan belongs among documentation for licensing commissioning and operation of a nuclear installation, which will be issued by

UJD following application from the operator supported with appropriate safety documentation (see H.6.1) and a report on the assessment of the previous phase of commissioning under Art.19 of the Atomic Act and under Annex 1 (C) thereof.

Seq. No	Country	Article	Ref. in National Report
28	France	Article 20	Section E Page 20

Question/ Can opinion of UJD supersede opinion of other bodies involved in licensing in the framework of a Comment licensing process?

Answer Opinion or decision of UJD cannot annul, substitute or abrogate opinion or decision of other regulatory authorities participating in the licensing procedure.

The competencies of each governmental regulatory body is laid down in the Act No. 575/2001 Coll. LL. on the Organisation of Activities of the Government and Central Public Service Authorities (as amended from time to time) and particularly in specific acts of their material competence. Each regulatory body issues decisions based on their specific acts of competence.

UJD issues its decisions focused on nuclear safety. UJD as a specialized construction authority is bound to take other authorities opinions into consideration when issuing the final decision in the construction proceedings.

Seq. No	Country	Article	Ref. in National Report
29	France	Article 20	Section E Pages20-21

Question/ Does UJD rely on expert organizations for the assessment of the licensing documentation (in Comment particular safety reports)? If the answer is positive, how are selected the experts? Are they submitted to a certification process? What is their level of independency?

- Answer The regulatory body uses in the safety assessment of the supervised nuclear facilities services of the International Atomic Energy Agency and cooperater with other regulatory bodies and their technical support organisations. Important is co-operation between the UJD and STUK (Finland), GRS (Germany), IPSN (France), US NRC (USA) and European Commission (projects financed from EC). In addition UJD has established a Department of Safety Analyses and Technical Support. The department has been equipped and the staff has been trained under the international projects and co-operation (Swisslovak projects). The department performs independed safety analyses, review and assessment of NPPs safety for UJD. Particular answers:
  - Does UJD rely on expert organizations for the assessment of the licensing documentation (in particular safety reports)? Yes.
  - If the answer is positive, how are selected the experts? They are properly qualified workers of specialized organizations like VUJE, a.s. (Research Institute of Nuclear Power Plants, Inc.), VÚEZ, a.s. (Research Institute of Energy Plants, Inc.), various scientific institutes of the Slovak

Academy of Sciences, and Universities.

- Are they submitted to a certification process? They have to have a required academic degree closed with the State examination and a specified practice.
- What is their level of independency? They may not be connected with a development of the documentation reviewed.

Seq. No	Country	Article	Ref. in National Report
30	France	Article 20	Section E Page 23
			e

Question/ Is the sharing of competencies between UJD and UVZ defined in a regulatory text? Comment

Answer The division of powers between UJD and UVZ is established in the Act No. 541/2004 Coll. LL. (for UJD) and in the Act No. 272/1994 Coll. LL. on Public Health Care Services as amended (this is going to be replaced by the newly published Act No. 126/2006 on Public Health Care Services that will enter into force on June 1, 2006).

The most important for UJD is the competence of supervising nuclear safety of nuclear installations. For UVZ the most important competence is supervising the sources of ionising radiation.

Besides the principal division of powers in the above-mentioned acts, there exists also interdepartmental agreement on co-operation between the UJD and ÚVZ, concluded by UJD and Ministry of Health upon the Slovak Government Resolution No. 442/2003 of the 5 June 2003.

The basic principle of co-operation and joint inspections between the UJD and UVZ is to avoid "dual inspections" (obtaining the operator with the same things twice) as well as exchange the information and findings that might be of other authority interest or relevance for inspection. For example, in 2005, three special joint inspections were performed. These inspections were focused on fulfilment of requirements for nuclear and radiation safety according reconstruction of vitrification facility, commissioning of discontinual bituminisation facility and management of contaminated soils. This system of joint inspections was developed due to lack of clear definitions of powers, problems with the existence of dual competency as well as experience during the last period.

Seq. No	Country	Article	Ref. in National Report
31	Hungary	Article 20	E.2.1.2, p. 20

Question/ When discussing the inspection plan, what is the meaning and content of the section "VÚJE NI"? Comment

Answer "VÚJE NI" means nuclear facility operated by VÚJE.

There are two areas of inspection activities/special inspections at VÚJE:

- 1. VÚJE management Personnel training and qualification
- 2. VÚJE Training Centre Personnel training and qualification

ÚJD's attention is directed to the overall personnel training system, preparation of training programs and study materials for training of all categories of NI employees at the training and education centre VÚJE, which performs selected parts of NPP staff training.

Seq. No	Country	Article	Ref. in National Report
32	Hungary	Article 20	E.2.1.2, p. 21

Question/ • What kind of statistical evaluation is included in the analysis of inspection activities? Comment Has the means of financial penalty been used by the regulatory body anytime, and if so, what was its extent?

Answer Analysis of inspection activities contains:

- total number of team, special, unplanned and routine inspections
- total number of protocols (tables and diagrams)
- total number of findings, shortcomings and number of good practice examples
- average number of findings, shortcomings and number of good practice examples per 1 inspection
- the most frequent shortcomings and codes of shortcomings (in respect of inspection directive)
- conclusions and recommendations for Inspection plan for the next year

Example of financial penalty:

Financial penalty as a result of unplanned/special inspection due to non-compliance with L&C at the Mochovce NPP (UNSOLVED LONGTERM INDICATION OF EXCESSIVE PRESURE ON THE MAIN COOLANT PUMP SERVICE DECK A301/1,2) in 2004. UJD has issued Decision No. 199/2004 about aggravation of nuclear safety.

Details on event are accessible in the Incident Reporting System of the IAEA.

Seq. No	Country	Article	Ref. in National Report
33	Netherlands	Article 20	E.2.1.1

Question/ Could the Slovak Republic provide data on performed inspections (statistics, typical or specific Comment topics, major findings, etc.)?

- Answer Statistical data on assessment and inspection activities of the UJD are regularly published in the Annual Reports of the UJD in chapters:
  - Safety assessment and inspection of NPPs
  - Safety assessment and inspection of other NIs

Link: www.ujd.gov.sk

Seq. No	Country	Article	Ref. in National Report
34	Slovenia	Article 20	Section E.2.1.2 p.21

Question/ Are there any kind of financial warranties provided by the applicant before a licence is granted (as Comment to demonstrate sufficient financial resources in case of bankruptcy or liquidation of the operator or in case it fails to implement the prescribed radiation protection measures)?

Answer In the Atomic Act, there is not explicitly laid down the exact sum to be demonstrated. Anyway, pursuant to § 7 as one of the conditions for granting permission or authorization to applicant is to provide evidence of adequate technical and human resources with requested professional competency.

Pursuant to § 6(2), attached to the application shall be for example

- if the activities subject to authorisation are expected to generate radioactive waste, a document supporting that the management of radioactive waste is ensured, including the respective financial provision,

- for legal person as an applicant, a document evidencing ownership and organisational structure of the applicant for permission or authorisation,

- documents evidencing the numbers of the permanent staff including staff professional competency.

Pursuant to § 10 (1) (n), the authorization holder is liable to inform the UJD without any delay of

the declaration of insolvency or rejection of insolvency proceedings because of lack of assets.

Pursuant to § 10 (5), the authorisation holder is liable to notify the UJD in writing of any changes in facts on the basis of which permission or authorisation was issued and of any facts which might result in modification or cancellation of the permission or authorisation. Such notification shall be made within 15 days of the occurrence of such change.

Seq. No	Country	Article	Ref. in National Report
35	Sweden	Article 20	E.1.2.2, p.18

Question/ It is noted in the report that the Act No. 541/2004 Coll. has replaced Act No. 130/1998 Coll. on Comment peaceful use of nuclear energy except for Arts. 3 (9) and (10) that are coming into force 1 January

2007

What are the main differences compared to the previous Act and what objectives are achieved by replacing the old Act?

Answer In connection with the accession of the Slovak Republic to the EU in May 1,2004 and with the successful preparation for it, the necessity to amend the previous Atomic Act No. 130/1998 Coll. LL has occurred. After discussions, the decision was made to prepare a completely new law that would include all necessary changes with regard to the experience with existing law and regulations as well as the praxis in Slovakia.

The new Act has maintained the original philosophy, structure and content of the Atomic Act, according to practice common elsewhere in the world. The Act does not cover the supervisions of adverse effects of ionising radiation.

The most important changes are as follows:

Name of the "Atomic Act" became an officially introduced term.

Scope of definitions was extended and the existing terms are presented more detailed.

Rearrangement of some provisions was made; competency of the UJD was defined precisely and presented in the front section of the Act.

The UJD refrained from regulation and licensing of the suppliers. Those licenses were replaced by permissions for particular activities and UJD examines those on safety concerns only. This fact oriented the supervisory activities on the operators of the nuclear installations and their quality assurance systems.

Important competency transfer was made, where UJD became a specialised construction authority, excluding the special planning and expropriation proceedings. Licensing activities for the respective stage of service life of a nuclear installation have been prepared at a more rigorous level.

Changes in the area of safeguards, duties of operators to report to the European Commission, record keeping and inspection of nuclear materials, shipment of radioactive waste from and to the European Union, procurement of and permission for import and export of particular dual-use goods.

Changes in the position of the inspectors of the UJD were set by more rigorous definition of their position, more detailed arrangement of the inspector examination, appointment, its links with the Civil Service Act, etc.

Changes in other acts such as in the Criminal Code, the Construction Code, Act on Administrative Fees, Act 26/2002 Coll. on Exports and Imports of Special Materials and Equipment subject to the International Control Regimes, Air Act, Act 95/2000 Coll. on Labour Inspection were made.

Seq. No	Country	Article	Ref. in National Report
36	Sweden	Article 20	E.2.1, p.19

Question/ Please clarify the relation between licensing for siting, construction and commissioning.

- Comment E.g. does the licensing for siting include preliminary assessments for construction as well as commissioning and operation of the facility?
- Answer Relationship between the different types of permissions and authorizations reflect the different stages of nuclear installation existence (lifetime stages). For each of these stages, particular license is required. Therefore, one license precedes application for the next one.

Upon the Atomic Act basis (see: www.ujd.gov.sk) as well as the Construction Code, the application for issuance of the particular license have to be attached with the specific documentation. Such documentation has to be elaborated for each stage separately, but in consideration to and by specifying the previous documentation.

Thus when applying for permission for siting, an application has to be attached with e.g.

- the safety report of reference,
- report of reference on the decommissioning method,
- project intention for physical and technical solution of nuclear installation design development project level,
- report of reference on the method of management of radioactive waste and spent nuclear fuel,
- requirements on the quality of the nuclear installation,
- environmental impact assessment of the nuclear installation as well as potential impact assessment of the environment on the nuclear installation etc.

When applying for the authorization for the building permission an application should be attached with e.g.

- preliminary safety report providing evidence for the meeting of the legal requirements on nuclear safety based on the data considered in the project,
- project documentation needed for building permission proceedings,
- preliminary plan of management of radioactive waste, spent fuel, including their transport,
- preliminary decommissioning plan concept,
- quality system documentation and requirements on the quality of the nuclear installation and their evaluation,
- preliminary limits and conditions of safe operation, etc.

When applying for authorisation for the commissioning of nuclear installation and operation, the application should be attached with the

- limits and conditions of safe operation,
- list of classified equipment as classified into safety classes,
- testing programmes of classified equipment,
- nuclear installation commissioning programme, split up into stages,
- operational control programme of classified equipment,
- quality system documentation and requirements on the quality of the nuclear installation, and their evaluation, etc.

Thus the UJD, in the licensing procedure in certain lifetime stage, takes into considerations and preliminary assesses also the future lifetime stages at the levels important for that particular stage. So the preliminary construction assessment, operation and decommissioning in the siting licensing procedure will be assessed more generally and less rigorous and detailed than in the case of licensing construction stage.

Seq. No	Country	Article	Ref. in National Report
37	Sweden	Article 20	E.2.1.2, p.19

Question/ The report notes that the inspection plan, as a rule, is developed for the period of one year. Comment How is long term/strategic planning considered?

Answer There is a long term strategy for relevant safety systems which aims to perform inspection of all redundancies and subsystems of safety systems. The goal of this long term strategy is to do a complete inspection of safety systems within 5 years.

Seq. No	Country	Article	Ref. in National Report
38	Sweden	Article 20	E.2.2.2, p.21

Question/ Could Slovakia please elaborate on the relationship between the nuclear regulatory authority (ÙJD) Comment and the Public Health authority (ÙVZ), i.e. joint inspections, review of license applications, etc.

Answer Division of powers between UJD and ÚVZ is established in the Act No. 541/2004 Coll. LL. (for UJD) and in the Act No. 272/1994 Coll. LL. on Public Health Care Services as amended (this is going to be replaced by the newly published Act No. 126/2006 on Public Health Care Services that will enter into force on June 1, 2006).

Besides the law and regulations, there exists also inter-departmental agreement on co-operation between the UJD and ÚVZ of the 23 June 2003, concluded by UJD and Ministry of Health (that supervises the Public Health Authority).

The basic principle of co-operation and joint inspections between the UJD and UVZ is to avoid "dual inspections" (obtaining the operator with the same things twice) as well as exchange the information and findings that might be of other authority interest or relevance for inspection. For example, in 2005, three special joint inspections were performed. These inspections were focused on fulfilment of requirements for nuclear and radiation safety according reconstruction of vitrification facility, commissioning of discontinual bituminisation facility and management of contaminated soils. This system of joint inspections was developed due to lack of clear definitions of powers, problems with the existence of dual competency as well as experience during the last period.

Seq. No	Country	Article	Ref. in National Report
39	Sweden	Article 21	F.2.1, p.28

Question/ The report notes that nuclear safety and radiation protection is overriding and takes precedence over Comment the other interests of the company.

How is this principle proven?

Answer The given requirement for the paramountcy of nuclear safety and radiation protection is incorporated in the organisation process documentation. (see sections F.1.2 and F.3.2)

Seq. No	Country	Article	Ref. in National Report
40	Austria	Article 22	Section F

Question/ What are the financial arrangements pertaining to the management of institutional waste? Comment

Answer Processing, conditioning and disposal of institutional radioactive wastes financially arranged for by

the originator of such wastes(polutter pays principle).

Seq. No	Country	Article	Ref. in National Report
41	Austria	Article 22	Section F

Question/ What is the ownership status of SE-VYZ following the recent takeover of SE by ENEL?

Comment What implications, if any, will the takeover have on financing of the decommissioning projects performed by SE-VYZ?

Answer The ownership of SE-VYZ together with NPP V-1 is transfered to the 100% state owned company GovCo Inc. by April 2006. The system financing of decommissioning projects will remain the same (in connection with the ownership transfer), however the new conditions for finacing of decommissioning projects in Slovakia is defined by a new Act on the nuclear account, approved by the Slovak parliament on March 16th 2006.

Seq. No	Country	Article	Ref. in National Report
42	Hungary	Article 22	F.2.2, p. 31

Question/ What is the amount of annual contributions to the State Fund and how is it determined? Comment

Answer Upon the Annual Report of the State Fund, the annual contributions are approximately SKK 2,6 bilion (EURO 65 million) as contribution of nuclear installation operator, plus SKK 0,5 bilion (EURO 12,5 million) as bank interests, plus penalties if imposed by UJD.

Pursuant to § 3 of Act No. 254/1994 Coll. LL. on the State Fund for Decommissioning of Nuclear Energetic Installations and Management of Spent Fuel and Radioactive Waste the contributions are made by:

- a) contributions of the nuclear installation operators,
- b) fines imposed by the UJD,
- c) bank interests,
- d) allocations from the national budget,
- e) other sources if the specific regulation establishes.

Pursuant to § 3 (2), operator of nuclear installation is liable to pay annual contributions of 350.000 SKK (EURO 8750,-) for 1 MW of installed capacity of the nuclear installation plus 6,8 % from the sales prize of the electricity annually generated in the nuclear installation.

The regulation No. 14/1995 Coll. LL. contains details of creation and provisions of the use of the resources of the State Fund.

Note: In nowadays, new draft act on the National Nuclear Fund, subject to legislative procedure, was adopted in the National Council on March 16 2006. At the time, it has not been published yet because of being submitted to the President for a signature.

Seq. No	Country	Article	Ref. in National Report
43	Netherlands	Article 22	Section F

Question/ How are adequate financial resources ensured for radioactive waste disposal (including institutional Comment control)?

Answer Under Art. 21 of Act No. 541/2004 Coll. on peaceful uses of nuclear energy (Atomic Act), "The radioactive waste management costs including the cost of institutional control following the closure of the repository were covered by the radioactive waste originator" (polutter pays principle). The above funds are accumulated in the State Decommissioning Fund and allocated in accordance

with the Act No. 254/1994 Coll. on the State Fund for Decommissioning Nuclear Installations and Spent Fuel Management (currently an amendment thereto under way).

The ownership of SE-VYZ together with NPP V-1 is transfered to the 100% state owned company GovCo Inc. by April 2006. The system financing of decommissioning projects will remain the same (in connection with the ownership transfer), however the new conditions for finacing of decommissioning projects in Slovakia is defined by a new Act on the nuclear account, approved by the Slovak parliament on March 16th 2006.

Seq. No	Country	Article	Ref. in National Report
44	Netherlands	Article 22	Section F 2.2

Question/ The initial financial resources and the annual contributions determine the growth rate of the Comment decommissioning fund and hence the starting point of the dismantling operations of a nuclear

- facility. Thsi is dependent on the chosen decommissioning strategy. Which strategy direct dismantling or deferred dismantling has Slovakia adopted?
- Answer An uniform strategy for decommissioning nuclear power plants has not been adopted to date. The development of such strategy to be adopted by the Slovak Government by the end of 2007. All the documents drawn up to date for decommissioning of nuclear power plants are prepared in three recommended options:
  - closure with supervision,
  - protective storage of the reactor,
  - immediate decommissioning.

All the options end up with exempting a nuclear installation from the Act on peaceful uses of nuclear energy.

Seq. No	Country	Article	Ref. in National Report
45	Sweden	Article 22	F.2.1, p.30

Question/ It is noted in the report that the license holder shall be obliged to provide for sufficient financial

Comment resources and human resources for nuclear safety including necessary engineering and technical support activity in all areas relating to nuclear safety.

How is this proved by the licensee and verified by the regulatory authorities?

Answer

## <u>UJD (in accordance with the Atomic Act 541/2004) verifies:</u>

- special professional competency of authorisation holder employees and issue, withdraw and revoke from them license of special professional competency,
- professional competency of employees of authorisation holder for providing professional training to authorisation holder employees, who provide professional theoretical education and simulator training for licensed employees, and issue, withdraw and revoke from them license of professional competency

UJD (in accordance with the Atomic Act 541/2004) approve:

- preliminary limits and conditions of safe operation and limits and conditions of safe operation (the number of shift personal with principal impact on nuclear safety is part of OL&C)
- system of the professional training of authorisation holder employees

UJD (in accordance with the Atomic Act 541/2004) assesses:

 safety analysis reports (SARs) which contain chapter 13 Organisation of authorisation holders (organisation of authorisation holders structure and responsibilities of departments, division etc.)

Financial resources of authorisation holder are not a matter of the UJD.

Seq. No	Country	Article	Ref. in National Report
46	Sweden	Article 23	F.3.3, p.32

Question/ The report notes that the long-term strategic goal of SE, a.s. is to generate as much electricity as the

- Comment company is capable to sell with reasonable profit so as remain a competitive and thriving company. How are possible conflicting interests between profitability and safety governed? What is the responsibility of the regulatory authorities in this respect?
- Main mission of SE, a.s., (as mission of each utility operating power plants), is the production of Answer electricity or heat, by highest possible effective utilization and operation of power sources. Naturally precautions must be taken that production goals cannot compromise nuclear safety or safety in general. Such measures/ tools are described in the national report - sections F.1.2 Nuclear safety and radiation protection policy, F.3.2 SE, a.s. policies / concepts. "SE, a.s. Safety policy" was approved by board of directors in June 2004, new "Nuclear safety and radiation protection policy", replacing the one from 1997, was approved by board of directors in June 2005 in accordance with the requirements of SE, a.s. Safety Policy. NS&RP Policy determines basic objectives, principles, requirements, measures and responsibilities in the field of nuclear safety and radiation protection. Nuclear safety and radiation protection as its inseparable part is considered the highest priority and is superior over the other interests of the Company. Policy is disseminated / reflected in the relevant QA documentation - both managerial and working. Priority to safety is also strengthened by other means, such as implementation of safety culture principles (Annual action plans on SC are approved, implemented and evaluated at each NPP) by special training lectures in the frame of basic and periodic training programs, etc.

§ 23, art. 1) of the Atomic act reads the following "The authorized holder shall pay attention to the safety issues prior over any other aspects of the authorized activity". Obviously the role of regulatory authority is supervision of the fulfilment of this obligation.

Seq. No	Country	Article	Ref. in National Report
47	Belgium	Article 24	F.4.3, page 38

Question/ Radioactive discharges from SE-EMO (and SE-EBO): tritium discharges are close to the authorised Comment discharge limits and there seems to be no evolution over the last 5 years. Can these discharges be considered ALARA?

Answer Tritium is generated as a result of several nuclear reactions in light water reactors. But the dominant contributor (more than 90%) is nuclear reaction of neutron with boron nucleus contained in boric acid (absorber present in primary coolant). Volume of produced tritium depends on neutron flux and such on operation of the reactor. An economic cleaning or removal of tritium from the liquid waste is not possible. Question of applying optimization is not adequate with this respect. The only possibility is a controlled release of liquid waste, containing also tritium, to the environment, of course by meeting authorized discharge limits approved by Public Health Authority. Certain decrease of tritium generation is expected in the near future due to a change of core design at Bohunice unit 3 & 4 and at Mochovce units. New fuel, containing burnable poison gadolinium, will be loaded this year. Following this, boric acid concentrations will be lower and such the amount of tritium generated will be moderated.

Seq. No	Country	Article	Ref. in National Report
48	Bulgaria	Article 24	

Question/ Are dose constrains established for the members of the public in the case that an accidents caused Comment by natural events happens in a waste disposal facility as it was done for human intrusion?

Answer The specific dose constraints for the accidents caused by natural events in the waste disposal facility have not been established. However the dose constraint of 10 microSv/y for post closure period

covers some natural caused accidents (flood).

Seq. No	Country	Article	Ref. in National Report
49	Hungary	Article 24	F.4.3, p. 35

Question/ According to the Report the limits for radioactive discharges "are set out in the annex hereto", but Comment this annex is not included in the Report

Answer We apologize for this drawback.

Limits of atmospheric and liquid discharges authorized for both sites are provided in following table.

		A	nnual discharge limits			
		Vent	ilation flue		Liquid	discharges
	Noble gases (any mixture)	Iodines (gaseous and air-borne phase)	Air-borne particles (aerosols) – mixture of long-lived radionuclides	Sr 89, 90	Tritium	Corrosion and fission products
	[Bq/yr]	[Bq/yr]	[Bq/yr]	[Bq/yr]	[Bq/yr]	[Bq/yr]
Bohunice (EBO,VYZ)	4 . 10 <sup>15</sup>	1.3 . 10 <sup>11</sup>	1.6 . 10 <sup>11</sup>	3.10 <sup>8</sup>	4.37 . 10 <sup>13</sup> River Váh	3.8 . 10 <sup>10</sup> River Váh
Bohunice (EBO,VYZ)					4.37 . 10 <sup>11</sup> River Dudváh	3.8 . 10 <sup>8</sup> River Dudváh
Mochovce (1, 2)	4.1.10 <sup>15</sup>	6.7 . 10 <sup>10</sup>	1.7.10 <sup>11</sup>	no limit	1.2.10 <sup>13</sup>	1.1.109
		Annual discha	rge limits	A	ctivity conten	t [Bq/m <sup>3</sup> ]
	Noble gases (any mixture)	Iodines (gaseous and air-borne phase)	Air-borne particles (aerosols) – mixture of long-lived radionuclides	Sr 89, 90	Tritiun	Corrosion and fission products
	[Bq/day]	[Bq/day]	[Bq/day]	[Bq/day]	[Bq/m <sup>3</sup>	] [Bq/m <sup>3</sup> ]
NPP Bohunice (EBO, VYZ)	5.5.10 <sup>13</sup>	1.8.109	2.2 . 10 <sup>9</sup>	no limit	1.95 . 10	) <sup>8</sup> 3.7 . 10 <sup>4</sup>
NPP Mochovce (1,2)	5.5.10 <sup>13</sup>	9.0 . 10 <sup>8</sup>	2.5 . 10 <sup>9</sup>	no limit	1.1.10	<sup>8</sup> 4.10 <sup>4</sup>

Seq. No	Country	Article	Ref. in National Report
50	Hungary	Article 24	F.4.3, p. 37-38

Question/ What is the reason for the differing discharge limits for the two NPPs? Comment

Answer Main reason for differences between discharge limits is a different configuration of nuclear installations on both sites SE, a. s. We operate two PWR units (type of reactor VVER-440) at Mochovce site only. At Bohunice there are four PWR units (V1, V2, type of reactor VVER-440), but also one NPP (A1) under decommissioning, interim spent fuel storage and facilities for the treatment of radioactive waste. However, the limit for a member of public, defined by the valid law (Act. NC of SR No. 272/1994 Coll., on the protection of the human health - amended) is the same for each site – 250 microSv/year.

Seq. No	Country	Article	Ref. in National Report
51	Slovenia	Article 24	

Question/ What is the prescribed dose constraint for the public exposure due to discharges from nuclear Comment facilities? Could you provide a comparison between the public exposure and the dose constraint(s)?

Answer The dose constraint for public exposure is 250 microSv/y. The individual effective doses for the members of the critical groups are below 1microSv/y for both sites (Bohunice and Mochovce) during last years.

Seq. No	Country	Article	Ref. in National Report
52	Czech Republic	Article 25	

Question/ What is the differnce between internal, on-site and in-site emergency plan? Comment

Answer It is the same term. In generally the term "on-site emergency plan is used.

Seq. No	Country	Article	Ref. in National Report			
53	Czech Republic	Article 25				
Question/ Comment	on/ What organisation is under the abbreviation UVZ? Which regulatory body is it?					
Answer	UVZ means "Public Health Authority"					
Seq. No 54	Country Czech Republic	Article Article 25	Ref. in National Report			

Question/ What does it mean that "staff are classified by the scope of emergency training." Comment

Answer The point is that a wrong expression has been taken over from the National Report (translation). In original text an expression "staff are classified by the scope of emergency preparedness" was introduced. Employees and persons taken under care of authorisation holder are divided in four categories depending on length of their stay at NPP or their role in the structure of emergency preparedness. Based on § 10 of UJD Regulation No. 55/2006 the authorisation holder has to make all employees and further persons staying on NPP site acquainted with on-site emergency plan at taking-out of work, when changing work assignment and then once per two years. All employees participate in large-scale site exercises, which are organized by the emergency response organization take part in professional training, drills or exercises twice a year at least. It is the duty of the authorization holder to organize exercise of whole emergency response organization once per year at least and an exercise involving state authorities once per three years.

Seq. No	Country	Article	Ref. in National Report
55	Hungary	Article 25	F.5.7.1, p. 44

Question/ A section F.5.3 is referenced, but there is no such section in the Report.

- Comment What scenarios are considered relevant in emergency preparedness related to waste management and decommissioning?
- Answer Authorization holders prepare their exercise scenarios themselves based on possible initiating events, which are published in the on-site emergency plan. They have to observe requirements for exercise set down by the Regulation No55/2006 and further legal regulations.

Seq. No	Country	Article	Ref. in National Report
56	Lithuania	Article 25	

Question/ Are there any requirements on frequency of UJD and other involved authorities (regional, district Comment etc.) participating in co-ordination exercises?

Answer There are duties to exercise and frequency of exercises are subject to the Regulation No. 55/2006

Seq. No	Country	Article	Ref. in National Report
57	Netherlands	Article 25	Section F.5

Question/ Regarding Emergency Planning, Article 25 of the Joint Convention covers the need for on and off-Comment site emergency plans and the need to test the plans at an appropriate frequency. Your response to Article 25 describes the operational structure for the off-site response to emergencies. How often

are the on-site and off-site emergency plans in the Slovk Republic tested?

Answer Authorization holders have to assure professional training, drills or exercises twice per year at least for their elements of emergency response organization and to organize exercise of the whole emergency response organization once per year at least and an exercise involving state authorities once per three years.

Seq. No	Country	Article	Ref. in National Report
58	Sweden	Article 25	F.5.4, p.73

Question/ Do the "Public Protection Plans" include strategies on how to inform both the public and the media Comment in an adequate and coherent way in case of an emergency?

Answer In compliance with Annex 2 to the UJD Regulation No. 55/2006 the authorization holder has to inform public on ionising radiation and its impact on human health as well as on impact to the environment, on possible events at NPPs, on their classification according to their importance, on principles of off-site emergency plans and on activities, which should be performed by the public in case of given event. Also the state authorities and authorization holders have, in compliance with annex to the UJD Regulation No. 55/2006, to inform public in case of an incident or accident at NPP about this incident or accident, on the Regulation of their significance, on their anticipated development, on measures taken in the period of threat and on urgent and consequent countermeasures to protect public during early, intermediate and late phases.

Seq. No	Country	Article	Ref. in National Report
59	Austria	Article 26	Section F

Question/ Given, the fixed shut-down date, what is the current status of the plans for the shutdown and Comment decommissioning of NPP V1, which have been agreed in the accession negotiations to the EU?

Answer Slovak Republic commitment to shut down Units 1 & 2 of Bohunice V1 NPP in 2006 and 2008 respectively undertook through Resolution No. 801/99 of the Slovak Government.

Slovenské elektrárne, plc. (SE, a.s.) are implementing the pre-decommissioning support projects for early shutdown of Bohunice V1 Nuclear Power Plant (V1 NPP) financed from the Bohunice

International Decommissioning Support Fund (BIDSF) administered by the European Bank for Reconstruction and Development (EBRD). To undertake this work, a Project Management Unit (PMU) has been established by SE a.s. as part of SE's V1 NPP Shutdown Project Department and a contract with a Consultant Consortium (IEES) has been placed by SE a.s. for consultancy services to the Project Management Unit.

"Project" means the operation of the PMU within which the PMU Consultant is performing the consultancy services for the provision of management support to the Client (SE, a.s.), which comprises overall management and management of the work associated with the BIDSF funded or co-funded projects.

The PMU Consultant Personnel, including the Client Personnel, makes up the PMU responsible for planning management, project management, conceptual engineering, procurement, and implementation of 3 groups of projects (projects related to the final shutdown of V1 NPP, development of decommissioning documentation, and projects related to waste management and storage).

The fundamental objectives of the PMU are to implement and execute the pre-decommissioning support projects financed or co-financed by the BIDSF and:

Development of the necessary conceptual engineering services for the pre-decommissioning support projects

Preparation of requirements for the procurement of detailed engineering and supply packages Engineering management and co-ordination of the projects

Interrelations and the provision of management support to SE a.s. during the implementation of the Project

Sharing knowledge of modern project management and engineering methods, including training of SE a.s. personnel

The BIDSF pre-decommissioning support projects can be divided into three groups according to the areas and priorities addressed:

Projects related to final shutdown of Bohunice VI NPP

These projects address the specific need to ensure safe operation of Units 1 & 2 of V1 NPP until shutdown, and continuing operation of V2 and SE-VYZ facilities during the pre-decommissioning period from 2003 to 2011.

Projects related to the development of decommissioning documentation

The projects consist of the procurement of engineering services for the preparation of engineering and licensing documentation related to the decommissioning process of V1 NPP in accordance with Slovak legislation.

Projects related to waste management and storage

The projects address the supply of additional waste management technologies as may be required to treat, condition, provide additional buffer storage and/or disposal capacity for historical and/or decommissioning waste streams.

The PMU is responsible for the following functions within the implementation of the projects: Project Management, including overall and individual management of the pre-decommissioning projects (scheduling, cost control, risk and interface management, contract implementation, reporting, and quality assurance)

Conceptual Engineering, drafting of Technical Specification and Engineering Management Contract Procurement and Contract Management

Safety and Licensing, and Environmental Due Diligence

Detailed engineering, supply, installation, construction and other activities will be undertaken by the contractors to be selected by the PMU.

According to international experience, during dismantling of a V1 NPP there are lots of material with activity levels below the clearance levels and therefore they could be cleared on the basis of an official decision by the authorities and be managed as conventional material.

Taking into account the problems associated with the management of radioactive wastes, one of the main objectives in the dismantling of a nuclear power plant is the release from the regulatory control of the largest possible number of materials.

Current clearance capacity of the Bohunice site corresponds to current waste amount. The content of radionuclides with an allowable release of radioactive substances to the environment has been determined in accordance with Regulation No. 12/2001 Coll. on Requirements for the Provision of Radiation Safety, Ministry of Health SR (2001).

The objective of new BIDSF project "Free Release of Decommissioning Materials" is to provide a licensed large capacity technology and facility for measurements of very low activity for the purpose of release of dismantled equipment and other materials from regulatory control. The project has been divided in two phases with the following main scope:

### Phase 1 (2006 - 2008):

- Development of conditional release criteria for soils, concrete, metallic and non-metallic materials.
- Development and implementation of a measurement methodology and definition of a sampling program, methodology for activity assignment and calculation of (directly) non measurable isotopes, isotopic vectors, scale factors, etc.

Licensing process of Phase 1

#### Phase 2 (2008 - 2010):

Supply, commissioning and start-up of characterisation equipment and ancillary facilities Development of the free release procedures Licensing process of Phase 2

The current Slovak Policy for free release and remediation of materials and soils was issued in 2000 (Act No. 272/1994 Coll. on Public Health Protection 272/1994, amended in 2000, 2002 and 2004). The basic free release principle was based on an individual effective dose limit of 10 µSv/y and a collective effective dose limit of 1 manSv/y. It allows the release of material with higher contamination than the derived activity limits (clearance levels) if the use of said material results in a lower dose than the dose limit with permission of the Authorities.

New supporting Slovak clearance levels were issued in 2001 in accordance with IAEA guidelines (TECDOC 855 and Safety Series 89) on exemption/free release principles based on individual nuclide mass or surface activities.

Nevertheless, in the development of a free release process, conditional release criteria have to be established for a specific site and taking into account the nature of the decommissioning materials. In addition to Slovak regulations, international recommendations on the application of the clearance levels will have to be taken into account in the development of these criteria.

Seq. No	Country	Article	Ref. in National Report
60	Sweden	Article 26	Section A, p.9

Question/ According to the report, the nuclear power plant A1 was shut down in 1977 and is at the moment in Comment the first stage of decommissioning. Almost 30 years has passed between shut down and start of decommissioning - how has the technical systems etc. been maintained during this period? Has any difficulties in the initial decommissioning been identified to be related to this long period of "nonactivity"?

The power plant A-1 was decommissioned in 1977. By 1979 activities on the plant were directed to Answer renewal of its operation. Following the decision on permanent shutdown of the plant, the plant

decommissioning preparation activity was carried out from 1980, i.e. a complex RAW management system had been developed, RAW from the operation were processed, spent fuel transfer outside of the plant was carried out. As the plant was after an accident, necessary measures were taken to prevent its environmental impacts. In addition activities typical for the decommissioning process, i.e. decontamination and dismantling of technologic systems were carried out. For example dismantling of low-contaminated equipment (secondary part of the engine room and intermediate engine room). Dismantling of equipment showed a higher degree of contamination, however this activity was carried out with a view to clearing operating premises to install RAW processing technologies.

Seq. No	Country	Article	Ref. in National Report
61	Sweden	Article 26	Section B, p.10

Question/ According to the report, the Slovak government has assigned to submit a "Policy of

Comment decommissioning of nuclear facilities and management of spent fuel evaluated according to the act on environmental impact assessment" for a discussion on government level by 31st December 2007. Perhaps there could already here be a presentation of main thoughts and outline of the policy?

Answer As yet there are currently no such results as could be used for presentation. A draft strategy is to be developed by 11/2006.

Seq. No	Country	Article	Ref. in National Report
62	United States of America	Article 26	

Question/ The Slovak national report addresses the provisions of Article 26 by referring the reader to the 1st

Comment National Report reviewed in November 2003, even for those questions based on apparent omissions in that report. Issues were raised at the Country Group 1 session regarding the Slovak report. These included a comment that the decommissioning plan should provide for ensuring an adequate number of qualified staff. Furthermore, a series of questions were asked regarding controls needed following decommissioning when the site was not suitable for unrestricted release. A request was made for a summary of the results of decommissioning NPP A1 Bohunice. Most of the areas questioned regarding decommissioning in the Slovak republic have not been addressed in this report. Please include this information in the third report and address this comment in your national presentation.

Answer The power plant A-1 was decommissioned in 1977. By 1979 activities on the plant were directed to renewal of its operation. Following the decision on permanent shutdown of the plant, the plant decommissioning preparation activity was carried out from 1980, i.e. a complex RAW management system had been developed, RAW from the operation were processed, spent fuel transfer outside of the plant was carried out. As the plant was after an accident, necessary measures were taken to prevent its environmental impacts. In addition activities typical for the decommissioning process, i.e. decontamination and dismantling of technologic systems were carried out. For example dismantling of low-contaminated equipment (secondary part of the engine room and intermediate engine room). Dismantling of equipment showed a higher degree of contamination, however this activity was carried out with a view to clearing operating premises to install RAW processing technologies.

Seq. No	Country	Article	Ref. in National Report
63	Sweden	Article 27	Section I, p.60

Question/ How is EU Directive 92/3/Euratom implemented in the regulation concerning transboundary Comment movements (as described in art. 27 JC) in the Republic?

Answer The Directive 92/3/Euratom is directly (full text) incorporated in § 16 of the Atomic Act (translation available on www.ujd.gov.sk)

Seq. No	Country	Article	Ref. in National Report
64	Sweden	Article 27	Section I, p.60

Question/ Could you please clarify how Act No 541/2004 Coll. regulates transboundary movements (as Comment described in art. 27 JC)

Answer The Act No 541/2004 Coll. describes requirements for the transport of radioactive materials in § 15 Transport of Radioactive Materials (including spent fuel). § 16 describes transport of radioactive waste between Member States and from and to the Community implementing Directive 92/3/Euratom. Annex 2 describes documentation necessary for the application for transport license. Details on transport of radioactive materials (including spent fuel) are described in Regulation No 57/2006 Coll. on details concerning the requirements on transport of radioactive materials. For example if a natural person or a legal person is going to realize a transport of spent fuel from Slovakia abroad, it is obliged to fulfill all requirements listed in Act No 541/2004 Coll. and in Regulation No 57/2006 Coll. The same requirements are compulsory for the transport of spent fuel from abroad.

Article No. 16 (from procedural and organisational point of view) together with article No. 15 (from technical point of view – IAEA TS-R-1) are basis for governing transboundary movement (www.ujd.gov.sk).

Seq. No	Country	Article	Ref. in National Report
65	Ukraine	Article 27	

Question/ Section I.1.2, page 58

Comment Are there any emergency preparedness requirements or emergency preparedness regulatory references contained in the licence for transboundary transport?

Answer UJD Regulation No. 57/2006, by which details on requirements during the shipment of radioactive materials are set down, stipulates in frame of documentation for shipment the emergency transport order. Belongings of emergency transport order are defined by §§ 19 to 21 of UJD Regulation No. 55/2006 on details concerning emergency planning in case of incident or accident.

Seq. No	Country	Article	Ref. in National Report
66	Sweden	Article 28	Section J, p.61

Question/ How is the Council Directive on High Activity Sealed Sources (2003/122/Euratom) implemented in

- Comment the legislative and regulatory system? It would be of particular interest to be informed how art. 3 para 2 (b) has been implemented (financial security or any other equivalent means) and to what extent implementation of the requirements in art 9 para 3 and 4 has been made (systems aimed at detecting orphan sources and campaigns to recover orphan sources left behind from past activities)?
- Answer The implementation of the directive on high activity sealed sources is in the approval process at present.

Implementation of art.3 para2: The duty for the licensee (user of HASS) to deposit money into a special "Nuclear account" before commissioning of the facility with high activity sealed source has been established in the regulation. The amount of the money should cover expenses for management and disposal of the source. The sum of money will be specified by the national agency for disposal of radioactive waste, it will depend on source characteristics. The money will be reimbursed in the case that the licensee will transfer the disused source to the supplier or other holder.

Implementation of art. 9 para3: The state has established the detection system on important border crossings already. The operators of important scrap recycling facilities have installed detection systems as well. The duty to install detection system for operators of large metal scrap yards and recycling installations has been established by the governmental decision.

Full implementation of art. 9 Para 4 needs the amendment of the act. No 272/1997 Coll. on public health. But the recovering campaign of orphan sources should be performed by extended supervision program by the regulatory body focused on unused and orphan sources.

Seq. No 67	Country United States of America	Article Article 28	Ref. in National Report 61		
Question/ Comment	/ Responses to comments on the First Joint Convention National Report concerning storage are not it evident in the Second Report. What criteria are applied for limiting interim storage pending conditioning and/or disposition as waste?				
Answer	Activities for this area are realized in the sense of QMS and connected with Operational instructions (OI). Activity is described in OI No. PP U-45 Plan of radioactive waste disposal in ISFS, witch was prepared in accordance with Act No. 541/2004 – Atomic Law.				
Seq. No 68	Country Bulgaria	Article Article 29	Ref. in National Report		
Question/ Comment	estion/ Does Regulation No. 626/2004 of the Slovak Government determine the organization that shall nment make the five-yearly re-evaluation of the annual payments to the State Fund for Decommissioning of Nuclear Installations and Management of Spent Fuel and Radioactive Waste? If not, who makes that re-evaluation?				
Answer	A proposal for re-evaluation of the annual payments to the State Fund for Decommissioning of Nuclear Installations and Management of Spent Fuel and Radioactive Wastes is being prepared by the Slovak Ministry of Economy which submits them for approval to Parliament.				
Seq. No 69	Country Bulgaria	Article Article 32	Ref. in National Report		
Question/ Comment	What measurements are applied in practic applied that is based on directly measurab activity of specific radionuclides?	e to categorise radio le parameters like ga	active waste? Is categorisation mma dose-rate, total activity or		
Answer	The classification of radioactive waste is set up in the regulation of UJD No. 50/2006. The principal waste classes include transient waste, low and intermediate level waste (which are subdivided into short lived and long lived waste) and high-level waste. The classification is in accordance with the recommendation of IAEA and the Commission and reflects also the disposal scheme in Slovakia. This classification is based on the radioactive waste activity level. In practice the generated radioactive waste is segregated according to the physical, chemical and radiological properties and according to the scheme of its further treatment and conditioning. This segregation is performed preferably at the place of radwaste generation The measurements necessary from the point of view of radwaste characterization are performed either in the place of radwaste generation or as first step on the entry of radwaste to the treatment and conditioning				

center. The measurements of radionuclides activity linked with acceptance criteria for disposal in liquid radwaste are relatively easy to perform, the radionuclides activity measurement for solid radwaste are performed on the basis of Co-60 and Cs-137 activity measurements in the model sample (metal drum) with the usage of correlation coefficients.

Seq. No	Country	Article	Ref. in National Report
70	Bulgaria	Article 32	

Question/ What measurements are applied in practice for clearance of material from regulatory control? Is Comment clearance practiced based on directly measurable parameters like gamma dose-rate, total activity or activity of specific (measurable) radionuclides? Are the clearance procedures subject of regulatory approval?

Answer The clearance of radioactive material is subject of regulatory approval. The clearance is based on gamma-radionuclide specific measurements of measurable radionuclides in cleared material. However representative samples from any batch (freight) should be analyzed more detailed, including beta and alpha radionuclides before final measurements. Activities of all important radionuclides (including alpha, beta and week gamma) are calculated on the base of results of detailed analyses and measurements of representative gamma-radionuclides.

Seq. No	Country	Article	Ref. in National Report
71	Bulgaria	Article 32	

Question/ What methods are applied for radionuclide characterization of spent ion-exchange resins and Comment sorbents? Do you apply characterization methods based on directly measurable parameters?

Answer Ion exchange resins (prevailingly from primary clean up system)are regularly sampled during outages and activity is measured by gammaspectrometry. Limited number of samples were analysed also for dificult-to-measure radionuclides required to be declared for radwaste to be disposed of. These data are analysed together with other radwaste radionuclide vectors in order to determine correlation coefficients with key (reference) radionuclides.

In addition, two storage tanks with intermediate and low activity resins (sorbents) have been sampled in 2005 within EU funded project of V-1 plant decommissioning support. Due to heterogenity of tank contents and impossibility of satisfactory homogenisation about 50 samples have been withdrawn from different positions using specialised sampling device and analysed further in laboratory.

Seq. No	Country	Article	Ref. in National Report
72	Bulgaria	Article 32	

Question/ What methods are applied for conditioning of ion-exchange resins? What are the specific criteria Comment applied to the conditioning product?

Answer SE, a. s. intends to bituminize desaturated ion exchanges, controlling prior to their fixation for their physical and chemical composition, mechanical state, specific activity and radionuclide composition for fixed product we control: product filling, we achieve 40 %

composition for integrad		produce ming, we demove to	
		product wat	er content
		leachibility	
		thermal stab	oility
		fixed activi	ty
		sedimenta	tion of ion exchanges
Country	A	rticle	Ref. in National Report
Bulgaria	A	rticle 32	-

Question/ What is planned, and in which document, about construction of deep geological repository? Comment

Seq. No

73

Answer The need for development of deep geological repository is resulting from National strategy for radwaste management formulated as a Governmental decision No. 190/1994 where underground disposal is considered to be ultimate step for waste unacceptable for surface facilities. By Governmental decision No. 5/2001 the corresponding time frame for deep geological repository development process is established. Currently the construction of national underground facility within the territory of Slovakia represents one of the options for solution of final radwaste and spent

fuel management step (also export for reprocessing with ultimate disposal abroad and development of regional repository are taken into account).

The deep geological repository development plant was approved under IR at SE, a.s., in 2003. Phase 1 (1996-1998)

- Co-ordination activity
- Design and implementation activities
- Source member, field of near and remote interactions
- Siting
- Safety analyses

Phase 2 (1998-2001)

- Design and implementation activities
- Siting and remote interactions
- Safety analyses.

Phase 3 (reduction in the number of sites and passage from the level of study sites to survey) 2004-2006 (<u>a delay in the execution of this phase occurred because of SE</u>, <u>a.s.</u>, <u>restructuring and</u> <u>privatisation</u>).

- Safety analyses
- Geologic-survey works

Organization-management activities

- Phase 4 (selection of a prefered site out of two) 2007-2012
  - Safety analyses
  - Geologic-survey works
  - Organization-management activities
- Definitive selection of the site (planning decision)2012-2015
- Setup of an underground laboratory at the site of the selected deep geological repository and long-term monitoring thereof 2015-2030 implementation commencement (building permit) 2030 deep geological repository development completion 2037
   Deep repository commissioning (obtaining a licence) 2047

Seq. No	Country	Article	Ref. in National Report
74	Bulgaria	Article 32	

Question/ Is the Mochovce facility being used for storage of radioactive waste arising from decommissioning Comment of А-1 and is it envisaged to be used for storage of waste from В-1?

Answer The Mochovce National Radwaste Repository is a near surface type repository used for disposal of conditioned low- and medium-activity RAW arising from operation and decommissioning of nuclear installations located in the Slovak Republic's territory, produced in a variety of activities at research institutes, laboratories, hospitals and other institutions - so-called institutional wastes. Under Art. 21 of Act No. 541/2004 Coll. on peaceful uses of nuclear energy (Atomic Act) "All radioactive waste management activities must be directed to their safe disposal". According to the adopted philosophy all operation RAW have to be processed as of the date decommissioning (if possible)?.

All operation RAW that comply with the conditions for disposal at the near-surface disposal site are continuously processed at the Bohunice Processing Centre and disposed of at the Mochovce National Radwaste Repository. Those RAW that would fail to comply therewith will be conditioned and stored at the integral storage facility (under construction) until disposal thereof at the deep

geological repository.

Seq. No	Country	Article	Ref. in National Report
75	Bulgaria	Article 32	

Question/ After a strategy for "differed dismantling" of V-1 was selected, what is the planned location for Comment storage of the activated components (reactor pressure vessel and reactor internals)? Can the

Mochovce facility be used for that purpose? If not, do you plan to construct new storage/disposal facility and in what terms?

Answer <u>Note:</u> the V1 NPP decommissioning strategy has not been selected. The Conceptual Decommissioning Plan (2002) proposed a deferred dismantling.

National Repository at Mochovce (surface repository) for LILW is operating.

Radioactive wastes, which will not meet the requirements for storage at Mochovce repository, will be stored in the deep underground repository (DUR). The beginning of the operation of deep underground repository is expected after 2040. In case that the DUR will not be available (e.g. in immediate decommissioning alternative) these RAW will be temporarily stored in an interim buffer RAW storage constructed at Bohunice site. The erection of Interim storage is expected in 2007-2010.

Seq. No	Country	Article	Ref. in National Report
76	France	Article 32	Section D.2.2 Page15

Question/ Are the facilities for which "a permanent operation license" has been issued submitted to periodic Comment safety review and/or re-assessment?

Answer The facilities for treatment, conditioning or storage of radioactive waste mentioned in the Section D.2.2 are nuclear facilities. According to the act No. 541/2004 (Atomic act) the UJD may issue the authorization for nuclear facility operation for a maximum period of ten years. Authorization for the operation of a nuclear facility may also be issued repeatedly after periodic safety review. Under Art. 2 of UJD Regulation No. 49/2006 Coll. on periodic evaluation of nuclear safety "The licence holder will carry out the first periodic evaluation by the state of the nuclear installation as of the day on which eight years will have expired since the issue of the operation licence", with such evaluation being focused on:

a) comparison of the achieved state of nuclear safety on the nuclear installation with the current nuclear safety requirements and with the best technical practice,

b) verification of cumulative effects of nuclear installation ageing, the impact of both undertaken and envisaged changes to the nuclear installation, operating experience and technical development on nuclear safety,

c) establishment of justified and practical changes to the nuclear installation with a view to maintaining the required high nuclear safety standards or improve them close to those of modern nuclear installations in the world,

d) demonstration that the required nuclear safety standards are secured until the next periodic evaluation or the end of the licence validity.

The national radwaste repository was commissioned in 2001, i.e. the first periodic evaluation will be needed to be carried out in 2009.

Seq. No	Country	Article	Ref. in National Report
77	France	Article 32	Section D

Question/ Could Slovakia provide information on the management practices and regulations applied for

Comment collection, conditioning and storing waste generated out of the nuclear industry (medical, research, etc)?

Answer RAW produced outside of energy production are in the sense of Act No. 541/2005 defined as

IRAW – Institutional RAW (including sealed sources and orphan sources Disposal of IRAW is realized in accordance with internal guideline No. VYZ/3/ZSM – 054 (Disposal of RAW and IRAW) e. g. subsidiary guideline No. VYZ/SM – 054.05 (Disposal of CRAW). Financing of disposal IRAW is realized on commercial base, where SE-VYZ complete a standard contract with the owner of IRAW for final disposal of IRAW. Financing of disposal CRAW is realized trough States Found for Disposal of Nuclear facilities.

Seq. No	Country	Article	Ref. in National Report
78	France	Article 32	Section B.2 Page 11

Question/ What is the expected schedule for siting the deep geological disposal facility ? What are the Comment applicable regulations for this project (or the planned schedule for developing the regulation)?

Answer At present site selection for deep geological disposal facility is going on. Four perspective areas in two host formations (sediments and crystalline) have been determined for further geological investigation. Process has been partially suspended and to be re-opened in near future. Initial study was in 1996 and there were two stages between 1997-1998 and then between 1999-2001. Decision on selection of the most suitable locality is expected in 2015. No other specific data were established.

Atomic Act regulates siting for nuclear installations including repositories. Respective regulation No. 50/2006 Coll. defining criteria for site selections is applicable also for the project of underground repository.

The deep geological repository development plant was approved at SE, a.s., in 2003. Phase 1 (1996-1998)

- Co-ordination activity
- Design and implementation activities
- Source member, field of near and remote interactions
- Siting
- Safety analyses

Phase 2 (1998-2001)

- Design and implementation activities
- Siting and remote interactions
- Safety analyses.

Phase 3 (reduction in the number of sites and passage from the level of study sites to survey) 2004-2006 (a delay in the execution of this phase occurred because of SE, a.s., restructuring and privatisation).

- Safety analyses
- Geologic-survey works
- Organization-management activities
- Phase 4 (selection of a prefered site out of two)2007-2012
  - Safety analyses
  - Geologic-survey works
  - Organization-management activities
- Definitive selection of the site (planning decision)
   Setup of an underground laboratory at the site of the selected deep geological repository and long-term monitoring thereof
   2012-2015
   2015-2030
   2030

deep geological repository development completion 2037

Deep repository commissioning (obtaining a licence) 2047

Seq. No	Country	Article	Ref. in National Report
79	France	Article 32	Section B Page 11

Question/ What are the criteria for waste exemption and clearance?

Comment

Answer The limits for clearance are set by the regulation (e.g. 0,3 Bq/g and 0,3 Bq/cm2 for basic radionuclides like Co-60, Cs-137 etc.). In general the radionuclides are divided into 5 groups whereas for each group different limits are set. The regulation also specifies the amount of material from which the activity measurements are to be taken.

Seq. No	Country	Article	Ref. in National Report
80	France	Article 32	Section B Pages11-12

Question/ The waste classification of the Republic of Slovakia could include a category of waste called "very

- Comment low level activity waste", intermediate between low activity and clearance levels, which would require less stringent disposal conditions than disposal in the existing near-surface disposal (ex: landfill)
- Answer Existing waste classification system is based on IAEA and EU recommendations. Radiation protection legislation defines clearance levels. Category of so-called very low-level waste is understood to be a part of low and intermediate level waste (no activity limitation, it means that low level waste is everything over clearance levels including very low level waste). Practically the real activity limit between very low level and low-level waste is given by safety assessment for individual disposal facility. Of course this kind of low (very low) level waste requires not so stringent disposal conditions in terms of barriers, drainage, etc.). There is serious discussion on disposal of very low-level waste in Slovakia according to prepared decommissioning activities while arising of big amount of such waste type is expected.

Seq. No	Country	Article	Ref. in National Report
81	Germany	Article 32	p. 10

Question/ It is stated that there is a correspondence between Slovenské elektrárne, joint-stock company (SE Comment a.s.) and several organizations in the Russian Federation regarding the reprocessing of spent fuel

without returning the resulting products.

What is understood in this connection by the products of reprocessing?

Is it planned to provide legislation which could probably limit the existing options for spent fuel management?

When will a decision concerning a national repository for high-active waste (location / disposal strategy) be reached?

Answer There was communication with Russian organizations between 2001-2004 about possibilities of export of the spent fuel for reprocessing. Communication ended without commercial proposal because of unfavourable legislation in the Russian Federation. After changes in Russian legislation the discussions were not renewed.

The "Concept of decommissioning of nuclear facility and management of spent fuel" is reevaluated from environmental point of view and should by completed by 31.12.2007. It is assumed that decision about location of deep geological repository will be made after 2015.

Seq. No	Country	Article	Ref. in National Report
82	Germany	Article 32	p. 11

Question/ Can you describe the procedure of clearance and the waste management of the material from the

Comment decommissioning of the Bohunice 1 NPP?

Answer According to international experience, during dismantling of a V1 NPP there are lots of material with activity levels below the clearance levels and therefore they could be cleared on the basis of an official decision by the authorities and be managed as conventional material.

Taking into account the problems associated with the management of radioactive wastes, one of the main objectives in the dismantling of a nuclear power plant is the release from the regulatory control of the largest possible number of materials.

Current clearance capacity of the Bohunice site corresponds to current waste amount. The content of radionuclides with an allowable release of radioactive substances to the environment has been determined in accordance with **Regulation No. 12/2001 Coll**. on Requirements for the Provision of Radiation Safety, Ministry of Health SR (2001).

The objective of new BIDSF project "*Free Release of Decommissioning Materials*" is to provide a licensed large capacity technology and facility for measurements of very low activity for the purpose of release of dismantled equipment and other materials from regulatory control. The project has been divided in two phases with the following main scope:

#### Phase 1 (2006 - 2008):

- Development of conditional release criteria for soils, concrete, metallic and non-metallic materials.
- Development and implementation of a measurement methodology and definition of a sampling program, methodology for activity assignment and calculation of (directly) non measurable isotopes, isotopic vectors, scale factors, etc.

Licensing process of Phase 1

#### Phase 2 (2008 - 2010):

Supply, commissioning and start-up of characterisation equipment and ancillary facilities Development of the free release procedures

Licensing process of Phase 2

The current Slovak Policy for free release and remediation of materials and soils was issued in 2000 (Act No. 272/1994 Coll. on Public Health Protection 272/1994, amended in 2000, 2002 and 2004). The basic free release principle was based on an individual effective dose limit of 10  $\mu$ Sv/y and a collective effective dose limit of 1 manSv/y. It allows the release of material with higher contamination than the derived activity limits (clearance levels) if the use of said material results in a lower dose than the dose limit with permission of the Authorities.

New supporting Slovak clearance levels were issued in 2001 in accordance with IAEA guidelines (TECDOC 855 and Safety Series 89) on exemption/free release principles based on individual nuclide mass or surface activities.

Nevertheless, in the development of a free release process, conditional release criteria have to be established for a specific site and taking into account the nature of the decommissioning materials. In addition to Slovak regulations, international recommendations on the application of the clearance levels will have to be taken into account in the development of these criteria.

Seq. No	Country	Article	Ref. in National Report
83	Hungary	Article 32	Annex IV.3.2 p.67

Question/ Activity concentrations are given neither in Section D nor in the Annex (except for the liquid waste Comment stored in tanks, where the values - a few kBq/l - are surprisingly low).

Answer The values for tank activities are set out based on chemical analyses. Solid RAW at VVER nuclear power plants - summary activity of drums is only indicated in transport of drums for processing. It is calculated from the values of dose rate and drum weight. Every drum is measured for the dose rate and surface contamination. The dose rates values range between: combustible SRAW - 60 and 1800 microgray/hr active coal - less than 1 microgray/hr solid RAW for high-pressure compaction - 16 and 1000 microgray/hr solid RAW for cementation (SIAL matrices) - 300 and 500 microgray/hr concrete for *dying-cul* - less than 1 microgray/hr Surface contamination must be less than 0.3 Bq.

Summary activity of NPP A-1 solid RAW Beta + Gamma ranges between 10  $e^5$  Bq and 10  $e^{13}$  Bq. Summary activity of tank concentrates ranges between: NPP V-1 5.9  $e^6$  Bq/l and 2.35  $e^7$  Bg/l NPP V-2 6.0  $e^4$  Bq/l and 7.67  $e^5$  Bq/l NPP EMO 1.4  $e^4$  Bq/l and 7.38  $e^5$  Bq/l

Summary activity of liquid RAW at NPP A-1 ranges between: Beta, Gamma 1.3  $e^9$  Bq/l and 3.0  $e^{15}$  Bq/l Alfa 6.6  $e^4$  Bq/l and 2.4  $e^9$  Bq/l

Seq. No	Country	Article	Ref. in National Report
84	Korea, Republic of	Article 32	p.15, p. 52-53

Question/ The report states that the incineration facility and the sludge fixation facility have been operated for Comment waste treatment. What types of incinerator are used for the waste volume reduction? And what is

the fixation method for sludge and their volume reduction factor?

 Answer Incinerator volume reduction factor - 70 Incinerator weight reduction factor - 17 Sludges and fixed into cement or SIAL matrix - (share) Because of securing the product storability at the Mochovce repository the share is 8 – 12 % in the product. Also the bitumenisation on diskontinual line for sludges and ionex is being prepared as fixation method.

The double-chamber incinerator consists of the chamber furnace and the afterburning chamber. Burners are operated by furnace oil, the combustion gas is cleaned in the reverse washer and filtered.

Seq. No	Country	Article	Ref. in National Report
85	Lithuania	Article 32	

Question/ In subparagraph B it is written "…transitional radioactive waste – activity of which decreases Comment during storage below the limit value and then it is possible to release it into the environment…".

Could Slovakia provide information what are these main limit values?

Answer Limiting values are set in Regulation of Ministry of Health No. 12/2001 Coll. and are provided in the following tables.

Limiting values for release of radioactive materials into the environment

#### Table 1

Place of radioactive contamination		Radiotoxicity class acc. table 2			
		2	3	4	5
Materials, solid stuff and items brought out from workplaces with		ng release	e values of	contamin	ation -
sources of ionizing sources or otherwise released to the		mass activity [kBq/kg]			

environment	0,3	3	30	300	3 000
Surfaces of materials and items brought out from workplaces with		Limiting release values of surface			
sources of ionizing sources or otherwise released to the		contam	nination [k	Bq/m <sup>2</sup> ]	
environment	3	30	300	3000	3.10 <sup>4</sup>

#### Table 2

Class	Radionuclides
1	Na-22, Na-24, Mn-54, Co-60, Zn-65, Nb-94, Ag-110m, Sb-124, Cs-134, Cs-137, Eu-152,
	Pb-210, Ra-226, Ra-228, Th-228, Th-230, Th-232, U-234, U-235, U-238, Np-237,
	Pu-239, Pu-240, Am-241, Cm-244
2	Co-58, Fe-59, Sr-90, Ru-106, In-111, I-131, Ir-192, Au-198, Po-210
3	Cr-51, Co-57, Tc-99m, I-123, I-125, I-129, Ce-144, Tl-201, Pu-241
4	C-14, P-32, Cl-36, Fe-55, Sr-89, Y-90, Tc-99, Cd-109
5	H-3, S-35, Ca-45, Ni-63, Pm-147

Seq. No	Country	Article	Ref. in National Report
86	Lithuania	Article 32	

Question/ In subparagraph B it is written "It has not been defined yet when the spent fuel becomes a high-Comment level radioactive waste."

What are the main problems to define spent fuel as high-level waste?

Answer Actual concept of nuclear fuel cycle in the Slovak Republic is to implement openended fuel cycle. Long term objective in spent fuel management is construction of the deep geological repository for final storage of spent fuel and HLW. Decision about spent nuclear fuel as radioactive waste will be based on decision about construction and design of deep geological repository.

Seq. No	Country	Article	Ref. in National Report
87	Netherlands	Article 32	B.3

Question/ In B.3 criteria with 'limit values' are referred to, with limiting concentrations defined by Regulation

Comment No.12/2001 Coll. of MoH. Since the reader does not know the contents of this regulation, he has no clue of the height of the limits. How do these nuclide specific limits compare with international guidelines? Please explain.

Answer In the Regulation No. 12/2001 Coll. of MoH SR there are criteria for clearance of solid material. The radionuclides are classified in 5 radio toxicity groups. For any group a specific clearance level in specific activity and superficial activity has been established (example: Cs-137 - 0.3 Bq/g). The values of specific activities and superficial activities are based on older international guidelines, using values of 0.3, 3.0, 300.0, 300.0 and 3000 Bq/g for various radio toxicity groups.

Seq. No	Country	Article	Ref. in National Report
88	Netherlands	Article 32	Section B

Question/ Please give a short description of how waste management for non-nuclear radioactive waste is Comment organized (e.g. smoke detectors) regarding collection, treatment, disposal, responsibilities and financing.

Answer RAW produced outside of energy production are in the sense of Act No. 541/2005 defined as IRAW – Institutional RAW (including sealed sources and orphan sources Disposal of IRAW is realized in accordance with internal guideline No. VYZ/3/ZSM – 054 (Disposal of RAW and IRAW) e. g. subsidiary guideline No. VYZ/SM – 054.05 (Disposal of CRAW). Financing of disposal IRAW is realized on commercial base, where SE-VYZ complete a standard contract with the owner of IRAW for final disposal of IRAW.
Financing of disposal CRAW is realized trough States Found for Disposal of Nuclear facilities.

Seq. No	Country	Article	Ref. in National Report
89	Poland	Article 32	section B1, page 10

Question/ In the report, among the policy goals 'a long-term goal within the concept of spent fuel management

- Comment is a construction of deep geological repository of SF and HRAW in the Slovak Republic' Q: What is the current stage of studies or programmes oriented towards this concept development and implementation. Is there any preliminary long-term schedule adopted by authorities?
- Answer At present site selection for deep geological disposal facility is going on. Four perspective areas in two host formations (sediments and crystalline) have been determined for further geological investigation. Process has been partially suspended and to be re-opened in near future. Initial study was in 1996 and there were two stages between 1997-1998 and then between 1999-2001. Decision on selection of the most suitable locality is expected in 2015. No other specific data were established.

Atomic Act regulates siting for nuclear installations including repositories. Respective regulation No. 50/2006 Coll. defining criteria for site selections is applicable also for the project of underground repository.

The deep geological repository development plant was approved at SE, a.s., in 2003. Phase 1 (1996-1998)

- Co-ordination activity
- Design and implementation activities
- Source member, field of near and remote interactions
- Siting
- Safety analyses

Phase 2 (1998-2001)

- Design and implementation activities
- Siting and remote interactions
- Safety analyses.

Phase 3 (reduction in the number of sites and passage from the level of study sites to survey) 2004-2006 (a delay in the execution of this phase occurred because of SE, a.s., restructuring and privatisation).

- Safety analyses
- Geologic-survey works
- Organization-management activities
- Phase 4 (selection of a prefered site out of two)2007-2012
  - Safety analyses
  - Geologic-survey works
  - Organization-management activities
- Definitive selection of the site (planning decision)2012-2015
- Setup of an underground laboratory at the site of the selected deep geological repository and long-term monitoring thereof
  2015-2030
  2030
  2030
  2037
- Deep repository commissioning (obtaining a licence) 2047

Seq. No	Country	Article	Ref. in National Report
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90	Sweden	Article 32	Section B 1 n 10			
90 O						
Question/ Comment	The report notes that there is a correspondence between Slovakia and Russia in order to verify the possibility of transporting the spent fuel for reprocessing into the Russian Federation without returning the resulted products back into the Slovak Republic. Proposal for such transportation was indicated by the Russian side already. What is the status of this issue?					
Answer	There was communication with Russian organizations between 2001-2004 about possibilities of export of the spent fuel for reprocessing. Communication ended without commercial proposal because of unfavourable legislation in the Russian Federation. After changes in Russian legislation the discussions were not renewed. The "Concept of decommissioning of nuclear facility and management of spent fuel" is reevaluated from environmental point of view and should by completed by 31.12.2007. It is assumed that					
	decision about location of deep geologica	l repository will be	made after 2015.			
Seq. No 91	Country Sweden	Article Article 32	Ref. in National Report B.2, p.11			
Question/ Comment	Question/ It is noted in the report that costs of radioactive waste management produced during the Comment decommissioning of nuclear power facilities shall be covered from the resources of Fund. How is payment to the Fund arranged?					
Answer	The amount of payments to the Fund by NPP operators was established by Act No. 254/1994 Coll. This was SKK 350,000 a year for every megawatt of installed electric capacity of a nuclear installation and 6.8% of the selling price for electricity generated at the nuclear installation a year. The ownership of SE-VYZ together with NPP V-1 is transfered to the 100% state owned company GovCo Inc. by April 2006. The system financing of decommissioning projects will remain the same (in connection with the ownership transfer), however the new conditions for finacing of decommissioning projects in Slovakia is defined by a new Act on the nuclear account, approved by the Slovak parliament on March 16th 2006.					
Seq. No 92	Country Sweden	Article Article 32	Ref. in National Report D.3.2, p.16			
Question/ On metallic radioactive waste from A1, the report states that once it has been decontaminated it is Comment released into the environment. Please explain in what way the radioactive waste is released into the environment. What are the clearance levels for the metallic radioactive waste?						
Answer	Metal RAW are discharged into the envir follows:	onment through a m	ediator (A.S.A Slovakia, s.r.o.) as			
	carbon steel to Železia	arne Podbrezová, s.r	.0.			
	stainless steel to U.S. St	eel Košice, s.r.o.				
	In the monitoring workplace, the weight a	nd activity of a 200-	litre drum will change, from which			
	the average activity per kg of metallic mat discharge level The discharge levels for	erial will be ascerta	ined. This must be below the aterial into the environment result			
	from Annex 8 to Slovak Ministry of Health Regulation No. 12/2001 Coll. These are:					
	weight activity - for example for radiotoxicity Class 1 is 300 Bq/kg					
	surface activity of surface contamination - for example radiotoxicity Class 1 is $3 \text{ kBq/m}^2$ .					
Seq. No	Country	Article	Ref. in National Report			
93 Orrestis	United States of America	Article 32	10 he Slovely Demuklic and an invel			
Comment repositories. How is Slovakia benefiting from its experience from SAPIERR? Also, please describe						

potential deep geologic disposal sites in Slovakia, and their geology.

Answer It is expected, that SAPIERR results and experience will be utilized in case, if a regional repository will be developed. Presently the final report is prepared.
The research and development of DGR in Slovak Republic began in 1996 in 15 study areas.
Presently there are 6 research areas - 4 in granitoid rock formations, 2 in argillaceous and pelitic formations. In future (2012 – 2015) it is assumed, that these areas will be reduced to 2 test areas (1 in granitoid rock and 1 in sedimentary formation).

In the initial proposal 15 candidate areas were chosen. The follow-up works shortlisted the choice. The first drills were carried out under the deep geological reposition development program. The aim was to verify the existing information on the subbed of the sites, pumping and ascending tests, water sampling and a complex geophysical and borehole measurements were undertaken. Tests were performed on the rock samples to ascertain their fundamental properties.

The final result of the application of selection criteria in 1999 was the setting of 6 study sites for further research and survey:

- 1. "Central section of the Tribeč mountain range"
- 2. "Central section of the Žiar mountain range"
- 3. "Southern section of the Veporské vrchy hills"
- 4. "South-western section of the Stolické vrchy hills"
- 5. "Eastern section of the Cerová vrchovina highlands"
- 6. "Western section of the Rimavská kotlina basin".

Assessed in the study sites were geological, structural and tectonic conditions, hydrogeologic conditions, engineering-geologic conditions, geochemical characteristics of the rock environment, conditions, deposit conditions as well as characteristics of conflicts of interest in these areas. A team of specialists of the Bratislava-based State Geological Institute of Dionýz Štúr selected two locations for further investigation and research (one in crystalline and the other in sedimentary rock environment).

Western section of the Rimavská kotlina basin (sedimentary rock environment) Central section of the Tribeč mountain range (crystalline rock environment)

Seq. No	Country	Article	Ref. in National Report
94	United States of America	Article 32	11

Question/ Clearance or release levels are described only by reference to the appropriate regulation. Please Comment discuss quantitative concentration or dose limits, since none are provided in the report.

Answer In the Regulation No. 12/2001 Coll. of MoH SR there are criteria for clearance of solid material. The radionuclides are classified in 5 radio toxicity groups. For any group a specific clearance level in specific activity and superficial activity has been established (example: Cs-137 - 0.3 Bq/g). The values of specific activities and superficial activities are based on older international guidelines, using values of 0.3, 3.0, 30.0, 300.0 and 3000 Bq/g for various radio toxicity groups.

# 541

# ACT

of 9 September 2004

# ON PEACEFUL USE OF NUCLEAR ENERGY (ATOMIC ACT) AND ON ALTERNATIONS AND AMENDMENTS TO SOME ACTS



NUCLEAR REGULATORY AUTHORITY OF THE SLOVAK REPUBLIC

#### 541

# ACT

#### of 9 September 2004

# on Peaceful Use of Nuclear Energy (Atomic Act) and on Alternations and Amendments to Some Acts

The National Council of the Slovak Republic has ruled as follows:

#### Article I

# PART ONE BASIC PROVISIONS

#### § 1

# Subject of the Act

This Act regulates

- a) conditions of the peaceful use of nuclear energy,
- b) conditions of execution of the state administration, state supervision, and the competencies of the Nuclear Regulatory Authority of the Slovak Republic (hereinafter the "Authority") in the field of nuclear safety of nuclear installations, upon peaceful use of nuclear energy, as well as upon shipment and management of nuclear material, radioactive waste and spent fuel, physical protection of nuclear installations, nuclear material and spent fuel and physical protection upon shipment of nuclear material, radioactive waste and spent fuel (hereinafter "shipment of radioactive material"), and upon emergency planning,
- c) classification of nuclear material, conditions of management of nuclear material,
- d) conditions of management of radioactive waste and spent fuel,
- e) conditions of nuclear safety,
- f) conditions of verification of special professional competency of the authorisation holder employees pursuant to § 5 Sec. 3 and competency of the authorisation holder employees pursuant to § 5 Sec. 3,
- g) emergency preparedness system,
- h) liability for damage caused by nuclear event,
- i) rights and duties of natural persons and legal persons with respect to peaceful use of nuclear energy,
- j) sanctions for violation of the obligations under this Act.

# § 2

# Definition of certain terms

In this Act, terms are understood as follows:

- a) " a person of unblemished reputation" shall be a person who has not been legally convicted for a crime committed with premeditation or for a crime where the facts of the case were associated with the subject of the authorisation or permission pursuant to § 5,
- b) "physical protection" shall mean a set of technical, administrative or organisational measures needed to prevent and identify unauthorised activities concerning nuclear

installations, nuclear material, special materials and equipment, management of radioactive waste, spent fuel, shipment of radioactive material, as well as an unauthorised entering nuclear installations and perpetrating of sabotage,

- c) "emergency preparedness" shall mean the ability to develop and implement activities and measures leading to identification and effective coping with incidents and accidents at nuclear installations or upon shipment of radioactive material, and resulting in effective mitigation of their threatening of life, health or property of the population and the environment, with such an ability being documented in the emergency plan,
- d) "institutional radioactive waste" shall mean radioactive waste generated during the work with sources of ionising radiation, except of spent fuel and radioactive waste from nuclear installations,
- e) "nuclear safety" shall mean the status and the ability of nuclear installation or transport equipment and operating personnel thereof to prevent uncontrolled development of fission chain reaction or unauthorised release of radioactive substances or ionising radiation into the working environment or the environment, and to mitigate consequences of incidents and accidents at nuclear installations or consequences of events upon shipment of radioactive material,
- f) "nuclear installation" shall mean a set of civil structures and technological facilities,
  - 1. the part of which is nuclear reactor(s),
  - 2. for the production or processing of nuclear material or storage of nuclear material in quantities exceeding one effective kilogram,
  - 3. for processing, treatment or storage of radioactive waste,
  - 4. for disposal of radioactive waste from nuclear installations, of institutional radioactive waste or spent fuel; neither containers and shields in which radioactive material is used as a shielding material for sources of radiation, nor areas where such containers and shields are stored, shall be deemed nuclear installations,
- g) "limits and conditions of safe operation or safe decommissioning" shall mean the document containing acceptable parameter values for nuclear installation equipment, which defines the operation modes of the nuclear installation or its decommissioning modes,
- h) "management of
  - 1. nuclear material" shall mean production, processing, reprocessing, transmutation, handling, use, storage thereof,
  - 2. radioactive waste" shall mean collection, sorting, storage, treatment, conditioning, handling, disposal of radioactive waste from nuclear installations and treatment and disposal of institutional radioactive waste,
  - 3. spent fuel" shall mean storage, reprocessing, transmutation, handling and disposal thereof,
- i) "shipment of radioactive material" shall mean shipment operations, including activities connected with the loading and unloading, from the place of origin of nuclear material, radioactive waste from nuclear installations or spent fuel to the place of destination, and shipment operations from the place of treatment of institutional radioactive waste to the repository,
- j) "operation of nuclear installation" shall mean activities performed to achieve the purpose for which it was constructed,
- k) "radioactive waste" shall mean any material in gaseous, liquid or solid form for which no further use is foreseen, and that contains or is contaminated with radionuclides at concentrations or activities greater than clearance levels into the environment,

- 1) "storage of radioactive waste or spent fuel" shall mean emplacement of radioactive waste or spent fuel into areas, premises or facilities that allow their isolation, control and protection of the environment, with the intention of their subsequent retrieval,
- m) "specialised facility" shall mean a facility operated by a natural person or a legal person based on authorisation granted for professional training of the authorisation holder employees,
- n) "disposal of radioactive waste or spent fuel" shall mean emplacement of radioactive waste or spent fuel into radioactive waste or spent fuel repository,
- o) "termination of operation of nuclear installation" shall mean the condition of nuclear installation when its use for the original purpose was finished and the process is irreversible; in respect of radioactive waste and spent fuel repository, termination of the operation of nuclear installation shall mean the condition when emplacement of radioactive waste or spent fuel into the repository has been completed,
- p) "radioactive waste or spent fuel repository" shall mean a nuclear installation pursuant to letter f) indent 4., that allows radioactive waste or spent fuel isolation, control and protection of the environment (hereinafter referred to as "repository"),
- q) "classified equipment " shall mean systems, structures, components or parts thereof, including their software, important to the nuclear safety of the nuclear installation, classified into safety classes according to their nuclear safety importance, as well as according to the safety function of the system they are part of, and according to the significance of their contingent failure,
- r) "spent fuel" shall mean irradiated nuclear fuel removed from a nuclear reactor,
- s) "decommissioning" shall mean activities after termination of the operation taken to allow removal of a nuclear installation from the coverage of the present Act except of a repository,
- t) "use of nuclear energy" shall mean
  - 1. siting of nuclear installations, construction of nuclear installations, commissioning of nuclear installations, operation of nuclear installations or decommissioning of nuclear installations (hereinafter referred to as "decommissioning") and closure of radioactive waste and spent fuel repository,
  - 2. modifications at nuclear installations and verification of systems of nuclear installations or parts thereof,
  - 3. management of nuclear material, special material and equipment, with spent fuel and radioactive waste, including their generation,
  - 4. professional training of authorisation holder employees pursuant to § 5 provided at specialised facilities,
  - 5. shipment of radioactive material,
- u) "modifications at nuclear installation important to nuclear safety during the construction, commissioning, operation, decommissioning, closure of repository and/or after the closure of repository, which can be carried out only after obtaining previous permission or approval by the Authority and, in special cases, also after obtaining position by the European Commission" shall mean modifications
  - 1. of classified equipment which perform safety function or through which their safety function-related characteristics undergo changes,
  - 2. of documentation reviewed or approved by the Authority,
  - 3. which result in changes of limits and conditions pursuant to letter g),
- v) "modifications at nuclear installation during its construction, commissioning, operation, decommissioning, closure of repository and after the closure of repository, subject to preceding notification and review by the Authority" shall mean modifications not mentioned under letter u), which however, if implemented, may impact the nuclear safety.

#### Principles of peaceful use of nuclear energy

- (1) Nuclear energy may only be used for peaceful purposes and in accordance with the international agreements the Slovak Republic is bound. <sup>1</sup>)
- (2) Use of nuclear energy for other than peaceful purposes is prohibited.
- (3) The use of nuclear energy shall be justified by benefits outweighing potential risks of such activities, in particular when compared with other ways, which accomplish the same purpose.
- (4) In using nuclear energy, priority emphasis shall be given to safety aspects over any other aspects of such activities.
- (5) A level of nuclear safety, reliability and health protection at work and safety of technological facilities, protection of health from ionising radiation<sup>2</sup>), physical protection, emergency preparedness and fire protection must be achieved upon using nuclear energy so as to keep the life, health, working or environment-related hazards as low as can be reasonably achieved according to the available state-of-art knowledge; at the same time, irradiation limits must not be exceeded.<sup>2</sup>). Upon new significant information being obtained about the risks and consequences of the use of nuclear energy, the above-mentioned level must be reassessed, and measures shall be taken as necessary to meet the conditions pursuant to this Act.
- (6) Use of nuclear energy without permission or authorisation is prohibited.
- (7) To carry out test explosions of nuclear weapons or other nuclear explosions, to support or participate in the performance of any test explosions of nuclear weapons or other nuclear explosions is prohibited.
- (8) The radioactive waste shipment is prohibited to
  - a) a destination south of latitude  $60^{\circ}$  south ,
  - b) a State party to the international convention<sup>3</sup>), which is not a Member State of the European Union (hereinafter "Member State"), unless such shipment represents reimport of radioactive waste formed from materials exported from that state for purposes of their processing or reprocessing in the Slovak Republic,
  - c) a third country which, in the opinion of the competent authorities of the country of origin does not have the technical, legal or administrative resources to manage the radioactive waste.
- (9) Disposal of radioactive waste or spent fuel based on authorisation issued by the Authority, may only be undertaken by a legal person independent of the originator of radioactive waste, founded or established by Ministry of Economy of the Slovak Republic (hereinafter "Ministry of Economy").
- (10) Disposal of radioactive waste or spent fuel on the territory of the Slovak Republic is prohibited for other than the legal person pursuant to Section 9 above.

<sup>&</sup>lt;sup>1</sup>) E.g., Decree of Minister of Foreign Affairs No.61/1974 Coll. on Convention on Non-Proliferation of Nuclear Weapons; Decree of Minister of Foreign Affairs No. 62/1974 Coll. on Treaty on the Prohibition of the Emplacement of Nuclear Weapons and Other Weapons of Mass Destruction on the Seabed and the Ocean Floor and in the Subsoil Thereof.

<sup>&</sup>lt;sup>2</sup>) Act of the National Council of the Slovak Republic No.272/1994 Coll. II. on the Public Health Protection, as amended from time to time. Decree of Ministry of Health of the Slovak Republic No. 12/2001 Coll. II. on requirements on the provision for radiation protection.

<sup>&</sup>lt;sup>3</sup>) 4<sup>th</sup> Convention of African, Caribbean and Pacific Countries and the European Economic Community (Official Journal of the European Communities L 229,17.08.1991).

- (11) Any person who manages special materials and special equipment is obliged to notify the Authority of the commencement and the scope of such activities.
- (12) Any person who manufactures cladding assemblies for irradiated or spent fuel or who builds hot chambers or carries out research and development activities connected with conversion of nuclear material, enrichment, manufacturing of fuel elements, reactors, critical assemblies, reprocessing, and management of highly and moderately radioactive waste containing special fissile materials is obliged to notify the Authority and the European Commission of the commencement and the scope of such activities.
- (13) Details concerning the scope, contents and method of notifications pursuant to Sections 11 and 12 shall be laid down by a generally binding legal regulation to be issued by the Authority.

# PART TWO

# STATE ADMINISTRATION, STATE SUPERVISION AND COMPETENCIES OF THE AUTHORITY

# §4

# Competence of the Authority

(1) The Authority shall

- a) be in charge of the state supervision upon nuclear safety of nuclear installations,
- b) be in charge of the state supervision in the field of use of nuclear energy, physical protection and emergency planning,
- c) supervise the fulfilment of obligations pursuant to this Act,
- d) issue permission or authorisation to natural persons or legal persons pursuant to § 5 Sec. 2 and 3, check whether the conditions for permission or authorisation are met, and have the power to cancel permission or authorisation,
- e) approve the size of the emergency planning zone or the size of the common emergency planning zone related to nuclear installation for purposes of emergency planning,
- f) assure international cooperation in areas of applicability of the present Act, including implementation of commitments of the Slovak Republic under international agreements the Slovak Republic is bound by, as well as of the function of the contact point<sup>4</sup>), and shall fulfil additional liability to notify within the scope of its competencies pursuant to the special regulation<sup>5</sup>),
- g) keep informed neighbouring states, International Atomic Energy Agency, and other European Union authorities, as applicable, of cases of illicit trafficking of nuclear material, radioactive sources, incidents and accidents at nuclear installations on the territory of the Slovak Republic, as well as of events occurring upon shipment of radioactive material on the territory of the Slovak Republic,
- h) present to the Government of the Slovak Republic and subsequently to the National Council of the Slovak Republic, once a year, always by 30 April, reports on the status of nuclear safety of nuclear installations on the territory of the Slovak Republic and on its activities in the previous year,
- i) inform the public of

<sup>&</sup>lt;sup>4</sup>) E.g., Convention on Early Notification of a Nuclear Accident (Notice No.327/2001 Coll. LL.), Council Decision 87/600/Euratom dated 14.December 1987 on Community Arrangements for the Early Exchange of Information in the Event of a Radiological Emergency (Official Journal of the European Communities L 371,30.12.1987).

<sup>&</sup>lt;sup>5</sup>) Article 37 of the Treaty establishing the European Atomic Energy Community.

- 1. incidents and accidents at nuclear installations on the territory of the Slovak Republic,
- 2. incidents outside the territory of the Slovak Republic,
- 3. serious deficiencies identified by the Authority at nuclear installations, and of measures taken for their elimination,
- 4. events upon shipment of radioactive material, with the exception of confidential information subject to protection pursuant to the special regulation,<sup>6</sup>)
- 5. other information concerning nuclear safety of nuclear installations on the territory of the Slovak Republic,
- j) perform the activities of the civil construction authority in the cases pursuant to the special regulation,<sup>7</sup>)
- k) keep the national system of records on nuclear material, special materials and equipment records.
- (2) Additionally, the Authority shall
- a) approve
  - 1. types of transport equipment used for shipment of radioactive material,
  - 2. quality systems documentation of applicants for authorisation and authorisation holders,
  - 3. requirements on the quality of nuclear installations, categorisation of classified equipment into safety classes, and requirements on the quality of classified equipment,
  - 4. the system of the professional training of authorisation holder employees,
  - 5. the training program for licensed employees,
  - 6. preliminary plans of physical protection and plans of physical protection,
  - 7. preliminary on-site emergency plans and on-site emergency plans,
  - 8. preliminary limits and conditions of safe operation and limits and conditions of safe operation,
  - 9. limits and conditions of safe decommissioning,
  - 10. programme of the commissioning of nuclear installations, divided into stages,
  - 11. boundaries of nuclear installation and changes thereof,
  - 12. the size of the emergency planning zone or common emergency planning zone related to nuclear installation, and changes thereof,
  - 13. implementation of modifications pursuant to § 2 letter u),
- b) impose
  - 1. to reduce power or to suspend operation or decommissioning of nuclear installation, or the construction thereof,
  - 2. suspend managing of nuclear material, radioactive waste or spent fuel
  - 3. sanctions pursuant to this Act,
- c) determine
  - 1. new authorisation holder for managing nuclear material and nuclear waste whose originator is unknown or whose originator is not capable of managing nuclear material or radioactive waste in a safe manner,
  - 2. the obligation to another holder of the respective authorisation to assume the rights and duties concerning safe management of nuclear material or radioactive waste of an authorisation holder whose authorisation has extinguished due to reasons pursuant to § 9 Sec. 4, including the possibility of partial or complete withdrawal of nuclear material or radioactive waste from such an authorisation holder,
- d) verify

<sup>&</sup>lt;sup>6</sup>) Act No.215/2004 Coll. LL. on the Protection of Classified Information and on Amendments and Supplements to Other Acts.

<sup>&</sup>lt;sup>7</sup>) §121 Sec. 2 letter e) of Act No. 50/1976 Coll. on Land-Use Planning and on Construction Order (Building Act), as amended from time to time.

- 1. special professional competency of authorisation holder employees and issue, withdraw or revoke them licence of special professional competency,
- 2. professional competency of employees of authorisation holder providing professional training to authorisation holder employees, who provide professional theoretical education and simulator training for licensed employees, and issue and withdraw licence of professional competency,
- e) review
  - 1. off-site emergency plans in emergency planning zone,
  - 2. emergency transport order,
  - 3. documentation specified in the Annexes to this Act, necessary for the obtaining individual types of permissions or authorisations, which Authority does not approve pursuant to this Act,
  - 4. training programmes for employees with professional competency,
  - 5. technical equipment of specialised facility,
- f) issue permission for
  - 1. siting of nuclear installation,
  - 2. implementation of modifications pursuant to § 2 letter u),
  - 3. removal of nuclear installation from the coverage of this Act,
  - 4. dilution and consumption of nuclear material,
  - 5. individual stages of commissioning of nuclear installation,
  - 6. trial operation of nuclear installation,
  - 7. use of a new type of nuclear fuel,
- g) decide on whether
  - 1. an installation is a nuclear installation,
  - 2. modifications of nuclear installations represent those mentioned in § 2 letter u) or letter v),
  - 3. nuclear material, special material or equipment are concerned,
- h) issue further decisions pursuant to special regulations.<sup>8</sup>)
- (3) Executing state supervision, the Authority shall
- a) carry out inspections of workplaces, operations and premises of nuclear installations, operations and premises of permission or authorisation holders, check the fulfilment of obligations pursuant to this Act, the generally binding legal regulations issued on the basis of this Act, operating procedures issued by authorisation holders, whether limits and conditions of safe operation and safe decommissioning, quality assurance systems, as well as of duties arising out of decisions, measures or orders issued on the basis of this Act, are being observed
- b) inspect fulfilment of commitments arising out of international agreements by which the Slovak Republic is bound in respect of the applicability of this Act,
- c) inspect the system of professional training of employees, training programmes of employees with professional competency, training programmes of licensed employees of authorisation holders, and inspect professional competency as well as special professional competency of authorisation holder employees,
- d) investigate in situ the status, causes and consequences of selected failures, incidents and accidents at nuclear installations or events during shipment of radioactive material; during the investigation of incidents, accidents or events during shipment of radioactive material by an another than Authority, take part in the investigation as the statutory body,
- e) control conducting of the obligatory inspections, revisions, in-service inspections and inservice testing of classified equipment important to the nuclear safety,

<sup>&</sup>lt;sup>8</sup>) E.g., § 16 of Act of the National Council of the Slovak Republic No.127/1994 Coll. LL. on Environmental Impact Assessment, as amended from time to time; Act No. 50/1976 Coll., as amended from time to time.

- f) impose the elimination of deficiencies relevant to nuclear safety, physical protection, emergency preparedness,
- g) independently from authorisation holders, assess nuclear safety, physical protection and emergency preparedness,
- h) check the contents, updating and exercising of emergency plans which Authority approves or reviews, and the associated trainings,
- i) conduct in-situ reviews at workplaces, operations and premises of applicants for permission or authorisation and permission or authorisation holders, including observation of quality assurance systems.
- (4) Upon written agreement with Ministry of Labour, Welfare and Family of the Slovak Republic, the Authority shall lay down details of cooperation in supervision activities in the field of use of nuclear energy.

#### Use of nuclear energy

- (1) Nuclear energy may only be used based on permission or authorisation issued by the Authority to a natural person or a legal person.
- (2) Permission shall be required for siting of nuclear installation.
- (3) Authorisation shall be required for
- a) construction of nuclear installation (hereinafter referred to as "building authorisation"),
- b) commissioning of nuclear installation,
- c) operation of nuclear installation,
- d) decommissioning stage,
- e) closure of repository and institutional control,
- f) management of radioactive waste or spent fuel,
- g) management of nuclear material at nuclear installation,
- h) imports or exports of nuclear material,
- i) imports and exports of special material and equipment in accordance with the special regulation, <sup>9</sup>)
- j) shipment of radioactive material, including international shipment; such an authorisation shall not relate to carrier unless such person is at the same time the consignor,
- k) professional training of authorisation holder employees pursuant to letters b) through g),
- 1) re-shipment of radioactive waste pursuant to § 21 Sec. 11 letter a),
- m) imports of radioactive waste pursuant to § 21 Sec. 11 letter b),
- n) management of nuclear material outside of nuclear installation.
- (4) Authority's permission pursuant § 2 and authorisation by the Authority pursuant to Section 3 shall not replace license, authorisation, approval or certificate issued by other administrative authorities pursuant to special regulations.<sup>10</sup>)
- (5) The Authority may make any of its decisions subject to the fulfilment of conditions relating to nuclear safety, physical protection, quality assurance or emergency preparedness. The Authority may modify such conditions whenever conditions of nuclear safety, physical protection or emergency preparedness relevance, under which the original

<sup>&</sup>lt;sup>9</sup>) Council Regulation (EC) No.1334/2000 of 22 June 2000 setting up a Community regime for the control of exports of dual use items and technology, as amended (Official Journal of European Communities L 159, 30.06.2000).

<sup>&</sup>lt;sup>10</sup>) E.g., § 3 Sec. 1 of Act No.70/1998 Coll. II. on Energy and on Amendment to Act No. 455/1991 Coll. on Small Trade Business (Small Trade Act), as amended from time to time; Act No.95/2000 Coll. II. on Labour Inspection and on Amendments and Supplements to Some Laws, as amended from time to time.

decision was issued, change, and/or based on new knowledge of science and technology, or upon justified written request of permission or authorisation holder.

§ 6

# Application for permission or authorisation

- (1) Application for permission or authorisation shall include
- a) name and surname, permanent residence, registration number if already assigned by the Authority for natural persons,
- b) name, registered address and identification number of the organisation, name and surname of the person(s) who is (are) its statutory bodies or members, registration number if already assigned by the Authority for legal persons,
- c) subject, type, scope and place of activity for which permission or authorisation is requested, provision method for aforementioned activity, duration of the performance of the activity by applicant, and method of termination of the activity.
- (2) Attached to the application shall be
- a) a document of unblemished reputation of the natural person or the person who is the statutory body of the legal person in form of Abstract from Criminal Record Register, which is not older than three months,
- b) in case of entrepreneurs for legal persons, Abstract from Commercial Register or an equivalent register kept in the Member State, which is not older than three months; in case of entrepreneurs for natural persons, Abstract from Register of Small Trade Licensees or an equivalent register kept in the Member State, which is not older than three months,
- c) Memorandum of Association, Charter of Foundation or Articles of Incorporation, for newly established entities,
- d) if an application for permission for the siting of a repository or an application for Building Authorisation for a repository is concerned, land certificate of the state ownership which the repository is to be sited or constructed on,
- e) a document evidencing functional technical equipment of the applicant for the requested activity, and a document evidencing that the applicant has permanent staff with the required professional competency,
- f) if the activities subject to authorisation are expected to generate radioactive waste, a document supporting that the management of radioactive waste is ensured, including the respective financial provision,
- g) for legal person as an applicant, a document evidencing ownership and organisational structure of the applicant for permission or authorisation,
- h) documentation specified in Annexes to this Act requested to be attached to applications for individual types of permissions and authorisations,
- i) documents evidencing the numbers of the permanent staff including staff professional competency,
- j) if applications pursuant to the special regulation<sup>11</sup>) are concerned, documentation as requested by the special regulation.

<sup>&</sup>lt;sup>11</sup>) § 66,76,83 and 84 of Act No.50/1976 Coll., as amended from time to time.

#### Permission or authorisation issuance conditions

- (1) The general conditions for a permission or an authorisation to be issued to a natural person include
- a) capacity to enter into legal acts,
- b) unblemished reputation,
- c) evidence of a functional technical equipment for requested activity,
- d) evidence of an adequate permanent staffing with requested professional competency .
- (2) The general conditions for permission or authorisation to be issued to a legal person include
- a) capacity to enter into legal acts and unblemished reputation of the person who is the statutory body or member of the statutory body,
- b) evidence of a functional technical equipment for requested activity,
- c) evidence of an adequate permanent staffing with requested professional competency.
- (3) Specific conditions for the permission pursuant to § 5 Sec. 2 to be issued include
- a) environmental impact assessment of the nuclear installation if requested by the special regulation,<sup>8</sup>) as well as evaluation of the potential impact of surroundings on the nuclear installation,
- b) approved requirements on the quality of nuclear installation,
- c) approved proposal for boundaries of nuclear installation,
- d) approved proposal for the size of the emergency planning zone related to nuclear installation.
- (4) Specific condition for the authorisations pursuant to § 5 Sec. 3 letters a) through g), j), k), to be issued shall be an approval of the documentation of quality assurance system for activities to be authorised.
- (5) Specific condition for the authorisations pursuant to § 5 Sec. 3 letters a) through d), f), g), j) to be issued shall be an approval of preliminary plan of physical protection or physical protection plan.
- (6) Specific condition for the authorisations pursuant to § 5 Sec. 3 letters a) through d), f), g),j) to be issued shall be an approval of categorisation of classified equipment into safety classes.
- (7) Specific condition for the authorisation pursuant to § 5 Sec.3 letter a) to be issued shall be an approval of preliminary on-site emergency plan of the nuclear installation (hereinafter "preliminary on-site emergency plan").
- (8) Specific condition for the authorisations pursuant to § 5 Sec. 3 letters b) through d), f), g), j) to be issued shall be an approval of on-site emergency plan of the nuclear installation (hereinafter "on-site emergency plan"), off-site emergency plan and of emergency transport order.
- (9) Specific condition for the authorisations pursuant to § 5 Sec.3 letters a) through c), f), g) to be issued shall be an approval of preliminary limits and conditions of safe operation or of limits and conditions of safe operation.
- (10) Specific condition for the authorisation pursuant to § 5 Sec.3 letter d) to be issued shall be an approval of limits and conditions of safe decommissioning.
- (11) Specific condition for the authorisations pursuant to § 5 Sec.3 letters a) through e) to be issued shall be an approval of preliminary determination of boundaries of the nuclear installation, their determination or modifications thereof.

- (12) Specific condition for the authorisations pursuant to § 5 Sec.3 letters a) through e) to be issued shall be an approval of preliminary definition of the size of the area endangered by the nuclear installation, its definition or modifications thereof.
- (13) Specific condition for the authorisations pursuant to § 5 Sec.3 letter b) to be issued shall be an approval of the commissioning plan of the nuclear installation, divided into stages.
- (14) Specific condition for the authorisations pursuant to § 5 Sec.3 letters b) through g) to be issued shall be the fulfilment of the qualification requirements by licensed employees and employees with professional competency.
- (15) Specific condition for the authorisation pursuant to § 5 Sec. 3 letter h) to be issued is the existence of a business contract endorsed by the European Commission; the applicant or the natural person for whom the nuclear material in question is to be imported or exported shall be authorisation holder for management of nuclear material.

# Essentials and issuance of permission or authorisation

- (1) Unless provided for differently by this Act, the Authority in its decision on permission or authorisation
- a) shall indicate applicant's identification data and the registration number assigned,
- b) shall identify the object and the scope of the permission or authorisation,
- c) may determine conditions for the permission or authorisation to remain valid,
- d) may indicate time or technical restrictions for which the permission or authorisation is being issued.
- (2) The Authority may issue permission or authorisation for a maximum period of ten years, unless provided differently by this Act. Authorisation for the operation of a nuclear installation may also be issued repeatedly, its issuance however is conditional upon the meeting of the criteria mentioned in § 7 as well as of the conditions mentioned in § 23 Sec. 2 and 7. In this case, applicant for authorisation shall attach to the application the documentation mentioned in Annex 1 indent C in an adequate extent.
- (3) Activities specified in the permission or authorisation, may only be carried out by the person indicated in the permission or authorisation (hereinafter referred to as "authorisation holder").
- (4) The Authority shall decide on issuance of permission or authorisation after having verified that the applicant meets all the conditions provided for by this Act and the relevant generally binding legal regulations issued on the basis thereof. The permission or authorisation proceedings followed by the Authority shall be independent of the proceedings by any other administrative body. The applicant shall be the only participant of the proceedings.
- (5) Applicants for permission or authorisation shall be liable to enable Authority inspectors and persons invited by the Authority access to premises and places of the applicant and to render them the necessary cooperation upon the verification of the meeting of the conditions for permission or authorisation to be issued.
- (6) If the elements required are included in the application, if the required documentation is attached to the application and the applicant has fulfilled conditions, the Authority shall decide on the issuance of the permission or authorisation
- a) within 60 days unless this Act provides for differently,
- b) within four months if siting of nuclear installation, except repository is concerned,

- c) within six months if nuclear installation commissioning or decommissioning stage is concerned,
- d) d) within one year if building authorisation, siting and closure of repository or repeated authorisation for operation of a nuclear installation pursuant to Section 2 are concerned.
- (7) The time periods mentioned in Section 6 shall commence upon the delivery day of the complete application together with the prescribed documentation; such periods of time shall be extended by the amount of time during which the European Commission acts if its statement, standpoint, or approval is required pursuant to the special regulation.<sup>5)</sup>
- (8) If the Authority finds out that the application lacks elements as mentioned in § 6 Sec. 1, or that documents as mentioned in § 6 Sec. 2 are not attached to application, it shall request the applicant within 30 days from the application delivery day to eliminate the deficiencies or to provide the missing documents. In its request, the Authority shall determine a reasonable period of time for the elimination of the deficiencies and the submission of the missing documents, which shall not be shorter than 30 days. In its request, the Authority at the same time shall notify the applicant of the consequences of failing to eliminate the deficiencies or submit the missing documents, as mentioned in Section 9.
- (9) If the applicant fails to eliminate the deficiencies of the application or fails to submit the missing documents within the time period set by the Authority in spite of notice of possible suspension of the proceedings by the Authority, the Authority shall suspend the proceedings.

### Modification, cancellation or extinction of permission or authorisation

- (1) The procedure mentioned in § 6 through 8 shall be followed if application for modification of permission or authorisation is concerned.
- (2) The Authority may modify or cancel permission or authorisation issued to authorisation holder who violates his duties as laid down in this Act, the generally binding legal regulations issued based thereon, or conditions specified in the permission or authorisation.
- (3) The Authority may decide to cancel or modify permission or authorisation if their holder
- a) fails to eliminate, within the deadlines set by the Authority, deficiencies identified by the latter,
- b) will request in writing for cancellation or modification .
- (4) Permission or authorisation shall extinguish
- a) upon the death of the natural person concerned or his/her being declared dead,
- b) upon the dissolution day of the legal person concerned,
- c) upon the expiry date for which it was issued,
- d) by the decision of the Authority on the cancellation thereof.

#### § 10

#### Duties of the authorisation holder

- (1) Within the scope of the permission or authorisation, the authorisation holder shall be liable to
- a) ensure nuclear safety, physical protection, emergency preparedness, including verification thereof,

- b) observe documentation reviewed or approved by the Authority; any deviations from the documentation is allowed after preceding re-assessment or approval by the Authority,
- c) continuously and comprehensively evaluate the compliance with the principles mentioned in § 3 Sec. 3 through 5 and to ensure the practical implementation of the evaluation results,
- d) adhere to the conditions of the permission or authorisation, to investigate without any delay any violation of the these conditions and to take remedial measures and to prevent such violations from their repeating,
- e) observe with the limits and conditions of safe operation or limits and conditions of safe decommissioning; the Authority shall be notified, without any delay, of their violation, failure to adhere to them or their exceeding,
- f) observe with the technical and organisational requirements laid down by the generally binding legal regulations,
- g) render, upon the Authority carrying out inspection activities, Authority inspectors the necessary assistance pursuant to the specific regulation<sup>12</sup>) to provide inspectors with personal protective means to be able to carry out inspection activities, to render necessary assistance to persons invited by the Authority for evaluation of issues related to the performance of the inspection activities, allow access to the necessary documentation or provide other information under Authority's competence at Authority's request, even if they do not relate to the inspection activities,
- h) enable management of nuclear material, radioactive waste and spent fuel only to authorisation holders for management thereof pursuant to this Act,
- i) appoint only persons who meet the requirements mentioned in § 24, to perform working activities; and in case of persons performing activities pursuant to the special regulation<sup>6</sup>) to ensure the verification of their competency in accordance with this special regulation,
- j) reimburse the Authority costs connected with the verification of special professional competency,
- k) notify the Authority without any delay of any modification as mentioned in § 2 letter v),
- 1) submit to the Authority any modification as mentioned in § 2 letter u) for permission or approval, at least one month prior to its foreseen implementation,
- m) inform the public about the nuclear safety assessment status,
- n) inform the Authority without any delay of the declaration of insolvency or rejection of insolvency proceedings because of lack of assets,
- o) submit to the Authority classification of nuclear installation and nuclear material into the respective categories concerning the physical protection,
- p) work out preliminary on-site on site emergency plan, on-site on site emergency plan as well as source documents for off-site emergency plan and emergency transport order,
- q) notify the Authority demonstrably and without any delay, about interventions taken with the aim of averting incident, accident or remediation of their consequences,
- r) notify, in accordance with the approved physical protection plan, the Authority in writing of any aviation activities<sup>13</sup>) at nuclear installation premises and in their immediate vicinity.
- (2) The authorisation holder pursuant to § 5 Sec. 3 letters b) through e) shall be liable to submit to the Authority sufficiently ahead of time prior to the expiration date of authorisation, while taking into account the deadlines pursuant to the § 8 Sec. 6 and 7, the

<sup>&</sup>lt;sup>12</sup>) Act of the National Council of the Slovak Republic No. 10/1996Coll.LL. on Control in Public Service, as amended from time to time.

<sup>&</sup>lt;sup>13</sup>) E.g., § 44 of Act No. 143/1998 Coll. LL. on Civil Aviation (Aviation Act) and on Amendments and Supplements to Some Laws, as amended by Act No. 37/2002 Coll. LL.

application and relevant documentation for issue of authorisation for the relevant activity to be continued.

- (3) The authorisation holder shall be liable to enable Authority inspectors, persons invited by the Authority as well as authorised persons of international organisations carrying out inspections in accordance with the international commitments of the Slovak Republic, access to premises and places of nuclear installations in which nuclear materials are located, and to render them the necessary assistance upon the performance of their activities.
- (4) Authorisation holders for shipment of radioactive material and State authorities responsible for off-site emergency plans at regional level shall enable Authority inspectors, persons invited by the Authority as well as authorised persons of international organisations carrying out inspections in accordance with the international commitments of the Slovak Republic, access to documentation, premises and facilities to which the relevant emergency plans are concerned to.
- (5) The authorisation holder shall be liable to forward to the Authority data required by this Act, and to the European Commission or another competent body of the European Union data required by the special regulations mentioned in §13, as well as additional data required by international agreements that the Slovak Republic is bound by in relation to the European Union in respect of non-proliferation of nuclear weapons. At the same time, authorisation holder shall be liable to deliver to the Authority data required by the special regulations. <sup>14</sup>)
- (6) The authorisation holder shall be liable to notify the Authority in writing of any changes in facts on the basis of which permission or authorisation were issued and of any facts which might result in modification or cancellation of the permission or authorisation. Such notification shall be made within 15 days of the occurrence of such change.
- (7) The authorisation holder shall be liable to also comply with additional duties as specified in this Act.

# PART THREE

# NUCLEAR MATERIALS, SPECIAL MATERIALS AND EQUIPMENT, AND SHIPMENT OF RADIOACTIVE MATERIALS

# §11

# Nuclear materials, special materials and equipment

- (1) Nuclear materials are materials defined pursuant to special regulations.<sup>15</sup>)
- (2) Special materials and equipment are materials and equipment defined pursuant to special regulation.<sup>9)</sup>
- (3) Doubts whether a specific substance is nuclear material or whether a specific material or equipment is special material shall be decided upon by the Authority.
- (4) Special materials and equipment being subject of supervision by the Authority shall be determined by a generally binding legal regulation to be issued by the Authority.

<sup>&</sup>lt;sup>14</sup>) Article 79 of the Treaty on the establishment of the European Atomic Energy Community

<sup>&</sup>lt;sup>15</sup>) Treaty on the establishment of the European Atomic Energy Community.

Commission Regulation (Euratom) No 3227/76 of 19 October 1976 concerning the application of the provisions on Euratom safeguards, as amended from time to time (Official Journal of the European Community L 363, 31.12.1976).

#### Management of nuclear materials

- (1) The Authority shall, in its decision, determine another authorisation holder pursuant to § 5 Sec 3 letter g) or n) to take the necessary measures in respect of nuclear materials whose owner is unknown or whose authorisation pursuant to § 9 Sec.4 expired, or of nuclear materials acquired in contradiction with this Act. Reimbursement of expenditures incurred by such an authorisation holder shall accordingly follow the provision of § 21 Sec. 9.
- (2) Anybody who finds nuclear material or other equivalent radioactive material or suspects that nuclear material or other equivalent radioactive material is concerned, shall be liable to notify, without any delay, the Authority, the Police or Chief Hygienist of the Slovak Republic of the finding.
- (3) Anybody who identifies loss or theft of nuclear material or other equivalent radioactive material or suspects that or has the knowledge of a damage to nuclear material or other equivalent radioactive material, of monitoring equipment or seals controlling the status and flows of nuclear materials, shall be liable to notify, without any delay, the Authority, the Police or Chief Hygienist of the Slovak Republic and the European Commission of this fact.
- (4) In addition to the data pursuant to § 6, natural persons or legal persons in their application for the issuance of an authorisation pursuant to § 5 Sec.3 letter g) or n), shall indicate
- a) types of nuclear materials,
- b) activities for which the nuclear materials will be used.
- (5) If nuclear materials shall be managed at nuclear installation, data required by the special regulation<sup>16</sup>) shall be attached to the application for the issuance of an authorisation.
- (6) Natural persons or legal persons shall submit an application for the issuance of authorisation
- a) at least six months before the first receipt of nuclear materials to nuclear installation,
- b) at least two months before the first receipt of nuclear materials outside of nuclear installation.
- (7) Ways of use of nuclear materials by which they get spent or diluted so that they cannot be recovered or upon which they substantially change their form or status, with the exception of the use of nuclear fuel at nuclear reactor, may only be allowed with the preceding permission of the Authority and the European Commission.
- (8) Details concerning requirements upon management of nuclear materials shall be laid down by a generally binding legal regulation to be issued by the Authority.

#### § 13

#### Record keeping system and control of nuclear materials

- (1) The authorisation holder pursuant to § 5 Sec. 3 letters g) and n) shall be liable to
- a) keep records of such materials within the scope required by special regulations<sup>17</sup>), and operation records, to submit to the Authority reports on inventory changes,
- b) provide the Authority with copies of documentations as requested by special regulations,<sup>16)</sup>

<sup>&</sup>lt;sup>16</sup>) Treaty on the establishment of the European Atomic Energy Community.

<sup>&</sup>lt;sup>17</sup>) Chapter 7 of the Treaty on the establishment of the European Atomic Energy Community.

- c) appoint an employee who shall be responsible for keeping records and operation records on nuclear materials control, and report the Authority and the European Commission his/her given name and surname together with other contact data,
- d) keep the Authority and the European Commission informed on non-compliance with duties pursuant to special regulations.<sup>17</sup>)
- (2) Details concerning the operation record keeping, details concerning the conduct of inspection activities by the Authority, details concerning the preparation and submission of reports on inventory changes and concerning the method of notification and reporting of events connected with the function of the control equipment and with nuclear materials shall be laid down by a generally binding legal regulation to be issued by the Authority.

# Import and export of nuclear materials, special materials and equipment

The Authority shall issue authorisation for import or export of nuclear materials, special materials and equipment pursuant to special regulations<sup>18</sup>) to a natural person or a legal person based on written application with the documentation attached pursuant to Annex 2 indent B. The special regulations<sup>9</sup> shall be followed upon issuance of authorisation for import and export of special materials and equipment; the competent authority for the execution of that special regulation is Ministry of Economy.

# §15

# Shipment of radioactive materials

- (1) The consignor of radioactive materials shall mean a natural person or a legal person that prepares the shipment of radioactive materials, and is named as the consignor in the transport documents, and is authorisation holder for shipment of radioactive materials.
- (2) Unless this Act establishes otherwise, radioactive materials may only be transported based on shipment authorisation issued by the Authority to consignor.
- (3) Authorisation for shipment of radioactive materials shall be issued by the Authority upon submission of a written application with the documentation attached pursuant to the Annex 2 indent A.
- (4) Shipment of radioactive materials may be performed only by means of transport equipment which type was approved by the Authority. The Authority shall make a decision on application for approval of the transport equipment type within 12 months from the opening of the proceedings. Holder of decision on approved type of transport equipment shall be liable to report the serial numbers of the transport equipment to the Authority. Details concerning the elements of application and documents necessary attached to the application shall be laid down by a generally binding legal regulation to be issued by the Authority.
- (5) Decision on the approval of the transport equipment type shall be issued for a five years period at maximum.

<sup>&</sup>lt;sup>18</sup>) § 9 Sec.4 letter c), § 14 Sec.4 letter c) of Act No. 26/2002 Coll. LL. on the Conditions and Control of Imports, Exports, and Brokerage Concerning Goods and Technologies which are Subject of International Control Regimes, and on Amendment to Act No. 179/1998Coll. LL. on Trading in Military Materials and on Supplement to Act No. 455/1991 Coll. LL. on Small Trade Business (Small Trade Act), as amended from time to time.

- (6) The consignor shall be liable to verify the conformity of the properties and parameters of transport equipment with the approved type and to provide evidence for the conformity.<sup>19</sup>)
- (7) Transport equipment for the shipment of radioactive materials, approved in an equivalent manner in Member States or in some of a Member State of the European Free Trade Agreement, which at the same time is the signatory party to the European Economic Area, shall be deemed to be a type-approved pursuant to this Act.
- (8) Transport equipment for shipment of radioactive materials approved in an equivalent manner in countries not falling under section 7 may the Authority deems to be a type approved pursuant to this Act.
- (9) In respect of transport equipment determined for the transport of radioactive materials, documentation on tests shall be attached to the documents serving as the basis for the Authority decision on type approval. Persons authorised to carry out such tests at applicant's costs shall perform aforementioned tests.
- (10) Authorisation for shipment of radioactive materials shall be issued for each shipment separately; this is not the case of shipment where the same type of radioactive materials is concerned, with the same type of shipment by the same consignor; in such cases, authorisation for shipment may be issued for a one year period at maximum for the shipment of nuclear materials or spent fuel, or for a three years period at maximum for the shipment of radioactive waste.
- (11) Authorisation for the shipment of radioactive materials shall not be required for shipment of
- a) products from non-irradiated natural and depleted uranium and non-irradiated thorium,
- b) nuclear materials which total transported amount within period of 12 consecutive calendar months shall not exceed
  - 1. 500 kg of natural non-irradiated uranium or
  - 2. 1000 kg of non-irradiated depleted uranium and non-irradiated thorium.
- (12) The consignor of radioactive materials shall be liable to take care of the notification of their entering or leaving the territory of the Slovak Republic into or out of non-European Union member countries to the Border Customs Office, and to submit to this Border Customs Office a certified copy of the relevant authorisation; if transit is concerned, a certified copy of the valid authorisation issued by the State to which the radioactive materials from the Slovak Republic are to be released, shall be submitted at the entrance. The Customs Office shall not release such goods unless this condition is met. The Customs Office shall report data given in these documents to the Authority.
- (13) The provisions of § 21 Sec. 3 shall apply accordingly to the shipment of radioactive materials. Requirements pursuant to the international agreements<sup>20</sup>), the Slovak Republic is bound by, must be met upon shipment of radioactive materials.
- (14) Details concerning the requirements on shipment of radioactive materials shall be laid down by a generally binding legal regulation to be issued by the Authority.

Shipment of radioactive waste between Member States and from and to the Community

<sup>&</sup>lt;sup>19</sup>) Act No.264/1999Coll.LL. on Technical Requirements on Products and on Conformity Assessment, and on Amendments and Supplements to Some Laws, as amended from time to time.

<sup>&</sup>lt;sup>20</sup>) E.g., Regulation of Minister of Foreign Affairs No. 64/1987 Coll. on European Convention on International Road Transport of Hazardous Goods (ADR); Regulation of Minister of Foreign Affairs No.8/1985 Coll. on Convention on International Railway Transport (COTIF).

- (1) The holder of radioactive waste shall be a natural person or a legal person holding legal responsibility for it in the period before its transport, who (which) intends to transport it to the consignee.
- (2) The consignee of radioactive waste shall be a natural person or a legal person to whom (which) radioactive waste is transported.
- (3) The competent authority shall be a body in the country of origin, transit or destination, which in accordance with the national legal system has power in the field of supervision and control of shipment of radioactive waste.
- (4) Application for the authorisation for shipment of radioactive waste to Member States or states which are non-Member States (hereinafter referred to as "other countries") shall be submitted by radioactive waste holder using the standard document the specimen of which is contained in Annex 3 Section A.
- (5) The holder of radioactive waste shall attach to the application pursuant to the Section 4 a statement confirming that he will take radioactive waste back should he not be able to assure its shipment to the consignee or should the shipment become impossible under conditions imposed by the competent authorities of other countries. In case of the shipment of radioactive waste from other country, the consignee shall assure the radioactive waste holder statement. This statement shall also include the financial arrangements of the re-shipment of the radioactive waste.
- (6) Authorisation for re-shipment of radioactive waste, shipment of which has not been completed, shall be issued by the Authority.
- (7) The Authority shall forward the application pursuant to Section 4 for review to the competent authorities of country of residence of radioactive waste consignee (hereinafter referred to as the "destination country") and of transit country.
- (8) A single application may be submitted for authorisation for several shipments of radioactive waste pursuant to Section 4 provided that at the same time
- a) the radioactive waste have identical physical, chemical and radiological characteristics,
- b) the shipment will be carried out between the same holder and the same consignee of radioactive waste and include the same competent authorities,
- c) the radioactive waste
  - 1. will enter the territory of the Member State from other country via the same frontier post,
  - 2. will leave the territory of the Member State to other country via the same frontier post,
- d) the competent authorities of the countries participating in the shipment shall not decide differently.
- (9) The Authority shall reply the application pursuant to Section 4 forwarded by the competent authority of the Member State from which the holder of radioactive waste dispatches such waste (hereinafter referred to as "country of origin") using the standard document the specimen of which is contained in Annex 3 Section B, within two months from the application delivery day.
- (10) Where necessary, the Authority may request the competent authority of the country of origin a one-month extension of the time for assessment of the application pursuant to Section 4.
- (11) If the Authority shall not receive any statement from competent authorities of the destination country and transit countries concerning the application forwarded pursuant to Section 4, within the time periods pursuant to Section 9 or 10, their position shall be deemed as the consent with the shipment of radioactive waste, unless these countries have informed the European Commission in advance that they do not agree with such a procedure of automated authorisation for shipments of radioactive waste.

- (12) Where the Authority disapproves the application or issues an authorisation conditionally, it shall also indicate the reasons for such refusal or conditions to be met.
- (13) Where the Authority issues an authorisation for the shipment of radioactive waste of a similar nature as that one already authorised by the competent authority of the Member State of destination or a Member State of transit, the Authority may not impose stricter conditions.
- (14) The Authority will not issue an authorisation for shipment of radioactive waste into Member States unless the competent authorities of the destination Member State and transit Member States have approved the application pursuant to Section 4. The Authority shall inform these competent authorities about the issuance of the authorisation, using the standard document the specimen of which is contained in Annex 3 Section C.
- (15) The completed standard documents shall be attached to the accompanying documentation upon the shipment of radioactive waste to Member States. Where radioactive waste is transported by railroad, the standard documents shall be submitted to the competent authorities of the Member States concerned. The list of consignments shall be compiled by the holder of the radioactive waste prior to any transport using the standard document the specimen of which is contained Annex 3 Section D. The document shall accompany the radioactive waste during the shipment. Upon the completion of the latter, the document shall be attached to the acknowledgement of receipt of the waste.
- (16) Within 15 days of the receipt of radioactive waste, the consignee of radioactive waste from the Member State concerned shall confirm to the Authority the receipt of the waste using the standard document the specimen of which is contained in Annex 3 Section E. The Authority shall forward the copy of acknowledgement of receipt of the waste to the competent authorities of the Member States concerned.
- (17) If the Authority receives an acknowledgement of receipt of the waste shipped from the Slovak Republic a copy of an acknowledgement of receipt of the waste shall be mailed to the original holder of the radioactive waste.
- (18) Application for authorisation for shipment of radioactive waste from Member States or other countries shall be submitted to the Authority by the consignee of the radioactive waste using the standard document the specimen of which is contained in Annex 3 Section A. In such a case, the consignee of the radioactive waste shall be deemed to be a holder thereof, and the Authority shall act as the competent authority of the country of origin in relation to the competent authorities of the transit Member States, based on consignee's information.
- (19) Where radioactive waste shipped from other country to a consignee in another country enters the territory of a Member State via the territory of the Slovak Republic, the Slovak Republic shall be deemed to be Member State of origin, and the Authority shall act based on information provided by the person responsible for the shipment of radioactive waste via the territory of the Slovak Republic.
- (20) While reviewing the application for authorisation for shipment of radioactive waste into other country, the Authority shall inform the competent authority of country concerned about the shipment under preparation and about the issuance of authorisation for shipment unless shipment of radioactive waste to that country has not been previously banned pursuant to § 3 Section 8; the standard document the specimen of which is contained in Annex 3 Section B shall be used for that purpose.
- (21) The holder of radioactive waste, to whom (which) the Authority issued an authorisation for shipment into other country, shall inform the Authority in writing about the receipt of the radioactive waste within two weeks of their receipt in destination country. The written information shall also include

- a) an information about the last customs office which released the radioactive waste across the border of the Member State to other country,
- b) a declaration of the consignee confirming that the radioactive waste were received at the destination and indicating the customs office which released the radioactive waste to the territory of the destination country.
- (22) If the Authority issued an authorisation for shipment of radioactive waste, the Authority will enable its re-shipment after processing or treatment in case of the radioactive waste shall not be possible to re-ship to the consignee and, at the same time, the requirements laid down in the generally binding legal regulation to be issued by the Authority as well as requirements under international agreements, the Slovak Republic is bound by, are met.<sup>20</sup>)
- (23) Unless the holder of radioactive waste is not at the same time the originator of radioactive waste, then its originator is entitled to contractually transfer the responsibility for waste to the holder of the radioactive waste, and shall be liable to inform the Authority of this fact within 15 days after the signing of the contract.
- (24) The standard documents contained in Annex 3 shall be filled pursuant to the instructions contained in the individual sections of these documents.
- (25) The competent authority in the Slovak Republic to issue authorisation and to supervise shipments of radioactive waste between Member States and from and into the Community shall be the Authority. The Authority shall forward to the European Commission its name and address as well as all the information necessary for rapid communication, together with its disagreement, if any, with the automated procedure of authorisation, within 30 days of this Act entering into effect. The Authority shall keep the European Commission informed of any modifications of information needed for rapid communication, and shall forward such information without any delay as soon as it becomes available.
- (26) The Authority shall inform the European Commission once in two years, for the first time within 30 days of this Act entering into effect, about
- a) the application of the provisions of Sections 4 through 22,
- b) shipments of radioactive waste via the territory of the Slovak Republic.

# PART FOUR NUCLEAR INSTALLATIONS

# § 17

#### Siting of nuclear installations

- (1) The Authority shall decide on issuance of the siting permission of nuclear installation based on written application with the attached documentation pursuant to Annex 1 Section A, and based on the statement of the European Commission pursuant to the special regulation.<sup>21</sup>)
- (2) Based on application with the attached documentation pursuant to Annex 1 Section A, the Authority shall issue a statement about the environmental impact assessment of nuclear

<sup>&</sup>lt;sup>21</sup>) Article 41 of Treaty on establishment of European Atomic Energy Community.

Council Regulation (Euratom) No.2587/1999 of 2 December 1999, which defines investment projects subject to notification to the European Commission in accordance with article 41 of Treaty on establishment of European Atomic Energy Community (Official Journal of the European Communities L 315,09.12.1999).

Commission Regulation (EC) No.1209/2000 of 8 June 2000 on notices pursuant to article 41 of Treaty on establishment of European Atomic Energy Community (Official Journal of the European Communities L 138,09.06.2000), as amended by Commission Regulation (Euratom) No.1352/2003 of 23 July 2003 (Official Journal of the European Communities L 192,31.07.2003).

installation pursuant to the special regulation<sup>8</sup>) as well as the assessment of potential impact of the surrounding environment on nuclear installation.

(3) Details concerning the scope, content and method of preparation of documentation pursuant to Annex 1 Section A shall be laid down by a generally binding legal regulation to be issued by the Authority.

# § 18

Building permission for the construction of nuclear installations

- (1) A special regulation<sup>22</sup>) and this Act shall apply to building permission proceedings for the construction of nuclear installations.
- (2) Only holder of valid building permission issued pursuant to the special regulation<sup>23</sup>) shall be authorised to undertake construction of nuclear installation.
- (3) The Authority shall decide on the issuance of building permission for the construction of nuclear installation based on written application for building permission of the constructor with the documentation required by the special regulation<sup>11</sup>) and the documentation pursuant to Annex 1 Section B attached thereto.
- (4) Construction of nuclear installations involving specific interventions into the earth crust, such as underground repositories, shall be subject of specific regulations<sup>24</sup>) unless this Act establishes otherwise.
- (5) Details concerning the scope, contents and method of preparation of the documentation pursuant to Annex 1 Section B shall be laid down by a generally binding legal regulation to be issued by the Authority.

#### **§19**

Commissioning of nuclear installations and operation of nuclear installations

- (1) Only authorisation holder for the commissioning and operation of nuclear installation shall be authorised to commission and operate a nuclear installation.
- (2) The commencement of the commissioning of a nuclear installation shall mean loading of the first fuel assembly into the nuclear reactor, as well as the commencement of the management of nuclear material or radioactive waste or spent fuel at nuclear installations, which do not involve nuclear reactor.
- (3) Authorisation for the commissioning of a nuclear installation shall be issued by the Authority upon submission of a written application with the documentation attached pursuant to the Annex 1 Section C. Such authorisation shall be a part of preliminary use of construction pursuant to the specific regulation.<sup>25</sup>)
- (4) Permission for subsequent stage of commissioning shall be issued by the Authority upon the submission of a written application by the authorisation holder pursuant to Section 3, after having reviewed the evaluation report of the preceding stage of the commissioning of the nuclear installation.
- (5) Operation of nuclear installation is divided into the trial operation and operation.

 $<sup>^{22}</sup>$ ) § 43 through 85 of Act No.50/1976 Coll., as amended from time to time.  $^{23}$ ) § 66 of Act No.50/1976 Coll., as amended from time to time.

<sup>&</sup>lt;sup>24</sup>) Act No..44/1988 Coll. on the Protection and Utilisation of Mineral Wealth (Mining Act), as amended from time to time.

<sup>&</sup>lt;sup>25</sup>) § 83 of Act No.50/1976 Coll., as amended from time to time.

- (6) Permission for trial operation shall be issued by the Authority upon the submission of a written application with the evaluation report on the nuclear installation commissioning attached. Such permission shall be a part of the permission for the temporary use of the construction for trial operation pursuant to the specific regulation.<sup>26</sup>)
- (7) The Authority shall begin, at the authorisation holder proposal, the proceedings of official construction approval based upon affirmative evaluation of trial operation pursuant to the specific regulation.<sup>27</sup>)
- (8) The authorisation holder shall record and maintain data on the operation of the nuclear installation important for decommissioning, which are introduced in the decommissioning conceptual plan. At the same time, he shall ensure the earmarked funds to cover the costs connected with decommissioning.<sup>28</sup>)
- (9) Details concerning the scope, contents and method of preparation of the documentation pursuant to Annex 1 Section C and the report pursuant to the Sections 4 and 6 shall be laid down by a generally binding legal regulation to be issued by the Authority.

### Decommissioning

- (1) After the termination of nuclear installation operation the authorisation holder shall be liable to ensure its decommissioning. The responsibility for the decommissioning shall be with the authorisation holder for decommissioning stage.
- (2) Prior to the scheduled shutdown of a nuclear installation for the purpose of termination of its operation the authorisation holder for operation shall be liable to submit the documentation pursuant to the specific regulation<sup>8</sup>) and to complete it in a way to meet the requirements on the contents of the decommissioning conceptual plan.
- (3) Authorisation for decommissioning stage shall be issued by the Authority based on a written application attached with the documentation pursuant to Annex 1 Section D.
- (4) Where decommissioning requires the construction and utilisation of new technological plants within the territory demarcated by the boundaries of the nuclear installation to be decommissioned, the requirements pursuant to § 18 and 19 shall apply accordingly to the submission, review and approval of documentation.
- (5) Conventional waste from decommissioning is non-radioactive waste that was produced exclusively during the decommissioning process and which is subject of the specific regulation.<sup>29</sup>)
- (6) The Authority shall decide on removal of nuclear installation from the coverage of this Act based on a written application of the authorisation holder for decommissioning attached with the documentation pursuant to Annex Section F.
- (7) Details concerning the scope, contents and method of preparation of the documentation pursuant to Annex 1 Sections D and F shall be laid down by a generally binding legal regulation to be issued by the Authority.

<sup>&</sup>lt;sup>26</sup>) § 84 Sec. 1 and 2 of Act No.50/1976Coll., as amended from time to time.

<sup>&</sup>lt;sup>27</sup>) § 84 Sec. 3 of Act No.50/1976Coll., as amended from time to time.

<sup>&</sup>lt;sup>28</sup>) Act of the National Council of the Slovak Republic No.254/1994 Coll. LL. on State Fund for the Decommissioning of Nuclear Energy Installations and Management of Spent Fuel and Radioactive Waste, as amended from time to time.

<sup>&</sup>lt;sup>29</sup>) Act No.223/2001 Coll. LL. on Waste and on Amendments and Supplements to Some Laws, as amended from time to time.

### PART FIVE

### MANAGEMENT OF RADIOACTIVE WASTE AND SPENT FUEL

#### § 21

#### Management of radioactive waste and spent fuel

- (1) The responsibility for the safe management of radioactive waste prior to their receipt at the repository shall be with the originator of the radioactive waste.
- (2) Treatment of radioactive waste shall mean actions leading to the creation of a form suitable for shipment and disposal or storage of radioactive waste.
- (3) Radioactive waste shall be managed in a way:
- a) to maintain subcriticality,
- b) to secure removal of residual heat,
- c) to minimize effects of ionising radiation on staff, population and the general environment,<sup>2</sup>)
- d) to take into account properties influencing nuclear safety such as toxicity, flammability, explosiveness, and other hazardous properties.
- (4) Generation of radioactive waste and management of radioactive waste shall follow technical and organisational measures so as to keep their amount and activity as low as reasonable achievable.
- (5) The responsibility for disposal of radioactive waste from nuclear installation and disposal of institutional radioactive waste as well as responsibility for closure of repository and its institutional control shall be with the State under conditions laid down by this Act and other generally binding legal regulations.
- (6) Radioactive waste repository may be placed on land in a State-ownership only, in accordance with the approved Concept of Territorial Development of Slovakia and other approved territorial-planning documentation.
- (7) Unless otherwise specified by specific Act<sup>28</sup>), costs associated with the management of radioactive waste including costs of the provision for institutional control after the closure of repository shall be borne by the originator of radioactive waste.
- (8) In the case of radioactive waste whose originator is not known or where originator is not capable of managing radioactive waste safely the Authority shall appoint another authorisation holder for management of radioactive waste. In its decision, the Authority shall define the scope of the management of such radioactive waste.
- (9) Costs associated with the management of radioactive waste whose originator is unknown or costs incurred by authorisation holder appointed by the Authority pursuant to Section 8 shall be borne by State Fund for Decommissioning of Nuclear Energy Installations and Management of Spent Fuel and Radioactive Waste. When the originator of radioactive waste is identified subsequently, he shall be liable to reimburse the Fund for the costs incurred upon the management of the radioactive waste.
- (10) All activities during radioactive waste management shall be directed towards safe disposal thereof.
- (11) Imports of radioactive waste to the territory of the Slovak Republic shall be banned, except for cases under which the procedure pursuant to § 16 is complied with and except for imports of radioactive waste authorised by the Authority,
- a) that was generated by reprocessing and treatment of radioactive materials exported for this purpose and re-shipment of which was permitted by the Authority in advance,

- b) for purposes of their processing or treatment on the territory of the Slovak Republic provided that the export of materials with aliquot activity has been contractually provided and authorised by the Authority.
- (12) The provisions of the Sections 1 through 11 shall also apply accordingly to spent fuel management; the responsibility for the spent fuel management until its delivery and its receipt to repository shall be with the authorisation holder who (which) has produced the spent fuel.
- (13) Details concerning requirements for spent fuel management, with the emphasis on its storage and disposal and for management of radioactive waste, including its generation, classification of radioactive waste into classes, and details of requirements for its imports, and of requirements for the scope and contents of the documentation upon the management of radioactive waste, of requirements for equipment for management of radioactive waste, of requirements for reduicative waste, shall be laid down by a generally binding legal regulation to be issued by the Authority.

### Repository closure and institutional measures

- (1) Repository closure shall mean administrative and technical activities performed after the completion of the placement of radioactive waste or spent fuel into repository.
- (2) Institutional control shall mean a set of activities by which the legal person pursuant to § 3 Sec. 9 ensures control of access to the repository grounds and maintenance of the functionality of its barriers after repository closure by the time as specified in the safety documentation.
- (3) Authorisation for repository closure and for institutional control shall be issued by the Authority upon submission of a written application attached with the documentation pursuant to Annex 1 Section E by the authorisation holder for repository operation.
- (4) The authorisation holder shall take measures to ensure that after repository closure
- a) records shall be kept,
- b) institutional control of the repository shall be carried out,
- c) remedial interventions shall be implemented if necessary whenever unscheduled release of radioactive substances occurs.
- (5) The scope of the records pursuant to Section 4 letter a) and the scope of the institutional control pursuant to Section 4 letter b) shall be determined by the Authority as an authorisation condition.
- (6) Details concerning the scope, contents and the method of preparation of the documentation pursuant to Annex 1 Section E shall be laid down in a generally binding legal regulation to be issued by the Authority.

## PART SIX

# NUCLEAR SAFETY, PROFESSIONAL COMPETENCY, QUALITY ASSURANCE, PHYSICAL PROTECTION, OPERATIONAL EVENTS AND EMERGENCY PREPAREDNESS

#### § 23

#### Nuclear safety

- (1) The responsibility for nuclear safety shall be with the authorisation holder. The authorisation holder shall be liable to provide for adequate funds and human resources to ensure nuclear safety, including the necessary engineering and technical support activities in all areas related to nuclear safety. The authorisation holder shall pay attention to the safety issues prior over any other aspects of the authorised activity.
- (2) During the operation and during the decommissioning of a nuclear installation, the authorisation holder shall be liable to perform regular, comprehensive and systemic assessments of nuclear safety (hereinafter referred to as "periodic safety review") taking into account the state of the art in the area of nuclear safety review, and to take measures to eliminate any deficiencies identified.
- (3) The authorisation holder shall issue operating procedures for the performance of activities at nuclear installation, in particular concerning operation, maintenance, control and tests of defined equipment. Such regulations must be in accordance with the conditions set in the authorisation. The authorisation holder shall update the above-mentioned procedures and supplement them according to the current status of nuclear installation.
- (4) The authorisation holder may implement the modifications of nuclear installation pursuant to § 2 letter u) only provided that a preceding approval or permission has been obtained from the Authority, and in cases pursuant to the special regulations<sup>21</sup>) also after having obtained the statement of the European Commission.
- (5) The authorisation holder may implement the modifications of nuclear installation pursuant to § 2 letter v) only after a preceding notification to the Authority and after their review by the Authority pursuant to § 4 Sec. 2 letter g) second indent.
- (6) Separate records shall be kept by the authorisation holder about modifications of nuclear installation pursuant to § 2 letter u) or v).
- (7) Periodic safety review shall be performed by the authorisation holder at intervals and within the scope laid down by a generally binding legal regulation to be issued by the Authority.
- (8) Details concerning the nuclear safety requirements for nuclear installations in respect of their siting, design, construction, commissioning, operation, decommissioning and closure of repository, as well as the criteria for the categorisation of classified equipment into safety classes shall be laid down by a generally binding legal regulation to be issued by the Authority.

#### § 24

#### Professional competency

(1) Professional competency shall mean the sum of technical knowledge, practical experience, knowledge of generally binding legal regulations and operating procedures issued by the authorisation holder, needed to perform the working activities of the

authorisation holder employee. Professional competency shall be acquired through successful completion of professional training at a specialised facility.

- (2) Special professional competency shall mean the sum of professional knowledge, practical experience, principal attitudes and knowledge of generally binding legal regulations and operating procedures issued by the authorisation holder to ensure the nuclear safety, which is needed to perform working activities with direct impact on nuclear safety.
- (3) Working activities of nuclear safety relevance may be carried out only by employees with professional competency, whose professional competency have been verified by a professional commission established by the operator of a specialised facility, and to whom the certificate of professional competency has been issued.
- (4) Licensed employees of authorisation holder for commissioning of a nuclear installation, operation or decommissioning of a nuclear installation shall mean employees carrying out working activities with direct impact on nuclear safety, who completed second level of university education acquired in the Slovak Republic or on the territory of the Member States<sup>30)</sup> professional training, show health-related and mental competency, whose special professional competency has been verified by an examination commission established by the Authority and to whom the licence of special professional competency has been issued by the Authority.
- (5) The Authority shall issue licence of special professional competency based on the authorisation holder application pursuant to § 5 Sec.3 letters b) through d) after the meeting of qualification requirements pursuant to Sections 2 and 4, demonstration of health-related competency<sup>31</sup>), mental competency, completion of professional training and passing of the exam before the examination commission established by the Authority.
- (6) The holder of the authorisation pursuant to § 5 Sec. 3 letters b) through g) an j) shall be liable to provide for periodic examination of the employees<sup>32</sup>) focusing on health-related and mental competency if needed for the performance of their working activities.
- (7) The operator of a specialised facility may carry out professional training of the authorisation holder employees based on an authorisation only. Professional training shall be carried out in accordance with the approved system of training according to the training programmes.
- (8) The Authority shall issue an authorisation to operator of a specialised facility based on a written application, after reviewing the technical equipment used during the training and the professional competency of the applicant employees.
- (9) Employees of the operator of a specialised facility who carry out professional theoretical training of licensed employees and their training on a simulator (hereinafter referred as to "the lecturers") may carry out such activities based on licence of professional competency in the respective field of professional training only. Details concerning the verification and conditions of verification of professional competency of the lecturers shall be laid down by a generally binding legal regulation to be issued by the Authority.
- (10) Employees of the operator of a specialised facility who carry out professional training of licensed employees or employees with professional competency during their walk-through and on-the-job training (hereinafter referred to as "instructors") may carry out

<sup>&</sup>lt;sup>30</sup>) § 3 Sec. 1 of Act No. 477/2002 Coll. LL. on the Recognition of Professional Competency and on Amendment and Supplements to Act of the National Council of the Slovak Republic No. 145/1995 Coll. LL. on Administrative Fees, as amended from time to time.

<sup>&</sup>lt;sup>31</sup>) Act of the National Council of the Slovak Republic No. 277/1994 Coll. LL. on Health Care, as amended from time to time.

<sup>&</sup>lt;sup>32</sup>) § 12 letter j) and § 170 of Act of the National Council of the Slovak Republic No. 272/1994 Coll. LL., as amended from time to time.

such activities provided that they fulfil qualification requirements laid down in a generally binding legal regulation to be issued by the Authority.

- (11) The Authority shall issue the authorisation for professional training pursuant to Section 8 for the period of five years.
- (12) If a citizen of Member States having a skilled employment pursuant to Annex 4 is interested in vacancy at nuclear installation in the Slovak Republic, he shall not be discriminated because of his/her nationality or citizenship.
- (13) Under the terms of this Act, a skilled employment pursuant to Annex 4 shall mean regulated employment pursuant to the specific regulation<sup>33</sup>) unless otherwise specified by this Act.
- (14) Under the terms of this Act, a special training based on which citizen of Member States can acquire special knowledge in the field of nuclear energy pursuant to Annex 4 shall mean a regulated training pursuant to the specific regulation<sup>34</sup>), unless otherwise specified by this Act.
- (15) Under the terms of this Act, regulated education shall be recognised pursuant to the specific regulation,<sup>35</sup>) unless otherwise specified by this Act.
- (16) Professional competency in the field of nuclear energy with impact on nuclear safety based on recognised regulated education pursuant to Section 14 shall be equal to the professional competency pursuant to Section 1, unless otherwise specified by this Act or by the specific regulation.<sup>36</sup>)
- (17) Professional qualification in the field of nuclear energy with direct impact on nuclear safety based on recognised regulated education pursuant to Section 14 shall be equal to the special professional competency pursuant to Section 2, unless otherwise specified by this Act or by the specific regulation.<sup>36)</sup>
- (18) Details concerning professional training, activities of employees with professional competency and licensed employees of authorisation holders pursuant to § 5 Sec. 3 letters b) through g) and j) and their assignments to carry out the working activities, conditions of verification of their professional competency and their special professional competency including the issuance of licences of special professional competency, establishment of the professional commission and examination commission, documentation required to be attached to the application for the authorisation issuance pursuant to Section 8, requirements on professional training lecturers and professional training instructors , and requirements on the verification of their professional competency including the issuance of licence of professional competency, shall be laid down by a generally binding legal regulation to be issued by the Authority.

#### § 25

#### Quality assurance

- (1) The authorisation holder pursuant to § 5 Sec. 2 and 3 letters a) through g), j) and k) shall be liable to establish the organisational structure, procedures and resources necessary to assure the quality of nuclear installations (hereinafter referred to as "quality system").
- (2) Responsibility for the determination of and compliance with quality requirements for nuclear installations, classified equipment, their classification into the safety classes in the

<sup>&</sup>lt;sup>33</sup>) § 2 letter b) of Act No. 477 / 2002 Coll. LL.

<sup>&</sup>lt;sup>34</sup>) § 2 letter c) of Act No. 477 / 2002 Coll. LL.

<sup>&</sup>lt;sup>35</sup>) § 10 through 16 of Act No. 477 / 2002 Coll. LL.

<sup>&</sup>lt;sup>36</sup>) E.g., § 17n of Act No. 272 / 1994 Coll. LL., as amended from time to time.

field of the use of nuclear energy including equipment supplies and provision of services shall be with the authorisation holder.

- (3) The quality requirements pursuant to Section 2 shall correspond to the nuclear safety importance of the equipment and the nuclear safety relevance of the activities.
- (4) Quality system documentation of authorisation holder, quality requirements for nuclear installation, classification of classified equipment into safety classes and quality requirements for classified equipment shall be approved by the Authority.
- (5) Details concerning requirements for quality system documentation of authorisation holder, as well as details concerning quality requirements for nuclear installations, details concerning quality requirements for classified equipment and details concerning the scope of their approval, shall be laid down by a generally binding legal regulation to be issued by the Authority.

# § 26

# Physical protection

- (1) "Unauthorised activities with nuclear installations, nuclear materials, special materials and equipment, radioactive waste or spent fuel" mean activities carried out without the appropriate authorisation or carried out with the objective of damaging, destroying, illicit trafficking or mislaying nuclear materials, special materials or equipment, radioactive waste or spent fuel.
- (2) "Sabotage" means any deliberate act directed against a nuclear installation or nuclear materials, special materials or equipment, radioactive waste or spent fuel during the management or shipment thereof, which may directly or indirectly, by release of radioactive substances, jeopardize the lives, health or property of the population or the environment.
- (3) The responsibility for the physical protection shall be with the authorisation holder within the scope of the authorised activities.
- (4) The authorisation holder shall be liable to assure that persons who, with his permit, stay within the site of the nuclear installation or participate in the activities mentioned in Articles 12 and 21, or who participate on the shipment of radioactive materials, would observe requirements of physical protection.
- (5) The authorisation holder shall be liable to provide for the verification
- a) whether persons entering the site of a nuclear installation or participating in the shipment of radioactive materials are of unblemished reputation with the exception of
  - 1. persons whose unblemished reputation is required and demonstrated for the purpose of the performance of the activities pursuant to specific regulations,<sup>37</sup>)and persons accompanying them or
  - 2. persons accompanied by designated employees of the authorisation holder pursuant to Article 5 Section 3 letters b) through g) and j),
- b) whether persons who come into contact with category I and II nuclear materials, persons assuring physical protection, persons entering internal areas of a nuclear installation without being accompanied by designated employees of the authorisation holder, are reliable and of unblemished reputation,
- c) of health related and mental capacity of all persons whose working activities may be related to nuclear safety.

<sup>&</sup>lt;sup>37</sup>) E.g., Act No. 312/2001 Coll. LL. on Public Service and on Amendments and Supplements to Some Laws, as amended from time to time.

- (6) In case of trespassing the site of a nuclear installation, unauthorised activities at nuclear installation, and unauthorised activities during the shipment of nuclear materials or threat of such activities, Police or Railroad Police shall, at authorisation holder's request, render assistance within the scope of their competencies.
- (7) Upon identifying the facts mentioned in Section 6, the authorisation holder shall be liable to take measures as necessary and to inform without delay the Police or the Railroad Police and the Authority.
- (8) Where the authorisation holder is unable to provide for physical protection of a nuclear installation, nuclear materials, radioactive waste or spent fuel in accordance with the generally binding legal regulations, approved documentation and with the conditions laid down in the authorisation, he shall be liable on the basis of respective request, to assure the physical protection in co-operation with the Police. The Police shall be liable to meet such a request on a contractual basis.
- (9) Details concerning the requirements on the provision for physical protection, including the classification of nuclear installation or nuclear material into categories for purposes of the provision of physical protection shall be laid down by a generally binding legal regulation to be issued by the Authority.

Operational events at nuclear installation and events during shipment of radioactive materials

- (1) "Operational event" shall mean an event in case of which threat or violation of nuclear safety has occurred at a nuclear installation during the commissioning of the nuclear installation, during its operation, during the decommissioning stage or during the closure of repository.
- (2) "An event during the shipment" shall mean an event during the shipment of radioactive materials, which caused non-compliance with the requirements on nuclear safety during the shipment of radioactive materials.
- (3) Operational events and events during the shipment are divided to
- a) failure, which
  - 1. jeopardised nuclear safety without direct threatening of fulfilment of safety functions,
  - 2. disturbed safety barriers or other safety measures without direct consequences,
  - 3. induced the lapse of limits and conditions of safe operation and safe decommissioning,
  - 4. caused the violation of limits and conditions without direct consequences for fulfilling of the safety functions,
  - 5. triggered safety systems or triggered them due to actual reasons, but without direct consequences,
  - 6. caused violation of technical conditions or shipment regulations during the transport without direct consequences,
  - 7. caused other violation of reliability of equipment requiring remedial measures to be implemented to eliminate consequences,
  - 8. caused release of radioactive substances or ionising radiation without exceeding radiation limits,<sup>2)</sup>
- b) Incident, which caused
  - 1. threat or violation of fulfilment of the safety functions,
  - 2. failure of safety systems or triggering of safety systems due to actual reasons, requiring measures to be taken to eliminate the consequences,
  - 3. significant violation or failure of safety barriers,

4. release of radioactive substances or ionising radiation with exceeding radiation limits,<sup>2</sup>)

- c) Accident, which caused release of radioactive substances requiring implementation of measures to protect the population.
- (4) The authorisation holder shall be liable to
- a) develop binding procedures to solve the events pursuant to Section 3,
- b) timely implement preventive and safeguard measures and eliminate, without delay, conditions which might jeopardise nuclear safety, lives or health of persons,
- c) notify the Authority of deficiencies identified during operation, maintenance or control, which may result in the events pursuant to Section 3,
- d) notify the Authority of events pursuant to Section 3 and in the case of incidents and accidents during commissioning of nuclear installation, operation of nuclear installation and decommissioning of nuclear installation also Ministry of Interior of the Slovak Republic and Ministry of Health of the Slovak Republic shall be notified. The authorisation holder shall identify their reasons and take remedial measures,
- e) implement, based on the identified reasons of operational events and events during the shipment, measures to prevent them from repeating,
- f) inform the public about incident, accident, measures to protect health and activities required to be taken upon such incident or accident.
- (5) The authorisation holder shall be liable to notify about incident or accident during the transport to the Authority, Ministry of Interior of the Slovak Republic, Ministry of Transport, Posts and Telecommunications of the Slovak Republic, and Ministry of Health of the Slovak Republic.
- (6) The Authority shall investigate the reasons and the circumstances of the occurrence of incidents and accidents, as well as of selected failures.
- (7) Details concerning the way of notification of operational events and events during the shipment, details concerning the investigation of their reasons shall be laid down by a generally binding legal regulation to be issued by the Authority.

§ 28

Emergency planning and emergency preparedness

- (1) Emergency planning shall mean a set of measures and procedures to identify and cope with incidents and accidents at nuclear installations, and to identify and mitigate and eliminate consequences of release of radioactive substances into the environment during the management of radioactive materials, radioactive waste or spent fuel, and during the shipment of radioactive materials.
- (2) The following emergency plans are distinguished:
- a) preliminary on-site emergency plan, which contains scheduled measures on the site of a nuclear installation or of several nuclear installations during its/their construction,
- b) on-site emergency plan, which contains scheduled measures to be taken on the site of a nuclear installation or several nuclear installations, operated by a single authorisation holder, and links to off-site emergency plan,<sup>38</sup>)
- c) off-site emergency plan, which contains measures for the protection of the population within the emergency planning zone during the release of radioactive substances into the environment, as well as links to on-site emergency plan,

<sup>&</sup>lt;sup>38</sup>E.g., § 13 Sec. 1 letter i) of Act of the National Council of the Slovak Republic No. 42/1994 Coll. LL. on Civil Protection of the Population, as amended from time to time.

- d) emergency transport order, which contain measures to be taken in case of an incident or accident during the shipment of nuclear materials.
- (3) The authorisation holder shall be liable to take preventive measures as well as measures to mitigate or eliminate consequences of incidents and accidents at nuclear installations or during the shipment of radioactive materials. He shall be liable to inform the public about the measures and procedures.
- (4) To provide for the responsibilities pursuant to Section 3, the authorisation holder shall be liable to establish a special workplace and to set up the organisational structure as necessary.
- (5) The Authority shall approve the size of emergency planning zone for every nuclear installation based on an application as a part of relevant authorisation proceedings. Regional offices concerned by the emergency planning shall, based on the approved size of emergency planning zone of the nuclear installation, make decisions on the involvement of municipalities into the emergency planning zone. Where the applicant for the relevant authorisation in relation to several nuclear installations located on the territory for which also a common on-site emergency plan has been developed, is a single person, such nuclear installations shall be deemed as a single nuclear installation with a single common emergency planning zone.
- (6) The authorisation holder for the commissioning and operation of a nuclear installation or decommissioning shall be liable to arrange for monitoring systems of the nuclear installation as well as monitoring systems within the emergency planning zone.
- (7) Public service authorities, municipalities, natural persons and legal persons concerned by emergency planning shall be liable to render assistance in the development of emergency plans within the scope of their competencies, and to provide each other with the necessary source materials.
- (8) The applicant for authorisation shall be liable to submit to the Authority on-site emergency plan for approval, after being reviewed by Ministry of Health of the Slovak Republic, at least eight months prior to the scheduled start of the commissioning of nuclear installation, and subsequently every five years for re-approval.
- (9) Regional offices shall be liable to submit to the Authority off-site emergency plans of regions within the emergency planning zone for review, at least eight months prior to the scheduled start of the commissioning of nuclear installation, and subsequently every five years for repeated review.
- (10) Applicants for authorisation for shipment of radioactive materials shall be liable to submit to the Authority emergency transport order, at least six months prior to the first scheduled shipment of radioactive materials, and subsequently every five years for repeated review.
- (11) Authorisation holders or regional offices shall be liable to submit emergency plans for repeated review or approval at intervals shorter than five years in the case of the modifications of nuclear installation pursuant to Article 2 letter u), modifications of the organisational structure pursuant to Section 4, or modifications of the means determined to cope with incidents or accidents at nuclear installation or during the shipment of radioactive materials, modifications of the size of emergency planning zone, modifications of the size of common emergency planning zone or modifications of the provision for shipment of radioactive materials or modifications based on the results of exercises or inspections.
- (12) Emergency plans
- a) pursuant to Section 2 letter c) shall be approved by Ministry of Interior of the Slovak Republic,

- b) pursuant to Section 2 letter d) shall be approved by Ministry of Transport, Posts and Telecommunications of the Slovak Republic.
- (13) Approved emergency plans and approved sizes of emergency planning zones of nuclear installation shall be binding for all public service authorities, municipalities as well as for all natural persons and legal persons concerned by emergency planning.
- (14) Authorisation holders or regional offices shall exercise procedures according to the emergency plans prior to the commissioning of the nuclear installation or prior to the first shipment of radioactive materials; subsequently, authorisation holders or regional offices shall exercise them at regular intervals, evaluate the exercises and take corrective measures based on the results of evaluations.
- (15) Authorisation holders shall be liable to make their employees acquainted with preliminary on-site emergency plan, on-site emergency plan, and to train the designated employees for the performance of the functions under the respective on-site emergency plan. Authorisation holder shall instruct other persons of whose presence on the site of the nuclear installation he is aware, of their responsibilities during the occurrence of an incident or accident.
- (16) Holders of authorisation for the shipment of radioactive materials shall be liable to make persons involved in the shipment of radioactive materials acquainted with emergency transport order and to train designated persons for the performance of functions under emergency transport order. Other persons involved in the shipment of radioactive materials shall be instructed by authorisation holder of their responsibilities upon the occurrence of an incident or accident during the shipment of radioactive materials.
- (17) Public service authorities and municipalities concerned shall be liable to make the public within the emergency planning zone informed about the protective measures for the population in case of an incident or accident at the nuclear installation or about an incident or accident during the shipment of radioactive materials.
- (18) Public service authorities and municipalities, as well as legal persons and natural persons concerned shall be liable to participate, within the scope and in the way determined by the specific off-site emergency plan, in exercising and taking of protective measures, as well as, within the scope determined, in the elimination of consequences of incidents or accidents at nuclear installations or incidents or accidents during the shipment of radioactive materials.
- (19) The Authority shall be responsible for the realization of exercises and evaluation of the course and the consequences of incidents or accidents at nuclear installations and during the shipment of radioactive materials and the development of draft measures or recommendations for further proceeding; these activities shall be carried out at the Authority's workplace equipped with the necessary technical means.
- (20) Authorisation holder, at its r own account, and public service authorities and their subordinated agencies, free of charge, shall be liable to provide the Authority with the data needed for the provision of emergency preparedness, for the preparation of exercises, evaluation of incidents or accidents at nuclear installations and during the shipment of radioactive materials, as well as for forecasts of their development, such as technological data of nuclear installations, data from radiation monitoring, meteorological data, and additional data; the format, scope and method of the provision of such data shall be specified by the Authority.
- (21) Details concerning the content of emergency plans, details of procedures concerning their submission and approval, measures, procedures and activities, including the determination of the degree of severity of events according to international criteria, details about the notification of the Authority and the public, details concerning elements of
source documents needed to be attached to the application for the approval of the size of the emergency planning zone, common emergency planning zone, including the deadlines for the submission of the application, details of systems of monitoring, details of training, exercises and updating of emergency plans, details of data to be provided and the timecourse of incidents and accidents at nuclear installation and during the shipment of radioactive materials shall be laid down by a generally binding legal regulation to be issued by the Authority.

# **PART SEVEN**

# LIABILITY FOR NUCLEAR DAMAGE AND FINANCIAL COVERAGE THEREOF

# § 29

## Liability for nuclear damage

- (1) The provisions of the international treaty, which the Slovak Republic is bound by,<sup>39</sup>) shall apply for the purposes of the liability for nuclear damage. The provisions of the generally binding legal regulations concerning liability for damage<sup>40</sup>) shall only apply unless the international treaty or this Act establishes otherwise.
- (2) The authorisation holder for the commissioning of a nuclear installation, operation of a nuclear installation except repositories, and the authorisation holder for decommissioning stage or authorisation holder for shipment of radioactive material shall be liable for nuclear damage under the international treaty the Slovak Republic is bound by, as mentioned in Section 1.
- (3) If a single person is an authorisation holder pursuant to Section 2 for several nuclear installations located on the territory for which also a common on-site emergency plan was approved, such nuclear installations shall be deemed as a single nuclear installation for the purposes of the liability for nuclear damage. Several nuclear installations located on the same territory, but operated by different authorisation holders, shall not be deemed as a single nuclear installation, even if those installations are technologically linked to each other.
- (4) In determining the extent of loss and the method of indemnification of nuclear damage, provisions of the generally regulations concerning liability for damage shall be used.40) Regulations applicable at the time of the occurrence of the nuclear event, which caused the nuclear damage, shall apply for purposes of determination of the nuclear damage. The right for indemnification for nuclear damage shall be statute barred if it fails to be claimed within three years of the date on which knowledge was or could be obtained by the injured party of the event resulting in nuclear damage and of who was liable for it or within 20 years of the occurrence of such an event, whichever comes earlier, or after the extinction of insurance if the validity of the policy was longer.
- (5) Damage which occurred by spending funds on necessary measures to avert or reduce irradiation or to recover initial or equivalent condition of the environment shall be also deemed as nuclear damage, provided that such measures were prompted as a result of a nuclear event and the nature of the matters allows it.

<sup>&</sup>lt;sup>39</sup>) Vienna Convention on Civil Liability for Damage caused by Nuclear Event (Notice No.70/1996 Coll. LL.). Joint Protocol to the Application of the Vienna Convention and Paris Convention (Notice No.71/1996 Coll. LL.).

<sup>&</sup>lt;sup>40</sup>) § 415 through 450 of Act No. 40/1964 Coll. Civil Code, as amended from time to time.

Act No.513/1991 Coll. Commercial Code, as amended from time to time.

- (6) The amount of the liability of the authorisation holders pursuant to Section 2 in respect of nuclear damage caused by each single nuclear event shall be limited to
- a) EUR 75,000,000, if a power nuclear installation for energy purposes is concerned,
- b) EUR 50,000,000 if remaining nuclear installations and shipments of radioactive material are concerned.

# § 30

# Financial coverage of liability for nuclear damage

- (1) Authorisation holder shall be liable to secure coverage of authorisation holder 's liability for nuclear damage up to the values shown in Article 29 Sec. 6, through insurance or other type of financial security.
- (2) Insurance shall be obtained or other financial security shall be established for each nuclear installation or shipment of radioactive material separately, with account being taken of the provisions of Section 4 and Article 15 Sec.11.
- (3) The coverage of the operator's liability for nuclear damage pursuant to Section 1 must be maintained during the whole period of validity of the authorisation pursuant to § 29 Sec. 2 and for at least 20 years after a nuclear event.
- (4) Nuclear events shall be exempted from the coverage of liability for nuclear damage caused by small quantities of nuclear material or radioactive waste, in respect of which no nuclear damage is expected. Details concerning the maximum limits of such quantities shall be laid down by a generally binding legal regulation to be issued by the Authority.
- (5) Upon the occurrence of a nuclear event, the authorisation holder shall be liable to make written notification available within the area affected by such an event, according to the findings of the Authority and other bodies concerned, that authorisation holder is liable for the nuclear damage caused by the event. This written notification must be available for public at the authorisation holder, at the Authority and in all municipalities within the area.

# PART EIGHT

# STATE SUPERVISION, INSPECTION ACTIVITY, NUCLEAR SAFETY INSPECTORS, INTERNATIONAL INSPECTIONS, ADMINISTRATIVE DELICTS AND INFRACTIONS

# § 31

# State supervision, inspection activity and nuclear safety inspectors

(1) The Authority shall supervise the compliance with this Act and with the other generally binding legal regulations issued based thereon, as well as adherence to the scope and conditions laid down in the decisions pursuant to Article 4, and the fulfilment of measures to eliminate deficiencies identified in protocols (hereinafter referred to as "inspection activity"). The Authority shall carry out inspection activity at authorisation holders and at persons who may be justifiably suspected to use nuclear energy for other than peaceful purposes or without authorisation or at persons who may be justifiably suspected to violate commitments under international treaties concerning peaceful uses of nuclear energy; the Slovak Republic is bound by. The Authority shall also carry out controls at persons reasonably suspected to be involved in activities in the field of uses of nuclear energy pursuant to this Act without authorisation or permission.

- (2) Inspection activity shall be carried out by appointed civil servants (hereinafter referred to as "inspectors") acting on behalf of the Authority.
- (3) Inspector shall carry out inspection activities while being employed as civil servants in the relevant field of civil service pursuant to the specific regulation<sup>37</sup>) by service office being the Authority. Inspector must meet qualification criteria, have acquired relevant competency and successfully passed inspector's exam, thus meeting the special qualification criteria. Only such an inspector may serve in areas involving confidential information who, apart from meeting the criteria required from inspectors, is authorised to deal with confidential information pursuant to the specific regulation.<sup>6</sup>)
- (4) During the period before the passing of inspector's exam, Authority's employee trained for the position of inspector shall have the position of inspector candidate. He shall be authorised to carry out inspection activities when accompanied and supervised by an inspector.
- (5) Inspector's exam shall comprise a written and an oral part. The inspector's exam shall be passed before examination commission, members of which shall be appointed by Authority Chairman. The purpose of the inspector's exam is to verify whether inspector candidate is familiar with and is able to apply the regulations needed for the performance of inspection activities in the field he is expected to carry out inspection activities.
- (6) The examination commission to inspector-candidate within 15 days shall communicate the result of inspector's exam. The Authority shall issue to inspector-candidate certificate of successfully passed inspector's exam.
- (7) After having successfully passed inspector's exam, the Authority Chairman shall assign the inspector candidate to the inspector position based on the proposal of the examination commission chairman, and shall issue inspector ID.
- (8) The Authority Chairman and Vice-Chairman shall obtain inspector IDs upon their appointment to their office.
- (9) Upon carrying out inspection activities, inspector shall identify himself or herself by inspector ID.
- (10) Inspection activity may only be carried out so that human health and safety and the environment shall not be jeopardized.
- (11) Inspector shall be authorised to
- a) enter at any time and without any restrictions the premises of authorisation holders as well as the premises of nuclear installations and premises where nuclear materials, special materials and equipment are held, or where radioactive waste or spent fuel are managed, to carry out inspection activities in them, to verify knowledge of regulations of employees with professional competency and licensed employees who do not currently perform activities with direct impact on nuclear safety; to investigate the status, causes and consequences of operational event and event upon shipment of radioactive materials; as well as to check the status of emergency preparedness; to carry out inspections of compliance with nuclear safety, physical protection, and operating procedures; to verify professional competency of authorisation holder employees; and to participate in the investigation of operational events and events upon shipment of radioactive materials,
- b) carry out inspection, participate in tests and carry out acts aiming at checking whether the requirements under this Act, the generally binding legal regulations issued based thereon, and conditions laid down in the Authority decisions and inspection activities protocols are complied with,
- c) request submission of documentation, records or other documents necessary for the performance of inspection activities and request copies thereof and provision of information and explanation,

- d) having notified the statutory body of authorisation holder or the employee designated by him, take samples of materials or media used, in quantities necessary for analysis, or take environmental samples,
- e) use technical means to make photo, video and audio documentation necessary for the performance of inspection activities unless such use is not prohibited by specific regulations,<sup>6</sup>)
- f) order to keep equipment, workplaces, buildings and structures or their parts in original condition until the completion of investigation or order to record the status of equipment, workplaces, buildings and structures or parts thereof as of the time of the performance of the inspection activities,
- g) order to perform the measurements, controls, tests and other acts necessary for the performance of inspection activities,
- h) after negotiation with the statutory body of the legal person or a person authorised by statutory body or a natural person – authorisation holder, deficiencies identified, to order, in the form of a protocol, measures to eliminate the deficiencies, including binding deadlines,
- i) withdraw licence of special professional competency in cases where deficiencies concerning special professional competency or activities are identified in a licensed employee that might be of direct impact on nuclear safety; or in case of lecturer, to withdraw licence of professional competency if deficiencies of professional competency or activities are identified which result or might result in an unsatisfactory professional training of licensed employees of authorisation holders.
- (12) Inspector shall forward the withdrawn licence of special professional competency or licence of professional competency to the Authority for further proceeding. The Authority shall make a decision on the revoke or return within one month of the withdrawal of the licence.
- (13) Licence of special professional competency or licence of professional competency may be revoked for a specified period of time, not exceeding three years, or permanently. The licence shall be revoked for a specified period of time in cases where the reasons for the revoke can be expected to extinguish. If the employee successfully passes the exam before an examination commission or a professional commission verifying special professional competency or professional competency of the employee concerned, than the licence shall be returned. The licence shall be revoked permanently, if the holder of the licence of special professional competency lost his/her physical or mental competence permanently.
- (14) The authorisations of inspector pursuant to Section 11 shall apply accordingly also to in-situ review as part of the authorisation or permission procedure, as well as to the performance of inspections at persons in respect of whom justified suspicion has arisen of involvement in activities pursuant to this Act without authorisation or permission, or at persons who may be justifiably suspected to perform activities in the field of the uses of nuclear energy for other than peaceful purposes.
- (15) Unless this Act establishes otherwise, the principal rules of control activities laid down in the specific regulation<sup>41</sup>) shall apply to the performance of inspection activities.

<sup>&</sup>lt;sup>41</sup>) § 8 through 13 of Act of the National Council of the Slovak Republic No. 10/1996 Coll. LL.

# Suspension of operation of nuclear installation

- (1) The Authority shall decide to restrict the scope or the validity of authorisation; or shall order the authorisation holder to take the necessary measures; or shall order to suspend the operation of nuclear installation where there is a risk in delay of or upon a serious occurrence of nuclear safety, physical protection or emergency preparedness relevance.
- (2) Where other authority has made the decision to suspend the operation of a nuclear installation due to reasons other than threat to safety, such body shall be liable to reimburse the authorisation holder for the costs needed to assure nuclear safety, and State Fund of Decommissioning of Nuclear Installations and Management of Spent Fuel and Radioactive Waste for the corresponding portion of the costs incurred as the result of such a decision.

# § 33

# International inspections

- (1) "International inspection" shall mean an activity carried out by international inspectors based on international treaties the Slovak Republic is bound by.
- (2) "Inspection mandate" shall mean a document authorising international inspectors to carry out inspections pursuant to Section 1.
- (3) Any natural person or legal person shall be liable to render assistance to international inspectors upon inspection activities, in the extent corresponding to the rights of the latter according to their inspection mandate.
- (4) Natural person and legal person concerned by international inspection shall have the right to be acquainted with the inspection mandate.
- (5) International inspections may only be carried out in a way, which does not jeopardise the health and the safety of people and the environment.
- (6) The provisions of Sections 1 through 5 shall apply accordingly also to other authorised persons designated by the European Commission who carry out activities pursuant to the specific regulation.<sup>42</sup>)
- (7) Authority inspectors may participate in international inspections and, where the inspection is carried out by persons pursuant to Section 6, also representatives of ministries and other authorities of State administration may participate within the scope of their competencies laid down by specific regulations.<sup>43</sup>)
- (8) Where necessary for the purposes of achieving the objective or the execution of international inspection, the Authority may request assistance from Police and Customs Authorities. In its request, the Authority shall specify the extent of the assistance. The Police and Customs Authorities shall be liable to meet the request by the Authority within the scope of their authorisations. Where a risk in delay exists, the Authority shall be entitled to ask the competent courts to issue preliminary ruling for the access of international inspectors into premises subject of international inspection.

<sup>&</sup>lt;sup>42)</sup> Article 35 of the Treaty on the establishment of European Atomic Energy Community.

<sup>&</sup>lt;sup>43</sup>) E.g., Act No. 575/2001 Coll. LL. on the Organisation of Activities of the Government and Central Public Service Authorities, as amended from time to time.

# § 34

# Administrative delicts and offences

- (1) The Authority upon authorisation holder who has violated the provision of Article 3 Sec. 2, 7, 8 or 10, shall impose a fine of up to SKK 50,000,000.
- (2) The Authority upon legal person who has violated the provision of Article 3 Sec.6 shall impose a fine of up to SKK 30,000,000.
- (3) A fine of up to SKK 10,000,000 shall be imposed by the Authority upon authorisation holder who has violated his responsibilities under Article 10 or failed to comply with the conditions laid down in the authorisation or permission or failed to take, within the deadlines set, measures imposed upon him by the decision of the Authority or failed to take the measures imposed by inspector to eliminate the deficiencies pursuant to Article 31 Sec. 11 letter h).
- (4) A fine of up to SKK 1,000,000 shall be imposed by the Authority upon legal person who failed to meet the responsibilities under Article 3 Sec. 11 and 12, Article 12 Sec. 2 and 3, and Article 33 Sec. 3.
- (5) A fine of up to SKK 500,000 shall be imposed by the Authority upon authorisation holder who has failed to provide information important from the viewpoint of State supervision or failed to notify information of nuclear safety, physical protection or emergency preparedness relevance, or who has appointed an employee to carry out activities for which he/she does not meet the professional competency or special professional competency criteria.
- (6) A natural person who violates the provision of Article 3 Sec. 6 or fails to comply with the responsibilities under Article 3 Sec. 11 and 12, Article 12 Sec. 2 and 3 and Article 33 Sec. 3 shall be deemed to have committed an offence. For such offences, the Authority shall impose a fine of up to SKK 100,000. In offence proceedings, the Authority shall proceed in accordance with the specific regulation.<sup>44</sup>)
- (7) An additional fine amounting to up to twice the fine imposed in accordance with Sections 1 through 5 may be imposed upon the person who failed to remedy, within the deadline set, insufficiencies for which a fine has been imposed previously.
- (8) Proceedings on the imposition of fines pursuant to Sections 1 through 5 may be opened within one year of the date on which the Authority has identified the violation of responsibilities, but not later than within three years of the date on which the violation of the responsibilities occurred.
- (9) In imposing fines and determining their amounts according to Sections 1 through 5, an account shall be taken of mainly the severity, manner, duration and potential consequences of the violation of responsibilities, of co-operation and attitude of the entities subject of supervision or natural persons or legal persons concerned upon elimination of consequences of insufficiencies and to measures taken. In justified cases, the Authority may refrain from imposing the fine.
- (10) The criminal liability of authorisation holders, or natural persons and legal persons, as well as criminal liability of their employees shall not be prejudiced by the imposition of a fine.
- (11) The income of fines shall represent revenues of State Fund of Decommissioning of Nuclear Energy Installations and Management of Spent Fuel and Radioactive Waste.

<sup>&</sup>lt;sup>44</sup>) § 51 through 88 of Act of the Slovak National Council No. 372/1990 Coll. on Administrative Infractions, as amended from time to time.

## PART NINE

# COMMON, TEMPORARY AND FINAL PROVISIONS

#### § 35

# Relation to Administrative Proceedings Code

Proceedings of the Authority shall be subject of the general regulation on administrative proceedings<sup>45)</sup> except the deadlines set for the issuance of rulings in proceedings pursuant to Article 8 Sec. 6 and Article 15 Sec. 4 and except of the elements of the rulings in proceedings pursuant to Article 15 Sec. 4, Article 16 and 24.

## § 36

Through this Act, the legal acts of the European Communities and the European Union listed in Annex 5 are implemented.

## § 37

## Temporary provisions

- (1) The validity of authorisations issued pursuant to previous regulations, except of the authorisation of activities pursuant to Article 5 Sec. 2 and 3 of this Act, shall extinguish upon this Act taking into effect. Other rulings issued pursuant to the previous regulations shall be deemed as rulings issued pursuant to this Act.
- (2) Proceedings opened prior to the date this Act enter into force, shall be completed pursuant to the previous regulations. Proceedings concerning the licences shall be suspended upon the date of enter into force of this Act.
- (3) Where the carrying out of any activities in respect of nuclear energy uses is not in accordance with the conditions as laid down by this Act, the legal person or natural person concerned shall be liable to negotiate without delay with the Authority measures to bring them in compliance with this Act. The measures must be taken within the deadline set by the Authority or within six months of this Act taking into effect, whichever comes sooner.
- (4) The Authority shall issue to the inspectors new IDs pursuant to this Act within three months of this Act taking into effect.

#### § 38

## Repealing provisions

The following will be repealed:

 Act No.130/1998 Coll. LL. on peaceful uses of nuclear energy and on amendments and supplements to Act No. 174/1968 Coll. on the State professional supervision of safety at work, as amended by Act of the National Council of the Slovak Republic No. 256/1994 Coll. LL. and Act No.470/2000 Coll. LL.,

<sup>&</sup>lt;sup>45</sup>) Act No. 71/1967 Coll. on Administrative Proceedings (Administrative Proceedings Code), as amended from time to time.

- 2. Regulation of the Nuclear Regulatory Authority of the Slovak Republic No. 29/1999 Coll. LL. which publishes the list of special materials and equipment,
- 3. Regulation of the Nuclear Regulatory Authority of the Slovak Republic No. 30/1999 Coll. LL. which lays down details of maximum limits of quantities of nuclear materials which are not expected to cause nuclear damage,
- 4. Regulation of the Nuclear Regulatory Authority of the Slovak Republic No.186/1999 Coll. LL. laying down details of the provision for physical protection of nuclear installations, nuclear materials and radioactive waste,
- 5. Regulation of the Nuclear Regulatory Authority of the Slovak Republic No.187/1999 Coll. LL. on professional competency of employees of nuclear installations, as amended by Regulation of the Nuclear Regulatory Authority of the Slovak Republic No.317/2002 Coll. LL.,
- 6. Regulation of the Nuclear Regulatory Authority of the Slovak Republic No.198/1999 Coll. LL. on accounting for and control of nuclear materials,
- Regulation of the Nuclear Regulatory Authority of the Slovak Republic No.245/1999 Coll. LL. on emergency planning for the case of incidents or accidents, as amended by Regulation of the Nuclear Regulatory Authority of the Slovak Republic No.318/2002 Coll. LL.,
- 8. Regulation of the Nuclear Regulatory Authority of the Slovak Republic No.246/1999 Coll. LL. on documentation of nuclear installations upon their decommissioning,
- 9. Regulation of the Nuclear Regulatory Authority of the Slovak Republic No.284/1999 Coll. LL. on details of transport of nuclear materials and radioactive waste,
- 10. Regulation of the Nuclear Regulatory Authority of the Slovak Republic No.31/2000 Coll. LL. on events at nuclear installations,
- 11. Regulation of the Nuclear Regulatory Authority of the Slovak Republic No. 190/2000 Coll. LL., laying down details of management of radioactive waste and spent fuel,
- 12. Regulation of the Nuclear Regulatory Authority of the Slovak Republic No. 317/2002 Coll. LL. on requirements on quality systems of authorisation holders and on amendments and supplements to Regulation of the Nuclear Regulatory Authority of the Slovak Republic No.187/1999 Coll. LL. on professional competency of employees of nuclear installations,
- 13. Regulation of the Nuclear Regulatory Authority of the Slovak Republic No.318/2002 Coll. LL. on safety documentation of nuclear installations and on amendments and supplements to Regulation of the Nuclear Regulatory Authority of the Slovak Republic No.245/1999 Coll. LL. on emergency planning for the case of incidents or accidents,
- 14. Regulation of the Nuclear Regulatory Authority of the Slovak Republic No.121/2003 Coll. LL. on nuclear safety assessment,
- 15. Regulation of the Nuclear Regulatory Authority of the Slovak Republic No.167/2003 Coll. LL. on requirements on nuclear safety of nuclear installations.

# Article II

Act No.50/1976 Coll. LL. on physical planning and rules of construction (Construction Act), as amended by Act No.139/1982 Coll., Act No.103/1990 Coll., Act No.262/1992 Coll., Act of the National Council of the Slovak Republic No.136/1995 Coll. LL., Act of the National Council of the Slovak Republic No.199/1995 Coll. LL., ruling of the Constitutional Court of the Slovak Republic No.286/1996 Coll. LL., Act No.229/1997 Coll. LL., Act No.175/1999 Coll. LL., Act No.237/2000 Coll. LL., Act No. 416/2001 Coll. LL., Act No.553/2001 Coll. LL., Act No.217/2002 Coll. LL., Act

No. 103/2003 Coll. LL., Act No.245/2003 Coll. LL., Act No.417/2003 Coll. LL., and Act No.608/2003 Coll. LL. shall be amended and supplemented as follows:

1. Letter e) shall be added to Article 121 Section 2, which shall read as follows:

"e) the Nuclear Regulatory Authority of the Slovak Republic in respect of extensions of nuclear installations and constructions connected with nuclear installations located on the grounds within the boundaries of a nuclear installation.".

- 2. The words "and nuclear safety of nuclear installations" shall be added to Arrticle126, Sec. 1 after the word "environment".
- 3. The text "building permit and decision on approval of construction" shall be omitted from Article 126 Sec. 3".

# Article III

Act of the National Council of the Slovak Republic No. 145/1995 Coll. LL. on administrative fees, as amended by Act of the National Council of the Slovak Republic No.123/1996 Coll. LL.; Act of the National Council of the Slovak Republic No.224/1996 Coll. LL.; Act No.70/1997 Coll. LL. ; Act No.1/1998 Coll. LL.; Act No.232/1999 Coll. LL.; Act No.3/2000 Coll. LL.; Act No.142/2000 Coll. LL.; Act No.211/2000 Coll. LL.; Act No.468/2000 Coll. LL.; Act No.553/2001 Coll. LL.; Act No.96/2002 Coll. LL.; Act No.118/2002 Coll. LL.; Act No.215/2002 Coll. LL. Act No.237/2002 Coll. LL.; Act No.418/2002 Coll. LL.; Act No.457/2002 Coll. LL.; Act No.465/2002 Coll. LL.; Act No.477/2002 Coll. LL.; Act No.465/2002 Coll. LL.; Act No.217/2003 Coll. LL.; Act No.245/2003 Coll. LL.; Act No.190/2003 Coll. LL.; Act No.583/2003 Coll. LL.; Act No.5/2004 Coll. LL.; Act No.199/2004 Coll. LL.; Act No.204/2004 Coll. LL.; Act No.347/2004 Coll. LL.; Act No.382/2004 Coll. LL.; and Act No.434/2004 Coll. LL.; Act No.347/2004 Coll. LL.; Act No.382/2004 Coll. LL.; Act No.434/2004 Coll. LL.; Act No.347/2004 Coll. LL.; Act No.382/2004 Coll. LL.; Act No.434/2004 Coll. LL.; Act No.347/2004 Coll. LL.; Act No.382/2004 Coll. LL.; Act No.434/2004 Coll. LL.; Act No.347/2004 Coll. LL.; Act No.347/2004 Coll. LL.; Act No.382/2004 Coll. LL.; Act No.434/2004 Coll. LL.; Act No.347/2004 Coll. LL.; Act No.347/2004 Coll. LL.; Act No.347/2004 Coll. LL.; Act No.382/2004 Coll. LL.; Act No.434/2004 Coll. LL.; Act No.347/2004 Coll. LL.; Act No.347/2004 Coll. LL.; Act No.347/2004 Coll. LL.; Act No.347/2004 Coll. LL.; Act No.382/2004 Coll. LL.; Act No.434/2004 Coll. LL.; Act No.347/2004 Coll. LL.; Act No.347/2004 Coll. LL.; Act No.347/2004 Coll. LL.; Act No.382/2004 Coll. LL.; Act No.434/2004 Coll. LL.; Act No.347/2004 Coll. LL.; Act No.3

PART XII NUCLEAR SAFETY of the scale of administrative fees shall read as follows:

# "Position 195

Ruling on approval of

a)	type of transport equipment for the shipment of radioactive materials	SKK 5,000
b)	documentation of quality system of applicants for permission or authorisat	tion or holders
	of permission or authorisation	SKK 5,000
c)	requirements of nuclear installation quality, classification of classified e	equipment into
	safety classes and quality requirements on classified equipment	SKK 5,000
d)	system of professional training of employees	SKK 5,000
e)	training programme for licensed employees	SKK 1,000
f)	physical protection plan	SKK 5,000
g)	preliminary on-site emergency plan	SKK 5,000
h)	on-site emergency plan	SKK 5,000
i)	limits and conditions of safe operation	SKK 5,000
j)	limits and conditions of safe decommissioning	SKK 5,000
k)	programme of commissioning of nuclear installation divided into stages	SKK 5,000
l)	boundaries of nuclear installation and changes thereof	SKK 5,000
m)	size of the emergency planning zone and changes thereof	SKK 5,000
n)	implementation of nuclear safety-relevant modifications	SKK 1,000

Authorisation

If amendments to ruling pursuant to letters a) through n) are concerned, the administrative body may reduce the fee to as little as 50 % of the rate shown. Position 196

Ruling on

a)	approval for siting of the construction of a nuclear facility	SKK	10,000
b)	building authorisation for the construction of a nuclear installation, includ	ling site	survey
		SKK	10,000
c)	authorisation for commissioning of nuclear installation, including site surve	ey	
		SKK	10,000
d)	authorisation for operation of nuclear installation	SKK	10,000
e)	authorisation for operation of nuclear installation after systemic and	comprel	hensive
	nuclear safety review	SKK	10,000
f)	authorisation for decommissioning stage	SKK	10,000
g)	authorisation for closure of repository and of institutional control	SKK	10,000
h)	authorisation for management of radioactive waste and spent fuel	SKK	5,000
i)	authorisation for management of radioactive materials	SKK	5,000
j)	authorisation for imports or exports of nuclear materials, special materials	and equ	ipment
		SKK	5,000
k)	authorisation for shipment of radioactive materials	SKK	5,000
l)	authorisation for professional training of authorisation holder employees		
		SKK	5,000
m)	authorisation of re-shipment of radioactive waste	SKK	5,000
n)	authorisation for imports of radioactive waste	SKK	5,000
0)	authorisation for management of nuclear materials outside of nuclear install	lation	
		SKK	1,000

Authorisation

- 1. If a written submission is concerned with incomplete or inadequate documentation, the administrative authority may increase the fee under this item by as many as 50% of the set rate.
- 2. If modifications of rulings mentioned under position 196 are concerned, the administrative authority may reduce the fee by up to 50% of the rate shown.

Position 197

Ruling on review of emergency transport order

SKK 5,000

Authorisation

If modifications of a ruling shown under position 197 are concerned, the administrative authority may reduce the fee to as low as 50% of the rate shown.

Position 198

Ruling on permission of

	0 1	
a)	implementation of modifications of nuclear safety relevance	SKK 1,000
b)	the use of a new type of fuel	SKK 3,000
c)	exemption of the coverage of nuclear facility of the Act	SKK 5,000
d)	dilution and consumption of nuclear materials	SKK 3,000
e)	individual stages of commissioning of nuclear installation	SKK 3,000

Authorisation

If modifications of ruling mentioned under position 198 are concerned, the administrative authority may reduce the fee to as low as 50% of the rate shown.

Position 199

a)	issuance of licence of special professional competency	SKK	500
b)	extension of validity of licence of special professional competency	SKK	200
c)	issuance of licence of professional competency	SKK	1,000
d)	extension of validity of professional competency	SKK	500

# Article IV

Act No.95/2000 Coll. LL. on labour inspection and on amendments and supplements to some laws, as amended by Act No. 231/2002 Coll. LL., Act No.121/2004 Coll. LL., and Act No. 215/2004 Coll. LL. shall be amended as follows:

§ 16a shall be inserted after §16, which reads as follows:

"§ 16a

Upon execution of supervision of safety and protection of health and safety during the work at technical facilities in nuclear energy sector, State administration authorities in the field of labour inspection shall co-ordinate their activities with the Nuclear Regulatory Authority of the Slovak Republic,<sup>15a</sup> which executes State supervision of nuclear safety.".

Footnote to reference 15a reads as follows:

"<sup>15a)</sup> Article 4 Sec. .4 of Act No.541/2004 Coll. LL. on peaceful use of nuclear energy (Atomic Act) and on amendments and supplements to some laws.".

# Article V

Act No.478/2002 Coll. LL. on protection of air, which amends and supplements Act No. 401/1998 Coll. LL. on charges for air pollution, as amended from time to time (Air Act), as amended by Act No. 245/2003 Coll. LL. and Act No. 525/2003 Coll. LL. shall be amended and supplemented as follows:

1. Section 2 shall be omitted from Article 1.

2. Letter b) in Article 2 shall read as follows:

"b) pollutant means any substance introduced by anthropic activities into the air either directly or indirectly, having or potentially having harmful effects on human health or the general environment, except substances introduction of which into the environment is regulated by the specific regulation,  $^{1}$ ".

Footnote to reference 1 reads as follows:

"<sup>1</sup> Act of the National Council of the Slovak Republic No.272/1994 Coll. LL., as amended from time to time.

Regulation of the Ministry of Health of the Slovak Republic No. 12/2001 Coll. LL. on requirements on the provision for radiation protection.".

# Article VI

This Act shall take into effect on 1 December 2004, except Article 3 Sec. 9 and 10, which shall take into effect on 1 January 2007.

Ivan Gašparovič s.m. Pavol Hrušovský s.m. Mikuláš Dzurinda s.m.

#### Annex No.1 to Act No. 541/2004 Coll. LL.

# DOCUMENTATION OF NUCLEAR INSTALLATIONS NEEDED FOR THE INDIVIDUAL DECISIONS

## A. Documents to be attached to the written application for permission for siting of nuclear installation

- a) safety report of reference,
- b) report of reference on the decommissioning method,
- c) project intention for physical and technical solution of nuclear installation design development project level,
- d) report of reference on the method of management of radioactive wastes and spent nuclear fuel,
- e) requirements on the quality of the nuclear installation,
- f) proposed boundaries of the nuclear installation,
- g) proposed size of the emergency planning zone,
- h) environmental impact assessment of the nuclear installation, if special regulation establishes,<sup>8</sup>) as well as potential impact assessment of the environment on the nuclear installation.
- **B.** Documents to be attached to the written application for building permission for the construction of nuclear installation
- a) preliminary safety report providing evidence for the meeting of the legal requirements on nuclear safety based on the data considered in the project,
- b) project documentation needed for building permission proceedings,
- c) preliminary plan of management of radioactive waste, spent fuel, including their transport,
- d) preliminary decommissioning plan concept,
- e) classification of classified equipment into the safety classes,
- f) preliminary plan of physical protection,
- g) quality system documentation and requirements on the quality of the nuclear installation and their evaluation as mentioned in Section A, letter e),
- h) preliminary on-site emergency plan,
- i) preliminary limits and conditions of safe operation,
- j) pre-operation preliminary inspection programme of nuclear installation,
- k) preliminary outline of the boundaries of the nuclear installation (specification of the data mentioned under Section A letter f),
- 1) preliminary definition of the size of the emergency planning zone of the nuclear installation (specification of the data mentioned under Section A letter g),
- m) documents pursuant to § 6 Sec.2 letter j).
- C. Documents to be attached to the written application for authorisation for the commissioning of nuclear installation and operation
- a) limits and conditions of safe operation,
- b) list of classified equipment as classified into safety classes,
- c) testing programmes of classified equipment as determined by the Authority,
- d) nuclear installation commissioning programme, split up into stages,
- e) operational control programme of classified equipment,
- f) quality system documentation and requirements on the quality of the nuclear installation, and their evaluation pursuant to Section B letter g),
- g) operating regulations set by the Authority,
- h) on-site emergency plan,
- i) pre-operation safety report, specifying the report mentioned under Section B letter a),
- j) probability assessment of operation safety of shut-down reactor and for low output levels, as well as for full reactor output in case of nuclear installation comprising nuclear reactor,
- k) physical protection plan, including contract with the Police pursuant to § 26 Sec. 8, as well as description of the method of aviation activities<sup>13</sup>) at premises or in the vicinity of the nuclear installation,
- 1) radioactive waste and spent fuel management plan, including their transport,
- m) plan concept of decommissioning of the nuclear installation,
- n) document providing evidence for financial coverage of liability for nuclear damage, except repository,
- o) professional training systems for employees,
- p) training programmes for licensed employees,

- q) training programmes for employees with professional competency,
- r) documents providing evidence for the meeting of the qualification criteria by licensed employees and employees with professional competency,
- s) documents providing evidence for the preparedness of nuclear installation to be commissioned, for trial operation evaluation report on the commissioning of nuclear installation, and for permanent operation evaluation report on trial operation,
- t) off-site emergency plan for regions within the emergency planning zone,
- u) definition of boundaries of nuclear installation by specification of the data mentioned under Section B letter k),
- v) definition of the size of the emergency planning zone of nuclear installation by specification of the data mentioned under Section B letter l),
- w) documents pursuant to § 6 Sec.2 letter j).

#### D. Documents to be attached to the written application for authorisation for decommissioning stage

- a) limits and conditions of safe decommissioning,
- b) documentation of quality system and requirements on the quality of nuclear installation,
- c) on-site emergency plan,
- d) decommissioning stage plan,
- e) decommissioning concept for the period after the conclusion of the decommissioning stage to be authorised,
- f) physical protection plan, including contract with the Police pursuant to § 26 Sec. 8, as well as description of the method of aviation activities<sup>13</sup>) at premises or in the vicinity of the nuclear installation,
- g) radioactive waste management and shipment plan and management plan of conventional waste from decommissioning,
- h) document providing evidence for financial coverage of liability for nuclear damage,
- i) test programme of classified equipment,
- j) operating regulations set by the Authority,
- k) professional training system for employees,
- 1) training programmes for licensed employees,
- m) training programmes for employees with professional competency,
- n) documents providing evidence for the meeting of the qualification requirements by licensed employees and employees with professional competency,
- o) off-site emergency plan for regions within the emergency planning zone,
- p) modifications of boundaries of nuclear installation by specifying the data mentioned under Section C letter u),
- q) modifications of the size of the emergency planning zone of nuclear installation by specifying the data mentioned under Section C letter v),
- r) classification of classified equipment into safety classes.
- E. Documents to be attached to the written application for authorisation for closure of repository and for institutional control
- a) overall assessment of the condition of the repository and its operation, including description of modifications and changes of the repository and their safety evaluation,
- b) overall inventory of disposed radioactive waste,
- c) repository closure plan and institutional control plan, including safety analyses,
- d) monitoring programme, including proposal for potential remedial measures,
- e) professional training system for employees,
- f) training systems for employees with professional competency,
- g) documents providing evidence for the meeting of the qualification requirements by employees with professional competency,
- h) quality system documentation and requirements on the quality of the nuclear installation,
- i) modifications of the boundaries of nuclear installation by specifying the data mentioned under Section C letter u),
- j) modifications of the size of the emergency planning zone of nuclear installation by specifying the data mentioned under Section C letter v).
- F. Documents to be attached to the written application for the permission for the removal of nuclear installation from the coverage of this Act
- a) final description of the territory of the decommissioned nuclear installation and of all activities performed during the decommissioning,

- b) summary data on the quantities and activity of the disposed or long-term stored radioactive waste and on the quantities of other waste and materials released into the environment,
- c) list of data which will be kept after the completion of the decommissioning, indicating the duration of storage,
- d) results of the final check of the radiation situation based on independent verification, including standpoint of the radiation protection supervisory body

## Annex No.2 to Act No. 541/2004 Coll. LL.

- A. Documents to be attached to the written application for authorisation for shipment of radioactive materials
- a) carrier identification data,
- b) type and quantities of radioactive materials to be shipped,
- c) itinerary,
- d) expected shipment date,
- e) safety documentation:
- f) health protection plan against negative effects of ionising radiation,
- g) transport order, including emergency transport order,
- h) quality system documentation for shipment,
- i) physical protection plan,
- j) document on the approval of the transport equipment type,
- k) document providing evidence for the financial coverage of the liability for nuclear damage, if applicable,
- if authorisation for transit of nuclear material and spent fuel is concerned, document from the competent authority of the State of consignor confirming that their resumption is secured should the transit be not completed,
- m) approval of the shipment of nuclear material and spent fuel, issued by the competent authorities of the State of consignee or consignor and transit States if international shipment is concerned,
- n) statement by the competent authority of the State of the consignee confirming that the nuclear material or spent fuel will be used in accordance with the special regulation,<sup>46</sup>)
- o) authorisation for import or export of nuclear material,
- p) valid commercial contract endorsed by the European Commission if nuclear material is concerned, or draft contract or contract between the applicant and his counterpart with exact specification of special materials and equipment and of their quantities, except scheduled shipment of quantities and materials specified by specific regulations,<sup>47</sup>)
- q) authorisation for management of nuclear material issued to a natural person or a legal person who/which exports or imports the nuclear material.
- **B.** Documents to be attached to the written application for authorisation for import or export of nuclear materials, special materials and equipment pursuant to § 14
- a) identification data of the applicant; name and surname, date of birth, permanent domicile for natural person; name, registered address, identification number of the company, name, surname and permanent domicile of the statutory body or its member for legal person,
- b) type and quantities of nuclear materials, special materials and equipment to be imported or exported,
- c) indication of the State to or from which nuclear materials, special materials and equipment are to be exported or imported,
- d) expected import or export date,
- e) in respect of imports of nuclear materials, certificate providing evidence that the applicant is authorised for management of nuclear materials or that he has a contract with another natural person or legal person who/which is holder of authorisation for management of nuclear materials, who/which will manage the nuclear materials to be imported,

<sup>&</sup>lt;sup>46</sup>) Decree of the Minister of Foreign Affairs No.61/1974 Coll.

Decree of the Minister of Foreign Affairs No.62/1974 Col.

Treaty on the establishment of the European Atomic Energy Community.

Commission Regulation (Euratom) No.3227/76 of 19 October 1976 concerning the application of the provisions on Euratom safeguards, as amended from time to time (Official Journal of the European Communities L 363, 31.12.1976).

<sup>&</sup>lt;sup>47</sup>) Commission Regulation No 17/66/Euratom of 29 November 1966 exempting the transfer of small quantities of ores, source materials and special fissile materials from the Rules of the Chapter on Supplies (Official Journal of the European Communities L 241, 28.12.1966), as amended by Commission Regulation (Euratom) No. 3137/74 of 12 December 1974 (Official Journal of the European Communities L 333, 13.12.1974).

- f) in respect of exports of nuclear materials, special materials and equipment, a guarantee issued by consignee's State that the nuclear materials, special materials and equipment will not be managed in contradiction to the requirements of the international treaty the Slovak Republic is bound by,<sup>1</sup>)
- g) in respect of imports of nuclear materials, special materials and equipment, statement by the applicant for authorisation by which he commits himself
- 1. to refrain from using the material or equipment in question for purposes which would contradict the international treaty the Slovak Republic is bound by,<sup>1</sup>) and which would help achieving any military goals,
- 2. to provide for physical protection of the materials and equipment in question in accordance with § 26,
- 3. not to transfer the material or equipment in question to another natural person or legal person without obtaining permission from the Authority.

## Annex No. 3 to Act No. 541/2004 Coll. LL.

## STANDARD DOCUMENTS NEEDED FOR AUTHORISATION FOR SHIPMENTS OF RADIOACTIVE WASTE BETWEEN MEMBER STATES OR INTO AND OUT OF THE COMMUNITY

The standard document shall be printed in black ink on white paper, weighing at least 40 grams per square metre, and its strength should be such that in normal use it does not easily tear or crease. The standard document shall measure 210 by 297 mm (A4) with a maximum tolerance as to length of 5 mm less and 8 mm more.

Part A

Page 1

# APPLICATION FOR SHIPMENT AUTHORISATION

NOTE

The applicant must complete boxes 1 to 16 and must then send the entire standard document (parts A to E) to the competent authorities of his country, who are responsible for issuing the authorisation for radioactive waste shipment.

The applicant is the following, depending on the type of shipment (see box 1):

Туре А:	Shipment between Member States	– the holder of the radioactive waste;
Туре В:	Import to the Community	- the consignee of the radioactive waste;
Туре С:	Export from the Community	- the holder of the radioactive waste;
Type D: Transit	through the Community	- the person responsible for the shipment in the Member State by way of which the waste enters the Community.

Part A accompanies the waste as it is shipped, as do parts C and D.

Type of shipment (lick the appropriate box)				
Type of simplicit (liek like appropriate $b(x)$ ) Type $\Lambda$ : Shipmont between Member States				
Type A. Simplicit between Memoer States				
Type B: Import find the Community				
Type C: Export from the Community				
Type D: Transit through the Community				
Application for authorisation for ( tick the appropriate box):				
a single shipment				
several shipments Number of shipments planned:				
Planned period of execution:				
(Box to be completed for shipment(s) between Member States via one or more third countries.)				
Frontier post of exit from the Community:				
Frontier post of entry to third country (first country crossed):				
Frontier post of exit from third country (last country crossed):				
Frontier post of return to the Community:				
(These frontier posts must be identical for all shipments covered by the application unless otherwise				
agreed by the competent authorities.)				
Holder (trade name):				
Contact person: Mr/Ms				
Address:				
Post code:Country:				
Tel.:Telex:				
(Box to be completed if the information to be entered differs from that in box $4$ .)				
Place where the waste is held:				
Contact person: Mr/Ms.				
Address:				
Post code: Town: Country:				
Tel· Fax. Telex.				

Part A

	N C							
0	Nature of the waste:							
	Physico-chemical characteristics:							
	Main radionuclides:							
	Maximum alpha activity/package: (GBq)							
	Maximum beta	/gamma a	activity/package: (GBq)					
7	Total alpha act	ivity: (GB	Bq)					
	Total activity b	eta/gamm	na:(GBq)					
	Total number of	of package	es: Total net weight of waste: (kg)					
			Total gross weight: (kg)					
			Total volume ( <i>optional</i>					
	(These values a	are estima	tes if the application relates to several shipments.)					
	Model of pack	ages cont	taining the waste (e.g. plastic bags, metal drums 200 l, ISO transport container,					
	<i>etc.</i> ):	•						
	Means of ident	ification of	of the packages (if labelling is used, annex examples)					
8	Other hazard	categorie	s (tick any appropriate box/boxes)					
	Category 1	0	Explosive substances					
	Category 2		Gas: compressed, liquefied or dissolved under pressure					
	Category 3		Inflammable liquids					
	Category 4	4.1.	Inflammable solids					
	cutegory	4.2	Substances liable to spontaneous combustion					
		43	Substances which on contact with water give off inflammable gases					
	Category 5	5.1	Oxidizing substances					
	Category 5	5.1.	Organic perovides					
	Category 6	61	Toxic substances					
	Category 0	6.2	Substances liable to provoke disgust or infection					
	Catagory 8	0.2.	Corrective substances					
	Category 8		Various dangaraus substances					
0	Type of activity	oivino ri	se to the waste (e.g. medical research industrial nuclear industry or other activity to be					
9	specified):		se to the waste (e.g. meateur, research, maastrat matter maastry of other activity to be					
10								
10	Purpose of the	e shipmen	t (tick the appropriate box):					
	Return of waste resulting from re-treatment of irradiated fuel							
	Treatment and/or packaging of waste							
	Return of wast	e after trea	atment and/or packaging					
	Interim storage							
	Return after in	terim stora	age					
1	Final disposal							
1	Other purposes	s (to be sp	ecified)					
1		•••••						
1	1							

# Part A

11	Proposed form of transport	Point of departure	Point of arrival	Proposed carrier		
	(road, rail, sea, air, inland					
	water way)					
	1					
	2			••••••		
	3					
	4	•••••	••••••	•••••		
	5	••••••	••••••	••••••		
			••••••	•••••		
12	Ordered list of countries	involved in the shinmont	••••••	•••••		
14	(the first country is that w	here the waste is held and th	ne last the country of destind	ution)		
	1	3	5	7		
	2	4	6	8		
13	<b>Consignee</b> (trade name):		0	0		
15	Contact person: Mr/Ms	•••••••••••••••••••••••••••••••••••••••				
	Address:					
	Post code:	Town	Country:			
	Tel ·	Fax.	Telex			
14	(Box to be completed if the	e information to be entered	differs from that in box 13)			
••	Place of destination of th	e waste:				
	Contact person: Mr/Ms	- ··· <b>u</b> 5				
	Address:					
	Post code:		Country:			
	Tel:	Fax:	Telex:			
15	Applicant (trade name):					
	Person responsible: Mr/M	s				
	Address:					
	Post code:	Town:	Country:			
	Tel.:	Fax:	Telex:			
16	In accordance with the pro-	ovisions of Directive 92/3/E	uratom, I hereby:			
	i) apply for aut	horisation to make the ship	ment(s) of radioactive waste	described above;		
	ii) certify that the	ne information provided abo	ove is correct to the best of i	ny knowledge and that the		
	shipment(s) will be a	carried out in accordance wi	th all the relevant statutory	provisions;		
	iii) (Where the s	hipment is of type A or C)				
	- undertak	te to take back the waste if	the shipment(s) cannot take	e place or if the conditions		
	for ship	nent cannot be fulfilled(*),				
	(Where the sh	ipment is of type B or D)				
	- attach he	ereto a declaration by the h	older of the radioactive wa	ste established in the third		
	country that will take back the waste if the shipment(s) cannot take place or if the					
	conditio	ns for shipment cannot be fu	alfilled(*).			
		.*******	••••••			
		, exercised and the second				
	Stamp					
	Stamp					
	(Data and place	······		(Signatura)		
		) **********		(Signature)		
	(*) Only one of the asterio	sked statements can apply d	lelete whichever is inapplica	ble.		
	( ) Only one of the astern	site statements can apply. C	ierete winenever is mappilet			

Part B

Registration No: .....

(to be completed by the authorities responsible for issuing the shipment authorization)

# APPROVAL BY THE COMPETENT AUTHORITIES CONSULTED

## NOTE

- 1. The competent authorities responsible for issuing the authorization for the radioactive waste shipment should complete boxes 17 and 18 immediately on receipt of the application and enter the registration number at the top of each part of the standard document. They should then make sufficient copies of part B to send to any other competent authorities whose approval is required for the shipment(s) to be authorized ('the competent authority to be consulted'). For each competent authority to be consulted, box 19 should be completed on a copy of part B; that copy of part B, together with a copy of part A, should be sent to the competent authority to be consulted named therein.
- 2. The competent authority consulted should make any necessary additional entries in box 19 and should give the application due consideration. Within two months from the date of receipt it should complete box 20 and return the original copy of part B to the competent authority responsible for issuing the authorization. An extension of up to one month in the time required to consider an application may be requested by the competent authority consulted. Failure to complete and return the form by the due time shall be taken as deemed approval of the shipment application, subject to Article 6(4) of Directive 92/3/Euratom.

17	Competent authorities responsible for issuing the shipment authorisation						
	Depending on the type of shipment, these authorities are:						
	Type A:	the authorities of	the country of or	igin;			
	Type B:	the authorities of	the country of de	estination;			
	Type C:	the authorities of	the country of or	rigin;			
	Type D:	the authorities of	the Member Stat	e by way of which waste	enters the Community.		
	Name	of the competent authorities:					
	•••••	•••••	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	•••••		
	Contact person: N	Mr/Ms					
	Address:						
	Post code:	Town:		Country:			
	Tel.:	Fax:		Telex:			
18	Date of registrat	tion of the applica	tion:				
	í í	١					
	1	1					
	Stamp	1					
	~						
					(signature)		
19	Competent auth	orities of the cou	ntry consulted				
	Country:						
	Country of origin	1	of transit	of de	estination		
	Name of the com	petent authorities:					
	Contact person: N	Mr/Ms					
	Address:						
	Post code:	То	wn:	Country:			
	Tel.:	Fa	ıx:	Telex	:		

# Part B

Yes	(conditions if any)		
No	(reason for the refusal)		
Conditions	, if any	or	Reason for the refusal
		Stamp	

Part C

Page 1

## SHIPMENT AUTHORISATION

NOTE

The competent authorities responsible for issuing the shipment authorisation:

- 1. complete this part, bearing in mind, when filling in box number 22, that the maximum period of validity for the authorization is three years;
- 2. send it to the applicant together with the other parts necessary for the procedure (that is, part A, C, D a E);
- 3. send copies of this part to the other competent authorities consulted.

21	Competent authorities responsible for issuing the shipment authorisation					
	Depending on the type of shipment, these authorities are:					
	Type A: <i>the authorities of the country of origin;</i>					
	Type B: the authoriti	es of the co	ountry of de	stination;		
	Type C: the authoriti	es of the co	ountry of or	igin;		
	Type D: the authoriti	es of the M	ember State	e by way of which the waste ente	ers the Comm	unity.
	Name of the competent author	ities:				
	Contact person: Mr/Ms					
	Address:					
	Post code:	Town:		Country:		
	Tel.:	Fax:		Telex:		•••
22	Authorisation					
	Yes	Valid fo	r a single sl	hipment		
	No	Valid fo	or several sl	hipments		
	Date of expiry of the authoriza	tion:				
23	Sequential list of the countries	involved in	n the shipm	ent		
	(the first country is that where	the waste	is held and	the last the country of destination	on)	
	Country	Conditions Country Conditions				
		Yes	No		Yes	No
	1			5		
	2			6		
	3			7		
	4			8		
24	List of conditions			Reasons for the refusal		
	(indicating the country imposi-	ing the cor	nditions and	1		
	any references to attached doc	uments):				
				.		
				.		
				.		

Part C

The decision adopted and recorded in this part has been reached in accordance with the provisions of 25 Directive 92/3/Euratom. The competent authorities consulted are informed that the authorization for radioactive waste shipment has been granted or refused. Stamp ..... (Date and place) (Signature of the person responsible) N. B. This authorization in no way diminishes the responsibility of the holder, carrier, owner, consignee or any 1. other physical or legal person involved in the shipment. 2. The wastes shipped must be accompanied by parts A, C and D, duly completed.

Part D

Registration No: .....

(to be completed by the authorities responsible for issuing the shipment authorization)

## LIST OF PACKAGES

NOTE

This list must be completed by the holder of radioactive waste before each shipment (even if the authorization relates to several shipments). Like parts A and C of the standard document, it accompanies the waste while it is being shipped. It is then attached to the acknowledgement of receipt.

26	Holder (trade name):				
	Contact person: Mr/Ms				
	Address:				
	Post code:	Town:	Country:		
	Tel.:	. Fax:	Telex:		
27	The authorisation covers	a single shipment			
		several shipments	Serial number of the shipm	nent:	
28	Nature of the waste:				
	Physico-chemical characteristic	s:			
	Main radionuclides:				
	Maximum alpha activity/packag	ge:(GBq)			
	Maximum beta/gamma activity	package: (GBq)			
	Model of packages containing	the waste (e.g., plastic	bags, metal drums of 200 litres	s´ capacity, ISO transport	
	containers, etc. ):				
29	Total alpha activity: (GBq)				
	Total beta/gamma activity: (GB	q)			
	Total number of packages:				
	Total net weight of the waste: (	Kg)			
	Total gross weight: (Kg)				
	Total volume (optional):				
30	Identification of the packages	containing the waste			
	(identification number of each package, gross weight(Kg)/package, net weight(Kg)/package, activity				
	(GBq)/package)				
	See attached list ( <i>if the space pr</i>	ovided above is inadeq	<i>uate), or (if preferred)</i> the attac	ched document containing	
	the abovementioned data.				
31	Date of dispatch:				
	I hereby certify that the inform	nation provided in this	part (and the attached list) is	correct to the best of my	
	knowledge.				
		(	$\backslash$		
		C to a	)		
		Stan	ip /		
		$\sim$			
	(Date and place)		(Signa	ature of the holder)	
	(Date and place)		(Signa	iture of the holder)	
1					

page 1

Registration No: .....

(to be completed by the authorities responsible for issuing the shipment authorization)

# ACKNOWLEDGEMENT OF RECEIPT OF THE WASTE

## NOTE

This part must be filled in by the consignee, any necessary additions being made by the applicant. However, a consignee located outside the European Community may acknowledge receipt of the waste by means of a declaration separate from the standard document.

Depending on whether the authorization is for one or several shipments, the procedure to be adopted is as follows.

#### Authorization for a single shipment

1. Shipment of type A or B

Within 15 days of receiving the waste, the consignee must complete boxes 32, 33 and 35, and submit parts D and E to the competent authorities of the Member State of destination.

The competent authorities of the Member State of destination then forward copies of parts D and E to the other competent authorities consulted (and, where appropriate, the original of these two parts to the competent authorities which issued the authorization).

For shipments between Member States, the competent authorities of the Member State of origin must send a copyof the acknowledgement of receipt to the holder.

2. Shipment of type C or D

The applicant must ensure that the consignee located outside the European Community sends him part D and part E with boxes 32 to 35 duly completed immediately on receipt of the waste. Part E may be replaced by a declaration on the part of the consignee providing at least the information contained in boxes 34 and 35.

Within 15 days after receipt of the waste, the applicant must forward part D, part E (if the consignee did not use part E, the applicant must complete it with the exception of box 34) and, where applicable, the consignee's declaration, to the competent authorities which issued the authorization.

These authorities must then send copies of parts D and E, and, where applicable, the consignee's declaration, to the other competent authorities consulted.

#### Authorization for several shipments

1. Shipment of type A or B

The consignee completes boxes 32, 33 and 35 of part E after each shipment (having made several copies of a blank part E for this purpose) and submits this part direct to the competent authorities which issued the authorization. He attaches the part D relating to the same shipment.

2. Shipment of type C or D

The applicant must ensure that after each shipment the consignee located outside the European Communities completes boxes 32 to 35 on a copy of a blank Part E and returns it to him together with the appropriate part D.

The applicant must complete box 36 of part E and forward parts D and E to the authorities which issued the authorization.

3. Shipments of all types

When all the shipments covered by an authorization have been carried out, the final acknowledgement of receipt is completed and submitted as if the authorization were valid for a single shipment only (see above) except that:

- it is stated in box 33 of part E that the shipment in question is the last shipment covered by the authorization;
- any declaration made by a consignee located outside the European Communities must state that all the waste covered by the shipping authorization has indeed arrived;
- to provide an overview, the parts D for each of the shipments covered by the authorization must be attached to the final acknowledgement of receipt.

32	Consignee (trade name):
	Contact person: Mr/Mr
	Address:
	Post code: Town:
	Tel.:
	Place where waste is held:
	Contact person: Mr/Ms
	contact person. Mir/Mis
	A damage
	Address
	Post code:
	Tel.: Telex:
33	Authorization granted for:
	A single shipment
	Several shipments Serial number of shipment:
	Last shippent covered by the authorization: Yes No
34	To be completed for shinments of type C or D only:
34	(this item may be repleaded by a concerted declaration)
	(ins tiem may be replaced by a separate declaration)
	Frontier post of entry to the third country of destination:
	Country:
	Post:
35	Date of receipt of the waste:
	Date of dispatch of the acknowledgement of receipt together with part D:
	depending on the type of shipment, the acknowledgement of receipt must be sent:
	type A or B: to the competent authorities of the Member State of destination
	- type A of B. to the competent autorities of the Memoer State of destination,
	two C on D. to the conditional (two C) to the holder two D, to the concern concernities for the chimment
	- type C or D: to the applicant (type C: to the holder; type D: to the person responsible for the simplicant
	in the Member State by way of which the waste enters the Community).
	I hereby certify that the information provided above is correct to the best of my knowledge.
	Stamp /
	(Signature of the consignee)
	(orginature of the consignee)
1	



SECTION A

## FIELDS OF NUCLEAR ENERGY FOR WHICH SPECIAL TRAINING OR AT LEAST FIVE MONTHS' PRACTICAL WORKARE REQUIRED AND WHICH RELATES TO

- a) nuclear energy research in the fields listed in Section B,
- b) b) supervision, maintenance, repair or technical operation of installations and equipment for
  - 1. production, separation or any use of ores, source materials or special fissile materials or for the reprocessing of irradiated nuclear fuels,
  - 2. isotope separation,
  - 3. production of the special materials needed in the nuclear field, such as moderators and structural, cladding and shielding materials specially devised for nuclear purposes,
  - 4. production of nuclear energy,
  - 5. disposal of nuclear waste and radioactive impurities,
  - 6. transport or storage of radioactive materials,
  - 7. production, preparation or use of radioactive isotopes;
- c) planning, designing or construction of installations or equipment or constituent parts of the installations or equipment used in the fields listed in letters a) and b),
- d) protection against radiation.

#### SECTION B

#### LIST OF TYPES OF SKILLED EMPLOYMENT IN THE FIELD OF NUCLEAR ENERGY

#### Employment requiring knowledge equivalent to that of a nuclear engineer or nuclear technician

Employment requiring knowledge in one of the following fields:

- a) working conditions peculiar to the nuclear field and designing of nuclear equipment (nuclear engineer and nuclear technician),
- b) special mechanical problems in the nuclear field and designing of auxiliary equipment (mechanical engineer and technician),
- c) action of radiation on matter, and nuclear properties of the various substances used as fuels, moderators and structural materials for nuclear equipment; preparation of nuclear substances, reprocessing of spent fuels, disposal of radioactive waste or decontamination (chemical engineer and technician),
- d) properties of ceramics used in the field of nuclear energy (uranium and thorium oxides, uranium carbide, etc.) (ceramics engineer and technician),
- e) properties of structural materials for nuclear reactors, cladding materials for fuels and for metallic fuels; behaviour of such materials during irradiation and in the presence of the substances used in reactors or in reprocessing facilities (metallurgical engineer and technician ),
- f) control of nuclear reactors, measurement of radioactivity (electronics engineer and technician),
- g) neutron physics of nuclear reactors and essential requirements arising there from (thermodynamics engineer and technician),
- h) special features and operational supervision of a reactor, and measures necessary in the event of a major breakdown (operating engineer and technician),
- i) assessment and checking of the technical safety of the reactor and of the experimental nuclear plant (safety engineer and technician).

#### Prospector

Employment involving detection with the aid of special instruments (Geiger-Muller counters, etc.) of traces of radioactivity, however slight, in locations indicated by geologists; interpretation of the information obtained in order to guide later research.

#### Test driller in uranium mines

Employment requiring skill in directing operations relating to test borings in order to determine the nature of the land and to detect the presence of radioactive materials, and interpretation of the information obtained in order to direct later operations.

#### Mine superintendant in uranium mines

Employment involving the direction, supervision and/or control of one or more or of all underground sections or activities of a uranium mine, or the carrying out of technical research or complicated measurements and supervision of compliance with safety measures necessitated by the special nature of such mines. **Laboratory technician** 

Employment involving the study of radioactive ores and the carrying out, in co-operation with analysts, of chemical and physical analyses of samples in order to determine the intensity of radiation of the samples, their chemical composition and other characteristics.

**Operative (preparation of fuel elements )** 

Employment involving the carrying out of operations involved in the fabrication, by forging, of fuel elements, their inspection and testing ; the preparation and acceptance of metallic clads for fuels.

#### **Reactor superintendant**

Employment involving the operation of a reactor and requiring knowledge of fundamentals of electronics and reactor dynamics and also ability to interpret diagrams and to locate and repair minor breakdowns.

#### **Reactor operations supervisor**

Employment involving the operation of a reactor and requiring good general knowledge plus a thorough knowledge of all the distinctive features of the reactor ; ability to give orders and to take decisions.

#### Operative in charge of loading, unloading and cooling of nuclear fuels

Employment requiring ability to handle, in accordance with instructions, devices for loading, unloading and cooling nuclear fuels.

#### Laboratory technician (hot laboratory)

Employment requiring ability to interpret diagrams and to carry out the necessary assembly and adjustment, to undertake a test single-handed in accordance with detailed instructions and to express the results in quantitative terms; knowledge of the dangers arising from radiation and ability to use remote-control apparatus.

#### Engineering draughtsman (specialising in the nuclear field)

Employment requiring ability to prepare a simple design from written data and to illustrate it with rapidly executed drawings or sketches, giving visual representation of the subject of the design as defined, and to apply the radiation protection regulations in force.

#### **Operative (particle accelerator)**

Employment involving the operation and handling of high-voltage apparatus for electrostatic accelerators ; the construction, use and handling of ion sources ; the handling and the operation of apparatus to detect and measure radioactivity, etc.

## **Radiation protection officer**

Employment involving supervision of the safety of staff operating reactors or of staff in uranium mines or other nuclear installations, and requiring sound knowledge of the dangers arising from radiation and of protection against radiation.

#### **Decontamination officer**

Employment requiring ability to carry out, in the event of contamination, the necessary measures and certain special decontamination operations and, if necessary, to take practical measures.

#### Annex No.5 to Act No. 541/2004 Coll. LL.

# LIST OF LEGAL ACTS OF THE EUROPEAN COMMUNMITIES AND THE EUROPEAN UNION IMPLEMENTED

- 1. Council Directive 92/3/Euratom of 3 February 1992 on the supervision and control of shipments of radioactive waste between Member States and into and out of the Community (Official Journal of the European Communities L 035,12/02/1992).
- 2. Council Directive 89/618/Euratom of 27 November 1989 on informing the general public about health protection measures to be applied and steps to be taken in the event of a radiological emergency (Official Journal of the European Communities L 357, 07/12/1989).
- 3. Directive 62/302/EC of 5 March 1962 on freedom to take skilled employment in the field of nuclear energy (Official Journal of the European Communities P 057, 09/09/1962).