## Otázky a odpovědi k Národní zprávě ČR (Questions and Answers to the National Report of the Czech Republic)

## Polsko (Poland) - CG1

	1 /			
Q/C No.	JC Article	Sect./	Question/Comment	Answer
	No.	page		
Pl-cz-1	Article 32	Section B	According to Figure 2.1, the Czech Republic carries out an Environmental Impact Assessment (EIA) only in case of construction of new nuclear installation. Are you going to carry out a transboundary EIA consultation in case of renewing the operating licenses for example for unit 1 and unit 2 of the Temelin Nuclear Power Plant? (according to the Espoo Convention and Rivne Case).	The question is out of the scope of JC and fits into the scope of CNS. In the Czech Republic, the EIA process is regulated by the Act No. 100/2001 Coll. which is based on the relevant European legislation. That is why no EIA needs to be carried out. The Czech legislation (Atomic Act) does not recognize a concept of "renewal of licence". In the case of new authorisations for NPP operation granted upon expiration of a ten-year cycle, the applicant is obliged to document the fulfilment of all previous conditions as defined by the regulatory body and the regulatory body is obliged to verify this fulfilment.

Švýcarsko (Switzerland) – CG1

	JC Article		Question/Comment	Answer
	No.	page		
Ch-cz-1	Article 26	Section 6.6	How is the transition phase (phase between shut down and start of decommissioning) regulated?	So far no nuclear installation reached transition/decommissioning phase and it is not expected that it will be the case at least till 2025. But it is expected that the transition phase will be regulated as operational one. For NPPs conditions in modified operational license will clarify which operations can be (e.g. storage of SF) and cannot be (e.g. power generation,) performed incl. identification of preparatory works to decommissioning.
Ch-cz-2	Article 26	Section 6.6	What is the definition of the workplace-category?	Categories of workplaces follow potential radiological risks of these workplaces. Details on each category is provided in Article 19 of Decree No.422/2016 Coll., on radiation protection (https://www.sujb.cz/file/admin/sujb/docs/legislativa/vyhlasky/422_Radiation_safety_fin.pdf)
Ch-cz-3	Article 17	Section 8.7	Which measures are planned to assure the preservation of records of the location, design and inventory of the disposal facilities?	The Radioactive Waste Disposal Authority (SÚRAO), which is the only licensee of disposal facilities in the Czech Republic, shall by law keep records of disposed RAW and retain them for a time set in the documentation for the closure of a disposal facility. In practice so called "Standard document" which accompanies each single piece of RAW container or unconditioned RAW is available in three hard copies, while the original and the copies are filed in different fire protected rooms. The standard document for radioactive waste is archived by the SÚRAO and other licensees authorised for RAW management or the generators of RAW archive the same for the minimum of 10 years from consignment or disposal of RAW. Records on RAW are also available in electronic database system operated by SÚRAO and backuped periodically.
Ch-cz-4	Article 10	Section 7.7	How is SURAO going to support the process of finding volunteering municipalities?	SÚRAO is supporting the initiative of the draft legislation relating to the involvement of communities in the process of the siting of the deep geological repository. The draft was subsequently submitted to the Government Legislative Council. The Government authorized the Minister of Industry and Trade to create a working group which would consider the suggestions provided in the position outlined by the Government Legislative Council and prepare new draft legislation which the Ministry would then submit to the Government by 30 June 2018.
Ch-cz-5	Article 10	Section 7.7	SÚRAO is looking for municipalities that would like to be voluntarily involved in the site selection process. Is the location of these municipalities restricted to one of the potential locations previously selected or could they be anywhere in the Czech Republic?	characteristics. The public acceptance is measured regularly and the

Ch-c	z-6 Ar	rticle 25	Section	Concerning the activities of SÚJB it's mentioned, that there'll be a co-	Model TRAKON is used for these types of calculations. Model
			6.5.2.5/	operation between the Czech Hydrometeorological Institute and SÚJB	TRAKON consists of two sub-models - Media and Trajekt, Model
			p. 77	to forecast release of radioactive materials. What calculation model is	Media is designed for medium distances, model Trajekt is designed
			-	there used for?	for long distances.

## USA - CG1

Q/C No.	JC Article No.	Sect./ page	Question/Comment	Answer																		
Us- cz-1	Article 6		ticle 6 Chapter 7.7/p.	icle 6 Chapter 7.7/p.	cle 6 Chapter 7.7/p.	cle 6 Chapter 7.7/p.	rticle 6 Chapter 7.7/p.	article 6 Chapter 7.7/p.	rticle 6 Chapter 7.7/p.	ticle 6 Chapter 7.7/p.	rticle 6 Chapter 7.7/p.	icle 6 Chapter 7.7/p.	rticle 6 Chapter 7.7/p.	article 6 Chapter 7.7/p.	7.7/p.	7.7/p.	7.7/p.	7.7/p.	7.7/p.	7.7/p. 97	7.7/p. communities for a deep geological repository have caused schedule delays.  97 Please elaborate on the challenges with respect to public acceptance of the	Due to a series of petitions and local referenda against geological investigations in 2004-2005 there was a 5-year moratorium on siting activities connected with the development of a deep geological repository (2005-2009).
			The report indicates a decision on which of the six locations will be the two candidate sites is expected in 2018. Please provide an update on the	Time schedule given by updated Concept of SF and RW Management of the Czech Republic, approved by Government:																		
			decision schedule.	Research studies aimed at finding further potentially suitable DGR sites including the revision of studies performed before 2002																		
				Selection of two candidate sites based on the preliminary characterisation of the sites, including the position of the communities concerned																		
				Selection of the final site including the position of the communities concerned and submission of an application for land protection at the selected site																		
				Commencement of the EIA procedure for the construction of an underground laboratory at the final site																		
				Submission of an application for planning permission for the underground laboratory at the final site																		
				Commencement of the EIA procedure for DGR construction 2035 Submission of documentation for DGR planning permission to all the institutions concerned including the SÚJB (safety report)																		
				Submission of documentation for building permission 2045																		
				Deep geological repository construction (including the first disposal section) and the drafting of documentation for the commencement of operation																		
				Drafting of documentation for DGR operation authorisation, decision issuance  Commencement of deep geological repository operation 2065																		
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Us- cz-2	Article 26	Chapter 10/	Please elaborate on arrangements in place to manage disused sealed sources that do not meet acceptance criteria for disposal at the Richard	used for storage of DSRS (RAW in general) which do not meet WAC																		
		p.134	facility.	for disposal. These sources are put into storage containers with																		
				defined properties and in the future they will be disposed in deep geologic repository (after 2065).																		
Us-	Article 22	Chapter	Please elaborate on whether there is or will be a plan to evaluate the	SÚJB have introduced new system of human resources management																		
cz-3		6.2/p.	effectiveness of the human resources approaches and/or strategies in place																			
		55	to ensure that qualified staff are available for safety-related activities.	recommendations. Formally it is introduced through two different																		
				internal IMS procedures. First one is dealing with evaluation of personnel performance and implements legal requirements for sector																		
				of civil service in the Czech Republic. Second one is dealing with																		
				needed competence mapping and implements requirements of IAEA																		
				standards.																		

Francie (France) – (CG2)

	JC Article	Sect./	Question/Comment	Answer
Q/C NO.	No.	page	Question/Comment	Allswei
Fr-cz-1	Article 16	p.137	Czech Republic indicates that refurbishment of radioactive waste disposal facility Richard will take place in two stages, completed probably by 2020. Could Czech Republic specify the contents of each stage?	the modification of existing spaces to the new RAW disposal chambers and access and manipulation corridors. The second stage covers building of modern RAW reception facility including the laboratory for control of WAC declared by producers. Within this stage the reconstruction of access road to disposal facility site and reconstruction and sealing of old ventilation shafts will be also performed.
Fr-cz-2	Article 12	Section H/ p.106	Following the 5th Joint Convention meeting, the gradual dismantling of installations used in the past for sources management was identified as a remaining challenge in Czech Republic. Section 8.2.4 presents two buildings (241 and 211/8 from ÚJV Rež, a. s.) that have been reconstructed prior to 2015 and seem to be now reused for radioactive waste management purposes.  Could Czech Republic clarify which facilities were concerned by the challenge from the 5th Joint Convention and specify if this challenge is now considered as fully implemented?	meeting. Buildings 241 and 211/8 at ÚJV Rež, a. s. site have been used for RAW management since their construction and have been reconstructed. Works at building 241 have already been finished, as stated in national report ("• building 241 - Velké zbytky (RAW management facility), containing technology for processing and
Fr-cz-3	Article 19	p.137	Following the 5th Joint Convention meeting, the implementation of recommendations from the 2013 IRRS mission and the conduction of a follow-up mission in 2016 were identified as a measure to improve safety. Could Czech Republic present the main conclusions of the IRRS follow-up mission of 2016?	There was no follow-up IRRS in 2016, but in 2017, as clearly stated in the national report (see p. 147).  During the 2017 follow-up IRRS it has been determined that 16 out of
Fr-cz-4	Article 26	Section F/ p.81	Czech Republic indicates that the public is involved in the decision-making process concerning management of radioactive waste and	The Working Group for Dialogue on the Deep Geological Repository

spent fuel. Could Czech Republic give practical examples of this public involvement in the decision process? Could Czech Republic specify how this involvement is planned to be taken into account in the framework of the deep geological repository siting process?

contribute towards transparency concerning the deep geological repository for spent nuclear fuel and the high-level waste site selection process. This involved better respecting the interests of the public and strengthening the active participation of the communities directly affected in the process.

The Working Group was created with the support of the Ministry of Industry and Trade of the Czech Republic with the cooperation of the Ministry of the Environment. Most of the members of the Working Group consisted of representatives of the local authorities and municipalities directly affected by the repository project. In addition, local and national environmental organisations, both chambers of parliament, state institutions responsible for the disposal of radioactive waste (the Ministry of Industry and Trade, Ministry of the Environment, State Office for Nuclear Safety and SÚRAO) and the humanities and technical academic spheres were represented in the Working Group.

In 2014, the Working Group became a part of the Government Council for Energy and Raw Materials Strategy, thus its activities are now safeguarded directly by the Government. The mission and main objectives of the Working Group as well as its procedural regulations are defined in the Statute PS Dialog (in Czech only).

During 2016 the Working group held only two meetings. The activities were significantly influenced by the resignation of representatives of a number of localities and the gradual loss of a quorum. One of the undoubted achievements of the Working Group consisted of the preparation (in cooperation with representatives of non-governmental organisations and experts selected by community representatives) of draft legislation relating to the involvement of communities in the process of the siting of the deep repository. The draft was subsequently submitted to the Government Legislative Council. The Government authorised the Minister of Industry and Trade to create a working group which would consider the suggestions provided in the position outlined by the Government Legislative Council and prepare new draft legislation which the Ministry would then submit to the Government by 30 June 2018.

Concerning existing repositories in operation:

Public relations with respect to the currently operational Richard near Litoměřice, Dukovany and Bratrství near Jáchymov repositories primarily concerned the operation of local information centres, the distribution of information materials and regular meetings with local public representatives. Some information meetings are held as part of regular sessions held by so-called civil security committees (the Richard Civic Control Commission and the Dukovany Civic Security

				Commission), while others are held at the request of local councils. The creation of a similar Jáchymov Civic Control Commission is under preparation. The main reason for the creation of these commissions is related to our ongoing efforts to strengthen mutual confidence between the public, currently operational repositories and SÚRAO as the managing authority. The main task of the commissions is to carry out independent checks of the operation of radioactive waste repositories, to compare the results with relevant international practice and to provide the public with information on the knowledge gained. Members of the commissions consist of representatives of the communities concerned and their surroundings and specialists from SÚRAO and the relevant Mining Authority. SÚRAO's objective is to increase the levels of mutual confidence and understanding, respect and social responsibility between SÚRAO and the public.
Fr-cz-5	General	p.137	The Czech Republic report is subdivided accordingly to the guidelines regarding the Form and Structure of National Reports (INFCIRC/604/Rev.3), but different chapter are distinguished by numbers instead of letters.	INFCIRC/604/Rev. 3. As this structure is not binding it has been
				No substantial suggestions and challenges were identified in previous national report and therefore there is no need to address any measures in presented national report.

Q/C No.	JC Article No.	Sect./ page	Question/Comment	Answer
Hu-cz-1	Article 10	Chapter 6.7/p. 82	The Czech authorities and licensees hold workshops twice a year since 2010 to select the locations for Deep Geological Repository for	Sociological analysis performed in 2016 -2017 included public opinion research with the results below:
			RAW. Could you clarify how you measure the public acceptance in these regions and what the results were?	Acceptance of residents of the candidate sites in Czech Republic  To what extent do you agree or disagree with the following in your locality? 1 = resolutely agree, 7 = resolutely disagree  Brezovy potok  Certovka  Chado  Horka  Hradek  Kravi hora  Magdalena  Magdalena  Figure Acceptance of residents of the candidate sites towards site investigations and the construction of the DGR. (Source: Socio-economic analysis of localities targeted for the deep repository, 2016)  Public opinion survey is prepared as well in 2018 for all 9 sites, expected results will be available in summer 2018.

Q/C No.	JC Article No.	Sect./ page	Question/Comment	Answer
Sk-cz-1	Article 10	Chapter 7.7/p. 97	The report states that SÚRAO had expected that the geological works would start in 2011 – 2012 on those sites where municipalities would be voluntarily involved in the site selection process.  Has the alternative that none of the municipalities from the sites suitable for deep geological repository (DGR) construction will agree with its siting or construction also been considered?	The level of acceptance is measured regularly and in every site (9 together) there is a certain level of acceptance.
Sk-cz-2	Article 26	Chapter 6/p. 54	Could you describe the role of the SÚJB in the contractor's control process? Does the SÚJB issue any kind of licence to contractors?	According to the act No. 263/2016 Coll., atomic act, contractors of the NPP operator may have different roles — as subjects obliged to establish management system or, under very specific circumstances, as licensees. These roles can be even combined in one person and its responsibilities. Mere fact, that the subject is the NPP operator's contractor, does not mean that such subject must have a license granted by the Office — there is no special license for contractors of other license holders in the Czech nuclear law. The subject (contractor) must get the license from the Office only if performing an activity subjected to a license (as listed in § 9 of the atomic act), e.g. RAW management, ionizing radiation source management, services provided to the NPP operator in controlled area, monitoring etc. However, such license of the contractor does not compromise in any way primary responsibility of the NPP operator for safety, which is explicitly based in § 5 para 4 of the atomic act. Responsibility of the operator covers whole operation of the NPP, while responsibility of the contractors holding a minor license covers only their respective licensed activity. Licenses are granted by the Office after administrative proceedings, only if the applicant successfully demonstrated full commitment to legal requirements. The Office is only regulatory authority in the field of nuclear energy and ionizing radiation utilization, with exclusive power to supervise license holders, to impose penalties and remedial measures to them for any illegal behavior and to withdraw a license.  In fact, most of the contractors do not perform any licensed activity and thus have to obey only general obligations related to the management system. Several categories of the contractors are obliged to establish full scope management system in compliance with § 29 of the atomic act. These are listed in § 29 para 1 and include:  • persons who design or manufacture selected equipment or modify such equipment,  • persons who prepare, manage and carry out

				<ul> <li>person conducting safety assessments, and</li> <li>person conducting site evaluation for a nuclear installation.</li> <li>All these subjects have to comply with requirements of decree no. 408/2016 Coll., on management system.</li> <li>Beside this (listed) type of contractors the atomic act sets down also general requirements on any other contractors of the NPP operator and contractors of higher category. These other contractors are regulated by the atomic act as "suppliers of products or services".</li> <li>According to § 30 of the atomic act they are obliged to introduce and maintain a management system in compliance with the requirements under this act or by other means ensuring the quality of processes and activities and their outputs comparable with the requirements under this act. The atomic act also requires the NPP operator to make contractual arrangements with suppliers of products or services ensuring quality of them and control over this quality.</li> <li>Even though the Office does not issue any special licenses to contractors, they can be supervised by the Office and penalized if any misconduct is revealed. The Office has power to impose remedial measures to contractors or to the NPP operator (license holder using services or products of contractors) and thus modify their behavior or even choice of the contractor.</li> </ul>
Sk-cz-3	Article 32	Chapter 4.2/ p. 25-31	Which methods of radioactive waste minimisation during NPP operation are considered the most efficient?	The most efficient way to minimize the amount of produced RAW in NPPs is the use of fuel which keeps his containment function. This allows to reduce the contamination of primary circuit and so the amount and activity of generated RAW.
				Once the radioactive material, which cannot be further used, is declared to be RAW (clearance of radioactive material is also very efficient way to minimize the amount of RAW) the most efficient method of its minimization is the incineration and melting (for selected RAW streams). Incineration of 350 tonnes of radioactive waste resulted in the volume reduction up to 98% and the weight decrease by 92%. Melting of 45 t of contaminated metal material resulted in the volume and weight reduction by 95%.
Sk-cz-4	Article 25	General	IAEA Safety Standards GSR Part 3 and GSR Part 7 expects that government authorities develop a protection strategy to protect people and environment in case of nuclear and radiological emergencies. Is this protection strategy implemented in your legislation and practice? If yes, could the Czech Republic shortly describe how this is applied for RAW related installations (e. g. graded approach, etc.)?	The Protection Strategy will be a part of National Radiation Emergency Plan. This plan shall be drawn up by SUJB in cooperation with the Ministry of the Interior and approved by the government within four years of the entry into force of this Act. Every person shall act in compliance with the first national radiation extraordinary event plan within two years from the issue thereof.

Rakousko (Austria) – CG4

Q/C No.	JC	Sect./	Question/Comment	Answer

	Article No.	page		
At-cz-1	Article 19	p. 40	The NR states "SÚJB may change the conditions in the license if the circumstances important from the viewpoint of nuclear safety, radiation protection, physical protection or radiation extraordinary event management, under which the license was issued, have changed, or upon request of the licensee. The conditions of a license which may affect off-site emergency preparedness plan may be determined and changed only subject to an agreement with the competent regional office and affected municipal offices of municipalities with extended competence."  The general capability of the regulator to adapt the conditions in the license under defined circumstances can be considered as "good practice" if it is directed to continuously improve nuclear safety also following the actual state of knowledge and the level of science and technology and operational and other experiences.	Thank you for an assessment that can be added as the other argument for the good practice.  In general the Act No. 500/2004 Coll., Code of Administrative Procedure allows specifying in the verdict of the decision (license) the time limit for fulfillment of some imposed duty, or other requirements (conditions) necessary for its proper fulfillment.
At-cz-2	Article 20	p. 50	The Operational Programme Human Resources and Employment (OP HRE) entitled "Systematic policy for training and development of SÚJB employees" including annual evaluation of Individual plans of personal development can be considered as "good practice".	Thank you for the proposal! SUJB is planning to evaluate this process and (if needed) to introduce further enhancements.
At-cz-3	Article 22	p. 57	Mandatory provisions for the decommissioning of NPP Dukovany and NPP Temelín are reported to cover a fix annual amount.  Are there conditions which connect aliquotly the HLW/spent fuel production to the decommissioning provisions?	There is a fund (nuclear account) for management of RAW and SF which is separated from decommissioning fund. They are not formally connected, but assessment of decommissioning cost is based on the decommissioning plan which considers management of RAW from decommissioning. NPPs operator pays regular contribution to the nuclear account on the basis of generated power (55 Kč/MWh). Further details on the nuclear account incl. the amount paid by other RAW producers are provided in Articles 119-135 of Atomic Act (https://www.sujb.cz/fileadmin/sujb/docs/legislativa/zakony/Act 263 2016 web.pdf).

## Slovinsko (Slovenia) - CG4

Q/C No. J	JC Article	Sect./	Question/Comment	Answer

	No.	page		
SI-cz-1	Article 17	Section H/p. 119 and 121	What is the planned period of institutional surveillance of disposal facility Hostim?	The Hostim disposal facility has been closed in 1997. The monitoring program approved by SUJB determines the annual period of surface and underground water control. The exact period of institutional control was not determined but SURAO expects to monitor this site at least for another 50 years.
			What are the authorised limits of radioactive gaseous and liquid releases during the operational period of each disposal facility?	There are no authorized limits for releases from disposal facility in the Czech Republic. If there is a release of radioactivity from disposed RAW during the operational period of the disposal facility this event could be considered as emergency and the facility will be remediated.

Německo (Germany) – CG4

O	/C No. J	JC Article	Sect./	Question/Comment	Answer

	No.	page		
Ge-cz-1	Article 32.2.1	Chapter D2/ p. 21	In the pool, there are 17 positions for hermetically sealed containers for damaged fuel. Has any of this fuel in the past been loaded into dry storage casks and if not, does the Czech Republic already have a granted solution for these special cases?	No damaged and/or leaky SF assemblies were loaded into dry SF casks. At NPP Dukovany this kind of SF will be managed during the decommissioning of the whole NPP (after 2035), but at NPP Temelín this challenge is under investigation and should be resolved earlier than at decommissioning stage.
Ge-cz-2	Article 24	p. 71	The tasks for the inspectors are numerous (routine, ad hoc, investigation-based etc.). It is said that there are 50 inspectors responsible for 9 locations. That means roughly 5 persons for each location. Is the number of staff sufficient for adequate inspection work? What are the experiences of the Czech Republic?	There is a factual/typographical error in the national report. There are more than 150 inspectors employed in SUJB responsible not only to regulate all sites of nuclear installations but also other registrants and licensees. In previous national reports similar number of inspectors (150) has been reported.
Ge-cz-3	Article 23	p. 61	With respect to the graded approach to ensure and increase nuclear safety, is there any R&D carried out into long-term storage or has the Czech Republic planned any ageing management actions with the periodic 10-year inspections?	Each SF storage facility is inspected in general1-3 times a year. There is no 10- year inspection, but design approval of SF casks undergoes periodic review and re-licensing by SUJB every 10 years. The operator shall be able to perform controls, maintenance and repair of casks and he shall build well in advance a hot cell in extreme case to reload damaged casks, once NPPs reach decommissioning stage (licence condition of SF stores). No extensive R&D programmes are planned at the moment, but e. g. a programme on transportability of casks in use to DGR site is planned in close future (around 2020).
Ge-cz-4	Article 32	Chapter 8.6.3.2 /p. 124	Disposal facility Bratrství: In the National Report the categories of radioactive facilities are defined. Waste treatment and storage facilities are not mentioned in the lists. To which category do they belong?	RAW treatment and storage is not performed in disposal facility Bratrství and no treatment and storage facilities are mentioned on p. 124. RAW treatment and storage facilities are usually a part of larger RAW management facilities in e.g. NPPs. Separate storage facilities are reported in annexes to the national report.