

Joint Convention
 Questions Posted To Poland in 2018

Q.No *	Country	Article	Ref. in National Report
	Czech Republic	General	B, 12

Question/ Translation error: "...fusil materials...".

Comment

Answer Yes, it should be fissile materials

Q.No *	Country	Article	Ref. in National Report
	Czech Republic	General	B, 13

Question/ Comment The selection of the most promising regions was performed with a prospect of siting a new near surface repository. As a result of the screening analysis, 19 sites situated in 12 communes were chosen for further onsite research. Efforts should be continued to obtain acceptance from the public and local authorities for repository siting, which was not gained within the time frame of the Programme.

What is the attitude (resistance) of local residents in individual localities where a radioactive waste repository is being considered?

Answer The process of site selection for new low and intermediate level waste repository and realisation of Polish Nuclear Power Program (PPEJ) are not directly connected. Ministry of Energy (MoE) has held lengthy and complex discussions with local communities including local authorities and residents, most of whom strongly oppose repository siting within their community and expressed concerns about the influence of repository siting on the image of community. The main points of discussion were:

- Safety of repository and radioactive waste,
- Influence of repository localisation for local community and life of residents,
- Benefits of construction and exploration of repository for local community,
- Influence for local infrastructure,
- Ownership of land which was selected for repository,
- Next steps and the whole process of site selection, construction and exploration of repository.

Only one community accepted the performance of the geological survey, which was successfully completed. We are preparing to discussion with local authorities and residents about construction of repository. Since one potential site is not sufficient, we will start second process of site selection to reach to the end of this year 3-4 potential sites for next steps. MoE is preparing for discussion with local residents and to geological research of these potential sites. All potential sites were selected and recommended to MoE by governmental bodies responsible for managing the property of the State.

Q.No *	Country	Article	Ref. in National Report
	Czech Republic	General	L, 83

Question/ Comment This chapter also specifies the conditions for carrying out actions aimed at elimination of radiation emergency consequences, maintaining of the central register of doses received by category A workers, categorization of radiation workers (categories A and B) and requirements with regard to dosimetric equipment.

Do you register personal dose of category A and B in a central registry?

What was the maximum personal dose of the radiation worker A and B in the last five years?

Answer The central dose register records:

- workers exposed to ionizing radiation qualified to category A and their individual doses received in particular periods of work;
- persons and their individual doses received in case of accidental exposure (Article 16.1 of the Atomic Law Act);
- persons and their individual doses received in an emergency exposure situation (Article 20.1 of the Atomic Law Act).

The maximum sum of doses in the last 5 years is 85 mSv.
The maximum annual dose registered in the last 5 years is 79.28 mSv.

Q.No *	Country France	Article General	Ref. in National Report Section K
-----------	-------------------	--------------------	--------------------------------------

Question/ Comment The European Directive 2013/59/Euratom should be transposed in the regulatory framework of each European member state before February 2018.
Does the transposition of the Directive 2013/59/Euratom represent a challenge for Poland, within the context of the management of spent fuel and radioactive waste?

Answer In the context of spent fuel and radioactive waste management, the implementation of Council Directive 2013/59/Euratom is not a particular challenge for Poland. In Poland, as in other European Union countries, previously were implemented :

- Council Directive 2003/122/Euratom of 22 December 2003 on the control of high-activity sealed radioactive sources and orphan sources,
- Council Directive 2006/117/Euratom of 20 November 2006 on the supervision and control of shipments of radioactive waste and spent fuel,
- Council Directive 2011/70/Euratom of 19 July 2011 establishing a Community framework for the responsible and safe management of spent fuel and radioactive waste.

In comparison with the above mentioned Directives, Directive 2013/59/Euratom does not change anything regarding the management of spent fuel, and in the field of radioactive waste management only minor changes are introduced.

Q.No *	Country Slovakia	Article General	Ref. in National Report Section A/ p. 6
-----------	---------------------	--------------------	--

Question/ Comment Capacity of this repository site will be full in the year 2025. Is the new area for disposal site of this type of radioactive waste already selected?

Answer The existing National Radioactive Waste Repository (NRWR) in Rožan still have the potential and possibility for disposal of institutional radioactive waste. The decision about the closure of NRWR depends from amount of waste we need to dispose of and technological solutions. Due to delay of realization of PPEJ, the additional amount of radioactive waste derived from NPP will not have to be handled before 2030. We can now assume that NRWR will be closed at that time. From the previous selection process we have only one potential site. Since one potential site is not sufficient, therefore we will start second process of site selection to reach to the end of this year 3-4 potential sites for next steps.

Q.No *	Country Slovakia	Article General	Ref. in National Report Annex II/ p. 68
-----------	---------------------	--------------------	--

Question/ Poland intends to include nuclear energy into energy supply mix in the future.
 Comment According to the Polish Nuclear Power Programme, two nuclear power plants are to be built (see Annex II). The first unit is foreseen to be put in operation in 2025.

In the framework of the Programme, is there any plan on how and where to store or deposit the spent nuclear fuel from the proposed NPP?

Answer The Polish Nuclear Power Program is delayed. The first unit is foreseen to go into operation around 2030. Poland has not decided how to handle spent nuclear fuel yet. We investigate different ways and methods and we will make final decision during the process of selection of technology supplier.

Q.No	Country	Article	Ref. in National Report
*	Switzerland	General	A,6 and B, 16

Question/ Radioactive waste of low and medium activity is disposed in the National
 Comment Radioactive Waste Repository (NRWR) in Rózan site, operated also by the ZUOP. The repository - which came into operation in 1961 - is a near surface type repository, located 90 km from Warsaw on the grounds of an ex-military fort built in 1905. According to present expectations and what states in the National Plan of Radioactive Waste and Spent Nuclear Fuel Management, this repository, which is the only one in Poland, is foreseen to be completely filled by 2025. Currently also alpha radioactive waste and small amounts of nuclear material (mainly depleted uranium) is temporarily stored in Rózan.

What kind of process and measures are foreseen to retrieve the alpha radioactive waste and nuclear material before closure of the repository in 2025? What location is foreseen to store or dispose these wastes afterwards?

Answer Before the completion of New Surface Radioactive Waste Repository and obtaining of all of the licenses/permits that are required under existing laws and regulations, long-lived waste (including alpha radioactive and nuclear material) will remain at the site of National Radioactive Waste Repository (NRWR) in Rozan. Prior to the closure of the existing repository, the waste will be retrieved and re-classified according to the existing Polish regulations and then processed and re-packaged. The entire waste retrieval, segregation, characterization, processing and repackaging process will be subject to approval by National Atomic Energy Agency. The waste retrieval process will include four stages:

1. installation of waste retrieval equipment/devices,
2. installation of dosimetry systems,
3. construction of an additional facility for the waste segregation, characterization, processing, and repackaging operations,
4. waste retrieval and – if necessary – waste transfer in shielded containers.

Once segregated, processed, repackaged and categorized, the retrieved short-lived waste will be disposed of at the Rozan NRWR site, long lived waste will be stored in the New Surface Radioactive Waste Repository.

The date of NRWR closure, as stated in the National Plan of Radioactive Waste and Spent Nuclear Fuel Management, will be probably extended due to delays in the implementation of the PPEJ.

Retrieval of waste is inherently connected with the construction and operation of the New Surface Repository. This is due to the fact that the new repository is

needed for the future management of some of the waste currently being stored at the Rozan (e.g. long lived waste).

Q.No *	Country	Article	Ref. in National Report
	France	Article 6	Section E - pages 39-40

Question/ Comment Poland guarantees the access to information for the public through different regulatory or strategic dispositions (Atomic Law Act, 2014-2018 Programm on Communication Strategy for PAA, Act on Access to Information...).
Beside the possibility for each citizen to access to information, to formulate a request or to express its opinion and issue remarks on any planned facility or activity in the course of the Environmental Impact Assessment (EIA) procedure, are there special dispositions dedicated to the involvement of public and local stakeholders in decision-making processes, especially regarding the siting of new nuclear facilities?

Answer The Polish law requires the agreement from the local authorities (Mayor or the Council) who can organize a local referendum seeking the consent for the repository construction. Poland has decided to perform the site selection process at the local level in a fully transparent manner.

Q.No *	Country	Article	Ref. in National Report
	United States of America	Article 6	Section H pg. 58

Question/ Comment On the basis of the updated safety report for final closure of the near surface-type radioactive waste repository, the institutional controls will be established. Please elaborate on the factors that will be considered in designing and establishing institutional controls during operation of the facility.

Answer The key repository operation and closure safety factors to be considered during institutional controls are:

- to ensure adequate protection of employees, residents and of the environment at all stages of repository life cycle;
- to prevent accidents and mitigate the consequences of any potential accidents that may occur.

The long-term monitoring on repository closure will include observations of repository status and the effects thereof on the environment. The focus of the monitoring will be on:

- engineering (physical status of the barriers applied),
- environmental and radiological parameters, as well as on the maintenance of the safeguards. The monitoring plan for the repository and its surrounding area, considering waste profile and repository lifetime, is part of repository closure programme that is to be approved by PAA President.

According to the provisions of Atomic Law (Art. 53a), a repository shall be located, constructed, operated and closed so as to prevent an effective dose rate to the population, from all exposure pathways, that would be in excess of 0.1 mSv per year.

Data registers will be made in order to preserve the knowledge about the repository, its structure, deposited wastes, monitoring systems and measurement data. Data registers will be prepared in paper format (on durable paper) and recorded on electronic media that would enable data transfer to various data storage systems, considering progress in technology.

Register copies will be delivered for eternal storage to the following institutions:

- ZUOP,
- PAA,

- Local authority with jurisdiction over the repository being monitored,
- National Archives.

It is assumed that institutional control will be delivered for a period of time that would reflect control periods applied by other countries. In that situation it is frequently believed that the period of control should not be assumed to be longer than the nominal period. As a general rule, institutional control period is in the range from 100 to 300 years, with 300 years as the high limit.

The period of institutional control will be specified in detail by NRWR operation and closure reports, as updated and approved by PAA.

Q.No *	Country	Article	Ref. in National Report
	United States of America	Article 6	Section L pg. 69

Question/ Comment The U.S. commends Poland on early planning for geological disposal as the nuclear power program is being initiated.

Answer Thank you for your kind comment.

Q.No *	Country	Article	Ref. in National Report
	Czech Republic	Article 7	G, 51

Question/ Comment Also for Article 14, H, 56

What are the specific requirements regarding the design and construction of spent fuel management facilities and RAW management facilities?

Answer The requirements regarding design and construction of RW&SNF management facilities are provided in Atomic Law Act (ALA) and in Regulations: on the radioactive waste and spent nuclear fuel management and on nuclear safety and radiation protection requirements which must be fulfilled by nuclear facility design.

Pursuant to ALA no solutions and technologies shall be applied in the design, construction process, operation and closing of a radioactive waste repository, which have not been tested in practice at radioactive waste repositories or using trials, tests and analyses.

A design of a radioactive waste repository shall, in particular:

- 1) take into account the necessity to ensure radiological protection, physical protection and the necessity to maintain sub criticality during operation and closure of the repository and after its closure;
- 2) take into account the sequence of protective barriers;
- 3) contain solutions, which ensure reliable, stable, easy and safe to manage operation and closing of the radioactive waste repository;
- 4) takes into account the characteristics of the site

More specific requirements regarding to RW&SNF management facilities are specified in Regulation on radioactive waste repositories and spent nuclear fuel and in the Regulation on nuclear safety and radiation protection requirements which must be fulfilled by nuclear facility design. Abovementioned regulations states, among others, that those facilities shall be fire, water and frost resistance with appropriate low absorbability of water. The facilities shall be also equipped with ventilation and fulfill conditions resulting from physical-chemical properties and volume of RW&SNF. Additionally, the Facilities shall be protected against flooding or inundation.

At present, PAA President guideline on storage of RW derived from different

activities is under development. This guideline not only describes how to meet the requirements but also gives deep insight into RW storage issues.

Q.No *	Country Slovakia	Article Article 10	Ref. in National Report Section G/ p. 52
-----------	---------------------	-----------------------	---

Question/ Comment Which areas were chosen for the location and construction of a deep geological repository for spent fuel?

Answer It is too early to talk about DGR localizations. We didn't decide about the type of fuel cycle and the nuclear technology. From the geological point of view we reviewed the geology of the country and defined areas for potential geological repository. We are also participate in initiatives for construction of the regional repository on European (ERDO) and global (IFNEC) level. The information gained from the research conducted so far will be used as a basis for further work. However, since these works were conducted over ten years ago, it will not serve as basis for making any specific decisions. We are currently preparing new projects, which will be based on past data and which will recommend areas for further research.

Q.No *	Country Czech Republic	Article Article 12	Ref. in National Report H, 54
-----------	---------------------------	-----------------------	----------------------------------

Question/ Comment In the piezometers situated within the borders of the repository but close to fence and on the way of identified groundwater direction flow, the measurements observed are ranging up to 2000 Bq/dm³. How much is the tritium investigation level?

Answer The highest tritium concentrations were found in groundwater sampled from a piezometer that is located in the central part of the repository. The concentration is now in the order of 9 000 Bq/l. The values found in that piezometer in 2017 have been the lowest in the history of tritium measurements, i.e. since 1993. In a piezometer located at the fence, on the way of groundwater direction flow, tritium values ranged from 430 to 2970 Bq / dm³ in 2017. It should be noted groundwater flows towards Narew River located 800 m away from the repository in a direction that is opposite to the location of the Rozan City houses. In the vicinity of the repository, tritium concentrations in drinking water do not exceed the limits under Polish regulations for drinking water - 100 Bq/l. At a drinking water intake tritium concentrations in the order of 1 Bq/l were found. Moreover, it should be emphasized that 99,9 % of the local community in the Rozan use only tap water for drinking purposes.

Q.No *	Country Belgium	Article Article 12.1	Ref. in National Report Section H pg 54
-----------	--------------------	-------------------------	--

Question/ Comment Releases of tritium from the Rozan repository and migration of it to the groundwater has been observed. This raises questions about:
- confinement capacity of the repository for radionuclides stored in it and
- confinement capacity from the waste packages itself.

The released radionuclides are from the non-segregated , non-characterized and non-conditioned wastes. What is the rationale for not already having removed these wastes from the repository in view of their characterization and proper (re-)packaging?

Answer The risks to the population and to the environment from tritium release to the groundwater are considered as insignificant. The highest tritium concentrations were found in water sampled from a piezometer that is located in the central part

of the repository. The concentration is now in the order of 9 000 Bq/l. It should be noted groundwater flows towards Narew River located 800 m away from the repository in a direction that is opposite to the location of the Rozan City residential buildings.

In the vicinity of the repository, tritium concentrations in drinking water are on a very low level and do not exceed the limits under Polish regulations for drinking water - 100 Bq/l. At a drinking water intake tritium concentrations in the order of 1 Bq/l were found. Moreover, it should be emphasized that 99,9 % of the local community in the Rozan use only tap water for drinking purposes.

ZUOP has delivered the following preliminary repository closure activities:

1. In 2017, ZUOP started collection of samples from two facilities No. 2 and No. 3 where stored wastes require retrieval, segregation, characterization, processing and repacking before closure. In Facility No. 1, the measurements have been made for several years. To this end, openings have been made in facilities 2 and 3 for the installation of air inlets with filters that are periodically replaced and tested. The tests of air contained in the facilities is intended to determine the radiological conditions thereof and to prepare for opening the facilities in a safe manner to extract wastes that are stored therein. The measurements will be continued in 2018.

In November 2017, ZUOP hosted, in collaboration with the Ministry of Energy, a mission of IAEA experts titled “Experience of radwaste repository closure”. The purpose of the mission was to discuss the experience of other countries in the closure of radioactive waste repositories.

It should be emphasized that the costs of National Plan for Radioactive Waste and Spent Fuel Management regarding the closure are to be covered by a multiyear programme which is still to be established.

Moreover, retrieval of waste, is inherently connected with the construction and commissioning of the New Surface Repository. This is due to the fact that the new repository is needed for the future management of some of the waste currently being stored at the Rózan (e.g. long lived waste).

Considering the above, waste retrieval activities are not commenced.

Q.No	Country	Article	Ref. in National Report
*	Belgium	Article 13	Annex II Pg 68

Question/ Comment What are the main reasons for delay of the PPEJ program and what is the impact of it on timing and resources for

1. Siting, development and construction of a new surface repository
2. Closure of the Rozan facility
3. Enhancing and extending expertise in ZUOP as well as in PAA?

Answer PPEJ is delayed due to internal political reasons (changes in government policy with respect to PPEJ), delay in the expected progress of work compared to PPEJ schedule and partly, as a result of delay in obtaining public acceptance for a new surface repository siting. The delay of the PPEJ has a direct effect only on the dates of commencement and completion of projects that are related to the construction of the New Surface Repository and to the closure of Rozan site, but does not have impact on the decision related to construction and operation new repository. The delay in anticipated start of the nuclear power program does not impact on the capacity building in PAA and ZUOP. ZUOP staff members attend training courses

and events hosted by the Ministry of Energy, IAEA and other providers. PAA also put significant effort in the development of nuclear competences and made progress in increasing its staff in preparation for the introduction of nuclear power program over the recent years. PAA planned strategic activities to improve competence over a period of the next years. PAA is currently conducting two projects related to advance competence development: On-the Job-Training and Advanced Licensing Exercise Project. These projects are carried out in cooperation with foreign regulatory authorities and will be dedicated to radioactive waste management too.

Q.No *	Country Germany	Article Article 13	Ref. in National Report p. 68, Annex II
-----------	--------------------	-----------------------	--

Question/ Comment In Annex II it is mentioned that the delays in anticipated progress in the Polish Nuclear Power Programme (PPEJ) are noticed, therefore the Ministry of Energy is preparing its updating. The choice of the site for a LLW/ILW-SL waste repository as well as its design and construction are among the most important goals of the PPEJ.

Could Poland please provide information about when an update of the PPEJ will be available?

Can the updated PPEJ affect the decisions on the design and construction of a new repository?

Answer PPEJ will be updated in the middle of 2018 and it will not affect the decisions on the design and construction of a new surface repository.

Q.No *	Country Germany	Article Article 13	Ref. in National Report p. 71, Annex II
-----------	--------------------	-----------------------	--

Question/ Comment “According to the estimates made by the Radioactive Waste Management Plant (ZUOP), the NRWR-Rózan will be completely filled as early as about 2025, therefore choice of the site for LLW/ILW-SL waste repository, as well as its design and construction, are one of the most important goals of Polish Nuclear Power Programme and National Plan of Management of Radioactive Waste and Spent Nuclear Fuel. The draft Plan provides following stages for realisation of this task:

1. Finding potential sites Repository - 2013-2017.
2. The choice of location Repository - 2017-2018.”

Could Poland please describe the potential repository sites and the respective site selection process in more detail?

Answer Before receiving the agreement of local community for construction of new repository, we handle the information about potential sites as confidential. In 2013 MoE selected in an open tender procedure an entity tasked with undertaking the analysis necessary for the repository siting process. These works encompassed analysis of the results of the existing studies. Also, the results from geophysics researches obtained for the potential locations were reinterpreted. Based on these analyses optimal potential locations for the radioactive waste storage facility were identified. Further detailed research led to determining a specific site for the low- and medium- radioactive waste repository for which a safety report will be prepared. At present, we are preparing for discussions to find the agreement for construction from the local authorities. Since one potential site is not sufficient, MoE has decided to identify four new potential sites and is preparing for discussion with local communities about the consent for performing, inter alia, the geological survey. PPEJ is delayed and therefore the repository

selection is not under time pressure. Our target is to have 3-4 potential sites before we start final selection.

Q.No *	Country	Article	Ref. in National Report
	Germany	Article 13	p. 73, Annex II

Question/ Comment The report states that the necessity to construct a deep geological repository for spent fuel will arise about 2055-2060 at the earliest (about 30-40 years from commissioning the first nuclear power plant). “By this time, spent nuclear fuel will be stored on-site the NPP or in interim storage facility located in different place.” Could Poland please provide information on whether it already has prepared a storage concept (wet or dry storage)?

Answer The concept of storage (the type) will be chosen after we select the technology. In the Polish conditions the construction of a single, shared storage facility for both power plants may be considered, or, alternatively two storage facilities – one for each power plant. It is still too early to determine whether wet or dry storage will be applied until the final contract with a technology provider would be signed.

Q.No *	Country	Article	Ref. in National Report
	Belarus	Article 20	Section E

Question/ Comment Could you, please, clarify the following:

1. In what way is the graded approach reflected in the distribution of the regulator’s resources in various spheres of regulatory activity?
2. Please explain the strategy to compensate for loss of qualified personnel in the regulator. What are the measures taken by the regulatory body in this respect? Are there relevant documents developed for this purpose?
3. How is the problem of retaining newly recruited specialists in the regulator resolved?
4. What are the main internal procedures and methods used to verify professional competence of the regulator’s specialists?

Answer 1. PAA analyzes its human resources continuously, taking into account the principle of a graded approach. In 2011, the PAA changed its organizational structure in connection with the government's decision to introduce nuclear power in Poland. According to the prepared Human Resources Plan, in the years 2012-2014 about 40 new employees were hired, mostly in Nuclear Safety and Security Department. Currently, in connection with the implementation of the BSS Directive into national framework, it was found that it would be necessary to employ additional staff in Department of Radiation Protection. As it was mentioned in the Report, two category of Nuclear Regulatory Inspectors (NRIs) are introduced in the Atomic Law Act. Present system of training and qualification of NRIs is a tutorial, based on individual program endorsed by PAA President.:

- a) NRI qualified for activities’ inspection (1st stage) - 3 month training in PAA + 6 month training in different entities performing activities, with radiation sources
- b) NRI qualified for facilities’ inspection (2nd stage) - 3 month training in PAA + 9 month training in different entities but at least 6 month in nuclear reactor.

After completion of the practical training, each candidate for NRIs hast to successfully pass qualification examination organized by commission appointed by the PAA President.

2. Due to the adopted strategic objectives to compensate for loss of qualified personnel in the regulator, PAA produce documents:
 - a. Human Resources Management Program at the National Atomic Energy

Agency for 2017 / 2018 / 2019

b. Staffing Plan for the National Atomic Energy Agency 2017-2018

c. PAA Comprehensive Training Program

d. Developed a new innovative IPRZ that enabled the final shape of the training proposals, in particular OJT.

3. To retain new employees, PAA offer basic and fringe benefits packages (including long-term training packages)

4. PAA use multistage recruitment procedures including various recruitment methods, e.g. competence tests, case study, etc.

Q.No	Country	Article	Ref. in National Report
*	Slovakia	Article 20	Section E/ p. 39-40

Question/ Comment The report describes the execution of the Act on Access to Public Information by PAA. This act obliges PAA to provide any public information on demand to the applicant (except for confidential information or personal data).

Could Poland provide the information if there are other cases for exceptions of provision of data e.g. possible threat to the national security or safety of nuclear facilities? If yes, please explain the decision process and the institution responsible for it.

Answer The Atomic Law Act provides for specific exemptions of data disclosure in articles listed below:

Regarding the information disclosed by the nuclear facility operator and regulatory authority:

Article 35a. Par. 6.

Information on physical protection, nuclear material safeguards and classified information within the meaning of regulations on combating unfair competition shall not be disclosed.

Regarding the information disclosed by the regulatory authority:

Article 68c.

[...]. Information on physical protection, nuclear material safeguards and classified information within the meaning of regulations on combating unfair competition shall not be disclosed.

Decision process:

It is discretionary for the institution processing the public information request, to decide as to whether given information meets the exemption criteria. It is obligatory to decline abovementioned requests by an administrative decision.

Q.No	Country	Article	Ref. in National Report
*	Czech Republic	Article 21.2	F, 41

Question/ Comment The text does not cover the response to Para 2 of Article 2 - responsibility over the spent fuel or over the radioactive waste in case that no licensee is responsible for them (e.g. orphan sources).

Could you provide the clarification?

Answer The case where the licensee carrying the responsibility over the spent nuclear fuel does not exist as in Poland there is only one research reactor which is operated by the National Centre for Nuclear Research. Therefore the National Centre for Nuclear Research is responsible for the management of spent nuclear fuel from operation of research reactor.

In the case of radioactive waste or other radioactive substances of unknown origin which came from illegal trade or from the activities of an organizational entity that became insolvent upon the termination of its operation or from the environment contamination by unknown perpetrator, Radioactive Waste Management Plant has to perform collection, transport, processing, storage or disposal of such radioactive waste or substances and the costs of such services shall be covered from the national budget.

In case of a high activity source a license for a conducting activities with such a source shall be issued provided that the organizational entity applying for the license also concludes:

- 1) an agreement with the manufacturer or supplier of a high activity source under which the manufacturer or supplier undertakes to collect the source after the source-related activities have been terminated, and to ensure subsequent management of the source, and which regulates the terms of financial guaranty to cover the cost of source collection and management, or
- 2) an agreement with a state-owned public utility referred to in Article 114, Section 1 of Atomic Law Act, under which this company undertakes to collect the source after the source-related activities have been terminated and to ensure subsequent management of the source, and which regulates the terms of financial security to cover the cost of source collection and management.

Therefore, in the absence of the licensee, the responsibility for the management of the high activity source is borne by the other party to the above-mentioned agreements.

In the case of orphan sources, radioactive substance which came from illegal trade or of unknown origin, from the activities of an organizational entity that became insolvent upon the termination of its operation, or from the environment contamination by unknown perpetrator, the responsibility for management of such materials lies with the State and the costs of services involved are covered from the national budget (Article 119a of the Atomic Law Act).

Q.No *	Country Germany	Article Article 22	Ref. in National Report p. 54
-----------	--------------------	-----------------------	----------------------------------

Question/ Tritium releases from the Rózan repository:

Comment In the National Report it is stated that tritium releases from the Rózan repository are currently limited to the area of the repository. Are there any precautionary measures taken or planned to prevent a release of tritium from the site?

Answer The risks to the population and to the environment from tritium release to the groundwater are considered as insignificant. The closure of Rozan repository is to be preceded by activities that are intended to prevent tritium releases from the repository. Repository closure will involve retrieval of wastes from facilities no. 1, 2 and 3 where non-processed and non-segregated wastes, a potential tritium release source, are being stored. Upon segregation, characterization, processing, repackaging and categorization, the retrieved short-lived waste will be disposed of at NRWR Rozan and the retrieved long lived waste will be stored in the New Surface Radioactive Waste Repository.

Q.No *	Country Switzerland	Article Article 22	Ref. in National Report F, 42
-----------	------------------------	-----------------------	----------------------------------

Question/ Multiannual Plan: What is the envisioned time frame for the release of the

Comment Multiannual Plan, for the closure of the repository in Rózan as well as for the construction of a new radioactive waste repository?

Answer We can now assume that the new repository should be open around 2030. In 2019 we intend to prepare an update of the Governmental Program ‘National Program of Management of Radioactive Waste and Spent Nuclear Fuel in Poland’ with a new time frame.

Q.No *	Country Czech Republic	Article Article 24	Ref. in National Report F, 44
-----------	---------------------------	-----------------------	----------------------------------

Question/ Comment Regular monitoring of radiation was performed with use TLD dosimeters. In the last 3 years the average of individual dose equivalents registered were below detection value (0,4 mSv).

Is the detection value of 0,4 mSv for TLD too high?

Answer The report erroneously stated a detection limit of 0.4 mSv. In fact, the detection limit of TLD dosimeters has always been 0.1 mSv. TLD dosimeters are replaced and read on a quarterly basis.

Q.No *	Country Czech Republic	Article Article 25	Ref. in National Report F, 45
-----------	---------------------------	-----------------------	----------------------------------

Question/ Comment Explain the term "appropriate frequency"? How often emergency plans are being tested?

Answer The minimum testing frequency is once every 3 years at national and regional level and once every 2 years at facility level (once every 3 years for practices concerning X-ray devices), according to present legal requirements (Art. 96.1 of Atomic Law, regulation of the Council of Ministers on the national emergency preparedness plan and the patterns of facility and regional emergency preparedness plans).

Q.No *	Country Switzerland	Article Article 25	Ref. in National Report 45
-----------	------------------------	-----------------------	-------------------------------

Question/ Comment It is mentioned that there are several exercises on different levels with different frequencies. Are the exercises on the facility level supervised by the regulatory body and if so, how is such a supervision organized? Does the licensee prepare the exercise scenario or is it determined by the regulatory body?

Answer The minimum testing frequency is once every 3 years at national and regional level and once every 2 years at facility level (once every 3 years for practices concerning X-ray devices), according to present legal requirements (Art. 96.1 of Atomic Law, regulation of the Council of Ministers on the national emergency preparedness plan and the patterns of facility and regional emergency preparedness plans).

Scenarios and conclusions of the exercises on the facility level are verified by the regulatory body during the regulatory inspections.

Scenarios of the exercise are developed by the licensee.

Representatives of the regulatory body periodically participate as the observers in the exercises organized by the operator of the research reactor MARIA.

Q.No *	Country Switzerland	Article Article 26	Ref. in National Report D
-----------	------------------------	-----------------------	------------------------------

Question/ Comment Concerning Poland Atomic Law: Are there further approvals foreseen under the decommissioning license for particular decommissioning work? (by PAA?)

Answer No. Decommissioning plan shall cover all aspects related to decommissioning process, hence any further approvals of PAA are not required for particular decommissioning work. However, in case of cessation of decommissioning work

at least for 5 years, to commence next phase of decommissioning it is required to notify PAA' President and submit updated decommissioning plan for approval.

Q.No *	Country Switzerland	Article Article 26	Ref. in National Report D
-----------	------------------------	-----------------------	------------------------------

Question/
Comment Do the EWA RR building need a revised license for the storage of the spent fuel?

Answer Ewa RR does not need a revised license for storage of the spent nuclear fuel, because all the fuel was repatriated to the Russian Federation within the GTRI Program.

Q.No *	Country Switzerland	Article Article 27	Ref. in National Report I, 59-60
-----------	------------------------	-----------------------	-------------------------------------

Question/
Comment How is the European council directive 2006/117/EURATOM implemented into national law? If not, how does Poland meet all the requirements of Art. 27?

Answer The Council Directive 2006/117/EURATOM of 20 November 2006 on the supervision and control of shipments of radioactive waste and spent fuel entered into Polish provisions of law in 2008. The Directive was implemented to the Polish legal framework as:

- a. amendment of the Atomic Law Act;
- b. Regulation of the Council of Ministers of 21 October 2008 on granting an authorization and consent to import onto the territory of the Republic of Poland, export from the territory of the Republic of Poland and transit through that territory of radioactive waste and spent nuclear fuel.

Poland forwarded to the European Commission its 2nd report on the implementation of the Directive in December last year.

Q.No *	Country Belarus	Article Article 28	Ref. in National Report Section J
-----------	--------------------	-----------------------	--------------------------------------

Question/
Comment Does the country have a practice of life extension of sealed radionuclide sources after the end of their assigned lifespan?

Answer According to art. 44 of the Atomic Law Act devices containing radioactive sources before being put into operation are subject to control from the radiological protection viewpoint.

Such control is carried out by an organizational unit, which possesses a licence for the installation or trade in such devices.

Organizational units authorized to trade in and install devices containing radioactive sources may, within the scope of such an authorization (license), conduct activities related to the repeated installation and trading of such devices, and thus extend the period of operation of sealed radioactive sources.

Q.No *	Country United States of America	Article Article 28	Ref. in National Report Section J pg. 61
-----------	-------------------------------------	-----------------------	---

Question/
Comment Under the regulatory framework, please describe if disused sealed sources are considered or regulated differently from radioactive sources in active use.

Answer From the safety point of view, both disused sealed radioactive sources and sealed radioactive sources in active use are regulated in the same way.

Q.No *	Country Belarus	Article Article 32	Ref. in National Report Section B, Annex II
-----------	--------------------	-----------------------	--

Question/
Comment The national report states that October 16, 2015, the Council of Ministers of Poland approved the National Plan for the Management of Radioactive Waste and

Spent Nuclear Fuel.

According to the plan, by 2017, it is necessary to identify potential sites for a radioactive waste repository. In 2017–2018, it is planned to select a site for a radioactive waste repository. It is planned that in 2025 the site will be operating. Would you, please, provide information on the status of the implementation of the National Plan provisions? What are the potential sites for a radioactive waste repository under consideration? Has the final site been selected?

Answer Before receiving the agreement of local community for construction of new repository, we handle the information about potential localization as confidential. In 2013 MoE selected in an open tender procedure an entity tasked with undertaking the analysis necessary for the repository siting process. These works encompassed analysis of the results of the existing studies. Also, the geophysical material obtained for the potential locations, now deemed archival, was reinterpreted. Based on these analyses potential sites for the radioactive waste storage facility were identified. Further detailed research led to determining a specific site for the low- and medium- radioactive waste storage facility. We are currently preparing for discussions to find the agreement for construction from the local authorities.

Since one potential site is not sufficient, MoE has decided to identify four new potential sites and is preparing for discussion with local communities. seeking consent for performing, inter alia, the geological survey. PPEJ is delayed and therefore the repository selection is not under time pressure. Our target is to have 3-4 potential sites before we start final selection .

Q.No	Country	Article	Ref. in National Report
*	Belarus	Article 32	Section B, Annex II

Question/ Comment The national report states that by 2025 the only radioactive waste repository in Poland “Rozan” will have been completely filled and from then on all low- and medium-level radioactive waste will be sent to the planned new radioactive waste repository.

The commissioning of the radioactive waste repository is planned in 2025. Given the tight deadlines for the project implementation, what measures are planned for placing low- and medium-level radioactive waste in case of possible delays in putting a new repository into operation?

Answer The existing National Radioactive Waste Repository (NRWR) in Rozan still have the potential and possibility for dispose of institutional radioactive waste. The decision about the closure of NRWR depends from amount of waste we need to dispose of and technological solutions. Due to delay of realization of PPEJ, the additional amount of radioactive waste derived from NPP will not have to be handled before 2030. We can now assume that NRWR will be closed at that time.

Q.No	Country	Article	Ref. in National Report
*	Belarus	Article 32	Section B, Annex II

Question/ Comment The national report states that the Ministry of Energy was working to amend the Polish Nuclear Power Programme (PPEJ) in order to update its deadlines. Changes in the PPEJ were to be approved by the Government by the end of 2017.

In this regard, please, inform us whether changes have been made to the PPEJ. If so, please, inform us about the updated deadlines for the implementation of the nuclear power programme?

Answer PPEJ will be updated in the middle of 2018. The decision in this respect will be publicly announced and a new updated schedule will be available.

Q.No *	Country Czech Republic	Article Article 32	Ref. in National Report B, 17
-----------	---------------------------	-----------------------	----------------------------------

Question/ Para 1 (v)

Comment How were derived the limits for different RAW categories and how they are used in practice?

Are there any plans to implement a new RAW classification scheme proposed in the IAEA GSG-1 in Poland?

Answer The limits of the activity concentration and activity of radioactive waste for individual categories of waste have been determined taking into account:

- protection of people and the environment in case of the discharge into the environment waste containing radioactive isotopes;
- Polish Regulatory Body (PAA) experience from the use (in the past) of radioactive waste classification based on ALI (Annual limit on intake); (ALI is the derived limit for the amount of radioactive material taken into the body of an adult person by inhalation or ingestion in a year);
- the classification of radioactive waste used in other countries (mainly European countries and the USA);
- outcomes of the works of the EC working group dealing with the classification of radioactive waste;
- the Commission Recommendation of 15 September 1999 on a classification system for solid radioactive waste;
- IAEA publications in the field of radioactive waste; results of the works of the IAEA committees, in particular WASSC.

Among others the practical application of the categorization of radioactive waste consists in:

- separation and storage of transient radioactive waste by the time it became municipal waste;
- determining which radioactive waste can be disposed of in a near-surface repository (short life, low and intermediate level radioactive waste), and which in a deep geological repository (long-lived, high level radioactive waste);
- determining of storage conditions for individual categories of radioactive waste;
- determining which waste can be released into the environment (as non-radioactive waste) - this is very important for hospitals using, for example, Iodine therapies.

A it is mentioned in The National Plan for Radioactive Waste and Spent Nuclear Fuel Management Poland will consider the implementation of a new RAW classification scheme proposed by IAEA by adding a category of very low level waste. This is mainly due to the fact that planned nuclear power plant will generate huge amount of very low level waste during the operation and decommissioning phase as well.

Q.No *	Country France	Article Article 32	Ref. in National Report Section B - page 16
-----------	-------------------	-----------------------	--

Question/ Regarding the National Radioactive Waste Repository (NRWR) in Rózan, the
Comment report from Poland mentions (p. 17) that since 1968, "long-lived waste is placed in facility no 1 with the intention of retrieval" and that a new license has been granted by the President of National Atomic Energy Agency (PAA) "for storage of low and intermediate level waste (short and long-lived)" in NRWR until 2025. Could Poland confirm that this new license does not include any disposal of long-lived radioactive waste in Rózan?

The report also mentions in the Matrix a project of "New Near Surface Repository/Deep Geological Repository" for the disposal of "Nuclear Fuel Cycle Waste".

Could Poland specify in which type of new disposal facility (i.e., surface, deep geological or other such as intermediate depth disposal) the low and intermediate long lived radioactive waste will be managed? Does this management include both the new produced long lived radioactive waste and the retrieved long lived radioactive waste from the Rózan NRWR after its closure?

Answer The license granted to NRWR in 2016 allows only to storage of low and intermediate level waste (short and long lived). Disposal of long lived waste is prohibited. According to Atomic Law Act, long lived radioactive waste can be disposed of only in deep geological repository (DGR). Until the DGR is constructed, long lived waste will be stored either in Swierk center or in currently operated NRWR. In case of closure of NRWR, all long lived radioactive waste will be retrieved and transferred to the new surface repository for further storage, till DGR is constructed and operated. Presented approach is applied to new generated as well as stored so far long lived radioactive waste.

Q.No *	Country	Article	Ref. in National Report
	France	Article 32	Section B - page 16-17

Question/ Comment To the question (referring to the 5th report of Poland) whether there were very low level radioactive waste in the Polish waste categorization, Poland responds that waste with radioactive isotope concentration below the values that define of low level waste, could be considered as non radioactive waste.

Could Poland specify if, as a consequence, the values of Activity Concentration listed in the annex III tables, could be considered as clearance levels and / or levels to take into account for exemption of regulatory control? Could Poland indicate how this very low level radioactive waste is managed (e.g. is it recycled? is it sent to non-radioactive waste (conventional waste) disposal facilities?

Answer The values of activity concentrations given in the annex III tables are used for calculation whether waste is radioactive or non-radioactive. In case of waste containing different radionuclides if the sum of the ratio of activity concentration to the value listed in the table for each specific radionuclide is below 1 that means waste is classified as non-radioactive. For waste containing a single radioisotope waste is considered as non-radioactive if activity concentration does not exceed the value given in the table. In such case waste can be disposed in a conventional repository.

Q.No *	Country	Article	Ref. in National Report
	France	Article 32	Section B - page 17

Question/ Comment The report from Poland indicates that the disused sealed sources form an additional category of waste and that their categorization is also based on the Activity Concentration values listed in the Annex III tables.

Could Poland specify if, for sources whose activity is below the value that define low level sources, there could be an exemption of regulatory control? Is there existing a specific disposal for such type of non radioactive waste?

Answer In practice, the majority of disused sealed radioactive sources, irrespective of their activity, is transferred to the state-owned public utility referred to in Article 114, Section 1 of Atomic Law Act, for disposal.

Occasionally, a criterion based on activity concentration is used to qualify a sealed radioactive source into radioactive waste. In this case, if the activity of the sealed

radioactive source, before such source is classified as radioactive waste, decreased below the value specified for the given isotope in Annex 1 to the Regulation of Council of Ministers on radioactive waste and spent nuclear fuel, the activity concentration of the radioactive substance contained in this source is taking into account and such waste is classified as low, medium and possibly even high-level radioactive waste.

Q.No *	Country Portugal	Article Article 32	Ref. in National Report D, 26
-----------	---------------------	-----------------------	----------------------------------

Question/ Comment Could you please provide some information on the methods used for management of long-lived radioactive waste that may include other risk characteristics such as biological or chemical (e.g. biological materials containing C-14, resulting from research activities)?

Answer ZUOP does not hold any wastes that may involve biological or chemical risks. Should any such potential wastes occur, ZUOP would request confirmation from the waste producer so as to the absence of biological and chemical risks. ZUOP currently stores waste containing C-14 in facility at Swierk until it finds a further way to manage with them, which will be approved by regulatory body.

Q.No *	Country Switzerland	Article Article 32	Ref. in National Report B, 16
-----------	------------------------	-----------------------	----------------------------------

Question/ Comment In order to continue radioactive waste storage and disposal in Rózan NRWR until 2025, its enlargement has been made by an adaptation of the southern part of the fort moat and construction of the facility no 8a. A license for storage of low and intermediate level waste (short and long-lived) was granted by the PAA President by 2016 upon reviewing and assessment of license application submitted by ZUOP.

Has the enlargement of the repository only been licensed for storage activities or also for disposal activities?

Please describe the safety barriers of the repository.

Answer In 2016, only license for storage of low and intermediate level waste (short and long lived) in facility no 8a has been granted to the ZUOP. Rózan NRWR multi-barrier system consists of sequence of mutually complementary natural and engineering barriers. Natural barrier is formed by geological structures in the area where waste repository is located. The repository is located on a near surface layer of till (relatively impervious glacial clay. Additionally, the site is characterized by favorable hydrological conditions - low ground water table and great distance from river. Engineering barriers consist of the following types of preventing measures:

- waste form (physical-chemical form of radioactive substances contained in wastes along with inactive material they are bound to). Packaging materials and encapsulants include cement, polymeric materials and bitumen. These are designed to stabilize the waste physically and chemically and are therefore relatively chemically inert and insoluble.
- filling material (fills void space between containers at the storage site , e.g., concrete and bentonite),
- package (a single container or multi-pack meeting the transport requirements and requirements for a given repository type). standard package sizes are used for packaging waste at the source facilities prior to transport and emplacement at Rozan:
- Galvanized steel drums 50 dm³

- Galvanised steel drums 200 dm³
- constructions (e.g., concreted ditches or concrete chambers for waste reposition) sealing (isolating layers at the edge of a natural barrier).

Q.No *	Country Switzerland	Article Article 32	Ref. in National Report B, 9 and K, 62
-----------	------------------------	-----------------------	---

Question/ Comment Has the site selection process and the siting criteria for the new near surface repository been defined, since the selection will be take place in 2018?

Answer Siting criteria has been established in Atomic Law Act (ALA) and secondary Regulation on radioactive waste and spent nuclear fuel management. According to abovementioned legal acts, set of requirements must be fulfilled to confirm suitability of chosen site for accommodation a near surface repository.

In course of siting process following factors shall be investigated: natural conditions (seismic, regional hydrology, geotechnical and geo-hydrological conditions etc.), social conditions (demography, local economy, spatial development), external human induced hazard etc.

The Atomic Law also includes the list of exclusion criteria:

- seismic or tectonic unstable area
- in the area with risk of the occurrence of geological phenomena which may impact on the subsoil stability such as strong suffosion or karst formation processes, rock falls, landslides, subsidence, liquefaction of soils or other geodynamic phenomenas
- in the area with risk of the occurrence of flood or inundation
- in densely populated area
- in former or operating mine
- below the water level of rivers or lakes in the vicinity, etc.

Q.No *	Country United States of America	Article Article 32	Ref. in National Report Section L pg. 94
-----------	-------------------------------------	-----------------------	---

Question/ Comment Please describe how Poland will finance long term liabilities.

Answer The construction of the new low- and intermediate-level waste repository will be financed from the State Budget.
After the NPP commissioning all activities will be financed by the Fund for Disposal of Radioactive Waste and Spent Nuclear Fuel and the Fund for Decommissioning of the Nuclear Power Facility. Funds accumulated in these Funds will originate from quarterly payments to be made by the NPP operator as well as revenues resulting from investments of the fund resources permitted by the law. The financial resources accumulated in both funds will be excluded from the operator's bankruptcy estate. These funds will be also exempt from the enforcement procedure. The Fund for Decommissioning of the Nuclear Power Facility will remain under the responsibility of the NPP operator, however, any payment from the fund will only be possible after obtaining a positive opinion from the institution acting as the fund supervisor.

Q.No *	Country Belgium	Article Article 32.2.4	Ref. in National Report Section B Pg 14
-----------	--------------------	---------------------------	--

Question/ Comment Although clearance is used, an approved clearance methodology document does not exist. What (generic?) procedures are used and who is in charge of approval of them?

Answer We afraid that it is difficult to agree with the statement that in Poland „ an approved clearance methodology document does not exist”. To some extend the application of the clearance principle was included in the case of radioactive waste. The Atomic Law Act defines the term radioactive waste as “solid, liquid or gaseous materials containing radioactive substances or contaminated by such substances, further use of which is pointless or impossible, assigned to waste categories referred to in Article 47 including nuclear spent fuel intended for disposal”

See also Section B, page 16 of the report from Poland.

The regulation of Council of Ministers on radioactive waste and spent nuclear fuel sets limits for the activity concentration for different radioactive waste categories taking into account of course, activity concentration below which radioactive waste become conventional waste. In this case, the clearance level was defined in generally applicable provisions (see the above-mentioned regulation of the Council of Ministers).

Another example of the use of the clearance principle is Art. 52.1 of the Atomic Law: “ Liquid or gaseous radioactive waste generated as a result of activities referred to in Article 4, Section 1, may be discharged into the environment provided that its radioactive concentration in the environment may be disregarded from the radiological protection point of view. The method for waste discharge and its permissible activity shall be specified in the license.”

In this case the clearance level is set by the Polish Regulatory Body (PAA) individually for individual users (case by case). An additional example of the clearance principle is in §5 above-mentioned Regulation of the Council of Ministers:

“1) Earth or rock masses, removed in relation to mineral extraction from deposits,
2) mining waste,
3) uncontaminated soil and others untreated materials (in natural condition?), excavated during the construction works,
- containing natural radioactive isotopes, shall not be qualified into the low-level radioactive waste category if the sum of the maximal concentration ratios of these isotopes, resulting from inhomogeneity of the waste, to the values established in Annex 1 to this Regulation does not exceed 10 for a representative 1 kg waste sample.”

It can be stated that in Poland, clearance methodology is specified in the generally applicable law (the Atomic Law Act, Regulations) or in the license granted by the Polish Regulatory Body (PAA).

Q.No	Country	Article	Ref. in National Report
*	Belgium	Article 32.2.4	Section B Pg 16

Question/ Comment Is a periodic inspection program available for the wastes stored in the storage facilities in Swierck, especially for the old wastes stored in 19 or 19A? Is such inspection program discussed with and approved by PAA?

Answer Periodic Inspection Program is prepared according to Integrated Management System and is internal document of ZUOP (not discussed with PAA). In accordance with the Program, Disused radioactive sources located in Facility No. 19 are inspected once a year and radon measurements are made twice a year.

Moreover, environmental measurements made every three months include the following:

- does rate measurements inside Facility No. 19
- measurements in the vicinity of Facilities 19 and 19A.
- groundwater tests in the vicinity of Facilities 19 and 19 A. The following are monitored on a permanent basis:
- water level in Facility 19A storage tanks, tank tightness and water tests for conductivity and pH,
- measurements of air from within Facility 19A.

Moreover, PAA permanently supervises operations of Facilities No. 19 and 19A. ZUOP delivers to PAA quarterly reports on compliance with operating conditions under licenses held by ZUOP.

Q.No *	Country	Article	Ref. in National Report
	Belgium	Article 32.2.4	Section B pg 14

Question/ Comment ZUOP is operator for the waste treatment facilities as well as for the repository and for the development of WAC. Is a recognized independent organism in charge of the verification of the characterization processes and treatment processes as well as of the conformity of waste/package characteristics with the WAC?

Answer According to the recommendations by the ARTEMIS Mission, ZUOP is intending to establish an internal independent unit that would be responsible for the verification of radioactive waste processing and categorization processes, as well as for the descriptions of waste and packaging conformity with WAC standards. Currently, efforts are underway to upgrade the ZUOP's Integrated Management System so as to firm up the tasks of that independent organism in order to ensure compliance with Artemis recommendations.

Q.No *	Country	Article	Ref. in National Report
	Belgium	Article 32.2.5	Section B Pg 16

Question/ Comment Derivation of WAC: is this done following an approved methodology. Is this methodology verified and approved by the PAA and in how far is the regulatory body involved in the development/approval of the WAC? Existing WAC are rather simplified and derived from the Rozan safety case for which higher dose limits were used. In how far a revision of the WAC (more stringent) from an updated safety case might have an impact on the inventory of the wastes already accepted for the repository?

Answer Currently, ZUOP applies WAC, as stipulated by existing regulations. ZUOP is now at the stage of developing assumptions, as required for the establishing of a methodology that would determine specific WAC for the existing Rozan waste repository.

Officially, WAC are approved by PAA as part of the assessment of the license application, but ZUOP is planning for a close collaboration with PAA, in the WAC methodology development process.

The Rozan repository, despite the fact that it does not have WAC, meets the legal requirements for population doses. It was confirmed in Phare Project Report - Task 9 "Post Closure Safety Report": "Surface-type repository sited, built, operated and closed so as to prevent an effective dose rate to the population, from all exposure pathways, that would be in excess of 0.1 mSv per year over a period of 500 years", that has been and still is consistent with existing Polish laws and regulations.

According to the provisions of Atomic Law (Art. 53a), a repository shall be sited,

constructed, operated and closed so as to prevent an effective dose rate to the population, from all exposure pathways, that would be in excess of 0.1 mSv per year.

The WAC revision will have no impact on the inventory of waste currently disposed of in Rozan repository. However, it will be necessary to retrieve historical waste that was deposited in the disposal when there were no legal provisions.