

## MONTENEGRO

MINISTRY OF SUSTAINABLE DEVELOPMENT AND TOURISM

## ANSWERS TO QUESTIONS OF PARTIES TO

the Joint Convention to the Third National Report on the implementation of obligations under the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management

Podgorica, April 2018

	State Republic of Croatia	Planned activities	Ref. in the National R Section K, page 52	
Comment	of citizens, through organization the importance of safe radioact	of the governmental organisations is responsible for raising awareness through organization of round tables, workshops and education about ance of safe radioactive waste management?		
Answer	The national regulatory body f ionising radiation in Montenegr Sustainable Development and Agency, Administration for Ins division of responsibilities is pro Operation of State Administra 44/12, 61/12, 20/13, 17/14, 6/ 68/17, 87/17), adopted by for cooperation is regulated by the Republic of Montenegro 38/0 Activities of all four compete Decree on Organisation and M laws on the protection from supervision, transport of hazard them is responsible to involve implementation of activities awareness thereof.	to is composed of re- d Tourism, Nature pection Affairs and ovided in the Decree ation (Official Gazet (15, 80/15, 35/16, 4) the Government of Law on State Admi (3, Official Gazette nt institutions are of Method of Operation ionising radiation a dous matters and pro- the public, within the	epresentatives of the Mini and Environmental Prot the Ministry of Interior. A on Organisation and Met te of Montenegro 5/12, 11/16, 61/16, 73/16, 3/17, f Montenegro. Interinstitu- nistration (Official Gazette of Montenegro 22/08, 4 divided in accordance wi of State Administration, a and radiation safety, insp otection and rescue, and e eir fields of competences,	stry of tection clear hod of 25/12, 19/17, utional of the 42/11). ith the and by bection each of in the
	Namely, public participation in and, thus, the matters concern making, adoption of strategic of is governed by the Decree of debate in preparing laws (Offic the manner of and the prop administration bodies and no Montenegro 7/12).	ing safe manageme locuments and draft n the procedure ar ial Gazette of Monte edure for establish	nt of radioactive waste, de ing of regulations in Monto ad manner of conducting enegro 12/12) and the Dec ing cooperation between	cision- enegro public cree on state
	Furthermore, the standards fo on Free Access to Informatic Convention on Access to Infor Access to Justice in Envi Montenegro is a full member or of drafting of regulations the p view to drafting of the best Debates and forums, individual public debate.	on (Official Gazette rmation, Public Part ironmental Matters f. It is important to e proposer organises possible regulation	of Montenegro 44/12) a icipation in Decision-Makin (Aarhus Convention), mphasize that during the p a forty-day public debate of the highest quality po	nd the ng and which rocess with a ossible.
	Also, forums, public debates and round tables, both informative and educational, are organised by each of the above institutions which compose the regulatory body, within their competences and as needed, in accordance with the said legal framework.			
	It should be emphasized that educational events aimed at r radioactive waste management that manages radioactive was always mandatory.	aising citizens' awa nt, the presence of	reness of the importance representatives of the ins	of safe stitution

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Answer	<ul> <li>level radioactive waste;</li> <li>all known disused radio conditioned (except two)</li> <li>Storage is performed in which are intended for st</li> <li>There is a set of control facility and of stored radio independent programmed storage. One is perform radioactive waste storage and the latter is perform requirements and offers perform this task;</li> <li>The radioactive waste st</li> </ul>	e radioactive waste d radioactive waste onal for at least 50 ye volume of the waste methods of handling e existing storage, disposal with dec ts includes a table d sealed radioaction e volumes of expect ing phenomena, it raste storage and kaging of radioactive red: ontenegro by its str pactive sources has caesium sources) and n specifically design torage and meet the ol procedures which dioactive material. The es of monitoring of med by the holder ge, Centre for Ecoto hed by an independ the most advantag torage and all install	e storage) and based on the in Montenegro, it is estimated ears. After expiry of this period, e at that time, a decision will be radioactive waste. This may be building of a new storage or commissioning of the existing e with types and volumes of ve sources that exist in the ted radioactive waste. was considered initially during selection of technologies and e waste. ructure is low and intermediate ve been removed, dismantled, nd packed; ned stainless steel containers
4.	Country United States of America	Article Article 16	Ref. in the National Report Section E, 6.1.3 page 23
Question/ Comment	The report states that a proceed of the report states that a proceed of the radioactive o	edure has been de waste storage facil	eveloped and approved for the ity. Please summarize the key scribe the frequency at which
Answer	Key elements of regular inspect	tion control of radioa	ctive waste storage are:
1	1. Control of identification of	data on:	
	- The name and o is the operator,	other relevant inform	nation about the institution which

2.	<ul> <li>Safety control which includes:</li> <li>Control of the data on radioactive waste inventory which is in the storage and the manner of its monitoring;</li> <li>Control of accessibility and safety of the inventory database;</li> <li>Control of the source and waste monitoring system, from identification through to storage itself;</li> <li>Control of the storage design (description is provided for all variations and changes compared to the ones approved by the regulatory body during the licensing process, i.e. whether safety assessment was conducted after the changes were made, whether physical protection is ensured, whether the fire detection system is in working order, who manages physical protection of the storage, what is the video surveillance system for the storage and the surrounding of the storage, breaking in system, automatic ramp for the storage access control, control of keys, a key in case of accidents, etc.).</li> </ul>
3.	Control of monitoring data for radioactivity of the surrounding of the storage;
4.	A system for controlling safety inside the storage (waste acceptance criteria, safety assessment by a qualified radiation protection expert, ventilation control, control of filters, control of air humidity, control of potentially contaminated water, control of precipitation discharge - drainage, control of water from handling area, control of the system for electrical equipment security, control of fire warning signs);
5.	Control of the Protection Programme (whether the programme is in place, control of measuring equipment, control of personal dosimetry equipment, control of personal protection equipment, control of the storage entry and exit system, control of the warning system, identification of packages and space);
6.	Control of monitoring of occupationally exposed persons;
7.	Safety activities (preparation of waste in the storage, safety actions related to the activities of the person responsible for radiation protection, data on dose limits, marking of controlled areas, notifications such as radiation warnings);
8.	Local rules and monitoring (whether rules exist in written form, whether workers are familiar with procedures, control of procedures);
9.	Data on management (whether there is communication with the fire department and security, whether management is providing adequate staffing, whether management ensures adequate resources for training of the staff, whether management ensures adequate equipment, etc.);
10	. Control of the area (control of visitors, control of temporary workers (external employees), control of the population);
11	. Discharge of material from the storage (in accordance with a special programme);

	12. Interim storage (in accordance with a special programme);			
	13. Accidents (in accordance with a special programme);			
	14. Records.			
	Inspection of the radioactive waste storage is performed twice a year.			
5.	Country Federative Republic of Brazil		Ref. in the National Report Section E, page 21	
Comment	The report states that Montenegro has small quantities of stored disused sealed radioactive sources and of radioactive waste; and even so the country is provided with a central facility for the storage of radioactive waste. Despite of it, according the report: "provisions of the new Draft Law on Planning and Construction were proposed so as to redefine the facilities of state interest among which are also the facilities for storage and disposal of radioactive waste. For the first time, regulations in the area of planning and construction of buildings include the term 'facility for radioactive waste disposal'". Is Montenegro already planning to construct a final disposal facility? Is there any schedule being discussed and/or proposed to the site selection and construction of the final disposal facility in the country?			
Answer				
	The Ministry of Sustainable Development and Tourism will coordinate activitie aimed at the development of this National Analysis and establish a team/workin body composed of representatives of relevant Montenegrin institutions, who wi initiate preparatory activities for its development.			
	International Atomic Energy Ag of Radioactive Sources", used "Development of the analysis o sources and radioactive waste well. Under this interregional p preparations regarding drafting disused sealed radioactive sou International Atomic Energy A	gency INT9182 "Su d the opportunity to on further manageme e", which includes of project, Montenegro of the National An urces and radioactiv Agency (IAEA) by negro, but other cou	the interregional project of the staining Cradle-to-Grave Control o contribute to the pilot project ent of disused sealed radioactive disposal of radioactive waste as o used the opportunity to initiate halysis of further management of we waste in cooperation with the developing a special document intries participating in the project,	

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	Therefore, although the central storage for radioactive waste management in Montenegro is new and became operational on 13 June 2012, Montenegro is preparing the basis and documents for decommissioning of the storage for radioactive waste management. Namely, the Ministry of Sustainable Development and Tourism has initiated activities aimed at drafting of detailed plans for decommissioning of the storage (central storage) and the temporary storage (remains of airplane engines) and, in that respect, asked for expert advisory support from IAEA in the form of an expert mission which took place in the period 6-10 November 2017 under this regional project. These activities are extremely important for planning of funds and defining of legal norms within the new Law on lonising Radiation Protection, Radiation and Nuclear Safety and Security, which is in preparation. The mission was dedicated to advice for drafting of accommissioning and legal provisions for decommissioning and decommissioning costs will be prepared in line with the requirements of IAEA standard for decommissioning of facilities, provisions of Directives of the Council of Europe 2013/59/EURATOM, 2011/70/EURATOM, Commission Recommendation 2006/851/EURATOM of 24 October 2006 on the management of financial resources for the decommissioning of nuclear installations, spent fuel and radioactive waste, etc.		
6.	CountryArticleRef. in the National ReportFrench RepublicArticle 18Section E, page 24		
Question/ Comment	Montenegro's report mentions the necessity to strengthen inspection supervision from the quantitative and qualitative point of view, by engaging an additional number of inspection officers and through a continuous professional education. Could Montenegro specify its plan on this subject?		
Answer	For strengthening of the inspection capacities relating to ionising and non-ionising radiation protection, Montenegro has envisaged employment of additional three inspectors.		
	In 2018, employment of one inspector for ionising radiation protection is planned, and one inspector for non-ionising radiation protection in 2019 and one in 2020.		
	Professional competence and periodical review of the professional competence of other persons employed with license holders for implementation of ionising radiation protection measures will be performed by an authorized legal entity based		

	on the Framework Programme of Professional Training and Periodical Review of the Professional Competence, which will be an integral part of the Rulebook on Professional Training.		
	Until the above regulations are drafted, inspectors for ionising radiation protection will continue to attend continuous training provided by the International Atomic Energy Agency.		
	Country Republic of Croatia	Article 19.2.2	Ref. in the National Report Section E, page 22
Comment	For how long period was the licence for radioactive waste storage management issued? Do the licence conditions or regulations require periodic safety reviews and how often do they have to be performed?		
	The Law on Ionising Radiation Protection and Radiation Safety (Official Gazette of Montenegro 56/09, 58/09, 40/11, 55/16) does not envisage a license validity period or periodical reviews of the Safety Report. The new Law on Ionising Radiation Protection, Radiation and Nuclear Safety and Security which regulates this field is in preparation, and it will limit a license validity period and prescribe periodical reviews of Safety Reports. In the meantime, inspection is entitled to order measures regarding safety improvement during the control of operation of radioactive waste storage.		
8.	Country Republic of Croatia	Article Article 20	Ref. in the National Report Section E, page 24
Question/ Comment	I Please elaborate how is the internal cooperation assured considering that the regulatory body is structured within several governmental organisations: the Ministry of Sustainable Development and Tourism, the Nature and Environmental Protection Agency, the Administration for Inspection Affairs and the Ministry of the Interior?		
Answer	including radiation protection,	is structured with Nature and Env	radioactive waste management, hin the Ministry of Sustainable ironmental Protection Agency, ry of Interior.
	The coordination of the above institutions is a responsibility of the Ministry of Sustainable Development and Tourism, as an umbrella institution which manages the policy in this field and which is responsible for reporting to the European Commission and the International Atomic Energy Agency on various aspects in this field, including the negotiating process for the European Union membership, and well as reporting on the implementation of international - legal instruments.		
	Interinstitutional cooperation is regulated by the Law on State Administration (Official Gazette of the Republic of Montenegro 38/03, Official Gazette of Montenegro 22/08, 42/11) and the Decree on Organisation and Manner of Operation of State Administration (Official Gazette of Montenegro 5/12, 25/12, 44/12, 61/12, 20/13, 17/14, 6/15, 80/15, 35/16, 41/16, 61/16, 73/16, 3/17,19/17, 68/17, 87/17).		
	the Ministry of Economy, Police with competent inspection	ce Directorate and t services, which m	stress the good cooperation with the Customs Administration, and nonitor or are responsible for the Foreign Trade Law, Law on

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	Foreign Trade in Weapons, M Checklist of Goods and Dual L for import and export of goods.	Jse Technologies, a	and Dual Use Goods, National nd the Decision on the checklist
	Country French Republic	Article 20	Ref. in the National Report Section E
Comment	Is the independence of the considered sufficient by Montel from the executive?	regulatory body and negro? Are there pla	d the inspection administration ns to improve this independence
	management is structured with	thin the Ministry of onmental Protection	diation safety, radioactive waste Sustainable Development and n Agency, Administration for
Montenegro is a small system with limited use of radioactive s of ionising radiation and establishing of an independent state and currently not sustainable. Consequently, a possibility for potent existing capacities should be considered in the future, in line standards in the field of ionising radiation protection (BSS) in or recognized and proven practice in this field so as to facilitate transposition and implementation of international standard particularly considered during revision of the Strategy on Protection, Radiation Safety and Radioactive Waste Mana reorganisation matters will be considered in the drafting of the Radiation Protection, Nuclear and Radiation Safety.			dent state administration body is ity for potential reorganisation of ture, in line with the main safety n (BSS) in order to apply the best to facilitate easier coordination, nal standards, which will be Strategy on lonising Radiation Waste Management. Also, the afting of the new Law on lonising
	administration reform. For t particularly in the field of in inspection supervision and inspections, the Government within a single body, Admini separation of the inspection for for Inspection Affairs into an challenge at the moment, altho	the purpose of the inspection control, a more intense co of Montenegro con stration for Inspecti r ionising radiation p nother state adminis ough we are aware the ructured in a single	possible decisions in the state e state administration reform, and for easier performance of operation between competent solidated almost all inspections ion Affairs, in 2012. Therefore, rotection from the Administration stration body presents a great hat having all activities related to place is in accordance with BSS
	implementation capacities in t	he field of nuclear a nd increasing the n	strengthen administrative and and radiation safety and security number of employees, having in adards in this field.
10.	Country Republic of Greece	Article Article 22	Ref. in the National Report Section 5.1, page 15
Question/ Comment	Who bears the cost for the re any relevant arrangements in available e.g. from the side of i	n place to assure	to their manufacturer? Are there that the necessary founding is
Answer	Safe and secure managemen which leads to conservation a	t of radioactive sour and protection of the	rces is one of the main activities e environment and the health of

	current and future generatio environment.	ns and the prote	ection of living and working
	secure the return of the source t includes the cost of return of the	for own needs from also ensure by source to its manu to its manufacturer, the source, which ma	m suppliers, or directly from
	radioactive source which is not radioactive waste storage if it best international recommenda to returning disused sealed rad every imported source that is us agreement with the supplier un Also, it is prescribed, <i>inter alia</i> , packed in a way to prevent dis	and storing of radio nat a disused sea intended to be used cannot be returned tions are implemen ioactive sources to sed in the Clinical C nder which the sou , that a disused sea sipation of radioact	of the Rulebook on methods of active waste (Official Gazette of aled radioactive source, or a any longer, will be stored in the to the supplier. Therefore, the ted in Montenegro with regards their suppliers. For example, for entre of Montenegro, there is an tree is returned to the supplier. aled radioactive source must be ive material and must be stored ely defined by the acceptance
11.	Country United States of America	Article Article 22	Ref. in the National Report Section F, 7.2 pp. 28-29
Question/ Comment	Please describe the overall hun to ensure that qualified staff are	nan resources appro	paches and/or strategies in place -related activities.
Answer	The Strategy on Ionising Radiation Protection, Radiation and Nuclear Safety and Security for the period 2017-2021 with the Action Plan pays special attention to professional training and periodical review of professional competence. Namely, guidelines are provided for the establishment of a sustainable system of training and periodical competence in this field.		
	guidelines are provided for the	e establishment of a	a sustainable system of training
	guidelines are provided for the and periodical review of profess The Strategy on Ionising Radia Security for the period 2017-20 of Professional Training in the f ionising radiation protection (NI Ionising Radiation Protection, F the new Law will oblige compe in this field to prepare a five-ye above NPPT, which will be International Atomic Energy A	e establishment of a sional competence in ation Protection, Ra 221 envisages adop field of radiation and PPT) and its standa Radiation and Nucle tent institutions whi ear training plan for prepared in line gency (IAEA) and of the Ministry of	a sustainable system of training

	of the Professional Compe Professional Training whic Protection Agency.	tence, which will be ar th will be licensed by	n integral part of the Rulebook on y the Nature and Environmental
	technical services will co	ntinue to attend cont / Agency, while license	bers of competent institutions and inuous training provided by the holders will train their employees hed.
	Country Republic of Greece	Article Article 24	Ref. in the National Report Section 7.4, page 34
Question/ Comment	Have specific scenarios/ha could you please provide particular with regard to rac	some more details	d for category III threats? If yes, on these scenarios/hazards, in ement?
Answer	from the point of view of a Some of the reviewed ever - spilling of liquid in th - explosion in the sto - explosion in the imr - flood (raising of gr courses); - earthquake; - fall of an aircraft on - terrorist attack on th - fire in the storage; - radiological impact - external radiation d - precipitation outflow - dissipation of solid - direct radiation with - fall of a vessel with Consideration was given to of radiation sources - rad storage, for instance 1370 presented in the Safety documents, procedures, pl is approved by relevant st for Emergency Situations	assessment of probab hts include: ne storage; rage; nediate surrounding of ound waters, high pre- the storage; ne storage; of the storage; uring normal operation vs during normal operation	of the storage; tion of the storage; andling; os of accidents with different types located or may be located in the Ra; 238U and all the analysis are is a whole set of accompanying the entire set of these documents is the Agency, Ministry, Directorate cuments are classified as secret in laws which regulate facilities of
13.	Country Republic of Greece	Article Article 24	Ref. in the National Report Section 7.4, page 31
Question/ Comment	Is the concept of dose co storage facility? If yes, what	nstraints for public an at are the applicable do	d personnel exposure used in the ose constraints levels?

	Based on estimations and calculations, the Centre for Ecotoxicological Research Ltd. CETI, which manages the radioactive waste storage, has set dose limits for dose burden of workers and visitors for the storage, which are presented in the Instructions on Entering, Leaving and Staying in the storage in Podgorica (LAB- RAO – 01). Operational threshold annual effective doses for workers in normal operation equals 10 mSv/year, for visitors of the storage 3 $\mu$ Sv per visit (with annual maximum of 0.1mSv). The dose constraints for the most exposed individuals amongst the population is 0,1 mSv/year. All workers performing activities in the storage, as well as visitors, are continuously monitored in accordance with procedures of radiological protection of employees in the storage. Records are kept about all entries in the controlled area, which are used for immediate control of the dose received by individuals as defined by the Instructions on Entering, Leaving and Staying in the RAW storage in Podgorica (LAB-RAO – 01).			
	All dose limits are below the internationally accepted and recommended limits with a goal to ensuring that radiological burden resulting from working or staying in the storage is as low as possible and significantly lower than internationally accepted and the ones prescribed by the Rulebook on Exposure Constraints (1 mSv/year for the population and 20 mSv/year for occupationally exposed persons).			
14.	Country Republic of Greece	Article Article 24.3	Ref. in the National Report Section 7.4, page 33	
Question Commen	A As mentioned, a report on the submitted before the community what this radioactivity mon	nissioning of the stora	vity monitoring was required to be ge facility. Can you please describe	
	A detailed analysis – radioactivity monitoring was performed in the area where the storage is located now, and the status was zero. Later, a monitoring programme is implemented every year – two independent programmes of monitoring of interior and exterior of the storage, as per the license requirement. One programme is performed by the Centre for Ecotoxicological Research Ltd. CETI as the operator, and the other one is performed by an independent institution which meets all the necessary requirements. The structure of both programmes is almost identical, and they include the following types of research:			
Answer	A detailed analysis – radio storage is located now, an implemented every year – and exterior of the storag performed by the Centre f and the other one is perfor necessary requirements. T	pactivity monitoring wa of the status was zero - two independent pro- ge, as per the license for Ecotoxicological Re- formed by an independ the structure of both p	? as performed in the area where the b. Later, a monitoring programme is ogrammes of monitoring of interio e requirement. One programme is esearch Ltd. CETI as the operator dent institution which meets all the	
Answer	A detailed analysis – radio storage is located now, an implemented every year – and exterior of the storag performed by the Centre f and the other one is perfor necessary requirements. T they include the following t – testing of radon of storage; – gamma spectrome and soil from the in – testing the level	pactivity monitoring wa of the status was zero two independent pro- for Ecotoxicological Re- for Ecotoxicological Re- formed by an independ the structure of both pro- types of research: concentration in the pro- tric analysis of sample nediate surrounding of exterior radiation	? as performed in the area where the b. Later, a monitoring programme is ogrammes of monitoring of interior e requirement. One programme is esearch Ltd. CETI as the operator dent institution which meets all the programmes is almost identical, and premises of the radioactive wasters es of ground and surface waters, ai	
Answer	A detailed analysis – radio storage is located now, an implemented every year – and exterior of the storage performed by the Centre f and the other one is perfor necessary requirements. T they include the following t – testing of radon of storage; – gamma spectromer and soil from the in – testing the level measuring systems – testing the level surrounding of the radiation;	pactivity monitoring was obtained by an independent of the status was zero two independent pro- ge, as per the license for Ecotoxicological Re- formed by an independ of the structure of both p ypes of research: concentration in the p tric analysis of sample mediate surrounding of exterior radiation s; of contamination – e storage – gamma	? as performed in the area where the b. Later, a monitoring programme is ogrammes of monitoring of interior e requirement. One programme is esearch Ltd. CETI as the operator dent institution which meets all the programmes is almost identical, and premises of the radioactive wasters es of ground and surface waters, ai of the storage;	

15.	Country Republic of Macedonia	Article Article 26	Ref. in the National Report Section 7.6, page 40
	I is decommissioning plan for central radioactive waste storage facility was one of the documents in the process of licensing?		
Answer		nned so as to fulfil all	ife cycle of a radioactive waste I requirements in order to protect
	Rulebook on methods of colle waste (Official Gazette of Mo radioactive waste, while pro obtaining a license to mana Montenegro 56/11) provides th	cting, keeping, proce ntenegro 58/11), but visions of the Rule ge radioactive was nat the method of de Report, which is su	described in the definition of the essing and storing of radioactive t only with regards to storing of abook on closer conditions for te storage (Official Gazette of ecommissioning of the storage is ubmitted by the applicant in the ve waste storage.
	conditions for the location, co and decommissioning of a nuc of Yugoslavia 42/97). Howev Radiation Safety (Official Gazo	nstruction, trial oper clear facility (Official ver, the Law on lor ette of Montenegro 5	also defined by the Decision on ration, commissioning, operation Gazette of the Federal Republic hising Radiation Protection and 56/09, 58/09, 40/11, 55/16) does r facility, because it is a radiation
	"Decommissioning of Facilities Directive 2013/59/EURATOM against the dangers arising Directives 89/618/EURAT 97/43/EURATOM and 2003/ Council of Europe Directive Community framework for the radioactive waste, the new L Nuclear Safety and Security s international standards, and pr the existing Rulebook on clo radioactive waste storage, wh the location, designing, constr decommissioning of the radia location, construction, tria	s", provisions of Arti laying down basic from exposure to ic OM, 90/641/EU 122/EURATOM and 2011/70/EURATOM responsible and safe aw on lonising Rad hould transpose prov- repare in that respec oser conditions for ich would regulate t uction, trial operation tion facility, and the al operation, con facility (Official Gaze	omic Energy Agency GSR Part 6 cle 28 of the Council of Europe safety standards for protection onising radiation, and repealing IRATOM, 96/29/EURATOM, provisions of Article 7 of the of 19 July 2011 establishing a e management of spent fuel and iation Protection, Radiation and visions of relevant directives and t a separate rulebook or improve obtaining a license to manage the requirements for selection of n, commissioning, operation and e Decision on conditions for the mmissioning, operation and ette of the Federal Republic of
	management, became operati decommissioning are not all existing legal framework. In drafting of the new Law on le Safety and Security to guarant	onal on 13 June 20 ocated since such this respect, a prov onising Radiation Pr tee certain funds for	or long-term radioactive waste 12, the funds for its closure and norm is not prescribed by the vision should be defined during rotection, Radiation and Nuclear closure and decommissioning of defined as necessary in the

	requirements for obtaining a license to manage radioactive waste storage.		
	Also, applicants should be required to prepare a decommissioning plan, while the contents of the plan and decommissioning requirements need to be prescribed by the rulebook which describes decommissioning requirements. Planning of decommissioning costs ensures availability of funds when needed to provide for safe decommissioning costs, including costs of radioactive waste disposal. The estimation of decommissioning costs should be updated by updating the initial decommissioning plan or based on the final decommissioning plan.		
	For preparation of financial estimation for decommissioning of radioactive waste storage, the current holder of the license to manage radioactive waste storage Centre for Ecotoxicological Research Ltd. CETI, needs to prepare a cost-benefit analysis. During preparation of this analysis and definition of legal standards, it is necessary, <i>inter alia</i> , to use the Commission Recommendation 2006/851/EURATOM of 24 October 2006 on the management of financia resources for the decommissioning of nuclear installations, spent fuel and radioactive waste, which focuses on adequate financing, financial security and transparency to ensure that funds are used only for the purpose for which they have been established.		
	For the purpose of improvement of the legal framework with regard to decommissioning, an expert mission was implemented in the period 6-10 November 2017 with support from the International Atomic Energy Agency (IAEA) which was dedicated to advice for preparing decommissioning plans both for the interim facility and the central radioactive waste storage, and involved representatives of all relevant institutions, including the Centre for Ecotoxicologica Research Ltd.		
16.	Country Article Ref. in the National Repor United States of America Article 27 Section I, 10.1 page 47		
Question/ Comment	The report indicates that Montenegro has the obligation to procure radiation portain to monitors. Please provide an update with respect to the status of this effort. Additionally, the report states that until radiation portal monitors are in place, authorized professional agencies perform activities to control the transboundary movement of radioactivity. Please describe what steps these agencies are taking to provide control.		
Answer	As stated in the Report, Montenegro does not have portal monitors and is obliged to procure them in cooperation with available donors. During 2018, as a recognised measure 12 in the Action Plan of the Strategy on Ionising Radiation Protection Radiation Safety and Radioactive Waste Management for the period 2017-2021 National Detection Programme will be prepared, and it will include identification of national needs and setting priorities in order to improve cross-border control. Also what lies ahead of Montenegro is the establishment of a system for trade in nuclear materials, both within the new Law on Ionising Radiation Protection, Radiation and Nuclear Safety and Security, and with regards to preparation of necessary infrastructure (institutional and implementation) for the implementation of such provisions, in accordance with requirements of the IAEA standard and provisions of the Council Directive 2006/117/EURATOM of 20 November 2006 on the		

	Whenever a shipment of scrap metal appears on border crossings, if needed, inspection visits the border crossings, as well as within regular controls.		
	Until the installation of portal monitors for control of radioactivity of various goods at border crossings, continuous control of goods is established and performed by authorised legal entities of the Centre for Ecotoxicological Research Ltd and the Institute of Ferrous Metallurgy JSC, who are licensed by the Nature and Environmental Protection Agency to perform such activities. In case an elevated level of radiation is established during control of certain goods, authorised persons will secure the location and inform the inspection, who will perform an on-site visit and together with customs authorities return the goods to the owner of the shipment.		
	According to information on the implementation of these measures in a two-year period, a total of 97.925 radioactivity controls of imported goods were performed at border crossings in cooperation with the Centre for Ecotoxicological Research Ltd. (34.718) and the Institute of Ferrous Metallurgy JSC Nikšić (63.207), as per the Checklist and List of Goods which are subject to radioactivity control.		
17.		Article	Ref. in the National Report Section J
	Orphan sources: What is the amount of orphan s are undertaken in order to detec		er year? What kind of measures e.g. at scrap metal yards)?
Answer	No orphan sources have been detected in Montenegro since 2015. Control of scrap metal at export of metal waste from Montenegro is performed to detect orphan sources. Also, imported goods are controlled, particularly waste metal, at border crossings.		
	Whenever a shipment of scrap metal appears on border crossings, if needed, inspection visits the border crossings, as well as within regular controls.		
	Until the installation of portal monitors for control of radioactivity of various goods at border crossings, continuous control of goods is established and performed by authorised legal entities, Centre for Ecotoxicological Research Ltd and the Institute of Ferrous Metallurgy JSC, who are licensed by the Nature and Environmental Protection Agency to perform such activities. In case an elevated level of radiation is established during control of certain goods, authorised persons will secure the location and inform the inspection, who will perform an on-site visit and together with customs authorities return the goods to the owner of the shipment.		
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18.	Country Russian Federation		Ref. in the National Report Section J, 11.1 page 49
Question/ Comment	The Report says that according to relevant regulatory provisions "disused sealed radioactive source or radioactive source which is no longer intended for use shall be stored in the radioactive waste central storage facility, if its restitution to the supplier is not possible. This means that every disused sealed radioactive source is returned to the supplier, if possible, prior to its storage to the radioactive waste central storage facility, administered by the Centre for Eco-Toxicological Research". What measures are in place to ensure the return of the disused sealed sources? Please, elaborate, on the plans for their return.		
Answer	Safe and secure management of radioactive sources is one of the main activities which leads to conservation and protection of the environment and the health of current and future generations and the protection of living and working environment.		
	All holders of licenses to perform radiation activity who have sources of ionising radiation and procure them for own needs from suppliers, or directly from manufacturers, are obliged to also ensure by the agreement on a source procurement the return of the source to its manufacturer. This ensures funds to secure the return of the source to its manufacturer, i.e. the price of the procurement includes the cost of return of the source, which means that holders of licenses to perform radiation activity who have sources of ionising radiation bear the cost of their return.		
19.	Country Russian Federation	Article Article 28	Ref. in the National Report Section J, 11.1 page 49
Question/ Comment	Please, elaborate on the syst sources for the disposal purpos	em and criteria use ses?	ed to categorize disused sealed
Answer	Montenegro uses the methodology of the International Atomic Energy Agency with regards to categorisation of disused sealed radioactive sources. However, there are currently no criteria for disposal or requirements for radioactive waste disposal and they cannot be provided because the requirements for disposal have not been prescribed yet, except with regards to the legal ground for drafting of a specia rulebook on disposal within the Law on Ionising Radiation and Radiation Safety when Montenegro decides to perform disposal.		
	Country	Article	Ref. in the National Report
20.	United States of America	Article 28	Section J, 11.1 page 50
Question	The U.S. commends Montene	gro on its follow-on burces for safe ar	efforts to collect, transport, and and secure management in its

21.	Country Romania	Article Article 32	Ref. in the National Report page 50	
Comment	Could you mention the legal path of the high activity sealed radioactive sources management after they are returned to the manufacturer as disused radioactive sources?			
Answer	<ul> <li>Article 16 of the Rulebook on methods of collecting, keeping, processing and storing of radioactive waste (Official Gazette of Montenegro 58/11) regulates that a disused sealed radioactive source or a radioactive source which is not intended to be used any longer will be stored in the radioactive waste storage if it cannot be returned to the supplier. Therefore, the best international recommendations are implemented in Montenegro with regards to returning disused sealed radioactive sources to its supplier.</li> <li>All holders of licenses to perform radiation activity who have sources of ionising radiation and procure them for own needs from suppliers, or directly from manufacturers, are obliged to also ensure by the agreement on a source procurement the return of the source to its manufacturer. This ensures funds to secure the return of the source to its manufacturer, i.e. the price of the procurement includes the cost of return of the source, which means that holders of licenses to perform radiation activity who have sources of licenses to perform radiation and procure to its manufacturer, i.e. the price of the procurement includes the cost of return of the source of ionising radiation bear the cost of their return.</li> </ul>			
	The new Law on Ionising Radiation Protection, Radiation and Nuclear Safety and Security, which is in preparation and the drafting of which is coordinated by the Ministry of Sustainable Development and Tourism, will transpose provisions of the new Directive of the Council of Europe 2013/59/EURATOM laying down basic safety standards for protection against the dangers arising from exposure to ionising radiation, and repealing Directives 89/618/EURATOM, 90/641/EURATOM, 96/29/EURATOM, 97/43/EURATOM and 2003/122/EURATOM, which specifies that a disused radioactive source may be procured only from a supplier/manufacturer who has a clearly defined manner of handling the returned disused radioactive source.			
	Consequently, all future agreements on procurement of sources which holders of licenses to perform radiation activity procure for own needs, from a supplier or directly from a manufacturer, must also ensure that the supplier or the manufacturer to whom a disused radioactive source is returned has a clearly defined plan for further handling of the returned source, as verified by their competent regulatory body.			
	It is important to stress that Montenegro does not produce radioactive sources and therefore, after a source is returned to the manufacturer, it becomes the responsibility of another country and its handling is regulated by the leg- framework of that country.			
22.	Country Romania	Article Article 32	Ref. in the National Report Page 15	
	situations regarding potentially	/ illegal trade in ra hknown owners, as	strategy applied in solving the dioactive and nuclear materials, well as incident and accident	

The Parliament of Montenegro adopted the Law on Ratification of Amendments to Answer the Convention on the Physical Protection of Nuclear Material (Official Gazette of Montenegro – International Treaties 4/16 of 25 March 2016) whereby Montenegro contributed to entry into force of amendments to this Convention internationally on 8 May 2016 with a view to eliminating potential dangers created by sabotage of nuclear material and nuclear facilities, illegal appropriation and the use of nuclear materials, as well as illegal trade in radioactive and nuclear material, by joint action of the Parties to the Amendments. This is an expression of a clear position of Montenegro in combating nuclear terrorism. In addition, in December 2015, Montenegro formally expressed readiness to accept voluntarily implementation of non-binding Code of Conduct on the Safety and Security of Radioactive Sources and the supplementary Guidance on the Import and Export of Radioactive Sources and, at the same time, appointed a contact person for the Code. Montenegro is a member state of the incident and trafficking in nuclear and radioactive material database (ITDB) since 2006, while it prepared in 2009 the first Integrated Nuclear Security Support Plan (INSSP) in cooperation with the Department of Nuclear Security of the International Atomic Energy Agency and updated it in February 2017 with the Action Plan for the period 2017-2019. The objective of the INSSP revision included, inter alia: identification of national needs and needs prioritisation, proposing effective implementation plans for the following three years based on identified national priorities, as well as raising awareness of the nuclear safety information management system. In addition, measure 12 of the Action Plan of the Strategy on Ionising Radiation Protection, Radiation Safety and Radioactive Waste Management for the period 2017-2021 envisages drafting of the National Detection Plan, which will include identification of national needs and setting priorities for the purpose of improvement of cross-border control. Also, what lies ahead of Montenegro is the establishment of a system for trade in nuclear material both within the new Law on lonising Radiation Protection, Radiation and Nuclear Safety and Security and with regards to preparation of necessary infrastructure (institutional and implementation) to implement such provisions, in accordance with requirements of the IAEA standard

> Montenegro is participating in platforms of the Unified System for Information Exchange in Incidents and Emergencies for early notification of incidents which include radioactive sources with potential transboundary effects (USIE).

> and provisions of the Council Directive 2006/117/EURATOM of 20 November 2006 on the supervision and control of shipments of radioactive waste and spent fuel.

> As described in Section J (pp. 48 and 49), in case of detection of orphan sources, Article 37 of the Law on Ionising Radiation Protection and Radiation Safety (Official Gazette of Montenegro 56/09, 58/09, 40/11, 55/16) provides that costs of their storage will be provided from the Budget of Montenegro. According to applicable regulations, the Administration for Inspection Affairs performs inspection supervision via environmental inspection, i.e. performs control of the source until it is stored safely, finds the owner, if possible, and takes legally prescribed measures against the owner. Therefore, in case of detection of an orphan source, if inspector cannot establish ownership, he will file a misdemeanour or criminal charges against NN person and order a measure of storing of the source in the radioactive waste storage.

> The storage costs are provided for in the Budget of Montenegro pursuant to Article 37 of the Law on Ionising Radiation Protection and Radiation Safety. If the owner is

23.	Country Ukraine	Article Article 32	Ref. in the National Report Section D, page 15
	If a situation occurs in local self-government covered from the Budg	unit and not of license et of Montenegro.	gro, which is the responsibility of the holders, costs in that case will be
	Sustainable Development and Tourism, Prosecutor's Office, etc. Until the establishment of the formal team, it is important to point out that the Ministry of Sustainable Development and Tourism implemented successfully the project "Strengthening of environmental protection system at the level of state institutions of Montenegro" in cooperation with OSCE mission to Montenegro during 2011, which was supported within the activities dedicated to improvement of the Strategy on Ionising Radiation Protection, Radiation Safety and Radioactive Waste Management. Three training courses were delivered within the project for 110 officers of border police, customs outposts, as well as staff members of the Nature and Environmental Protection Agency and the Ministry of Interior in central, northern and southern region of Montenegro. For the project to be sustainable, a brochure dedicated to prevention of prohibited transport of nuclear and radioactive material was prepared, as well as a manual for detection and handling of a radiation sources and for controlling functioning of dosimetry equipment, which are published on the website of the Ministry of Sustainable Development, Police Directorate and the Customs Administration of Montenegro for the purpose of transparency and access to information. Regarding treatment of radioactive waste created during accidents or incidents, if it happens at the holder of the license to perform radiation activity, primary responsibility lies with the license holder in terms of restoring the situation and payment for storage of created radioactive waste. The same applies if the license holder has caused damages outside his premises.		
	detected; however, the by establishing of a fe Sustainable Developme detection in cooperatio prepare a work plan. A of a formal procedure fe such as, for example: for Inspection Affairs, I Protection Agency, IT	system in this respect n ormal team for orphan ent and Tourism will est n with relevant institutio fter that, detection of or or involvement of certain Police Directorate, Cus Forensic Centre of Mon DB contact person, Na	enegro when an orphan source is seeds to be improved and formalized sources detection. The Ministry of tablish the team for orphan sources ons, and the team will be obliged to phan sources requires development of Government bodies and institutions stoms Administration, Administration tenegro, Nature and Environmental tional Security Agency, Ministry of
	the inspector will order the lost source to be p waste storage if there is	placed in a safe place v	our or criminal, and issue order for with the owner or in the radioactive source any longer. In most cases, it

	Based on documents and licenses issued for operation of the storage (construction exploitation, license to manage radioactive waste storage) and based on estimated volumes of generated radioactive waste in Montenegro, it is estimated that the storage can be operational for at least 50 years. After expiry of this peri- depending on the condition and volume of the waste at that time, a decision will made concerning next steps – methods of handling radioactive waste. This may extension of the lifetime of the existing storage, building of a new storage development of a radioactive disposal with decommissioning of the exist storage.			
24.	Country Ukraine	Article Article 32	Ref. in the National Report Section D, page 13	
Question/ Comment	What data regarding ionizing radiation sources and radioactive waste are included to the database (central register)?			
Answer	The central registry of sources contains all available data on sources: type of device, type of isotope, activity of the source (given or estimated on the respective date), serial number of the source (if available), owner of the source and place where the source is used. In addition, records are kept of occupationally exposed persons and the persons who are responsible for radiation protection.			
25.	Country Ukraine	Article Article 32	Ref. in the National Report Section D, page 13	
Question/ Comment	How there is ensure radioactive waste again	ed protection of data on nst attacks of computer viru	ionizing radiation sources and uses (cyberattacks)?	
Answer	Protection of data on sources of ionising radiation and radioactive waste from computer viruses (cybercrime) is ensured by applying of the Information Security Law (Official Gazette of Montenegro 040/16) and through coordination by the Government Cyber Incident Response Team (CIRT). Strategic guidelines are provided within the Cyber Security Strategy of Montenegro for the period 2018-2021, which was adopted by the Government of Montenegro on 21 December 2017.			
	Due to continuous increase of the number of services that public and private sectors provide online, both to citizens and to other legal entities, safe cyber space of Montenegro is becoming one of national priorities. There is no doubt that cyber security constitutes a challenge of modern time and, as such, has not bypassed Montenegro either. We are witnesses to an increasing number of cyber incidents which affect Montenegro, through recent ransomware campaigns (software that encrypts contents of successfully infected computers and requests ransom payment for unlocking the data), DDoS attacks on the Government infrastructure, various online frauds, etc. The number of these cyber incidents is increasing substantially year after year.			
	Regarding development of information technologies and cyber security. Montenegro takes position 71 out of 193 member states according to the Report of the United Nations, i.e. of the International Telecommunication Union (ITU) titled "The Global Cybersecurity Index 2017". However, in the situation where new threats emerge every day, our efforts related to cyber security must follow such dynamics.			

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	The Parliament of Montenegro passed the Act on Changes and Amendments to the Information Security Act (Official Gazette of Montenegro 040/16) which envisages two key activities: establishment of the Information Security Council and protection of information infrastructure, which are in line with the NIS Directive (2016/1148), and after which the Information Security Council was established on 8 June 2017 within accompanying Action Plan for implementation of the Strategy.			
	In addition, the Analysis of Reports on Incident Situations in Montenegro, which is prepared by the Government Cyber Incident Response Team (CIRT) annually, noted a growing trend in the number of reported incidents year after year, as well as increasingly sophisticated attacks. The establishment of the national CIRT is a big step towards enhancing the abilities of the Government bodies to respond to cyber incidents affecting Montenegro. CIRT is recognised as a central point for incident response in Montenegro, however, there is an obvious lack of narrowly specialised staff to respond to this challenge successfully, and continuous efforts must be invested in its improvement.			
26.	Country Republic of Greece		Ref. in the National Report Section 5.1, page 15	
Question/ Comment	As stated in the report, "only solid radioactive waste that meets the acceptability t criteria for the radioactive waste storage facility may be held in storage". Are there any waste streams not fulfilling the acceptance criteria of the storage facility? What is the waste management approach in this case?			
Answer	The radioactive waste storage is intended for storing solid radioactive waste from industry, medicine or research activities. The storage is not intended for storing of liquid radioactive waste or waste that would be a product of nuclear power generation. Generally, Montenegro does not have and has never had in its history the facilities which could be classified as "nuclear" and, consequently, the number and type of radioactive waste is limited. On the other hand, all known radioactive waste and disused radioactive sources have been removed from the territory of Montenegro and stored in accordance with national regulations and principles of the International Atomic Energy Agency (IAEA). The conditioning process was taking place under supervision of the IAEA, which provided expert support to Montenegro in that activity.			
	It is important to notice that liquid radioactive waste does not exist in Montenegro, however, there is always a possibility of its occurrence. In case liquid radioactive waste occurs in Montenegro in any way, the holder of the license to manage radioactive waste storage is obliged to define a Plan for transforming such waste into solid waste outside the borders of Montenegro, including cost projection, so that it represents an integral part of the Analysis, in cooperation with the Ministry of Sustainable Development and Tourism, prior to adoption of the new Strategy for the period 2022-2027. Only solid radioactive waste which meets the acceptance criteria for the radioactive waste storage may be stored. This measure is contained in the Action Plan of the Strategy for the period 2017-2021.			
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