

**DPP DS477, Draft Safety Guide “The Management System for the Predisposal and Disposal of Radioactive Waste”
(Version 1 dated 23 April 2013)**

Note: Blue parts are those to be added in the text. Red parts are those to be deleted in the text.

	COMMENTS BY REVIEWER				RESOLUTION			
	Reviewer: Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) (with comments of GRS and BfS) Country/Organization: Germany				Page 1 of 7 Date: 2013-06-14			
Relevance	Comment No.	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification / rejection
2	1	General	Germany appreciates the IAEA’s intention to review the associated Safety Guides GS-G-3.3 and GS-G-3.4 in parallel to the revision of GS-R-3, with the objectives to simplify and consolidate both documents into a single Safety Guide, to take into account the feedback on experience of application from Member States, and to reinforce safety of radioactive waste management facilities. The drafting process of the proposed Safety Guide should follow the general considerations for combining Safety Guides elaborated in SPESS D document “Experience sharing on approaches to combining Safety Guides” (Version 2 dated 2011-03-07).	Comment only.	X			
1	2	General	The drafting process of the proposed Safety Guide should take into account that, with regard to long-term aspects, the management system for disposal differs from the management system for predisposal, due to special issues related to	Section 4 of the DPP states: “The objective of the Safety Guide ... is to provide updated guidance on developing and implementing <u>management systems</u> for both predisposal and disposal of radio-	X			

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			<ul style="list-style-type: none"> the period of institutional control after closure of the disposal facility: active (monitoring, surveillance) and passive (site markers, control on land use), the preservation of records. <p>This implies that the responsibilities for safety within the management system need to be appropriately addressed in the Safety Guide.</p>	<p>active waste.”</p> <p>The title of the proposed Safety Guide, however, suggests that DS477 will address one single management system which combines the predisposal and disposal phases under one umbrella. Clarification is required.</p>				
1	3	General	<p>In the new Safety Guide, it should be clearly and unequivocally stated when predisposal management of radioactive waste starts, either</p> <ul style="list-style-type: none"> once radioactive material or spent fuel generated during the operation of a nuclear fuel cycle facility has declared to be radioactive waste, or instantaneously during the operation of a nuclear fuel cycle facility, irrespective whether radioactive material or spent fuel generated has declared to be radioactive waste or not. 	<p>The definition provided in Para 1.2 of the Safety Requirements GSR Part 5 is not clear enough:</p> <p>“Predisposal management of radioactive waste ... covers all the steps in the management of radioactive waste <u>from its generation up to disposal</u>, including processing (pretreatment, treatment and conditioning), storage and transport.”</p> <p>In our opinion, the generation of radioactive waste itself is a genuine part of the operational activities of a facility but not part of the predisposal management. This means that predisposal management covers all the steps in the management of radioactive waste <u>following its generation</u>.</p> <p>(Note: This issue does also exist for the Draft Safety Guides DS447 and DS448, respectively.)</p>	X			

1	4	Section 2	1 st para, 2 nd bullet: “Developing Safety Guides in the facility specific areas that cover the whole lifetime of the facility (siting and site evaluation, design, construction , commissioning, operation and decommissioning/ closure);”	1. In case of a disposal facility for radioactive waste, the term ‘closure’ instead of ‘decommissioning’ is used. 2. Completeness with respect to the stages in the lifetime of a (pre)disposal facility. The Safety Guide SSG-12 “Licensing Process for Nuclear Installations” considers siting and site evaluation as a unit.		X	Since this paragraph refers ANNEX C to “ROADMAP on the Long-Term Structure of Safety Standards (May 2008)”, description in the DPP will not be changed. However, this comment will be taken into consideration when developing the DS477.		
3	5	Section 2	2 nd para, last sentence: “... In addition, Requirement 7 of GSR Part 5 states that “Management systems shall be applied for all steps and elements of the predisposal management of radioactive waste”.”	Editorial.	X				
3	6	Section 2	last but one para: “... This revision, which will reinforce safety, ensure s a better alignment with the Safety Fundamentals, SF-1, and take s into account the feedback from Member States’ application, will be published as a new General Safety Requirement, GSR Part 2.”	Editorial.	X				
3	7	Section 4	1 st para, 1 st sentence: “The objective of the this Safety Guide on the Predisposal and Disposal of Radioactive Waste is to provide updated guidance on developing and implementing management systems for both pre-disposal predisposal and disposal of radioactive waste.”	Wording; editorial.	X				
2	8	Section 4	1 st para, 2 nd sentence:	Clarification. According to the		X			

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			<p>“It is intended to be applied to the processing (i.e. pretreatment, treatment and conditioning), handling, long-term periods of storage, and also to the lifecycle of radioactive waste disposal facilities (including the period of institutional control).”</p>	<p>IAEA Safety Glossary (2007 Edition), the term ‘processing’ includes ‘pretreatment’, ‘treatment’ and ‘conditioning’ of radioactive waste.</p> <p>The Safety Guide should be applied to storage in general, not only to long term storage. The drafting process, however, should keep in mind that specific recommendations on management systems for the storage of spent fuel (including long term storage) are already provided in the Safety Guide SSG-15. Unnecessary duplication of recommendations should be avoided.</p>		<p>Revised as follows;</p> <p>The management systems considered in this Safety Guide is intended to be applied to the processing (i.e. pretreatment, treatment, and conditioning), handling, storage, and also to the lifecycle of radioactive waste disposal facilities .</p>		
1	9	Section 4	<p>It should be clarified in this section whether the new Safety Guide will also provide guidance on management systems for the predisposal and disposal of radioactive waste arising from mining, mineral processing, and other NORM related activities. It this is intended, the following statement should be added at the end of the 1st para:</p> <p>“The Safety Guide covers the management systems for managing all types of radioactive waste, including waste arising from mining, mineral processing, and other NORM related activities.”</p>	<p>The Draft Safety Guide DS459 “Management of Radioactive Residues from Mining, Mineral Processing, and other NORM related Activities” (revision of WS-G-1.2) is currently under development. DS459 will address the management of NORM residues that arise from mining, mineral processing, and other industries. Such residues, i.e. materials that remain from a process and comprise or are contaminated by NORM, may or may not be radioactive waste.</p>		<p>X</p> <p>DS459 is added to interface document in Section 5. Scope of the document will also be discussed during the development of DS477.</p>		
3	10	Section 5	<p>1st para, last sentence:</p> <p>“As applicable, it will also be coordi-</p>	<p>Editorial.</p> <p>Note: It should be explicitly</p>	X			

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			nated with the development and revision of other relevant IAEA Safety Standards and guidance under development.”	stated which other relevant guidance under development (beside IAEA Safety Standards) is meant in this context.				
1	11	Section 5	<p>Add new para:</p> <p>“This Safety Guide will interface with the following IAEA Safety Standards, international conventions and internationally recognized standards:</p> <ol style="list-style-type: none"> 1. Fundamental Safety Principles, Safety Standards Series No. SF-1, IAEA, Vienna (2006); 2. Predisposal Management of Radioactive Waste, Safety Standards Series No. GSR Part 5, IAEA, Vienna (2009); 3. Disposal of Radioactive Waste, Safety Standards Series No. SSR-5, IAEA, Vienna (2011); 4. Storage of Spent Fuel, Safety Standards Series No. SSG-15, IAEA, Vienna (2012); 5. Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management, IAEA International Law Series No. 1, IAEA, Vienna (2006); 6. International Organization for Standardization, Quality Management Systems: Requirements, ISO 9001:2008, ISO, Geneva (2008); 7. International Organization for Standardization, Environmental Management Systems: Require- 	<p>We recommend to include a list of IAEA documents that need to be taken into account and checked for consistency when drafting the Safety Guide (in analogy to the procedure in the DPPs for DS472 to DS475). Our proposed list is not intended to be final or exhaustive, and drafters may also consider other documents where appropriate and necessary.</p> <p>Please take note that</p> <ul style="list-style-type: none"> • specific recommendations on management systems for the storage of spent fuel (including long term storage) are also provided in the Safety Guide SSG-15; • specific recommendations on management systems for the predisposal management of radioactive waste from reactors and nuclear fuel cycle facilities are also provided in the Draft Safety Guides DS447 and DS448, respectively. <p>Therefore, the proposed Safety Guide has an interface with the above-mentioned docu-</p>	X			

			<p>ments with Guidance for Use, ISO 14001:2004, ISO, Geneva (2004);</p> <p>8. International Organization for Standardization, Guidelines for Auditing Management Systems, ISO 19011:2011, ISO, Geneva (2011).</p> <p>The Safety Guide will interface with the following documents under development:</p> <p>9. Leadership and Management for Safety, General Safety Requirements No. GSR Part 2 (revision of GS-R-3, DS456);</p> <p>10. Governmental, Legal and Regulatory Framework for Safety, General Safety Requirements No. GSR Part 1 Rev. 1 (revision through addition of addendum, DS462);</p> <p>11. Predisposal Management of Radioactive Waste from Fuel Cycle Facilities (revision of WS-G-2.5 and WS-G-2.6, DS447);</p> <p>12. Predisposal Management of Radioactive Waste from Reactors (revision of WS-G-2.5 and WS-G-2.6, DS448);</p> <p>13. Predisposal Management of Waste from the Use of Radioactive Materials in Medicine, Industry, Agriculture, Research and Education (revision of WS-G-2.7, DS454).”</p>	<p>ments.</p> <p>Note: The recommendations and guidance on management systems in DS447 and DS448 should be moved into DS477. The proposed Safety Guide is the appropriate place to deal with this topic.</p>				
2	12	Section 5	Add new sentence at the end of this section:	Missing information. The Nuclear Security Guidance Committee (NSGC) is			X	NSGC is already listed in “Review

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			<u>“Due to the cross-cutting safety and security aspects in the areas of predisposal and disposal of radioactive waste, this Safety Guide will be proposed as an “interface document” to the Interface Group.”</u>	involved in the development of the new Safety Guide.				committees”
2	13	Table of Content	Section 3 “Management responsibility”: Add a new item “Leadership for safety”.	Completeness and consistency with DS456 (revision of GS-R-3; future GSR Part 2), see Requirement 2.		X Consistency with GSR Part 2 will be taken into account and table of contents will be discussed during the development of DS477.		
2	14	Table of Content	Section 5 “Process implementation”: Add a new item “Interaction with interested parties”.	Completeness and consistency with DS456 (revision of GS-R-3; future GSR Part 2), see Requirement 10. Our proposal assumes that the item “Communication” in Section 5 deals with communication inside the organization.		X Consistency with GSR Part 2 will be taken into account and table of contents will be discussed during the development of DS477.		
2	15	Table of Content	Section 5 “Process implementation”: Add a new item concerning interdependencies between the various steps in the management of radioactive waste (e.g. between the predisposal and disposal phases), and also between the predisposal phase and the conditions of generation of radioactive waste.	For completeness. This issue is mentioned in Section 6 of the DPP and needs to be further elaborated in the Safety Guide.		X Table of contents will be discussed during the development of DS477.		

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1 – Essentials

2 – Clarification

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