

TITLE

Document Preparation Profile (DPP) for DS526

National Policies and Strategies for the Safety of Radioactive Waste and Spent Fuel Management, Decommissioning and Remediation

COMMENTS BY REVIEWER				RESOLUTION	
Reviewer: S Sarkar		Page.... of....			
Country/Organization: Australia /ARPANSA					
Date: 15 May 2020					
Comment No.	Para/Line No.	Proposed new text	Reason	Accepted / Modified / Rejected	Rationale
1	Section 6: Place in the overall structure of the relevant series and interfaces with existing and/or planned publications	Include SSR-6 after SSR-5	Spent fuel and radioactive waste go hand-in-hand with transport. Further, spent fuel and radioactive waste management involve storage (onsite, regional, centralized) and transport, and therefore, relevant requirements of the Transport Regulations need to comply with. For example, use of specific type of packages and relevant requirements for transport of waste and spent fuel.	R	We have refined the scope of the proposed Safety Guide so that it is clearer and accords with the view of the majority of the Member States that have provided comments. Although transport options and infrastructure (and interested parties views on them) can influence national strategies for safe management of radioactive waste and residues (and these will be considered – see response to comment No. 4 below), it is not the intention that this Safety Guide would address technical details of transport safety (i.e. transport regulations) because such details are unlikely to influence policy.

2	<p>Structure & Content of the Safety Guide</p> <p>Chapter 3: National Policies</p> <p>2nd bullet point- Provision of resources</p>	<p>2nd bullet point should be revised as '<i>provision of resources including financial provisions</i>'.</p> <p>Or, a separate bullet point can be added for '<i>financial provisions</i>'</p>	<p>It is important to make it clear that financial provision is key to the Safety of Radioactive Waste and Spent Fuel Management, Decommissioning and Remediation. For example, decommissioning involves significant financial commitment. In addition, 'operating organisation' must have the capacity to comply with any requirements imposed by the regulatory authority.</p>	A	
3	<p>Structure & Content of the Safety Guide</p> <p>Chapter 3: National Policies</p>	<p>Include a bullet point on 'acceptance' after 8th bullet point '<i>Waste acceptance</i>'</p>	<p>Some guidance on 'acceptance of waste' will be beneficial since the origin of waste and form of waste may dictate acceptance.</p>	M	<p>We understand the Reason given for the comment but suspect that this Safety Guide is probably not really the place to provide the detailed guidance that you may be seeking. As you know, waste acceptance criteria (WAC) are detailed controls on the operation of facilities that should be derived from the safety case for the facility. As such, WAC are probably at too detailed a level to affect policy. The Safety Guide will, however, address the minimization of waste generation, waste characterization, clearance, waste classification and waste inventory, which collectively may affect the waste inventory and waste management policies and strategies. Therefore, rather than adding a discrete bullet point on WAC (and it might seem odd to list WAC separate from the safety case), we have indicated a more general section on waste in the proposed tentative list of contents.</p>

4	Structure & Content of the Safety Guide Chapter 3: National Policies	Include a bullet point on <i>'infrastructure including transport route'</i>	It is an essential element for 'Disposal', 'regional storage', 'centralised storage' facilities, and 'spent fuel' movement as well. Interested parties including members of the public are always interested in transport, which may involve road, rail and inland waterways/sea transport.	A	We have included a section on infrastructure, including transport options and routes, in the proposed tentative list of contents.
---	---	---	---	---	---

TITLE

Document Preparation Profile (DPP) for DS526

National Policies and Strategies for the Safety of Radioactive Waste and Spent Fuel Management, Decommissioning and Remediation

COMMENTS BY REVIEWER				RESOLUTION	
Reviewer: S. Pepin, G. Volckaert Page 1 of.3 Country/Organization: FANC AFCN Date: 05/05/2020					
Comment No.	Para/ Line No.	Proposed new text	Reason	Accepted / Modified / Rejected	Rationale
1	Title	National Policies and Strategies for the Safety of Radioactive Waste and Spent Fuel Management, Including Waste from Management of Emergency Situations, Decommissioning and Remediation	The title “ <i>National Policies and Strategies for the Safety of Radioactive Waste and Spent Fuel Management, Decommissioning and Remediation</i> ” and the scope are very broad and mix different aspects: does the title refer to the national policies and strategies for the <u>radioactive waste resulting from decommissioning and remediation</u> or to the national policies and strategies for the <u>decommissioning and remediation processes</u> ? Although both are not independent of each other, they are two different things. On page 3, in the Justification section, the DPP rather refers to “national policies and strategies for the management of spent fuel and radioactive waste, <u>including radioactive waste generated</u> in a nuclear or radiological emergency, decommissioning and remediation “. This creates some confusion about the real scope of the document.	R	The safety guide is intended to cover national policies and strategies for the safety of (all) radioactive waste and spent fuel, and national policies and strategies for decommissioning, and national policies and strategies for remediation. The title does not need to include the origin of each radioactive waste.

2	Page 3 and 4	<p>4. OBJECTIVE The objective of this Safety Guide is to provide integrated, comprehensive recommendations on developing and implementing national policies and strategies for the safe management of all types of radioactive waste and radioactive residues (such as residues containing naturally occurring radioactive material, NORM).</p> <p>5. SCOPE The Safety Guide will address:</p> <ul style="list-style-type: none"> National policies and strategies for safe management of radioactive waste and residues, including NORM residues, arising from activities and facility operations, decommissioning and remediation. 	<p>On page 3-4: although not mentioned in the background and justification, the objective and scope sections of the DPP mention that the document will also apply to “<i>radioactive residues (such as residues containing naturally occurring radioactive material, NORM)</i>” – if this is well the case, then it should be included into the title and the distinction between NORM residues and radioactive waste be made clearer.</p> <p>By bringing NORM residues into the scope, there is a risk of duplicating the considerations already described in DS459 “<i>Management of Residues Containing Naturally Occurring Radioactive Material from Uranium Production and Other Activities</i>”.</p> <p>One should also keep in mind that NORM residues (also in the context of their disposal) may or may not be considered as radioactive waste depending on national regulatory and institutional framework and structure.</p> <p>As for the previous remarks, the document should avoid trying “to kill several birds with one stone”. One size does not fit all and a more focus scope would increase the efficiency of the document. Therefore we propose to leave out the NORM residues.</p>	R	<p>We have refined the scope of the proposed Safety Guide so that it is clearer and accords with the view of the majority of the Member States that have provided comments.</p> <p>Text has been added to include radioactive residues, including NORM, in the Background section. As noted above, the title does not need explicitly to list each class or type of radioactive residue or waste or its origin.</p> <p>The definitions in the 2018 Safety Glossary of ‘radioactive waste’ and of ‘NORM residues’ are clear, but they are not mutually exclusive, so that NORM residues are sometimes regarded as radioactive waste, but this depends on the circumstance, as is noted in the comment.</p> <p>Even if residues are not always regarded as waste, they still have to be managed safely to fulfil the Fundamental Principles of “Protecting people and the environment from the harmful effects of ionizing radiation”, and “avoiding undue burdens on future generations”.</p> <p>Although DS459 is intended to address policy and strategy for the management of residues from mining, mineral processing, and other NORM related activities, the purpose of DS526 is to provide comprehensive and integrated guidance on a wider range of national policies and strategies in one document.</p>
---	--------------	---	---	---	---

DS526 - National Policies and Strategies for the Safety of Radioactive Waste and Spent Fuel Management, Decommissioning and Remediation

COMMENTS BY REVIEWER				RESOLUTION	
Reviewer: Laís Alencar de Aguiar		Page 1 of 1			
Country/Organization: Brazil/CNEN/IRD-Radiation Protection and Dosimetry Institute					
Date:2019.05.28					
Comment No.	Para/Line No.	Proposed new text	Reason	Accepted/Modified/Rejected	Rationale
1	6. PLACE IN THE OVERALL STRUCTURE ...	To include: Model Regulations for Decommissioning of Facilities (IAEA TECDOC No. 1816) Model Regulations for Borehole Disposal Facilities for Radioactive Waste (IAEA TECDOC No. 1827)	Why not consider publications related to "Model Regulations"?	R	These publications are related to the subject area and their existence will be taken into account, but they do not need to be explicitly listed in the DPP because they are at a much more detailed level that would be needed for developing national policies and strategies.
2	7. OVERVIEW	To include: Assessing and providing an appropriate system of maintenance of the national radioactive waste inventory	National radioactive waste inventory should be considered in the guidance relating to national policies and strategies for waste	A	We have added text concerning the inventory in response to this comment and comments received from others.

COMMENTS BY REVIEWER				RESOLUTION	
Reviewer: Natural Resources Canada (NRCan) Country/Organization: Canada/NRCan		Page 2 of 4 Date: May 27, 2020			
Comment No.	Para/Line No.	Proposed new text	Reason	Accepted/Modified/Rejected	Rationale
2	Section 4/ paragraph 1 Section 5/ bullet 1	<p>The objective of this Safety Guide is to provide integrated, comprehensive recommendations on developing and implementing national policies and strategies for the safe management of all types of radioactive waste and radioactive residues (such as residues containing naturally occurring radioactive material, NORM) and for the safe decommissioning of facilities and activities, and for remediation.</p> <p>National policies and strategies for safe management of radioactive waste and residues, including NORM residues, arising from activities and facility operations, decommissioning and remediation.</p>	<p>NORM residues (and their disposal) may or may not be considered as radioactive waste depending on Member States' national regulatory framework. In addition, the Joint Convention does not apply to waste that contains NORM and that does not originate from the nuclear fuel cycle, unless it constitutes a disused sealed source or it is declared as radioactive waste by the Contracting Party. We suggest removing NORM from this guidance.</p>	R	<p>We have refined the scope of the proposed Safety Guide so that it is clearer and accords with the view of the majority of the Member States that have provided comments. As noted in the comment, depending on the circumstance, radioactive residues, including NORM residues, may or may not be regarded as radioactive waste. Nevertheless, radioactive residues still have to be managed safely to fulfil the Fundamental Principles of “Protecting people and the environment from the harmful effects of ionizing radiation”, and “avoiding undue burdens on future generations”. The existence of radioactive residues in a State should be considered and may have an important effect on national policies and strategies for the safe management of radioactive waste, decommissioning of facilities and activities, and remediation. The purpose of DS526 is to provide comprehensive and integrated guidance to IAEA Member States (whether or not they are a Contracting Party to the Joint Convention) on the development and implementation of national policies and strategies in one document.</p>

COMMENTS BY REVIEWER				RESOLUTION	
Reviewer: Natural Resources Canada (NRCan)		Page 3 of 4			
Country/Organization: Canada/NRCan		Date: May 27, 2020			
Comment No.	Para/Line No.	Proposed new text	Reason	Accepted/Modified/Rejected	Rationale
3	Section 7/ item 3	Legacy radioactive waste	<p>It should be clearly stated if legacy waste is under the scope of the guide or if it is excluded. Based on Section 2 – Background, first bullet, it is one of the drivers for the document, and should be addressed.</p> <p>Legacy waste could be addressed in Section 7 Overview.</p>	A	As mentioned in Section 2, the Safety Guide will address legacy waste. Legacy sites and wastes are included in the first bullet point in Section 7.
4	General/ Section 7 Overview, item 3 of structure and content of the Safety Guide	Arrangements for ensuring the implementation of a national policy/strategy	<p>Per GSR- Part 5, clause 3.6: “The national strategy for radioactive waste management has to outline arrangements for ensuring the implementation of the national policy.”</p> <p>Guidance on expectations and/or compliance monitoring related to the implementation of the national policy/strategy should be provided (e.g. reporting requirements).</p> <p>Could be addressed in Section 7.</p>	A	
5	General/ Section 7 Overview, item 3 of structure and content of the Safety Guide	Transportation of radioactive waste	<p>For some member states, transportation can be an important aspect of the national policy/strategy for the management of radioactive waste.</p> <p>It can be included as a discussion topic under Section 7, item 3.</p>	A	We have refined the scope of the proposed Safety Guide so that it is clearer and accords with the view of the majority of the Member States that have provided comments. Although transport options and infrastructure (and interested parties views on them) can influence national strategies for safe management of radioactive waste and residues (and these will be considered), it is not the intention that this Safety Guide would address technical details of transport safety (e.g. transport regulations) because such details are unlikely to influence policy.

COMMENTS BY REVIEWER				RESOLUTION			
Reviewer: Natural Resources Canada (NRCan)		Page 4 of 4					
Country/Organization: Canada/NRCan		Date: May 27, 2020					
Comment No.	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
6	General/ Section 7 Overview, item 3 of structure and content of the Safety Guide	Radioactive waste generated from new technologies	<p>To enable the development of new and future nuclear technologies, it may be challenging if the national policy/strategy is silent on the management of radioactive waste streams arising from new technologies. Therefore, one's national policy/strategy may need to include statements on how it would manage radioactive waste arising from new technologies.</p> <p>The topic of waste generated from new nuclear technologies could be considered in Section 7, item 3.</p>	A	This is already included because the intention is for the Safety Guide to address all radioactive waste. It is one of the issues that can be considered in developing the document.		

DPP

National Policies and Strategies for the Safety of Radioactive Waste and Spent Fuel Management, Decommissioning and Remediation (DS526)

COMMENTS BY REVIEWER				RESOLUTION	
Reviewer: Peter Lietava Country/Organization: SÚJB Praha, Czech Republic		Page 1 of 2 Date: 4 May 2020			
Comment No.	Para/Line No.	Proposed new text	Reason	Accepted / Modified / Rejected	Rationale
1	Para 2	National policies and strategies for radioactive waste and spent fuel management, decommissioning and remediation need to consider and include all of the relevant sites, facilities and activities and their life cycles within a broader national programme and their interdependencies in order to facilitate the achievement of a properly optimized level of safety. It is not sufficient only to optimize individual sites, facilities and activities, such as a single disposal facility or a single decommissioning project; optimization should also occur at the level of the national programme.	Do not include into DPP new and confusing term “national programme” which has a different meaning for EU Member States that shall to follow also the requirements of Council Directive 2011/70/Euratom. National programme in the context of the Directive implements national RAW and SF policy, ie. it is identical to the term “national strategy” as used by the IAEA.	M M	The point on interdependencies is accepted. Optimization is a Fundamental Principle that needs to be addressed. The term ‘radioactive waste management programme’ is not a new term and it appears in various Safety Standards including, SSR-4, SSG-40, SSG-41, SSG-45, GS-G-3.3, GS-G-3.4, NS-G-1.13, NS-G-2.7, NS-G-4.5, NS-G-4.6 and WS-G-5.1. The term “national programme” which is closely similar is not viewed as being identical to “national strategy”, rather it can be useful in referring to the programme of work undertaken to implement the national strategy. A footnote of explanation has been added.
2	Para 5	National policies and strategies for decommissioning of facilities and closure of disposal facilities.	For a specific kind of RAW management facilities - disposal facilities not only decommissioning but also closure policy and strategy has to be defined. However, to keep the title of the document short we do not recommend extending it.	R	Yes, but the text does not need to be changed in the way suggested – all steps in the disposal of waste are covered in preceding bullet point, including closure and institutional control of disposal facilities.
3	Para 7	The provision of local, regional and/or centralized waste management facilities (e.g. waste processing and waste storage facilities) nationally.	This item of the list is already covered by previous item (predisposal facilities) and consecutive item (disposal facilities). Delete to avoid duplicity.	A	

4	Para 7	Site end-states, institutional control of disposal facilities, and remediation objectives and their consistency across the nation.	The term “institutional control” is used in context of disposal facility lifetime.	R	Institutional control is maintained throughout the operation of all nuclear facilities, not only disposal facilities.
5	Para 7	Optimization of the national programme for waste and spent fuel management, decommissioning and remediation taking account of interdependencies.	See comment No. 1	R	See the response to comment No. 1. Optimization is a Fundamental Principle that needs to be addressed.
6	Para 7 Structure of SG	This section will address how the topics discussed in Section 3 should be addressed and implemented in national strategies for radioactive waste and spent fuel management, decommissioning and remediation.	National strategy is on the implementation of national policy.	A	
7	Para 7 Structure of SG	It is recommended to further develop item 4 of the SG structure and to consider items such as: <ul style="list-style-type: none"> • Research and development, • Funding of RAW and SF management, decommissioning and remediation, • Milestones (KPI) of national strategy • Public involvement and transparency 	To reach the objective of the document (to provide integrated, comprehensive recommendations on developing and implementing national policies and strategies...) there is a need to further develop details of chapter 4 on national strategy (at least in draft SG).	A	
8	General comment		We strongly recommend considering by the development of the Safety Guide the requirements of Council Directive 2011/70/Euratom so that the Safety Guide at least does not contradict the Directive.	A	

**ENISS comments on
IAEA draft DPP DS 526 *National Policies and Strategies for the Safety of Radioactive Waste and Spent Fuel Management, Decommissioning and Remediation* (April 2020)**

COMMENTS BY REVIEWER				RESOLUTION ENISS			
Reviewer: ENISS Country/Organization: ENISS 19/05/2020		Page 1 of 2 Date:					
Comment No.	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
1	5. Scope (page 4)	All steps in the management of radioactive waste and residues, including waste generation, waste minimization, <u>waste characterization</u> , clearance, predisposal management of radioactive waste and disposal of radioactive waste	Waste characterization is an essential step in being able to decide if waste can be removed from nuclear regulatory control by applying a clearance process and for its further safe management, either as non-radioactive waste (after successful clearance, physical and chemical characteristics are still needed for conventional landfills) or as radioactive waste (if clearance is not possible, then physical, chemical and radiological characteristics are needed for interim storage and/or disposal).	A			
2	7. Overview (page 7)	In line with comment 1, in the proposed structure of the Safety Guide, add a bullet " <u>Waste characterization</u> " in chapter 3 "National policies".	Same reason as for comment 1.	A			

DS526 “National Policies and Strategies for the Safety of Radioactive Waste and Spent Fuel Management, Decommissioning and Remediation”
(Draft dated 1 April 2020)
Status: STEP 3a

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 BASE) Country/Organization: Germany			Page 1 of 3 Date: 2020-05-13			
Relevance	Comment No.	Para / Line No.	Proposed new text	Reason	Accepted /Modified/ Rejected	Rationale
2	1	Ch. 3, para. 5	A new Safety Guide is proposed because of the gaps and slight inconsistencies in the existing guidance, and because it would not be difficult and hardly manageable to revise the many existing safety standards publications that currently contain only brief references to policies and strategies on radioactive waste and spent fuel management, decommissioning and remediation <u>and would lead to a fragmentation of the guidance on establishing and implementing these policies and strategies.</u> If the approach of revising existing safety guides was to be followed, it would not be simple to decide where amongst the various safety guides to include new guidance to address the gaps and, more importantly, it would not achieve what is wanted, which is integrated and, as far as possible, comprehensive guidance in this area. The development of this new Safety Guide is an opportunity to address the gaps and slight inconsistencies in the existing guidance <u>in a comprehensive and integrated manner</u> ; subsequent revisions of related Safety Standards should then lead to improved consistency of the <u>overall</u> guidance as a whole.	Text suggestions to avoid unnecessary repetitions. Also, in principle it should be manageable to revise the existing safety standards publications. And since there are some inconsistencies it might be even necessary to revise at least some of them. But the purpose is to provide comprehensive and integrated guidance in one document.	A	

1	2	Ch. 5	It should be stated clearly whether reprocessing will be within the scope of this guide or not.	<p>This safety guide will address policies and strategies for safe management of radioactive waste (including spent fuel) etc. This excludes reprocessing since generally spent fuel as part of reprocessing activity is not considered as radioactive waste. It is also not covered in the scope of the Joint Convention unless the Contracting Party declares reprocessing to be part of spent fuel management, as stated in Article 3 of the Joint Convention.</p> <p>However, it might be useful to also address reprocessing activities as part of the national policy.</p> <p>It should be made clear, whether reprocessing is with the scope of this safety guide or not.</p>	A	<p>We have refined the scope of the proposed Safety Guide so that it is clearer and accords with the view of the majority of the Member States that have provided comments. This set of comments was an outlier amongst those received – for example, it was the only one to include a comment suggesting the inclusion of reprocessing in the scope of the Safety Guide.</p> <p>We have made it clear that the Safety Guide will not address national policies and strategies for reprocessing in Section 5, “Scope”.</p>
2	3	Ch. 7	<ul style="list-style-type: none"> • Prioritization amongst the development and justification of new facilities and activities, decommissioning of facilities and remediation of existing sites and facilities across the nation. 	When new facilities are planned, they should also be justified. The same principle (periodization and justification) should also apply to new activities.	A	
2	4	Ch. 7, Sec. 3	<ul style="list-style-type: none"> • periodic review and adjustment and improvement of national policies 	National policies should be reviewed and adjusted periodically and as soon as there are changes in the national nuclear programme.	A	Implemented as ‘periodic review’ because a review may not always lead to an adjustment.

2	5	Ch. 7, Sec. 3	<ul style="list-style-type: none"> legacy radioactive waste 	It should be clearly stated if legacy waste is under the scope of the guide or if it is excluded. Legacy waste could be addressed under Sec. 3.	A	As mentioned in Section 2, the Safety Guide will address legacy waste. Legacy sites and wastes are included in the first bullet point in Section 7.
1	6	Ch. 7, Sec. 4	Review and improvement of the national strategies	The national strategy should also be reviewed and adjusted periodically or when there are changes in the programme and/or policy or upon new developments.	A	Implemented as 'periodic review'.

National Policies and Strategies for the Safety of Radioactive Waste and Spent Fuel Management, Decommissioning and Remediation

COMMENTS BY REVIEWER				RESOLUTION	
Reviewer: Jila Karimi Diba Page.... of.... Country/Organization: IRAN/National Radiation Protection Department (NRPD) of Iran Nuclear regulatory Authority (INRA) Date: 2020-05-29					
Comment No.	Para / Line No.	Proposed new text	Reason	Accepted / Modified / Rejected	Rationale
1	Clause 4 (Objective) / Second paragraph	“The target audience for the publication will be governments, regulatory bodies, licensees and operating organizations.”	Considering clause 7 (Overview) of this DPP that is about the structure and content for the Safety Guide. Please pay attention to 2.3 Responsibilities of licensees and operating organizations.	A	
2	Clause 6 (Place in the overall structure of the relevant series and interfaces with existing and/ or planned publications)	It is suggested to add GSR Part 7: <ul style="list-style-type: none"> • GSR Part 6 Decommissioning of Facilities • GSR Part 7 Preparedness and Response for a Nuclear or Radiological Emergency 	Requirement 15 of GSR Part 7 that is about Managing radioactive waste in an emergency states: “The government shall ensure that radioactive waste is managed safely and effectively in a nuclear or radiological emergency. 5.84. The national policy and strategy for radioactive waste management [19] shall apply for radioactive waste generated in a nuclear or radiological emergency, with account taken of paras 5.85 to 5.88. 5.85. The protection strategy (see Requirement 5) shall take into account radioactive waste that might arise from protective actions and other response actions that are to be taken. 5.86. Radioactive waste arising in a nuclear or radiological emergency, including radioactive waste arising from associated protective actions and other response actions taken, shall be identified, characterized and categorized in due time and shall	M	We do refer to GSR Part 7 Requirement 15 in the DPP. We have refined the scope of the proposed Safety Guide so that it is clearer and accords with the view of the majority of the Member States that have provided comments. This set of comments was an outlier amongst those received – for example, it was the only one clearly suggesting the inclusion of preparedness and response for a nuclear or radiological emergency in the scope of the Safety Guide. The Requirement for a national policy and strategy for radioactive waste management is contained in GSR Part 5. The national policy and strategy for radioactive waste management should certainly take account of waste generated in an emergency and this will be considered in the proposed Safety Guide.

			<p>be managed in a manner that does not compromise the protection strategy, with account taken of prevailing conditions as these evolve.”</p> <p>The lessons learned from past emergencies should be considered in providing this guide.</p> <p>Please let me attract your attention to Technical Volume 3 (3.3.8 waste management in the emergency) and Volume 5 (5.2 Remediation and 5.4 Management of contaminated material and radioactive waste) (The Fukushima Daiichi Accident).</p>		<p>The description of the scope has been revised so that it is clearer that the Safety Guide will address national policies and strategies for the safe management of radioactive waste generated as a result of a nuclear or radiological emergency, but it will not provide guidance on emergency preparedness and response for radioactive waste and spent fuel management, decommissioning and remediation.</p>
--	--	--	---	--	---

TITLE

Document Preparation Profile (DPP) for DS526

National Policies and Strategies for the Safety of Radioactive Waste and Spent Fuel Management, Decommissioning and Remediation

Red part is text to be added

COMMENTS BY REVIEWER				RESOLUTION	
Reviewer: M.Dionisi		Page.... of....			
Country/Organization: ITALY /ISIN		Date: 4 May 2020			
Comment No.	Para/Line No.	Proposed new text	Reason	Accepted/Modified/Rejected	Rationale
1	Ch.7	<p>After the 3rd bullet under the Chapt 7 Overview, add a new bullet:</p> <ul style="list-style-type: none"> Defining the inventory of the present radioactive waste streams and providing an estimation for future production 	<p>Par. 3.5 of the GSR Part.5 states:</p> <p><i>3.5. The national policy on radioactive waste management has to set out the preferred options for radioactive waste management. It has to reflect national priorities and available resources and has to be based on knowledge of the waste to be managed (e.g. knowledge of the inventory and of waste streams) now and in the future.</i></p> <p>One of the fundamental issue that establishes the basis for National Policies and Strategies for the Safety of Radioactive Waste and Spent Fuel Management is the knowledge of the waste to be managed. Waste characterization and Waste inventory are then a very important prerequisite for the development of the National strategies for RW and SF management.</p> <p>It is recommended that the Guide adequately deal with aspects of waste characterization and Inventorying.</p> <p>To support this comment see also Chapter 8 of NW-G-1.1 “Policies and Strategies for Radioactive Waste Management”</p>	A	

2	Tentative structure and content of the SG	<p>In the proposed content of the Safety Guide add a new bullet in the Chapter 3 National Policies</p> <p>Objectives for protection of people and the environment</p> <ul style="list-style-type: none">• Provision of resources• Regulatory approaches• Interactions with interested parties• Inventory and future production• Waste classification• Waste minimization (and the waste hierarchy)	See the reason for Comment n,1	A	
---	---	--	--------------------------------	---	--

DS526 National Policies and Strategies for the Safety of Radioactive Waste and Spent Fuel Management, Decommissioning and Remediation

COMMENTS BY REVIEWER				RESOLUTION	
Reviewer: WASSC Japan Page.... of.... total 4 pages Country/Organization: Japan/NRA Date: 29 May 2020					
Comment No.	Para / Line No.	Proposed new text	Reason	Accepted / Modified / Rejected	Rationale
1.	General	<p>Although the development of this document is one of the prioritized items in the 8th term of WASSC, this DPP seems somewhat concise to grasp big picture. Following issues are our concerns.</p> <ul style="list-style-type: none"> ● National policies and strategies for safety are not limited to those subject fields listed in this DPP and should be positioned as part of more comprehensive national policies and strategies such as given in UN SDGs. Usually, national policies and strategies need to consider not only safety but also other aspects such as nuclear security, interaction with interested parties etc. ● National policies and strategies are deemed intrinsically to be the subject of the NE series documents. <p>Therefore, the intent and scope should be more obviously mentioned in DPP. Following issues are to be clarified.</p> <ul style="list-style-type: none"> ● Will this document cover wider aspect other than safety? If so, some texts regarding such aspects should be added to Section 5. In addition, whether following items are covered in DS526? 	Clarification.	A	<p>We agree that national policies and strategies for safety are not limited to those subject fields listed in this DPP. The scope of DS526 is, however, defined to address the safety of management of all radioactive waste and spent fuel (and decommissioning and remediation), including interactions with interested parties and interfaces with security. This respects the logical boundary between promotion of nuclear energy and the safety of radioactive waste management. National policies and strategies for nuclear power generation and for the management of nuclear fuel before it is declared waste (e.g. fuel cycle policy, reprocessing) and for the safety of those activities would be outside the scope of DS526. It would not be sensible to try to address all of these areas in a single document. We believe that DS526 describes an area of ‘policy space’ that would be beneficial and feasible to address, and correspondingly we place more emphasis on GSR Part 5 Requirement 2 “National policy and strategy on radioactive waste management” as compared with GSR Part 1 Requirement 1 “National policy and strategy for safety”.</p> <p>We have added a bullet point on the relationships of national policies and strategies for the safety of radioactive waste and spent fuel management, decommissioning and remediation with other national policies and strategies (e.g. on environmental protection, on nuclear power generation) and their role in achieving UN Sustainable Development Goals.</p>

		<p>Scope of the document should be carefully shown in DPP.</p> <ul style="list-style-type: none"> ➤ Spent nuclear fuel for reprocessing ➤ Meaning of residue is necessary for clarification ➤ Residual materials generated from remedial action in off-site contaminated area <ul style="list-style-type: none"> ● Some rationale regarding independence from relevant publications in NE series should be mentioned. There may be some interaction with these publications, if so, such aspects would be useful materials of DPP. ● The relation between National and the government/ the regulatory body/ licensees and operating organizations should be clarified. ● Some clarification between planned activities (i.e. radioactive waste and spent fuel management, and decommissioning) and remediation should be mentioned. ● The targeted audience mentioned in Section 4 would not be limited to governments, regulatory bodies, and operating organizations, especially for remediation. For example, para. 1.9 of DS468 mentions <i>“This Safety Guide is intended to be used by governments, national authorities, regulatory bodies, operating organizations and other parties involved in the remediation of sites or areas and contributing to the recovery process for areas affected by past activities or events.”</i> 		<p>We have made several edits to the DPP to further clarify the scope. We have refined the scope of the proposed Safety Guide so that it is clearer and accords with the view of the majority of the Member States that have provided comments.</p> <ul style="list-style-type: none"> ➤ As drafted DS526 will not address national policies and strategies for reprocessing of spent nuclear fuel – this has been made explicit in Section 5. ➤ NORM Residues are defined in the 2018 Safety Glossary as “Material that remains from a process and comprises or is contaminated by naturally occurring radioactive material (NORM)”. ➤ As drafted DS526 will address national policies and strategies for clearance of sources including materials and objects and radioactive waste arising from remediation of contaminated areas on and off-sites – this has been made explicit in Section 5. <p>The relationship between the Safety Guide and the NE Series documents is clear – the Safety Guide will be an internationally endorsed IAEA Safety Standard publication; it will therefore have a different status to the NE documents and be separate from them. However, its development may build on their contents where appropriate. There have been discussions within the Secretariat concerning information exchange to assist the development of the Safety Guide and the updating and revision of the NE documents as appropriate.</p> <p>The relationships and responsibilities of national government, the regulatory body, licensees and operating organizations will be addressed in the document (it varies between Member States and may be illustrated using examples).</p> <p>The point on clarification between planned activities (i.e. radioactive waste and spent fuel management, and decommissioning) and remediation is mentioned in the first bullet point of Section 7 – we have edited this for greater clarity.</p> <p>We have clarified the target audience of the document.</p>
--	--	--	--	---

Specific comments					
2.	2. 4 th para. (p. 2)	The need to consider interdependencies is a fundamental problem that is also mentioned in SF-1. However, this is very situation-dependent and is not possible to pose general guides.	Comment only.	A	No response required.
3.	3. 2 nd para. (p. 3)	One of the approaches to comprehensively integrate safety guides is the safety case in the field of radioactive waste management, and optimization in the field of radiation protection.	Comment only.	A	No response required.
4.	6./12 from the bottom (p.5)	Remediation Process for Areas Affected by Past Activities and Accidents Remediation Strategy and Process for Areas Affected by Past Activities or Events	The title of DS468 was changed.	A	
5	6. (p.4-5)	The documents, SSG-23 ‘The Safety Case and Safety Assessment for the Disposal of Radioactive Waste’ and SSG-31 ‘Monitoring and Surveillance of Radioactive Waste Disposal Facilities’ should be added within the list.	They do not only deal with very technical matters, but also the matters they address are very much related to national policy and strategies affected by societal acceptance.	A	
6	5 th bullet (p.6)	The provision of local, regional and/or centralized waste management facilities (e.g. waste processing and waste storage facilities) nationally . → The national provision of local, regional and/or centralized waste management facilities (e.g. waste processing and waste storage facilities).	Clarification.	A	We have clarified the text in response to this comment and other received.

7	7./3 rd bullet from the bottom. (p.6)	Regarding interaction with interested parties, careful description such as communication with public and fostering public understanding would be essential to implement national policies and strategy.	Comment only.	A	No response required.
8	7./5 th bullet (p.6)	‘Predisposal management facilities’ would be better than ‘waste management facilities’.	Disposal facilities should be thought to be excluded from what is written in the 5 th bullet. This is needed for clarification.	A	We have clarified the text in response to this comment and other received.
9	7./8 th bullet (p.6)	Site end-states, institutional control of facilities, and remediation objectives and their consistency across the nation. → End-states and institutional control of site and facilities, and remediation objectives and their consistency across the nation.	Site end-states and institutional control should not only be discussed with facilities, but with sites.	A	
10	3./1 st bullet of p.7 (new)	Adding ‘Domestic waste transfer’ newly is also important.	‘Waste import and export’ only deals with international material flow. Domestic one needs to be dealt with, because siting of waste management facilities and transportation of spent fuel and radioactive waste are getting more difficult.	A	

11	3./p.7 (new)	The issue of ‘deconcentration and concentration of disposal facilities’ is recommended to be newly added to topics of national policies.	Siting of waste management facilities, especially HLW or SF disposal facilities is much more getting difficult. Concentration or centralization especially of different types of disposal facilities would be useful to be addressed in order not to enlarge the acceptance issue. In case of deconcentration is also useful because it can provide more detailed regulations based on the radioactive level of radioactive waste at each site and then the regulations will be simplified at each site. Therefore, such a description about both consideration from the view point of safety is important.	A	These topics can all be captured under national policies and strategies for siting of disposal facilities. The text has been revised to include this.
12	4./3-5 (p.7)	‘taking account of the hazards, radiological and other types of risk, concerns born by the general public , and the needs for sustainability and management of interdependencies’	Adding ‘concerns born by the general public’ is recommended.	A	This topic can be captured under national policies and strategies for interactions with interested parties. The text has been revised to include this.

13	7. /6 (p.7)	Remediation of sites and of areas contaminated by radioactive substances	The scope includes “National policies and strategies for remediation of areas contaminated by radioactive substances.” However, this list only refers to “Remediation of sites.”	A	
----	----------------	---	--	---	--

**DS526, National Policies and Strategies for the Safety of Radioactive Waste and Spent Fuel Management, Decommissioning and Remediation
(New Safety Guide) (Step 3)**

COMMENTS BY REVIEWER				RESOLUTION			
Reviewer: Page 1 of 2 Country/Organization: Republic of Korea / Korea Institute of Nuclear Safety (KINS) Date: 07/05/2020							
Comment No.	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
1	7. OVERVIEW / Line 1	(somewhere in the OVERVIEW) Ethical issues in radioactive waste management could be discussed and considered about such as: <ul style="list-style-type: none"> · Consideration of inter-generations and inter-regions as stated in Principle 7 and para. 3.27 of SF-1 · Risk transfer resulted from import and export · Precautionary and cost-beneficial measures · Rationality to or not to account for public preferences · Procedural justice for public participation 	Ethical issues in radioactive waste management could be discussed and considered about such as:	A			

DS526, Proposed Title: National Policies and Strategies for the Safety of Radioactive Waste and Spent Fuel Management, Decommissioning and Remediation

COMMENTS BY REVIEWER				RESOLUTION	
Reviewer: of...		Page...			
Country/Organization:		Date:			
Comment No.	Para / Line No.	Proposed new text	Reason	Accepted / Modified / Rejected	
1	General	Given the inherent link between the safety and security of radioactive sources, the DPP should make reference to the Nuclear Security Series 11 and 14 and other relevant security documents, and the drafters should be encouraged to work closely with nuclear security staff in preparation of this document.		A	

TITLE: DPP DS-526 National Policies and Strategies for the Safety of Radioactive Waste and Spent Fuel Management, Decommissioning and Remediation (Draft-10)

COMMENTS BY REVIEWER				RESOLUTION	
Reviewer: WASSC Member		Page 1 of 4			
Country/Organization: Pakistan/PNRA		Date: May 28, 2020			
Comment No.	Para / Line No.	Proposed new text	Reason	Accepted / Modified / Rejected	Rationale
1.	DPP	The DPP/safety guide may also include information about the policy and strategy on the safe management of sealed radioactive sources, orphan sources and ownerless waste.	<p>Every MS use a large number of sealed radioactive sources which require to be safely managed during their use after their useful life or when they become spent.</p> <p>The policy and strategy is an important instrument for their safe management. Therefore, information about the sealed radioactive sources, their policy and strategy may included explicitly in the DPP/safety guide. Further, safety guide need to address about the policy and strategy of orphan sources and ownerless waste.</p>	A	The Safety Guide will address all classes and types of radioactive waste, including disused sealed radioactive sources declared as radioactive waste – this is made explicit in Section 5. An additional sentence on disused sealed radioactive sources has also been added to Section 1 and a reference is given to the Code of Conduct on the Safety and Security of Radioactive Sources.
2a	Section 5	The Safety Guide will address: • National policies and strategies for safe management of radioactive waste and , spent fuel and residues including NORM residues , arising from activities and facility operations, decommissioning and remediation.	Safety guide need to address the national policy and strategy of spent fuel whether it is declared as waste or not.	A	

COMMENTS BY REVIEWER				RESOLUTION	
Reviewer: WASSC Member		Page 1 of 4			
Country/Organization: Pakistan/PNRA		Date: May 28, 2020			
Comment No.	Para / Line No.	Proposed new text	Reason	Accepted / Modified / Rejected	Rationale
2b		<ul style="list-style-type: none"> ○ All steps in the management of radioactive waste and residues, including waste generation, waste minimization, characterization and classification, clearance, predisposal management of radioactive waste and disposal of radioactive waste. • National policies and strategies for decommissioning of facilities. • National policies and strategies for remediation of areas contaminated by radioactive substances. 	<p>IAEA GSR part 5 requirement 9 is on the Characterization and classification of radioactive waste which states that "At various steps in the predisposal management of radioactive waste, the radioactive waste shall be characterized and classified in accordance with requirements established or approved by the regulatory body"</p> <p>The characterization is important for establishment the need for further adjustment, treatment, conditioning, or its suitability for further handling, processing, storage or disposal. Thus characterization serves to provide information relevant to process control and assurance that the waste or waste package will meet the acceptance criteria for processing, storage, transport and disposal of the waste.</p> <p>Radioactive waste is generated in a number of different kinds of facilities and it may arise in a wide range of concentrations of radionuclides and in a variety of physical and chemical forms. These differences result in an equally wide variety of options for the management of the waste. There is a variety of alternatives for processing waste and for short term or long term storage prior to disposal. Likewise, there are various alternatives for the safe disposal of waste, ranging from near surface to geological disposal. Thus, classification of radioactive waste is helpful in planning a disposal facility and at any stage between the generation of raw waste and its disposal. Further, section 6 discuss about the classification.</p>	A	We have identified characterization and classification as important for consideration.

COMMENTS BY REVIEWER				RESOLUTION	
Reviewer: WASSC Member		Page 1 of 4			
Country/Organization: Pakistan/PNRA		Date: May 28, 2020			
Comment No.	Para / Line No.	Proposed new text	Reason	Accepted / Modified / Rejected	Rationale
3.	Section 7, Page 6, bullet 3	Radioactive waste characterization	<ul style="list-style-type: none"> i. Characterization is important for establishment the need for further adjustment, treatment, conditioning, or its suitability for further handling, processing, storage or disposal. ii. It is requirement (No.9) of GSR part 5. Previously characterization was part of IAEA NW-G 1.1 -Policies and Strategies for Radioactive Waste Management. 	A	
4.	Section 7, Page 6, Contents	Principles for Establishing a Policy and Strategy	As per NW-G-1.1, NW-G-2.1 and NW-G-3.1, there should be a heading of “Principles for Establishing a Policy and Strategy” in contents.	M	The contents of NW-G-1.1, NW-G-2.1 and NW-G-3.1 were reviewed and considered in developing this DPP. One result of those discussions was that there is a desire for a focused and relatively short Safety Guide that will address the main policy and strategy elements, but that should not try to re-develop / update, those older NW documents. The NW documents are lengthy and detailed, but do not cover some of the more high-level issues related to the Safety Fundamentals and Requirements. The proposed contents list now notes clearly that the Safety Fundamentals and Requirements will be used as the primary basis for the guidance on establishing national policies and strategies.

COMMENTS BY REVIEWER				RESOLUTION	
Reviewer: WASSC Member		Page 1 of 4			
Country/Organization: Pakistan/PNRA		Date: May 28, 2020			
Comment No.	Para / Line No.	Proposed new text	Reason	Accepted / Modified / Rejected	Rationale
5.	Section 7, Page 6-7, Contents Section 3	3. NATIONAL POLICIES <ul style="list-style-type: none"> • Orphan and ownerless waste • Waste Characterization • Waste clearance, reuse and recycling of materials • Transfer of Radioactive waste • Nuclear security 	<ul style="list-style-type: none"> • Reason for characterization is given at comment 3 and 4. • Recycling minimize the volume of material • On site transfer that requirements of transport are not applicable and transfer of ownership may be addressed. • Nuclear security is mentioned at section 5 last para so may be included in the contents. 	A	All of these topics will be addressed; waste characterization is explicitly identified, recycling is a part of the waste hierarchy which is explicitly identified together with waste minimization, waste transfers are explicitly identified, nuclear security will be given due consideration as the development of the guide progresses – this is explicitly stated.
6.	Section 7, Page 6-7, Contents Section 3	<ul style="list-style-type: none"> • Safety and security objectives • Management of spent fuel • Management of radioactive waste • Public information and participation 	As per NW-G-1.1, there should be a sub-headings in contents: <ul style="list-style-type: none"> 3.1 Safety and security objectives 3.2 Management of spent fuel 3.3 Management of radioactive waste 3.4 Public information and participation 	A	The contents list will include appropriate headings and subheadings. The provisional contents and structure given in the DPP has been improved and all of these topics are included. The details will be confirmed during the development of the document.
7.	Contents	Establishment & Implementation of a National Policy	As per NW-G-1.1 and NW-G-2.1, there should be a heading of “ Establishment & Implementation of a National Policy ” in contents.	A	See responses above. The proposed contents list includes headings on these topics.

TITLE

Document Preparation Profile (DPP) for DS526

National Policies and Strategies for the Safety of Radioactive Waste and Spent Fuel Management, Decommissioning and Remediation

COMMENTS BY REVIEWER				RESOLUTION	
Reviewer: M. Nepeypivo Page.... of.... Country/Organization: Russian Federation /SEC NRS Date: 20 May 2020					
Comment No.	Para / Line No.	Proposed new text	Reason	Accepted / Modified / Rejected	Rationale
1.	Chapter 5. SCOPE	3rd sentence: All types classes of radioactive waste, including spent fuel declared as radioactive waste and disused sealed radioactive sources declared as radioactive waste.	Editorial remark (SNF and DSRSs are types of the waste not classes).	A	
2.	Chapter 7. OVERVIEW General comment	As applied to national policies and strategy in the field of radioactive waste management it is recommended to consider the requirements of Article 12 “Contents of national programmes” of Council Directive 2011/70/Euratom.	The Council Directive 2011/70/Euratom provides a systematic, intergraded requirements for the scope and content of the national policy and strategy for the safe management of spent fuel and radioactive waste which EC members have to be fulfilled.	A	

3.	Chapter 7. OVERVIEW	Given that the SG is new one, it is proposed to identify all the general topics related to the national policies and strategies for waste management, decommissioning and remediation to be addressed in the Guide (instead, only one example of possible topics is mentioned in the chapter).	To give clear understanding on the content of the new SG.	A	We have tried to identify more fully all of the general topics to be addressed in the guide and to further define the contents list. The structure and content for the Safety Guide given in the DPP, however, remains tentative. The structure and contents list with appropriate headings and further subheadings will be confirmed during the development of the document.
4.	Chapter 7. OVERVIEW	It is proposed in the SG to provide definitions on the terms <i>national policy</i> and <i>national strategy</i> for clear understanding and interpretations of the recommendations.	There are no the definitions of these terms in the IAEA Safety Standards.	A	We agree that the Safety Guide should provide explanations of the terms national policy, national strategy, and national programme. This is now indicated.
5.	Chapter 7. OVERVIEW Tentative structure and content of the SG 3. NATIONAL POLICIES	In the proposed content of the SG it is appropriate to consider adding a new topic in the Chapter 3 National Policies to addressing optimization of the national policy and national strategy.	Optimization is mentioned several times in the DPP and need to be addressed in the SG.	A	
6.	Chapter 7. OVERVIEW Tentative structure and content of the SG 4. NATIONAL STRATEGIES	2-nd sentence The <i>hazards, radiological and other types of risk</i> are the factors related to graded approach and rather this should be considered in the section 5. GRADED APPROACH TO NATIONAL POLICIES AND STRATEGIES while there are a lot of other key factors driving the development and implementation of the national strategy such as waste inventory, scope of nuclear program in the country, legislation and regulatory framework etc.	For the reason see Chapter 8. PREREQUISITES FOR STRATEGY DEVELOPMENT of NW-G-1.1 “Policies and Strategies for Radioactive Waste Management”.	A	

Comments on DPP DS526 National Policies and Strategies for the Safety of Radioactive Waste and Spent Fuel Management, Decommissioning and Remediation

COMMENTS BY REVIEWER				RESOLUTION	
Reviewer: Bengt Hedberg		Page.... of....			
Country/Organization: Swedish Radiation Safety Authority		Date: 29 May 2020			
Comment No.	Para / Line No.		Reason	Accepted/ Modified/ Rejected	Rationale
1	General		<p>We consider current scope too wide and also slightly confusing. The responsibility to develop a strategy for decommissioning usually rests with the organization being the licensee of the facility in question (already addressed in IAEA GSR Part 6, Requirement 8 and subsequent para's 5.1 – 5.5). And most decommissioning projects are more or less unique. And therefore normally no need for a “national” or nationwide policy and/or strategy for decommissioning, except on a very principle level; e.g. immediate or deferred dismantling.</p> <p>Remediation strategies for contaminated areas are likely to be unique for each situation, and the responsibility to develop a remediation strategy is likely to be imposed on the organization being charged with the responsibility for the remediation activities. (see IAEA GSR Part 3, Requirement 49 and subsequent para's 5.10 – 5.18).</p> <p>If the document should encompass all waste generating activities it should include also policies and strategies for construction and operation of nuclear reactors.</p> <p>We therefore think that the document should be framed so as to capture what we consider to be the main and overarching challenge, i.e. policies and strategies for management of interdependencies in radioactive waste management in a “cradle-to grave” perspective, i.e. (national) policies and strategies for management of radioactive waste and spent fuel.</p>	R	<p>We have refined the scope of the proposed Safety Guide so that it is clearer and accords with the view of the majority of the Member States that have provided comments. This set of comments was an outlier amongst those received – for example, it was the only one to include comments suggesting the exclusion of decommissioning and remediation from the scope of the Safety Guide. We believe that there is a need for comprehensive and integrated national policies and strategies, as argued in the DPP – this argumentation has been made stronger as a result of other Member States comments. The suggestion that “If the document should encompass all waste generating activities it should include also policies and strategies for construction and operation of nuclear reactors” in our view goes too far and the logic for it is not clear. It is not the intention to focus on the development of national policies and strategy for safety (GSR Part 1 Requirement 1), which are indeed extremely broad in scope. Rather, the intention is to focus more on national policies and strategies for the safe management of all types of radioactive waste and spent fuel (GSR Part 5 Requirement 2) and radioactive residues (such as residues containing naturally occurring radioactive material, NORM) and for the safe decommissioning of facilities and activities, and for remediation of sites and other areas contaminated by radioactive substances. The proposed scope is for radioactive waste and spent fuel the same as the scope of the Joint Convention. Notwithstanding the apparent differences of view, the Safety Guide will still address ‘the main and overarching challenge’ identified in the comment.</p>

COMMENTS BY REVIEWER				RESOLUTION	
Reviewer: Bengt Hedberg		Page.... of....			
Country/Organization: Swedish Radiation Safety Authority		Date: 29 May 2020			
Comment No.	Para / Line No.		Reason	Accepted/ Modified/ Rejected	Rationale
2	Title	Policies and strategies for safe management of spent fuel and radioactive waste	For the document to focus on the core issue to be addressed. And also to recognize that the “cradle-to-grave” situation may involve several policies and strategies, some of which – but not necessary all – might be of national nature. And for those policies and strategies to <u>include management of waste</u> from decommissioning and remediation.	R A A	<p>Again, the majority view is that there is a need for national policies and strategies, and for these to integrate consideration of decommissioning and of remediation with waste and spent fuel management because of the interdependencies between them. For example, the choice of decommissioning strategy can have a very large effect on the amounts of radioactive waste needing management and on the timing of their generation. Again, this comment was an outlier amongst those received from the Member States.</p> <p>We do recognize that there may be several policies and strategies and for this reason we identify and discuss them in the plural throughout the DPP. We have also added a bullet point in Section 7 which indicates that the relationships between different policies and strategies will be considered.</p> <p>Notwithstanding the apparent differences of view, the Safety Guide will still address ‘policies and strategies to include management of waste from decommissioning and remediation’ as recommended in the comment.</p>
3	Background, 1st para,	The achievement of safety during radioactive waste and spent fuel management, decommissioning and remediation is dependent on the availability and implementation of comprehensive national policies and strategies ¹ . Such national policies and strategies are also essential elements that assist Member States to achieve UN Sustainable Development Goals.	<p>(See comment 1 above as regards preference to exclude decommissioning and remediation strategies from this document.)</p> <p>The link to the UN Sustainable Development Goal is more or less invisible – propose to delete as we can’t see the added value. Or make a clear reference to a formal reference document.</p>	R A	<p>See responses to comments Nos. 1 and 2 regarding whether decommissioning and remediation should be in or out of scope.</p> <p>The IAEA, in line with its ‘Atoms for Peace and Development’ mandate, supports countries in their efforts to reach the 17 Sustainable Development Goals (SDGs) set out in the United Nations (UN) 2030 Agenda for Sustainable Development. We have strengthened the link in the DPP to the UN Sustainable Development Goals by including it more clearly in Section 7 as an item to be considered when developing the Safety Guide.</p>

COMMENTS BY REVIEWER				RESOLUTION	
Reviewer: Bengt Hedberg		Page.... of....			
Country/Organization: Swedish Radiation Safety Authority		Date: 29 May 2020			
Comment No.	Para / Line No.		Reason	Accepted/ Modified/ Rejected	Rationale
4	Background, 2 nd para,	<p>Policies and strategies for radioactive waste and spent fuel management constitute core elements when establishing arrangements to ensure, in a national perspective, that all radioactive waste and spent fuel are managed safely, including from decommissioning and remediation.</p> <p>National policies and strategies for radioactive waste and spent fuel management, decommissioning and remediation need to consider and include all of the relevant sites, facilities and activities and their life cycles within a broader national programme in order to facilitate the achievement of a properly optimized level of safety. It is not sufficient only to optimize individual sites, facilities and activities, such as a single disposal facility or a single decommissioning project; optimization should also occur at the level of the national programme.</p>	<p>See comment 1 above as regards potentially several policies and strategies and preference to exclude decommissioning and remediation <u>strategies</u> from this document.) But we support <u>management of waste from</u> decommissioning and remediation should be included.</p> <p>We also consider it somewhat inappropriate to introduce the concept of “national programme” in this document as it is not used in IAEA vocabulary and not a formalized element in the IAEA context, although familiar to European member states through EC Directive 2011/70/Euratom. As this is not a worldwide concept but limited to the EU context we propose it to be removed from the document.</p> <p>We also consider that optimization of such diverse activities that are integrated in a nationwide setting (“national programme”) is not possible to define, and even less to verify. Optimization are preferably used when possible to verify – or not – by some kind of measurements, and when activities to be optimized are in control of one and the same organizational entity, e.g. a licensee of a facility or activity. And how does requirements for optimization on individual licensees correspond to optimization “at the level of the national programme”? We fear that this proposal may generate expectations beyond reasonability and confuse more than clarify.</p>	<p>R</p> <p>R</p> <p>R</p>	<p>See responses to comments above regarding several policies and strategies, and regarding whether decommissioning and remediation should be in or out of scope.</p> <p>Use of the term ‘programme’ in relation to the safe management of radioactive waste is not new and the term ‘radioactive waste management programme’ is used in various Safety Standards including, SSR-4, SSG-40, SSG-41, SSG-45, GS-G-3.3, GS-G-3.4, NS-G-1.13, NS-G-2.7, NS-G-4.5, NS-G-4.6 and WS-G-5.1. However, it is correct that the term is not in the 2018 Safety Glossary and so we have added a footnote of explanation to the DPP. In response to comments from other Member States that strongly encouraged its consideration we have identified Council Directive 2011/70/Euratom as an ‘Interface Document’. That does not mean, however, that the Safety Guide will have to be the same as the Directive – the WASSC members will decide on the content of the Safety Guide and the membership of the IAEA and the range of situations to be considered is much greater than in the EU.</p> <p>Optimization requires the use of judgement and is not a concept that can solely be evaluated against numerical criteria. Organizations participating in a national programme will each have their own responsibilities and, depending on their remit, or role, these will include optimization of individual facilities and activities, and optimizing the coordination between and across different facilities and activities. For example, there is little point optimizing activities at a particular waste processing facility if it will lead to the production of waste in the wrong form or at the wrong time for the waste management programme.</p>

COMMENTS BY REVIEWER				RESOLUTION	
Reviewer: Bengt Hedberg		Page.... of....			
Country/Organization: Swedish Radiation Safety Authority		Date: 29 May 2020			
Comment No.	Para / Line No.		Reason	Accepted/ Modified/ Rejected	Rationale
5	Background, 3 rd para, 2 nd sentence	... Article 32 of the Joint Convention requires Contracting Parties to report on national policies for the safety of radioactive waste and spent fuel management and on the implementation of practices aimed at the achievement of these policies. ...	The Joint Convention Treaty (INCIRC 546) Art 32 does not specify “national” policy. And a Contracting Party /MS may have several policies for different elements within the national situation, e.g. reprocessing of some SF and direct disposal of other SF. Another example: In Sweden 3 out of 4 NPP dispose of VLLW in shallow land burials at the NPP site, whereas the 4 th NPP disposes of VLLW in the central disposal facility for short-lived LILW.	A	This is textually correct, but note that the Contracting Parties are nations, and that the draft text of the DPP identified policies, plural.
6	Background, First bullet in list, bottom of page 1	Propose to delete	See comment 1 above as regards preference to exclude decommissioning and remediation <u>strategies</u> from this document.	R	See responses to comments Nos. 1 and 2 regarding whether decommissioning and remediation should be in or out of scope.
7	Background, Summary of Analysis ... page 2, 1 st para 1 st sentence	The Safety Requirements relevant to national policies and strategies for radioactive waste and spent fuel management, decommissioning and remediation are included ...	See comment 1 above as regards potentially several/parallel policies and strategies and preference to exclude decommissioning and remediation <u>strategies</u> from this document. See also comment 2 above about focus for this document	R	See responses to comments Nos. 1 and 2.
8	Background, Summary of Analysis ... page 2, 1 st para, Last sentence	Propose to delete last sentence “ For example, one gap relates to a lack of guidance on optimization at the level of a national programme. Some further examples of deficiencies follow. ”	See comment 4 above. We consider optimization of “national programmes” to be impossible to achieve and especially verify.	R	See responses to comment No. 4.

COMMENTS BY REVIEWER				RESOLUTION	
Reviewer: Bengt Hedberg		Page.... of....			
Country/Organization: Swedish Radiation Safety Authority		Date: 29 May 2020			
Comment No.	Para / Line No.		Reason	Accepted/ Modified/ Rejected	Rationale
9	4. Objective 1 st para, last sentence	Delete last sentence: “... In so doing, the Safety Guide will address optimization and the interdependencies between related actions at the national level, in accordance with Principle 5 of the Fundamental Safety Principles and various Safety Requirements. ”	Statement is factually wrong. Optimization as addressed in IAEA SF-1 Principle 5 addresses optimization “... throughout the lifetime of a facility or an activity ...” and do not address interdependencies at all.	R	Note that SF-1 Principle 5 includes: “Where there are <u>interdependences</u> between related actions or between their associated risks (e.g. for different stages of the lifetime of facilities and activities, for risks to different groups or for different steps in radioactive waste management), these must also be considered. The text of the DPP has been revised for greater accuracy.
10	7. Overview, Last bullet	Propose to delete • Optimization of the national programme for waste and spent fuel management, decommissioning and remediation taking account of interdependencies.	We fear that this proposal may generate expectations beyond reasonability and confuse more than clarify. Specifically with regard to potential conflict between requirements for optimization on individual licensees and optimization “at the level of the national programme”? Criteria?	R	See responses to comment No. 4.
11	7. Overview, 3. National policies Bullets 10, 14	Propose to delete • Development and optimal use of waste management facilities • Interdependencies and interactions between policies, and optimization at the level of a national programme	The use and operation of individual facilities are – according to many national legal frameworks – the responsibility of the licensee, only. And therefore not possible to “optimize” through a national policy. See above about optimization.	R	See responses to comment No. 4.

COMMENTS BY REVIEWER				RESOLUTION	
Reviewer: Bengt Hedberg		Page.... of....			
Country/Organization: Swedish Radiation Safety Authority		Date: 29 May 2020			
Comment No.	Para / Line No.		Reason	Accepted/ Modified/ Rejected	Rationale
12	7. Overview, 4. National strategies	We think this section must be revised	<p>Current wording very difficult to interpret. Text need to be expanded and clearly explain and define what is meant by "... prioritization and scheduling of activities taking a ccount of the hazards, radiological and other types of risk, and the needs for sustainability and management of interdependencies.", i.e.;</p> <ul style="list-style-type: none"> • What is meant by in "other types" of risk? • What is meant by "need for sustainability"? Of what? • What is meant by "management of interdependencies"? Between what? Everything? 	A	

TITLEms

COMMENTS BY REVIEWER				RESOLUTION	
Reviewer: Swiss Federal Nuclear Safety Inspectorate		Page 1 of 1			
Country/Organization: Switzerland		Date: April 30, 2021			
Comment No.	Para/Line No.	Proposed new text	Reason	Accepted/Modified/Rejected	Rationale
1	Chapter 4 (p. 3)	The objective of this Safety Guide is to provide integrated, comprehensive recommendations on developing, revising and implementing newly developed and revised national policies and strategies for the safe management of all types of radioactive waste ...	In chapter 2 of DSS526, it is clearly illustrated that recommendations to national policies already exist in various Safety Standards Publications. Similarly, examples of national policies can be found when looking into the many national reports to the Joint convention. Most member countries have already developed a national policy and strategy, and for the majority of those countries, the topic will not be “to develop” a national policy and strategy from scratch, but rather “revise” them in the light of the planned new safety guide.	A	
2	Chapter 4 (p. 3)	The target audience for the publication will be governments, regulatory bodies, and operating organizations.	National policies are issued by national governmental organisations. In many countries, the operating organisations are private. In addition, large volume of waste may be produced by international research centres. The waste streams of these producers have to be integrated into one national policy. Evidently the waste-producing, “operating organizations” have to be integrated when establishing a national policy, but the responsibility lies in the hands of the regulatory bodies.	R	The comment addresses national policies while the Safety Guide will address national policies and strategies (and the programmes through which they may be implemented). Strategies and national programmes are overseen by Governments and regulatory bodies, but they are to some extent developed by operating organizations and they are implemented by operating organizations and licensees. In response to comments received from other Member States we have explicitly listed licensees in the target audience for the Safety Guide.

3	Chapter 6 (p. 5)	<p>The Safety Guide will interface with the following draft Safety Standards being in an advanced stage of development:</p> <ul style="list-style-type: none"> • DS459 ... • DS468 ... • DS477 The Management System for the Predisposal Management and Disposal of Radioactive Waste • DS489 ... 	<p>In DS477, “national policy” or “national policies” are mentioned in 2.2, 2.3, 4.13, 4.15 and 4.17. It seems evident that management systems have to rely on national policies as these provide important boundary conditions for safety management.</p>	A	
4	Chapter 7 (p. 7)	<ul style="list-style-type: none"> • Development and optimal use of waste management facilities (no text changes) 	<p>Note that in some countries with existing disposal programmes and decisions on the phase-out of the nuclear cycle, there will be a conflict in the future between closing doors of radioactive waste repositories and ongoing waste production in the medical, industrial and research sector. Such a conflict has to be addressed by the national programmes. Organisations producing radioactive waste may just be founded in these days, but their waste will only be ready for final storage, after radioactive waste repositories have already been decommissioned. Thus, this needs planning far in advance. Such cases should be addressed in the draft safety guide.</p>	A	

DS526

COMMENTS BY REVIEWER				RESOLUTION	
Reviewer: Rodrigo Salinas		Page: 1... of..1..			
Country/Organization: UAE/FANR		Date: 2020-May-13			
Comment No.	Para/Line No.	Proposed new text	Reason	Accepted	Rationale
1	Point 7	Shall we understand that waste generated due to a nuclear or radiological emergency will be considered in the proposed document? Or the secretariat intends to develop another document addressing this specific and relevant topic?	<p>Point 2 refers to “Requirement 15 of GSR Part 7 addresses the issue of managing radioactive waste generated in a nuclear or radiological emergency” and Point 5 refers to “Although the Safety Guide will cover radioactive waste generated as a result of a nuclear or radiological emergency, it will not provide guidance on emergency preparedness and response for radioactive waste and spent fuel management, decommissioning and remediation.”.</p> <p>However, point 6 does not refer to GSR Part 7 and the tentative structure does not refer to waste generated due to emergencies.</p>	M	Yes, DS526 is intended to address national policies and strategies for managing radioactive waste (including that which might be generated as a result of a nuclear or radiological emergency). However, these policies and strategies will not address emergency situations but, rather, will address policy and strategy development for waste management and the management of waste in period after any emergency has ended. This has been made more explicit.

DS526 - National Policies and Strategies for the Safety of Radioactive Waste and Spent Fuel Management, Decommissioning and Remediation

COMMENTS BY REVIEWER				RESOLUTION (ONR)	
Reviewer: Denise Varley Page.1.of.3.. Country/Organization: UK/Office for Nuclear Regulation 2020				Date: June	
Comment No.	Para / Line No.	Proposed new text	Reason	Accepted/ Modified/ Rejected	Rationale
1	General		There is a need for DS526 to recognise that optimisation at a national level should be compatible with existing regulatory frameworks. Optimisation is usually applied at a facility or activity level through authorization / licensing.	A	This is expected. In addition, DS526 will include the normal IAEA preface information and Member States have flexibility in the application of the Safety Standards at the national level.
2	General		The structure and content do not include any annexes. The safety guide would benefit from the inclusion of case studies as annexes if they could be made available. This would enable the experience of Member States to be shared more effectively.	A	
3	Section 2, Page 1	Remove “relating to” from the 3 rd sentence “In the summary report of the Sixth Review Meeting of the Joint Convention, the Contracting Parties highlighted, as an ‘overarching issue’....	Words are redundant in the sentence.	A	

4	Section 2, Page 2, 6 th paragraph	Replace “How such interdependencies should be taken into account is not indicated, and in fact cannot be achieved within the scope of SSG-15” with “SSG-15 does not provide guidance on how this can be achieved.”	Shorter with a similar meaning.	A	Implemented avoiding the non-specific ‘this’.
5	Section 3 Page 6	Consider separating out predisposal waste management and waste disposal facilities in the list in this section.	The list in the scope is not fully consistent with the list in the overview section, noting comments in the background text on the importance of disposal. The purpose of the overview section is not clear, noting that some but not all of the items are reproduced in the contents list.	A	We have improved the proposed contents list so that it covers all of the items identified in the DPP and the new items identified in Member States’ comments.
6	Section 3, para 5.	Change to “The development of this new Safety Guide is an opportunity to capture new learning, address the gaps and slight inconsistencies in the existing guidance; subsequent revisions of related Safety Standards should then lead to improved consistency and clarity of the guidance as a whole.”	Information will be incorporated into this safety guide not captured in existing safety standards publications.	A	Implemented together with changes proposed in other comments.
7	Section 5, para 2	Change text to “Although the Safety Guide will cover policies and strategies for radioactive waste generated as a result of a nuclear or radiological emergency,....”	Pre-establishing policies and strategies for the safe management of radioactive waste <u>before</u> an incident occurs could be seen as an important component of emergency preparedness, response and recovery.	A	With minor improvements to the wording.

8	Section 7 4 th – 6 th dot points, Page 6	Combine 4 th and 5 th bullet points to remove repetition and add local, regional and national to disposal facilities in the 6 th bullet point to be consistent with predisposal management facilities.	The difference between waste management facilities and predisposal management facilities is not clear. Flexibility is required to allow Member States to consider having local, regional or national facilities for all types of waste management facilities, as appropriate.	A	
---	--	---	---	---	--

USA Comments on DPP for DS526

” National Policies and Strategies for the Safety of Radioactive Waste and Spent Fuel Management, Decommissioning and Remediation”

COMMENTS BY REVIEWER				RESOLUTION	
Reviewer: Multiple – POC Bobby Eid (Bobby.abu-Eid@nrc.gov) Page.1... of...5. Country/Organization: USA/NRC Date:05-29-2020					
Comment No.	Para / Line No.	Proposed new text	Reason	Accepted / Modified / Rejected	
1	Scope	The scope of the proposed DS526 guidance is very broad covering multiple overlapping topical areas with diversified policies and strategies that are difficult to incorporate in a single guidance addressing overall national policies and strategies particularly for countries with extensive nuclear programs. For example, NORM policies and strategies included in this guidance may complicate issues since its policies and strategies could be different from other nuclear programs like waste and spent fuel management and decommissioning associated with nuclear power generation during and after cease of operation. In fact, for many countries NORM is regulated by different regulatory authorities and has its own stakeholders and interest groups that may impact policies and strategies in a different fashion than other programs such as nuclear power generation. Therefore, we recommend deleting NORM from the scope of this guidance.	Focus the guidance on a manageable high-level policies and strategies of nuclear programs and consider addressing policies and strategies for NORM under different guidance.	R	<p>We understand and appreciate the reasoning for the comment. Narrowing the scope of the Safety Guide might in fact be an easier thing to do, but our understanding of the Safety Standards is that there is a need for comprehensive and integrated guidance on national policies and strategies covering the management of all radioactive waste and NORM residues. Even if NORM residues are not always regarded as waste, they still have to be managed safely to fulfil the Fundamental Principles of “Protecting people and the environment from the harmful effects of ionizing radiation”, and “avoiding undue burdens on future generations”.</p> <p>The existence of NORM in a State may have a significant effect on the management measures that are needed, and the interactions and interdependencies between the needs for the management of radioactive waste and spent fuel on one hand and NORM on the other should be taken into account where relevant.</p> <p>In response to your Comment No. 7, and similar comments from other Member States, we have clarified the proposed scope of the Safety Guide so that the proposed scope is (for radioactive waste and spent fuel) the same as the scope of the Joint Convention. In summary, we believe that the scope as it is now defined represents an area of ‘policy space’ that would be beneficial and feasible to address.</p>

2	General	When developing policies and strategies there is a need to <u>integrate both safety and security</u> . Currently the DPP addresses only safety aspects without referring to integration to achieve both safety and security goals under the national policies and strategies. Therefore, we suggest adding a Section on “Integration of Safety and Security” when developing policies and strategies.	Integration to achieve both safety and security goals should be addressed in a concomitant fashion with development or updating of policies and strategies.	A	The DPP does identify DS526 as an ‘Interface Document’ and lists NSGC as a relevant review committee who will be involved. In response to this comment and others that we have received, we have added references to IAEA Nuclear Security Series Nos. 11 and 14 and included the suggested topic in Section 7 of the DPP.
3	General	Consider using “Phased Approach,” in developing policies and strategies. The DPP lacks outline of phases or stages for development of policies and strategies. We note that generic policies to achieve safety and security, where applicable, goals can be developed. However, strategies to implement such policies may be impractical to achieve in one phase or stage within years or decades. For example, an ultimate policy for HLW and Spent Fuel management could be disposal in a geologic disposal repository. However, strategy to achieve such policy may be implemented in different phases including establishment of safe Independent Spent-Fuel Storage Installations (ISFSI) in the short-or mid-term phase. In this context, we suggest and several decades later disposal in a geologic repository. Therefore, we recommend the guidance when developed consider using the concept of phased-approach strategy to implement complex and controversial policies.	Using the Phased-approach concept to achieve policy goals is an important concept to consider in the guidance to provide flexibility for implementation within a reasonable timeframe while ensuring safety, and to minimize liabilities.	A	Added to Section 7

4	General	We recommend use of risk-informed, or graded approach to safety/risk assessment as an over-arching policy and strategy when developing policies and strategies as well as implementation priorities. We recommend adding an independent Section on overarching policies dealing with the concept of graded approach or risk-informed approach when developing policies and strategies.	Graded approach to risk has been recognized and accepted as a generic policy and strategy concept for most nuclear regulatory programs.	A	Added to Section 7
5	General	We note that many countries have already well-established programs with appropriate policies and strategies. These policies and strategies can be modified or updated based on changes in leadership perspectives or influences from policy makers or stakeholders. Therefore, we recommend adding a Section dealing with changes in policies and strategies and consider peer national/international peer reviews of specific country policies and strategies.	Role of peer reviews to advice on policies and strategies may be helpful.	A	Added to Section 7
6	General	DS526 should address “Safety Culture, (SC) in policies and strategies development. We suggest adding a Section addressing SC concept in the context of policy and strategy development.	Safety Culture is an important concept that should be included in an independent Section of the guidance.	A	Added to Section 7

7	Section 4, “Objective”, line 3, and other Places in the document.	<ol style="list-style-type: none"> 1. Delete footnote 3. Add “spent fuel” after “radioactive waste”. 2. Please use “radioactive waste and spent fuel (SF)” through the document. 	The footnote defines radioactive waste as “including spent fuel declared as waste.” In many countries, SF is a term used independent of waste since it can be a resource. In addition, the Joint Convention does not include spent fuel in the definition of radioactive waste. Therefore, we recommend that the treatment of spent fuel in this document be consistent with the Joint Convention.	A	We have clarified the proposed scope of the Safety Guide as suggested so that the proposed scope for radioactive waste and spent fuel is the same as in the Joint Convention.
8	Section 6, “Place in the Overall Structure...”	The safety guide should consider including a list of interfaces with all relevant key safety standards which can be provided in a separate attachment. Interface information is crucial since this is a unique guidance overlapping across most, if not all, safety requirements and key specific guidance that already published by IAEA.	Details of Interface issues for this unique guidance document.	A	We believe that Section 6 fulfils this purpose for the DPP. We have identified such a list as a possible Appendix to the Safety Guide.

9	Section 7	We note that for large developed programs, responsibility for the national program policies and strategies may be divided among numerous regulatory bodies or authorities such as the case in the USA (e.g.; DOE, EPA, NRC, and States). Therefore, the concept of “optimizing” the national program could be more complex and may require significant coordination for optimization or updating of policies.	The guidance needs to consider shared responsibility by multiple authorities when developing or optimizing policies and strategies.	A	Added to Section 7
10	Section 7, “tentative structure and content for the Safety Guide”	We suggest that the section on “National Strategies” be subdivided by member states nuclear program size into three categories: large (one or more NPPs); medium (with only research reactors); or small (only medical, industrial, and academic radioactive waste); this is similar to how the Country Group division occurs among Joint Convention Contracting Parties.	We caution against using the concept of “one size fits all” when addressing policies and strategies for all participating member states.	A	We have introduced this into Section 6 of the proposed structure and contents for the Safety Guide.