

**COMMENTS ON DS 432 “Generic Criteria for the Radiation Protection of the Public and the Environment”**

COMMENTS BY REVIEWER				RESOLUTION			
Reviewer: D.S. Rana (Member, WASSC)		Page.... of....					
Country/Organization: India		Date: 22-06-09					
Comment No.	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
1.	General		<u>Comment:</u> It is understood from the content of DPP is that the emphasis is on `Protection of the Environment`. However, from the proposed table of content it is not clear how this aspect will be covered in the safety guide. Also, it is not clear if the extent of environment (water, air, biosphere, geological etc.) would be covered in the document. These need to be resolved.				

**Title: DS432DPP Generic criteria for the radiation protection of the public and the environment**

COMMENTS BY REVIEWER				RESOLUTION			
Reviewer: Kumazawa, Hayashida, Nakata		Page 1 of					
Country/Organization: Japan/ JNES		Date: 16 Sept. 2009					
Comment No.	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modif./rejection
1	2. Para4/Line2 Page 1	and medical exposure <del>of patients.</del> or and medical exposure of patients, including comforters & carers, and volunteers in biomedical research.	As defined in ICRP Publ. 103(2007)				
2	2. Para4/Line3 Page 1	...is covered in many general and 'facilities and activities specific' Safety Guides.	Because of stressing one phrase "facilities and activities specific."				
3	2. Para6/Line2 Page 2	Optimization of protection in all exposure situations (the same above).	Because of clarifying it.				
4	4. Para1/Line4-5 Page 2	While mention is normally made of the basic principles of optimization of protection, under <u>dose</u> constraint, and dose limitation <u>for practice</u> , the guidance often stops at that.	Because of clarifying the meaning of constraint and dose limitation.				
5	ANNEX 2. framework	a. Exposure situations <u>b. Biological Aspects</u> c. Dosimetric Quantities d. Dose Assessment	Because of the necessity to explain the foundation of quantity "dose" relating to the detriments to the public and the environment at risk of radiation exposure.				



**Generic Criteria for the Radiation Protection of the Public and the Environment (DS432)**

COMMENTS BY REVIEWER				RESOLUTION			
Reviewer: Page 1 of 1 Country/Organization: Japan/NISA Date: June 22, 2009							
Comment No.	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
1	General	We agree with our US colleague's comments No.3 and No.4.					
2	General	Define clearly "individual" and "public".	These definitions are essential to understanding the contents of DS432.				
3	General	Take into account not only the direct exposure pathway but also the indirect pathway.	In the context of radioactive waste disposal, the exposure pathway to the public and environment is indirect. In addition that exposure pathway has a greater dispersion zone and uncertainty due to long term timeframe.				

**DPP 432 (Generic Criteria for the Radiation Protection of the Public and the Environment)**

COMMENTS BY REVIEWER

Reviewer : KIRYU Yasuo

Page.... of....

Country/Organization : Japan /MEXT(Ministry of Education, Culture, Sports, Science and Technology)

Date:

Comment No.	Para/Line No.	Comment/ Proposed new text	Reason
1.	General	There is not an apparent need for the proposed document.	Generic matters are discussed in BSS. Further details should be given in application-specific or facility-specific Safety Guides. “Generic” Safety Guides could be verbose and disregarded unless it is aimed at developing useful tools such as the categorization of sources.
2.	General	It would be better to focus on the public only, because it is necessary to discuss on the protection of the environment more and more.	

3.	General	Control of public radiation exposures from all sources needs to be balanced, especially between the nuclear industry and the non-nuclear industry.	The BSS contains the requirements regarding public exposures from the nuclear industry that is more stringent than ones for the non-nuclear industry. For example, the dose constraints for public exposures from the nuclear industry are required to be set below 1mSv/y, though the reference level for public exposures from non-nuclear industry can range from 1 to 20mSv/y.
4.	2. BACKGROUND/RATIONALE (page 2)	The description on “Dose limitation” should be added as one of the three key principles of radiological protection in planned exposure situations.	ICRP Pub.103 says, “the three key principles of radiological protection are retained in the revised Recommendations” in EXECUTIVE SUMMARY.  Also, these key principles, i.e. Justification, Optimization and Dose limitation, are described in “3. PLANNED EXPOSURE SITUATIONS” of BSS draft 2.0.
5.	Page 2.	<p>The following are some of the main topics of generic nature:</p> <ul style="list-style-type: none"> <li>· Justification in all exposure situations (planned, emergency, existing);</li> <li>· Optimization of protection in all exposure situations;</li> <li>· <u>Dose limit in planned exposure situations;</u></li> <li>· Dose and risk constraints in planned exposure situations at design and planning stages;</li> <li>· Role of reference levels in emergency and existing exposure situations;</li> <li>· Representative person in all exposure situations;</li> </ul> <p>These concepts will be expressed in practical terms.</p>	The intention of this Safety Guide to underpin the specific guidance on the application of the Safety Principles of SF-1 as given in section 5. The three significant principles of radiological protection, justification, optimization and <u>dose limit</u> should be addressed in this safety guide as well as in SF-1 with higher priority than the roles of dose or risk constraints and reference levels.

6.	Annex	<p>Proposed new Chapter 2 is as follows:</p> <p>2. Framework for Protection of Public and Environment</p> <ul style="list-style-type: none"> <li>a. <u>Definition of a source</u></li> <li>b. <u>Identification of the exposed individuals</u></li> <li>c. <u>Reference animals and plants</u></li> <li>d. Exposure situations</li> <li>e. Dosimetric quantities</li> <li>d. Dose assessment</li> </ul>	<p>The concepts of "a source", "individuals of the public" and "reference biota" are the key elements for this document, and should be discussed in this chapter.</p>
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**TITLE: DS432 (DPP) Safety Guide - Generic Criteria for Radiation Protection of the Public and the Environment**

COMMENTS BY REVIEWER				RESOLUTION			
Reviewer: Contact: Bobby Abu-Eid		Page 1 of 2					
Country/Organization: USA/WASSC		Date: June 11, 2009					
Comment No.	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
1	General	The document should initiate its rationale discussion using DS379 three categories of exposure situations; namely, planned, emergency, and existing exposure situations (DS379 V2.0). Radiation protection principles concerning the public depend to large extent on these situations or circumstances. For example, public protection under an emergency situation may differ than protection from radiation associated with planned licensed activity. Therefore, the document should be structured based on the BSS categories of exposure situation.	Consistency and harmony with the BSS (DS379 V 2.0)				
2	General	The topics presented overlap with DS379. Therefore, the document, when developed, should avoid redundancies and duplications with key safety documents dealing extensively with public protection (e.g.; DS379).	Avoid redundancy and duplications with existing standards.				
3	General	<p>The DPP provided a list of the main topics of generic nature, including:</p> <ul style="list-style-type: none"> <li>▪ Justification in all exposure situations (planned, emergency, existing);</li> <li>▪ Optimization of protection in all exposure situations;</li> <li>▪ Dose and risk constraints in planned exposure situations at design and planning stages;</li> <li>▪ Role of reference levels in emergency and existing exposure situations;</li> <li>▪ Representative person in all exposure situations;</li> </ul> <p>The above list of main topics dealt mainly with human and public exposure. These topics did not specifically address environmental protection issues.</p>	Justification of the Title "...Protection of the Public <b>and the Environment;</b> " is missing. There no apparent justification of having the second part of the title.				



COMMENTS BY REVIEWER

RESOLUTION

Reviewer: Contact: Bobby Abu-Eid  
Country/Organization: USA/WASSC

Page 2 of 2  
Date: June 11, 2009

Comment No.	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
4	General	The current title of the document includes “protection of the environment.” This topic should be dealt with under a separate guidance or by updating existing guidance documents. Environmental protection topic could be extensive if it is intended to deal with protection of surface water, groundwater, biota, and reduction of ecological risks. Alternately, the guidance may address the issue of environmental protection assurance through protection of the human and the public.	The topic “Protection of the Environment deals with more extensive and complex issues that need to be addressed under a separate guidance or through update of existing IAEA guidance.				