

TITLE: DS479 Operating Experience Feedback for Nuclear Installations (10 April 2017)

COMMENTS BY REVIEWER				RESOLUTION			
Country/Organization: FRANCE / ASN		Date: April 2017					
Comme nt No.	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
1.	1.4	The objective of this Safety Guide is to provide recommendations for establishing, implementing, assessing and continuously improving an operating experience programme for nuclear installations to prevent or minimize the risk of future events ³ <u>by learning from events which already occurred at the installation or elsewhere.</u>	Clarification	Yes			
2.	1.9	This Safety Guide does not address operating experience related to nuclear security <u>although many</u> recommendations of this Safety Guide would be relevant. The main reason for this is that Some information in the operating experience programme may be subject to confidentiality requirements for security or other reasons established under the Amendment to the Convention on the Physical Protection of Nuclear Material [12]. Guidance on information security is outside the scope of this Safety Guide; such guidance is provided in the IAEA Nuclear Security Series publications Nuclear Security Recommendations on Physical Protection of Nuclear Material and Nuclear Facilities (INFCIRC/225/Revision 5), IAEA Nuclear Security Series No. 13 [13] and Security of Nuclear Information, IAEA Nuclear Security Series No. 23-G [15].	Although nuclear security events do require specific modalities to preserve confidentiality, thus avoiding undermining security, recommendations developed in the Safety Guide are broadly applicable. This could be acknowledged.	Comment adopted with minor change: '...although some recommendations' It is better to avoid use of 'many' in this case.			

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3.	2.1	<p>The Fundamental safety principles [1], and in particular Principle 3, states that “Effective leadership and management for safety must be established and sustained in organizations concerned with, and facilities”.</p> <p>and activities that give rise to, radiation risks.”</p> <p>All organizations with responsibilities for safety should foster mutual understanding and respect through honest and open communication on operating experience as part of a strong safety culture. As indicated by Requirement 12 (fostering a culture for safety) of GSR Part 2 [4], senior managers and all other managers shall advocate and support measures to encourage a questioning and learning attitude at all levels in the organization and the these communications should include reporting of problems relating to technical, human and organizational factors and reporting of any deficiencies in structures, systems and components to avoid degradation of safety, including the timely acknowledgement of, and reporting back of, actions taken any deficiencies with potential adverse effects on safety even if they are not covered by formal reporting requirements. Para 6.7 of this publication also 6.7. states that “The management system shall include evaluation and timely use of the following:</p> <p>(a) Lessons from experience gained and from events that have occurred, both within the organization and outside the organization, and lessons from identifying the causes of events;...</p> <p>(c) Lessons from identifying good practices.</p> <p>In addition, Requirement 11 of GSR Part 2 states that “The [operating] organization shall put in place arrangements with vendors, contractors and suppliers for specifying, monitoring and managing the supply to it of items, products and services that may influence safety”</p>	Get closer to GSR Part 2 requirement, considering Para 1.7 of this publication and Para 1.11 (i) and 1.13, with a reminder of SF-1.		Most of the proposed text was added into 2.8		Roles and responsibilities of the managers are provided in the section THE MANAGEMENT SYSTEM AND THE ROLE OF MANAGEMENT and particularly recommendation for fostering strong safety culture (and statement from

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4.	Fig 1	Add an arrow between the box “Investigation” and the box “Corrective action”	Corrective actions need to be taken for significant events, not only for low levels events or ear misses...	Yes			
5.	2.6	Transfer the bullet list in a footnote	It is strange to detail, in this early section of the Safety Guide, some processes of the OPEX process which could be centralized at a corporate level but which have not yet been introduced on a wider perspective. These items are later captured in the guide (e.g. para 2.38...)	Yes			
6.	2.10	The management system should include procedures for activities at the installation <u>or at services/equipment providers</u> , for the feedback of operating experience as part of the operating experience programme to prevent recurrence of events and to enhance safety.	Why limiting to on-site activities?	Yes			

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7.	2.14	Delete 2.14	Redundant with GSR Part 2 and no additional guidance provided.			Deleting some of the important aspects of the OE programme from the guide would result in an incomplete guide. Wording has been changed to distinguish and provide better understanding of the recommendation.	Some of the recommendations coming from GSR Part 2 should also be provided in this safety guide (particularly once related to OE). Management role in OE should be emphasized in this Safety Guide otherwise important message would be missed as not everyone would review GSR Part 2. This is a safety guide so it includes only recommendations. Guidance how to fulfil the recommendations will be elaborate in TECDOCs or safety series. Also see comment No 3 which proposes adding more text from GSR Part 2 into this guide.

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8.	2.15	Delete 2.15	Redundant with GSR Part 2 and no additional guidance provided.			Yes	GSR Part 2 requires fostering safety culture in general, while the recommendation is specific for fostering OE programme. Some of the recommendations on how to foster ... can be found in paras following 2.15. However, if this explanation is strongly opposed the IAEA may accept the comment.
9.	2.18	Delete 2.18	Redundant with 2.16 and 2.17	yes			
10.	2.20	2.20. Management should ensure that corrective actions resulting from the operating experience programme are given appropriate priority within budgetary and staffing plans and are supported by adequate resources—to ensure that that are implemented, with follow-up to review their effectiveness.	This gives a wrong message as putting economic constraints on the process. Also for consistency with 2.17			Yes	The comment changes the original idea of the recommendation that is to ensure that overall budgetary plans give (in long term) appropriate priority for plant improvements or upgrades resulting from OE.
11.	2.20	to ensure that that <u>they</u> are implemented, with follow-up to review their effectiveness.	Typo	yes			

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12.	2.26	Issues should be identified and reported promptly to facilitate timely screening, <u>implementation of any short term measures required for safety</u> , and follow-up.	Immediate action may be needed to ensure safety. This should be mentioned. Make it consistent with 2.31 and 2.35	yes			
13.	2.28	<u>Even if accountability should be encouraged by recording who reports an event</u> , Anonymous reporting should <u>also</u> be possible.	Accountability is to be encouraged, as stated in para 5.2 (b) of GSR Part 2. Make it also more consistent with expectation set in 2.29 of the draft guide.	yes			
14.	2.30	A process should be put in place to ensure that preliminary reports on issues and events that challenge (or have the potential to challenge) safety are reported to designated individuals in the operating organization <u>and, when needed</u> , to the regulatory body and to relevant external organizations in a timely manner.	Not all events shall be reported to the regulator or external organizations...			yes	The para discusses events with significant challenges to safety only, not all events. Wording changes/ text added to make the recommendation clearer.
15.	2.32	The screening team should have management support and the authority to allocate the responsibilities necessary to carry out the investigation and analysis of the issues or events.	Redundant with 2.16 and 2.17			yes	The point here is that the screening should be done by a multidisciplinary team with sufficient authority for taking important decisions— 2.16 and 2.17 are different recommendations in nature.

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16.	2.36	Delete 2.36	Redundant with 2.37		<i>External operating experience (from other nuclear installations and other interested parties like vendors, suppliers, designers and research institutions)</i>		Change the first sentence in the paragraph 2.37 to include interested parties.
17.	2.43 (a)	The root cause analysis should be conducted by a team with appropriate skills and knowledge relevant to the nature of the event;	Redundant with 2.16 and 2.44			yes	The point here that RCA should be conducted by a team, not by individuals only. Appropriate knowledge does not refer to OE knowledge.
18.	2.49	If a previous similar event is found to have occurred at the installation, then the corrective actions taken then should be reviewed to identify why the event recurred and to identify more effective corrective <u>or preventive</u> actions.	Preventive actions should also be mentioned.	yes			

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19.	2.59	Delete 2.59	Redundant with 2.9			yes	Paragraph 2.9 is about development and implementation of OE programme in general, 2.59 emphasizes need for one particular element of OE, trend analysis and regular management reviews.
20.	2.63	Delete 2.63	First sentence may not be true for any event, especially for a licensee where corporate services develop corrective actions. Second sentence is redundant with GSR part 2 5.2 (no added value)		The relevant management responsible for implementation of a corrective action should be included in its development and should be held accountable... para simplified.		Deleting GSR Part 2 related recommendations from this guide would result in an incomplete guide – it would not provide proper understanding of all elements of OE programme.
21.	2.64	Delete 2.64	Too detailed. It is up to the licensee to define who is responsible for approving what... The licensee management system should describe the responsibility and process for approval. Para 2.66, dealing with cancelled or postponed action, is enough.	yes			

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22.	2.67	If recommended corrective actions will take a long time to implement, <u>the need for</u> interim or compensatory corrective actions should be <u>analysed so that needed actions are</u> put in place to minimize the risk.	There may not be any needed interim action.	yes			
23.	2.71 and 2.72	2.71. Lessons learned from internal and external operating experience should be <u>implemented by relevant personnel – including at service/product providers – to improve safety and prevent events. To this aim, the operating organization, and service/product providers when relevant, should incorporate lessons learned in relevant activities such as training, revision of procedures, safety analysis, work management activities., design and modification of the installation.</u> 2.72. Personnel should understand how to use operating experience and should apply the lessons from operating experience to improve safety and prevent events. This use should be actively encouraged and reinforced by management.	Combine both to get a result oriented recommendation		Some changes adopted to make the recommendations more result oriented.		Agency prefers having the recommendations in two separate paras – 2.71 is about implementation of OE in relevant processes, 2.72 is about daily use of lessons learned from OE by personnel during their works.
24.	2.78	Based on these various assessment, The operating organization should issue a periodic report that summarizes the results of effectiveness reviews of the operating experience programme, and should identify in that report any areas for improvement to address the issues identified. The report should also include the results of evaluations of the implementation of the lessons from operating experience and effectiveness of corrective actions. and define then implement measures to address them.	No need to get to this level of detail. Focus on the outcome.		Text modified with minor changes.		

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25.	2.80	Relevant operating experience information should be retained for use throughout the installation's operating lifetime, including as input for periodic safety reviews, <u>deterministic and probabilistic safety assessment, design and implementation of plant modifications</u> and ageing management.	No reason to exclude deterministic safety analysis. Plant upgrade is also a key area benefiting from OPEX.	yes			
26.	3.1	The regulatory body and all other organizations with responsibilities for safety should foster mutual understanding and respect through honest and open communication, including on operating experience. Such communication should <u>may</u> include safety related issues that are not covered by formal reporting requirements, consistent with Requirement 21 of GSR Part 1 (Rev.1) [5] and Requirement 12 of GSR Part 2 [4]. Specifically, such communication may also include for example good practices and positive occurrences.	This is a quite wide interpretation of the GSR requirements... See earlier comment		Reference to GSR Part 2 was deleted.		26
27.	3.2	All—regulatory bodies with safety related responsibilities should establish and implement an effective operating experience process.	To be consistent with Safety Glossary.	yes			
28.	3.3	The regulatory body should develop national regulations <u>and regulatory guidance</u> requiring operating organizations to establish and maintain operating experience programmes...	Regulatory guidance is also helpful...	yes			
29.	3.3	Such programmes should be consistent with the recommendations in Section 2.	The regulator should ensure the programmes are consistent with national regulatory requirements.	yes			
30.	3.6	Delete 3.6	Not specific to OPEX. There are dedicated guides on the regulatory processes and functions.	yes			

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31.	3.8	3.8. A schematic diagram of a typical regulatory operating experience process containing the recommended elements is shown in Fig. 2.	No need to make it a separate paragraph.	yes Adopted also for 2.5			
32.	3.9	The regulatory operating experience programme should be managed by appropriately trained, experienced and knowledgeable personnel, and where possible supported by experts from different disciplines, to facilitate the determination of <u>to enable the timely determination of an appropriate regulatory response to an issue.</u>	No need for such details as already captured in the first part of the sentence Timeliness should be stressed.	yes			
33.	FIG 2	Same comment as in Figure 1		yes			
34.	FIG 2	In the box “National operating Experience”, add “inspection findings”	For a regulator, inspection is another way to gather operating experience.	yes			
35.	FIG2	Delete “Issues without significant safety implications”	Looking at events without a significant safety implication should not be stressed. One reason is that the regulator may have a lot less information on these events as they may not have to be reported... The box “trending and review” is sufficient. This would increase consistency with 3.23.			yes	No al events reported by operating organizations to the RB are significant and do not require specific regulatory response, many of them are treated by regulators for trending purposes only.

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36.	3.14 3.16		Annexes and not appendixes should be used			yes	Appendix is a part of main text (it includes “should” wording). Annex is not a part of main text and it provides examples only (it does not include “should” wording)
37.	3.18	Delete 3.18	Too detailed.			yes	Decision on safety significance of an issue should be possible to reconstruct, eg. using established criteria.

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38.	3.19 3.20	3.19. The screening of reports from operating organizations regulated by the regulatory body should include confirming <u>the significance of the event and that no obvious additional short term safety measure is required</u> the accuracy, completeness and timeliness of the report and its consistency with the prescribed reporting criteria and requirements. The regulatory body should obtain clarification or further information from the operating organization if necessary. 3.20. The screening process may identify information for onward dissemination, a need for further investigation of the issue or further trending, or necessary regulatory actions.	The main purpose of the screening process is to ensure that there is no obvious lack of required immediate safety measures and to confirm – broadly – the safety significance of the event		<i>The screening of reports from operating organizations regulated by the regulatory body should include confirming the significance of the event and that no obvious additional safety measures are required. It should also include confirming the accuracy...</i> Possible screening process outcomes such as further analysis, were included into the text, but 3.20 kept as a separate para.		
39.	3.21	3.21. The regulatory body should establish requirements for the investigation <u>by the operating organization</u> of events <u>it has</u> reported by the operating organization , commensurate with the safety significance of the event....	Clarification	yes			

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40.	3.25	Based on the results of independent investigations, analyses and reviews of operating experience, the regulatory body should require, <u>if needed, additional</u> appropriate corrective actions to be taken by the operating organization when they are considered necessary to improve safety and prevent recurrence of events with significance for safety. The requirements imposed by the regulatory body should be commensurate with the significance for safety, in accordance with a graded approach.	Clarification	yes			
41.	3.26	For the most significant events, The regulatory body should <u>specifically</u> monitor the operating organization's implementation of the required corrective actions to ensure that it is effective.	For most events, the regulator won't perform any specific monitoring. It may use dedicated inspections or sampling to ensure the licensee does implement the actions.		<i>'Where applicable, the regulatory body should...'</i> Para merged with 3.25 to make it clear what is meant by 'where applicable'.		

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42.	3.27	Delete 3.27	Improving the regulator's management system is not the key concern and addressed by 3.32. Updating regulations and guide is but is already addressed in 3.11		<i>The regulatory body should identify corrective actions to improve regulatory requirements and regulatory practices where relevant to address applicable lessons from operating experience.</i>		Regulatory body should have own regulatory experience process to develop and implement corrective actions based on OE.
43.	3.30	The regulatory body should put procedures in place to review operating experience from other States and from international reporting systems and share it with domestic operating organizations where applicable.	Redundant with 3.7 (a) and FIG2 and 3.17.	yes	.		
44.	3.30	The information shared should include details of any cases in which regulatory experience was used to make enhancements to the regulatory framework in accordance with Requirement 15 of GSR Part 1 (Rev.1) [5].	Too detailed. No added value compared to GSR Part 1	yes			
45.	3.31	Additional inspections of the operating experience programme or parts thereof <u>or other regulatory response</u> should be undertaken if shortcomings are identified relative to regulatory requirements.	Other means may be used by the regulator to address shortcomings...	yes			

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46.	Appendix x	Transform Appendix into an Annex	All suggested criteria may not be relevant for all facilities. Furthermore, the list mixes events of various safety significance, some of them may not have to be individually reported to the regulator			yes	The current list have been achieved through extensive discussions with member states over several years. It's not perfect but it's a consensus. Similar criteria are provided in the Appendix 1 of the current valid safety guide NS-G-2.11. There were no comments on reporting criteria by other member states. The Agency proposes to keep it as it is. We do agree that the criteria do not reflect event significance – consensus on what is deemed to be significant has not been reached as this is linked also to safety culture maturity level, which is obviously different in individual MS.

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47.	A9	When such a request is made by the regulatory body, the information and assessments should be provided within an agreed time period. If, after the main report is submitted, significant further corrective actions are taken or more information is gained from further investigations, this should be reported to the regulatory body as follow up information. Reports should, wherever possible, be communicated and disseminated widely to relevant bodies and should be considered as possible information to be exchanged internationally.	Does not fit with the title of appendix. If kept, should be transferred somewhere in the text.		<i>The operating organization should submit follow-up reports if the initial report is known to be incomplete or if significant additional information becomes available. The operating organization should also submit specific additional information and assessments as it considers necessary, or if the regulatory body requests such information and assessments to complete its understanding of an event.</i>	yes	Follow up report (which includes new important information) is one of the reports, so it fit in Appendix 1 (dealing with reports). The Agency proposes shortening of the text.

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48.	Annex	Shorten drastically the annex and refer to IRS/IRSRR/FINAS website	No need for history, description nor potential uses...			yes	The potential users of the guide do not have to be IRS/IRSRR/FINAS users, so the Agency proposes to keep this information in content as it is that IRS/IRSRR/FINAS non-users have better picture of these systems. When compared with the current valid NS-G-2.11 it is obvious that the text describing the reporting systems has already been significantly shortened.
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NSGC 11 - FR COMMENTS ON SAFETY DOCUMENTS

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Reviewer: DANDRIEUX		Page.... of.6.					
Country/Organization: FRANCE / MEEM		Date: 10/05/2017					
Comment No.	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
DS 479							
1	2.74	2.74. Legal requirements and commercial interests may restrict the dissemination of some information. The operating organization should make the necessary arrangements with the organizations concerned to ensure that	The rule is not to minimize information to be protected but to protect the information that needs to be protected	X			
		any restrictions on the information to be disseminated are minimized.					
2		3.29. Legal requirements and commercial interests may restrict the dissemination of some operating experience. The regulatory body should make the necessary arrangements with the organizations concerned to ensure that any restrictions on the information to be disseminated are minimized. ...	Same justification	X			

Japan NUSSC Comments on DS479 “Operating Experience Feedback for Nuclear Installations”

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Country/Organization: Japan/NRA		Date: 15 May 2017					
Comm ent No.	Para/Line No.	Proposed new text	Reason				
1.	1.10./L2 and others	STRUCTURE Section 3 provides recommendations on <u>the</u> operating experience <u>programme processes</u> for the regulatory body.	To keep a consistency with SSR-2/2 (Rev. 1) requirement 24.	X			
2.	FIG. 1 FIG. 2	See the last two pages. Three arrows are added and two are removed. Some texts are deleted.	Modification to present information flow described in Chapter 2. "At the installation level" is removed because it seems inconsistent with para. 2.54.		X Some modifications were accepted to improve the figures.		
3.	2.35.	SCREENING Screening should include identifying and prioritizing any immediate actions that might be necessary, in accordance with the safety significance and potential for recurrence of a particular issue or to the significance of a developing adverse trend. <u>The results from immediate review are being sent to investigation as shown in FIG. 1.</u>	The immediate review results are being sent to next elements shown in FIG. 1.			X	Immediate review of significant events is done prior formal screening, see SSR 2/2, 4.13. New text added into 2.30.
4.	2.40.	The results from screening of all operating experience (internal and external) should be recorded and may be used for evaluation in subsequent self-assessments, periodic safety assessments or peer reviews. <u>Investigation In</u>	Editorial. Addition: The screening results are being sent to the next elements shown in FIG. 1.			X	Immediate review of significant events is done prior formal

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		<u>accordance with the significance and priority, the results are being sent to immediate review, investigation, trending and review or documentation elements as shown in FIG. 1.</u>					screening, see SSR 2/2, 4.13. New text added into 2.30.
5.	2.48. the last bullet	<p>INVESTIGATION</p> <p>2.48. In the case of events for which root cause analysis is necessary, the analysis should document the following:</p> <p>.....</p> <p><u>(i) An evaluation of the potential for common cause or common mode failures.</u></p>	<p>One of the most important information was missing.</p> <p>“The potential for common cause or common mode failures” are already stated in A.2. (b) in the appendix as a minimum.</p>	X			
6.	2.70.	<p>COMMUNICATION: USE, DISSEMINATION AND EXCHANGE OF INFORMATION</p> <p>Relevant operating experience <u>from corrective actions or documentation elements</u> should be shared with other organizations in a timely manner at appropriate levels (e.g. at the level of designers, constructors, installations or operating organizations, or national and international organizations).</p>	<p>Addition to describe information flows as shown in FIG. 1.</p>			X	<p>Figures 1 and 2 provide information on basic elements of a typical OE programme, the figures are not OE programme flowcharts. Operating experience in general is from all aspects of</p>

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							events, not from corrective actions only.
7.	3.14.	REPORTING The minimum criteria indicating events that should be required to be reported to the regulatory body are provided in para. I.1 <u>A.1.</u> of the Appendix.	Missing references.	X			
8.	3.16.	The regulatory body should specify requirements for the types of event report, the timing of reporting and the format and content of the different reports. Paragraphs I.2-I.7 <u>A.2. to A.7.</u> of the Appendix provide details of appropriate reporting requirements.	Missing references.	X			
9.	3.21./L2	INVESTIGATION Criteria for requiring investigations should include, in addition to safety significance, the presence of novel causes, <u>including for common cause or common mode failures</u> , the existence or likelihood of repeat occurrences <u>recurrences</u> , and the potential for generic lessons to be identified.	The same comment #5. Editorial.	X			

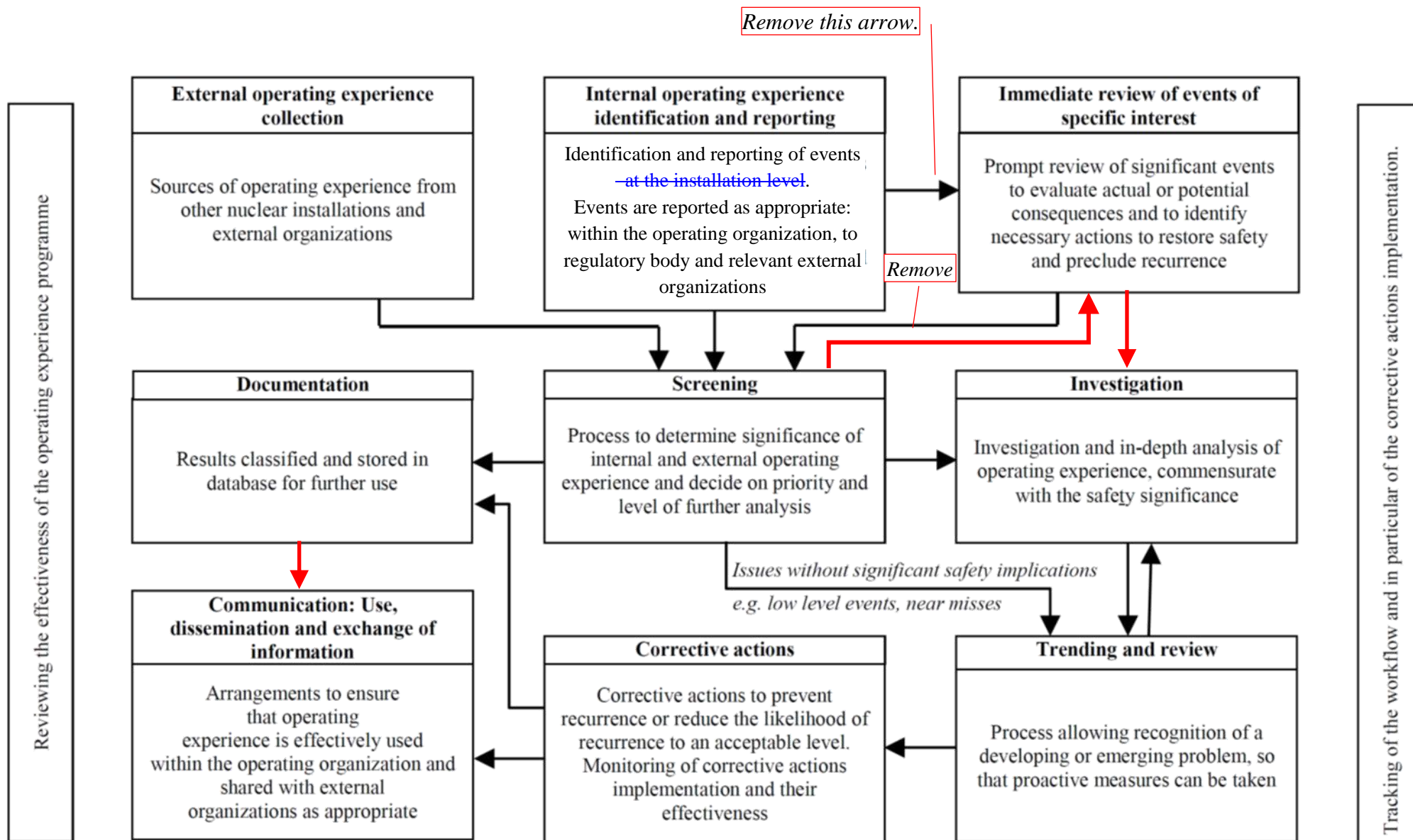


FIG. 1. Schematic diagram of a typical operating experience programme.

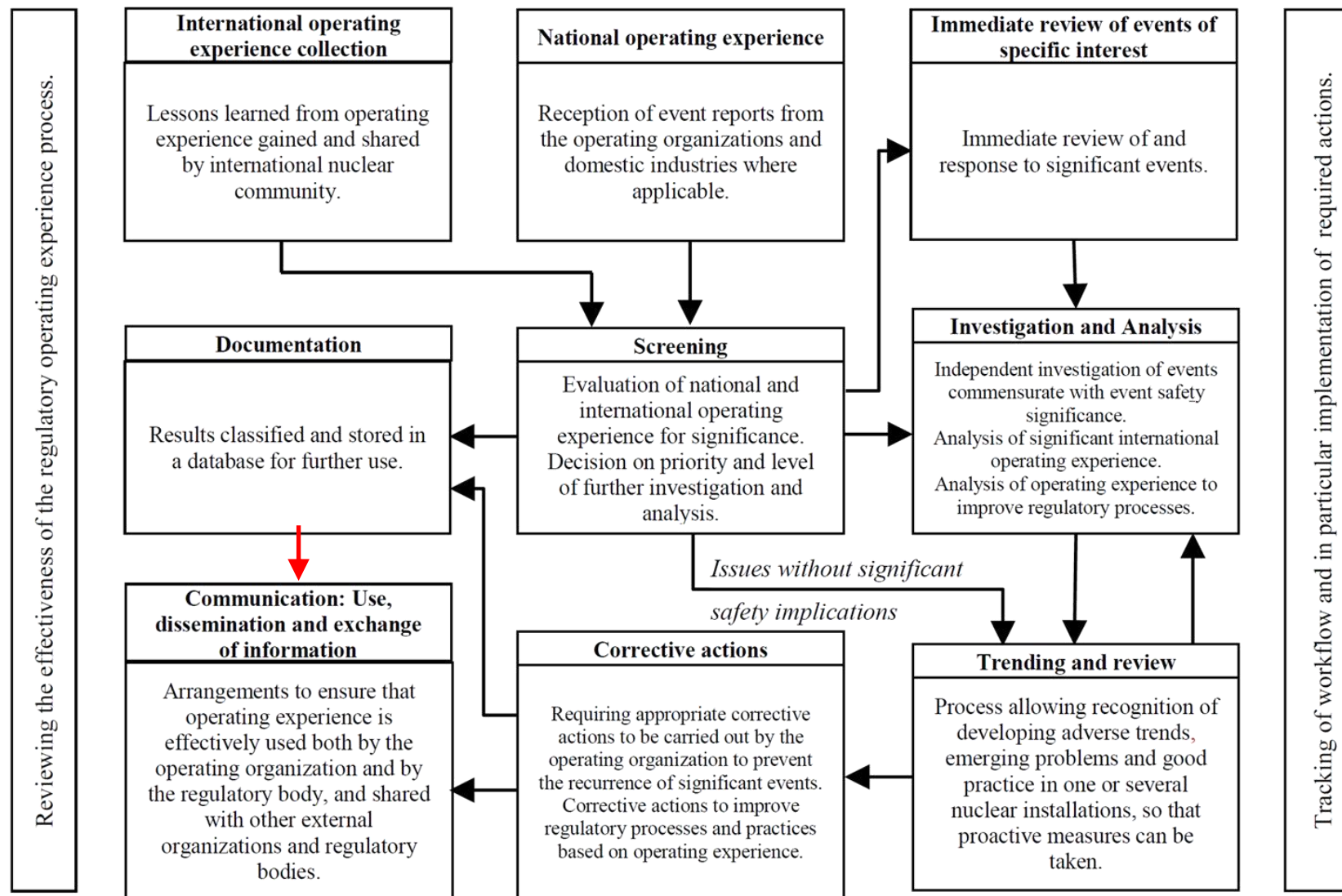


FIG. 2: Schematic diagram of a typical regulatory operating experience ~~process~~programme.

Operating Experience Feedback For Nuclear Installations (DS479)

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1	No 3 in annotation	The description method is not matched for No. 9 of reference comparing to others.	Other reference has the revision No. but it does not have anything.	X			
2	Para 1.9	Correct the sentence that is related with the No. 14 of reference.	In order of reference, it seems no sentence that is related with the No. 14 in reference.	X			
3	Fig. 1	Need to build the connection between the external operating experience collection and the immediate review of events of specific interest	Figure 1 does not give the relationship between both elements.			X	Immediate review and screening should be understood as one element of OE process, see eg. 2.35. The figure is not perfect, its idea is to provide information on typical elements of OE process only – it's not a flowchart, see 2.5, and must be viewed in combination with the text in the guide. A typical flowchart may be added to the guide

							if requested.
4	Para. 2.14		The sentence is not clear in part of ‘ ~ levels the importance of operational safety issues.’	Wordin g improve d			
5	Para. 2.2.4	‘~the design, construction, operation and decommissioning of the installation, ~’	The operation stage is added in to the sentence for completing the life of installation.	X			
6	Para. 2.28	‘~ access to the operating experience reporting system ~’	In the same para., the operating experience reporting system is used.	X			
7	Para. 2.40	‘~ safety assessment or peer reviews.’	Erase mistyping ‘Investigation’ after paragraph.	X			
8	Para. 2.48	‘~, technological and organizational factors’	A noun or an adjective?	X			
9	Para. 2.49	‘then the corrective actions taken should be reviewed’	Erase mistyping ‘then’	X			
10	Para. 2.51	‘~ all causes have been identified and that corrective actions have been developed to address the causes.’	The follow-up sentence for ‘organizational issues’ is unclear.		X Para re-worded, ‘organizational contributors’ is used		
11	Para. 2.52	‘~ with the significance of operating experience ~’	‘the’ is not used for operating experience.	X			
12	Para. 2.74	‘IAEA Nuclear Security Series No. 23-G[15].’	Reference No. is not matched to the list of reference.	X			
13	Para. 3.2	‘~ an effective operating experience programme’	Phrase of ‘an effective operating experience programme’ is matched to the phrase in para. 2.4.	X			
14	Para. 3.4	‘~ domestic operating experience ~.’	‘internal’ in previous sentences used for		X ‘regulatory’ used		

			licensee's case, so another word may be used.		instead of 'internal' to clarify the recommendation		
15	Para. 3.4	‘ ~ Requirement 15 of GSR Part 1 (Rev. 1)[5].’	Reference No. is not matched to the list of reference.	X			
16	Para. 3.9	‘ ~ appropriately trained, experienced and qualified personnel, ~’	The word is matched to the sentence of para. 2.16.	X			
17	Fig. 2	‘Domestic operating experience’	Consistency of expression	X			
18	Para. 3.10	‘ ~ of GSR Part 2[4] ~’	Consistency of expression	X			
19	Para. 3.10	‘ ~ domestic, other national and international operating experience.’	Simplification of sentence	X			
20	Para. 3.12	‘ ~ should be trained, dedicated and qualified appropriately for ~’	The word is matched to the sentence of para. 2.16.	X			
21	Para. 3.14	‘ ~para. A.1 of the Appendix.’	In Appendix, No of Paragraph is used the form of A.number.	X			
22	Para. 3.16	‘Paragraphs A.2 ~ A.7 of the Appendix ~’	In Appendix, No of Paragraph is used the form of A.number.	X			
23	Para. A.8		No. 18 and 19 of references are not identified at the list of reference.	X			
24	A-1	‘ ~ describes three database systems maintained ~’	Clearly describe following systems.	X			
25	A-4	‘ ~ platform for event reporting ~’	‘event’ coverse ‘incident’	X			
26	A-10	‘In 1996, the Convention on Nuclear Safety entered into force ~’	According to ‘IAEA.org/topics/nuclear-safety-conventions’	X			

27	A-10	‘~ Convention on Nuclear Safety [I-1]	Reference to the convention on nuclear safety should be provide. ‘IAEA-INFCIRC/449’		X Adopted as A-5		
28	A-10	‘Article 19 (OPERATION) of the convention ~’	Describe the title of article	X			
29			According with IAEA homepage on April, 24. 2017., The Safety Standards No. of Safety of Nuclear Fuel Cycle Facilities is officially NS-R-5(Rev.1). So carefully handle this reference.	X			
30			Could you declare the exact frequency for the regular intervals used in Para. 2.58 (e.g., quarterly, semiannually, annually etc.)	In 2.59 it is stated that trending should be reviewed on regular basis, new text added ‘...such as monthly or quarterly ...’			
31			Orthography for references in Appendix and Annex are different	X			

			from those in main text.				
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Member State Comments on IAEA Draft Safety Guide
“Safety Guide on Operating Experience Feedback for Nuclear Installations (NS-G-2.11)” (DS479)

COMMENTS BY REVIEWER				RESOLUTION			
Reviewer: Cynthia Jones, NUSSC representative, U.S. Nuclear Regulatory Commission Country/Organization: United States of America Date: 31 July 2016 & May 2017							
Comment No. / Reviewer	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
1	Footnote 1 /1-3	Operating experience (OE) is information that is pertinent to the safe design, fabrication, construction, commissioning, operation, and decommissioning of a nuclear installation. OE includes, for example, reportable and non-reportable (including low level) events, operational events records, near misses, good practices and all other experience information applicable pertaining to the nuclear installation.	-Since this guide applies to vendors, “fabrication” should be added especially when considering that manufacturing defects can have a big impact on nuclear safety; -Operational records do not necessarily provide lessons learned. Operational events do.			X	Definition of OE has been deleted from the guide by technical editor as the meaning of it is well understandable from the guide text and some of the existing definitions, e.g. see definition of an event in footnote 3
2	Footnote 1 /4-5	Issues involving non-conforming, counterfeit, fraudulent or suspect items or parts that have the potential to constitute a substantial safety hazard are also to be identified and reported within the OE system.	There is no clear regulatory requirement at this point to comply with this statement as written, e.g., there is no requirement for a vendor to report a counterfeit item supplied under a non-nuclear safety related purchase order. In addition, see comment on 1.8.	Addresse d in 2.24			
3	1.4	“...to define the minimum recommendations recommended	Clarity	Addresse d in 1.4			

COMMENTS BY REVIEWER				RESOLUTION			
Reviewer: Cynthia Jones, NUSSC representative, U.S. Nuclear Regulatory Commission Country/Organization: United States of America Date: 31 July 2016 & May 2017							
Comment No. / Reviewer	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
		<u>features</u> of..."					
4	Footnote 2	An operating organization is either an organization applying for authorization or authorized to operate an authorized facility and responsible for its safety, or an organization (and its contractors) which undertakes the siting, design, fabrication, construction, operation and/or decommissioning of a nuclear facility.	Add "fabrication" and "decommissioning" for consistency.			X	Definition of operating organization has been deleted from the guide by technical editor – such definition is provided in IAEA Safety Glossary 2016,
5	1.8	This Safety Guide applies to all relevant organizations that are involved in the nuclear industry, such as regulatory bodies, technical support organizations, operating organizations with ongoing, phased out or planned nuclear programmes, vendor companies (designers, engineering contractors, manufacturers, etc.), research establishments and technical universities with studies in the nuclear field, if their work is in support of a nuclear facility.	Although OE can, and should, be used by the listed entities, the guide does not provide guidance to all such entities to develop and report OE originated by them. Also, it is not clear that these entities will have access to the tools discussed in this guide or that their commitment has been obtained.	Addresse d in 1.5			
6	2.2	All organisations involved in nuclear safety-related activities important to safety should implement or participate in an effective OE system.	Organizations such as nuclear power plant licensees, should report non-safety related events that could challenge		Addressed in 2.2, minor rewording		

COMMENTS BY REVIEWER				RESOLUTION			
Reviewer: Cynthia Jones, NUSSC representative, U.S. Nuclear Regulatory Commission Country/Organization: United States of America Date: 31 July 2016 & May 2017							
Comment No. / Reviewer	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
			nuclear safety such as loss of offsite power or support systems for safety-related equipment.				
7	2.3 /5-6	Delete "Relevant lessons from other industries should also be taken into consideration, as necessary."	This sentence is redundant with the 2nd sentence (lines 3-4).	X			
8	Fig.1, Identification and reporting block	At installation level the event Internal OE is identified and recorded. If reporting criteria reached, reported as appropriate: within installation (utility) to regulatory body and applicable external organisations.	-The body of the guide aims to cover more than events; -Consider similar changes throughout guide, e.g., Fig. 2.	Adopted in Fig 1			
9	After 2.20	Add a new Para as stated below: "Management should ensure radioactive waste minimization and early allocation of adequate funds for decommissioning."	Important aspects of operating experience feedback include waste minimization and avoiding shortages of decommissioning funds.		Addressed in existing 2.20		
10	2.22 /3	Line 3, after operational records, add " audit records ."	"Audit Records" are important source of operating experience feedback	Adopted in 2.24			
11	2.22 / 5-6	...non-conforming, counterfeit, fraudulent or suspect items (NCSFI) <u>(CFSI)</u> ...	CFSI (or NCFSI?) is the usual abbreviation.		X		Abbreviation deleted by editorial.
12	2.36 /2-3	"This also applies for <u>significant</u> international major events requiring immediate actions."	Clarity/editorial	Addressed in 2.37			

COMMENTS BY REVIEWER				RESOLUTION			
Reviewer: Cynthia Jones, NUSSC representative, U.S. Nuclear Regulatory Commission Country/Organization: United States of America Date: 31 July 2016 & May 2017							
Comment No. / Reviewer	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
13	2.51	Root Cause Analysis (RCA), when required , should document the following	Root cause analyses are only required for the most significant events. The scope of this guide includes less significant OE.	Adopted in 2.48			
14	2.51, Footnote 8	Insert definition for extent of cause	The definition for extent of condition is repeated from Footnote 7, and the definition for extent of cause is missing.	Adopted in 2.48 (h)			
15	3.3 /2	This system should be consistent with the criteria discussed in chapter 2.	Not all criteria in Chapter 2 are enforceable by the regulator. If “consistent with” does not imply an exact match to the Ch. 2 criteria, USA has no objection.	Sentence deleted, good comment.			
16	3.5 /1-2	“...not only capable for of handling events of daily life typical, expected events , but also...”	Clarity/editorial	X			
17	Fig. 2	In Utilisation block, add a second bullet: “Lessons learned are applied to improve RB framework, such as licensing, inspection, and rulemaking.”	For significant events, it is imperative that lessons learned are incorporated into impacted regulatory programs. For example, generic reactive inspection procedures may need to be initiated, and baseline inspection	X			

COMMENTS BY REVIEWER				RESOLUTION			
Reviewer: Cynthia Jones, NUSSC representative, U.S. Nuclear Regulatory Commission Country/Organization: United States of America Date: 31 July 2016 & May 2017							
Comment No. / Reviewer	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
			procedures may need to be revised.				
18	Fig. 2, Investigation block	Review of the licensee's/ vendor's event investigation. Independent, detailed and in-depth analysis of significant events to determine their causes of an event as well as the need for reactive inspections.	-To cover vendor issues; -Due to limited resources and regulatory scope, only significant events need the thorough actions described in this block.		X Text in the block has been made more general to cover all applicable OE,		
19	3.18 /2	This also applies also for significant international major events requiring immediate actions."	Editorial/consistent with change proposed for paragraph 2.36	Addressed in 3.18.			
20	3.20	Outcomes of the screening process may include: recommendation for internal limited or widespread distribution; recommendation for generic communication; recommendation for reactive inspection; limited identification of information for onward distribution; Recommendation to performance of a detailed analysis of the issue; further trending, and identification of necessary regulatory action, or that no further action is required.	-Trending is covered by 3.23; -Significant outcomes should come out of the detailed analysis and not the screening process.	Addressed in 3.20.			
21	Add an "Application" section	Section should cover the implementation of the lessons learned into regulatory programs.	Application of the lessons learned into regulatory programs would help improve future licensing		Comment addressed in 3.27.		

COMMENTS BY REVIEWER				RESOLUTION			
Reviewer: Cynthia Jones, NUSC representative, U.S. Nuclear Regulatory Commission Country/Organization: United States of America Date: 31 July 2016 & May 2017							
Comment No. / Reviewer	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
			and inspection activities. See comment on Fig. 2.				
22	Appendix I, I.1. / 10	Initial risk perception of <u>significance</u> ;	"Risk perception" is unclear. The term "perception of the significance," used later in I.1. may have been intended.	Addressed in App. I.3 (g)			

DS497 Operating Experience Feedback for Nuclear Installations, STEP_11_5_2017, Draft 10th April 2017

COMMENTS BY REVIEWER				RESOLUTION			
Reviewer: M-L. Järvinen, Country/Organization: STUK		Page.... of.... Date: 8 th May 2017					
Comment No.	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
1.	2.40.	2.40. The results from screening of all operating experience (internal and external) should be recorded and may be used for evaluation in subsequent self-assessments, periodic safety assessments or peer reviews. Investigation	typo Delete the title of next chapter from the paragraph.	X			
2.	2	“OPERATING EXPERIENCE FEEDBACK IN OPERATING ORGANIZATIONS” or something clear and correct	Title “FEEDBACK OF OPERATING EXPERIENCE IN OPERATING ORGANIZATIONS” is not OEF as it should be; not for collecting feedback from OE processes >> change title!	X			
3.	3	3 ...	typo: Chapter number is missing for chapter 3	X			
4.	figure 1 and 2		On the “flow chart” diagram (figure 1 and 2), database and communication are connecting to other phases of proses only in the end? Should be connecting to all phases!		X		The figures are not perfect flowcharts and have never been meant to be. Their main purpose is to provide information on recommended basic elements of OE programme. If a flow chart is requested, the agency may propose one in the

							attachments. Some modifications were done in the figures to reflect the comment.
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