DS453 Occupational Radiation Protection

COMMENTS BY REVIEWER RESOLUTION Reviewer: Page...1 of 1... Country/Organization: Japan/NRA

| Date: 30 October 2014 | | | | | | | |
|-----------------------|-----------|--|----------------------------|----------|---------------------|----------|------------------------|
| Comment | Para/Line | Proposed new text | Reason | Accepted | Accepted, but | Rejected | Reason for |
| No. | No. | | | | modified as follows | | modification/rejection |
| 1 | 5.40./3 | To ensure that the remediation | The deleted part is the | | | R | For consistency, |
| | | programme is adequately | same as para. 6.13. in | | | | continuity and |
| | | documented, a system of record | WS-G-3.1, which is | | | | completion sake the |
| | | keeping also form part of the | | | | | current text is more |
| | | remediation plan, and should | | | | | adequate. Moreover |
| | | include occupational health and | And it is seemed that this | | | | the text is fully |
| | | safety records for remediation | part is not concerned with | | | | consistent with the |
| | | workers. Further such records to be | occupational radiation | | | | DS468 and the |
| | | included in the remediation plan are | protection. | | | | Ref.[34] has already |
| | | listed in Ref.[34].÷ | Therefore, this part is | | | | mentioned in the |
| | | (a) Descriptions of activities | unnecessary. | | | | beginning of the |
| | | performed; | | | | | section. |
| | | (b) Data from monitoring and | | | | | |
| | | surveillance programmes; | | | | | |
| | | (c) Occupational health and safety | | | | | |
| | | records for remediation workers; | | | | | |
| | | (d) Records of the types and | | | | | |
| | | quantities of radioactive waste | | | | | |
| | | generated and of their management; | | | | | |
| | | (e) Data from environmental | | | | | |
| | | monitoring; | | | | | |
| | | (f) Records of financial | | | | | |
| | | expenditures; | | | | | |
| | | (g) Records of the involvement of | | | | | |
| | | other interested parties; | | | | | |
| | | (h) Records of any continuing | | | | | |

| responsibilities for the site; |
|--|
| (i) Identification of locations that |
| were remediated and those with |
| residual contamination; |
| (j) Specifications of any areas that |
| remain restricted and the restrictions |
| that apply; |
| (k) Statements of any zoning and |
| covenant restrictions or conditions; |
| (1) Statements of lessons learned. |

Draft Safety Guide DS453 Occupational Radiation Protection (23 September 2014) ENISS Comments

| COMMENTS BY REVIEWER | | | RESOLUTION | | | | |
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| Reviewer: | ENISS | | | | | | |
| | 6 | | | | | | |
| Country/Org | ganization: | ENISS | | | | | |
| Date: 03.11. | 2014 | | | | | | |
| Comment No. | Para/Line No. | Proposed new text | Reason | Accepted | Accepted, but modified as follows | Rejected | Reason for modification/rejection |
| General | | The TO has rejected a number of | proposals for a change, | | | | The resolution for |
| | | sometimes without giving any reason | or rationale. Therefore we | | | | MS comments was |
| | | present our proposals for a change aga | in. | | | | prepared by the |
| | | | | | | | drafting group |
| | | | | | | | of experts after |
| | | | | | | | critical |
| | | | | | | | discussions. It is a |
| | | | | | | | collective decision |
| | | | | | | | of the drafting |
| | | | | | | | group as approved |
| | | | | | | | by the |
| | | | | | | | coordination |

| | | | | | | committee. Reasons were provided where appropriate. |
|---|------|---|---|---|---|--|
| 1 | 3.10 | Optimization of protection and safety needs to should be considered at all stages of the life of equipment and installations, in relation to both exposures from normal operations and potential exposures. | Shall-statements are not allowed in a guide. | | | Editorial – will be considered during the editorial process. |
| 2 | 3.13 | (d) The potential impact of protection actions on the level of other (non-radiological) risks to workers or members of the public; | Outside the scope of a radiation protection standard. | | R | Sentence within the scope of the guide. |
| 3 | 3.16 | In the <u>complex</u> nuclear industry facilities, situations are more complicated, and a structured approach is helpful needed as part of a detailed RPP, including the use of decision aiding techniques (see paras 3.24–3.27), the establishment of dose constraints (see paras 3.28–3.33) and the establishment of investigation levels (see paras 3.122–3.128) as appropriate. | To avoid shall-statements and to describe the situation more realistic. | A | | First part ("In the complex nuclear facilities") accepted. Second part dilutes the guidance and therefore rejected. |
| 4 | 3.17 | The elaboration of an RPP, adapted to the specific exposure situations, is an essential element of work management. | The RPP is not the leading document and it is not necessary to have one if there are working procedures and documents used for the application for a license etc. | | R | Sentence should be considered as a whole. The context is work management for occupational radiation protection. |
| 5 | 3.18 | Management should record | The major objective is | | R | The subject matter |

| | | information on the way in which optimization of protection and safety is being implemented and disseminates the information where appropriate. | protection and safety. | | and the whole section here is on "Optimisation" |
|----|------|--|--|---|--|
| 6 | 3.18 | (a) The rationale for proposed operating, maintenance and administrative procedures, together with other options that have been considered and the reason for their rejection; | There is no need for a justification of operating procedures. They are fixed in the licensing procedure and will be endorsed by the license. | R | This is necessary for an effective optimization of protection and safety at workplaces. |
| 7 | | Commitment to optimization of protection and safety | See above | R | Focus is on optimisation of protection and safety |
| 8 | 3.19 | The primary responsibility for protection and safety optimization lies with management | See above | R | See above |
| 9 | 3.20 | Senior management should translate its commitment to optimization of protection and safety into effective action by incorporating optimization into an appropriate RPP, commensurate with the level and the nature of the radiological risk presented by the practice. | See above | R | See above |
| 10 | 3.22 | Where necessary, the regulatory body should undertake all relevant actions to enforce regulatory requirements on management to apply this principle. | This goes too far. After granting a license the optimization is basically finished technically and reduced to the ALARA principle as working principle in the hands of | R | Optimisation of protection and safety is a regulatory requirement. The qualification "Where necessary" |

| | | | the operator. | | adequately describes the guidance. |
|----|------|---|---|---|--|
| 11 | 3.24 | The process of optimization of protection and safety measures may range from intuitive qualitative analyses to quantitative analyses using decision aiding techniques, but has to be sufficient to take all relevant factors into account in a coherent way so as to contribute to achieving the following objectives: | Too much sophisticated | R | Deletion will dilute the coherent approach. |
| 12 | 3.26 | (a) Identify all practicable protection options that might potentially reduce the occupational exposure; (b) Identify all relevant economic, social and radiological factors (sometimes non-radiological factors as well) for the particular situation under review that distinguish between the identified options, e.g. collective dose, distribution of individual dose, impact on public exposure, impact on future generations, investment costs; (c) Quantify, where possible, the relevant factors for each protection option; (d) Compare all options and select the optimum option(s); | Exaggerated, not needed and not practice. | | Editorial – will be considered during the editorial process. |
| 13 | 3.28 | Dose constraints are may be used for optimization of protection and safety, [] Dose constraints are may be applied to occupational exposure and to public exposure [] | Dose constraints are not a requirement but an option. | R | Editorial – will be considered during the editorial process. Dose constraints are used in practice in majority of |

| | | Dose constraints are set separately for each a source under control and serve as boundary conditions in defining the range of options for the purposes of optimization. | Not each source needs to have a dose constraint, only if appropriate. Setting dose constraints e.g. for smoke detectors or dental X-ray units makes no sense. | | | situations. |
|----|-------|---|---|--|---|--|
| 14 | 3.29 | After exposures have occurred, tThe dose constraint may be used as a benchmark for assessing the suitability of the optimized strategy for protection and safety that has been implemented and for making adjustments as necessary | Dose constraints are no limits and it is not the dose constraint that determines whether protection is optimized. See also 3.31 Dose constraints should not be used retrospectively to check compliance with the requirements for protection and safety. | | R | The para do not say that dose constraints are limits. The deletion will dilute the whole meaning. |
| 15 | 3.30 | The setting of any dose constraints should be such that dose limits for occupational exposure are complied with when workers incur exposures from multiple sources or tasks. | To reach that objective dose constraints are not needed. It can simply be controlled by personnel dosimetry. | | R | Text is adequate. |
| 16 | 3.41 | Cases where For a few specialists only the flexibility provided by the averaging of doses over five years might be needed include planned maintenance operations in nuclear plants and routine work in some uranium mining operations | The examples given are misleading. | | R | It was only examples based on practical experiences reported. |
| 14 | 3.49a | New: A RPP is not necessarily a single document. It may be the sum | For clarification to avoid bureaucracy. | | R | Utmost importance to protection and |

| | | of documents issued for an application for a license, a operational manual or a simple user guide, especially for registered practices. | | | | safety is one of the embodied principles of the standards. |
|----|------|---|---|--|---|---|
| 15 | 3.60 | (c) The integration of occupational radiation protection with other areas of health and safety such as industrial hygiene, industrial safety and fire safety; | Outside the scope of a RP standard | | R | Requirement as per the BSS (see also BSS para 3.95(e). Here the objective is coherency for overall protection and safety. |
| 16 | 3.64 | In order to coordinate decision making concerning the choice of measures for protection and safety, it may be appropriate in large facilities, depending on the size of the organization, to create a specific advisory committee with representatives of those departments concerned with occupational exposure. The main role of this committee would be to advise senior management on radiation protection the RPP. Its members should therefore include management staff from the relevant departments and workers with field experience. The functions of the committee should be to delineate the main objectives of radiation protection the RPP in general, and operational radiation protection in particular, to validate the protection goals, to make proposals regarding the choice of measures for protection and safety | The objective is radiation protection. An RPP, if there is one, is only one tool. | | R | The paragraph context is RPP. The first suggestion to add "large facilities" – will be considered during the editorial process. |

| | | and to give recommendations to management regarding the resources, methods and tools to be assigned to the fulfilment of the RPP. | | | | |
|----|------|--|--|--|---|--|
| 17 | 3.65 | The RPP management should specify the need for and designate qualified experts in the relevant fields, such as: (a) Radiation protection; (b) Internal and external dosimetry; (c) Workplace monitoring; (d) Ventilation (in underground mines, for instance); | See above | | R | It is the RPP that determines the need for relevant qualified experts. |
| | | (e) Occupational health; (f) Radioactive waste management. | Outside the scope | | | |
| 18 | 3.71 | Management should consult the appointed qualified experts as appropriate on aspects of radiation protection the RPP, | It is RP and not the programme what is essential. | | R | Whole section is on RPP. |
| 19 | 3.75 | These areas should be clearly defined in the RPP, and their classification should result from the prior radiological evaluation referred to in paras 3.53–3.56 | Essential is that the areas are defined and not the document where it is done. It might e.g. be a simple operating manual too. | | R | BSS requirement. |