

**CNSC Management Response to the 2011 IRRS Follow-up Mission Report
Content for Public Posting**

All IRRS Actions have been Completed

E-DOCS-#3880678

IRRS - FOLLOW-UP

Suggestion / Recommendation / Good Practice	IRRS Text	CNSC Management Response	IRRS Action Completed
S1	<p>Consideration should be given to updating the 1998 Memorandum of Understanding with Health Canada. This update should also define the roles and responsibilities of the Federal Provincial Territorial Radiation Protection Committee (FPTRPC) to ensure that there is a comprehensive and consistent safety regulation and oversight.</p> <p>Suggestion 1 (S1) from the 2009 IRRS mission remains open</p>	<p>The CNSC will initiate steps to engage Health Canada in the process of reviewing and updating the 1998 CNSC - Health Canada Memorandum of Understanding to ensure that comprehensive and consistent regulatory oversight of radiation safety with respect to patient safety is in place. This will include formalizing the roles and responsibilities of the FPTRPC.</p>	<p>February 2012. Memorandum of Understanding (MOU) between the CNSC and Health Canada has been updated and signed.</p>
R5	<p>CNSC should consider how to introduce effective arrangements for undertaking periodic safety reviews (PSRs) for these Class-1 facilities. Such PSRs should be proportionate and commensurate to the hazards to be controlled.</p> <p>Recommendation 5 (R5) from the 2009 IRRS mission remains open</p>	<p>The CNSC currently uses Integrated Safety Reviews which are equivalent to PSRs but have only been applied to refurbishment or life extension projects in Canada. It is anticipated that full adoption of such a process in Canada would be introduced and implemented over a period of several years.</p>	<p>May 2012. Action on PSRs has been integrated into the CNSC Fukushima Action Plan.</p>

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IRRS – TRANSPORT MODULE

Suggestion / Recommendation / Good Practice	IRRS Text	CNSC Management Response	IRRS Action Completed
S T1	The CNSC, in conjunction with Transport Canada, should consider enhancing the MOU and its implementing procedures in its next revision to avoid any omissions or undue duplication and to avoid conflicting requirements being placed on authorized parties.	In practice, the CNSC and Transport Canada work closely together to ensure that radioactive material is transported safely, in accordance with all regulatory requirements. The CNSC agrees with the suggestion, which is administrative in nature, and will work with Transport Canada to prepare a plan to revise the MOU.	December 2012. The MOU between CNSC and Transport Canada has been revised and signed.
S T2	The CNSC should consider including the witnessing of manufacturing as an action within its measures and procedures to demonstrate compliance assurance according to para. 307 of TS-R-1, and the procedures and measures linked to the consolidated compliance assurance program should be documented and be subject to regular review.	The CNSC agrees with the suggestion of having this systematic administrative step which would enhance the current CNSC comprehensive regulatory regime for the certification of transport packages. The CNSC will identify and evaluate any gaps in order to enhance the CNSC inspection of the manufacturing of transport packages.	February 2012. The CNSC conducted a gap analysis and a procedure has been developed for the conduct of an inspection of the manufacturing of transport packages.
G T1	The CNSC's use of systematic inspections of Radiation Protection Programs of carriers to facilitate the periodic assessments of radiation doses to transport workers, as required by para. 308 of TS-R-1, is considered to be a good practice.	Noted as a good practice. The CNSC will continue to use this practice to facilitate periodic assessments of radiation doses to transport workers.	No additional action required.

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S T3	The CNSC should consider establishing requirements for ensuring that any design changes/modifications made after the package design is approved do not invalidate the approved design.	The CNSC agrees with the suggestion but notes that the CNSC’s regulatory requirements do not authorize changes or modifications to certified packages without prior approval. The text below will be added, for clarity, to all package design certificates issued after December 2011 to address this administrative item: <i>Any modification to the package design must be submitted to the CNSC for approval prior to implementation.</i>	January 2012. The new text has been added to all package design certificates.
R T1	CNSC should review, and revise as necessary, its process and procedures to ensure that the contents of all types of package design certificates meet the requirements of para. 833 of TS-R-1 (2009). Such a review should also be conducted for other types of CNSC certificates which are subject to TS-R-1 requirements.	The CNSC reviewed the content of all relevant paragraphs of the 2009 Edition of the IAEA TS-R-1 Regulations and confirmed that its regulatory regime for certification of transport packages meets all current requirements of TS-R-1. The CNSC already has checklists in place to be used to ensure that all certificates include all required information applicable to the content of certificates of approval issued by the CNSC. In order to address this recommendation, which is administrative in nature, the CNSC will revise its processes and procedures to include additional administrative clarifications to ensure that all relevant information will be included in the CNSC package design approval certificates, certificates for special form radioactive material and certificates for shipment under special arrangement.	August 2012. The CNSC conducted a gap analysis and review against the TS-R-1 2009 version. The revised processes and procedures are being implemented.

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S T4	CNSC should consider reviewing the application of its electronic database to create package design approval certificates to verify full consistency of all produced certificates and to allow for options for extensions of a certificate like the addition of information on previous revisions of the certificate as an annex to it.	The CNSC will undertake a review of its electronic database and develop a plan to revise the database used to produce the package design approval certificates. This will include a review of the application to ensure consistency in the production of the certificates and allow for a new section on the certificate where information on the changes to the package since the last approval would be recorded. This administrative clarification will allow for a more efficient way of identifying the basis for the issuance of the new certificate.	April 2012. The CNSC conducted a gap analysis and review. Business requirements for the required modifications, to the database, have been determined. Scoping, costing and implementation are being managed within the CNSC's Information Technology priorities.
G T2	The CNSC Regulatory Document RD-364 "Joint Canada-United States Guide for Approval of Type B(U) and Fissile Material Transportation Packages" is a very detailed and comprehensive guide to assist applicants to demonstrate compliance with the Regulations as well as to assist competent authorities in the review and approval of applications. As such it contributes to a harmonized practice between Canada and the U.S. in the field of package design assessment and approval.	Noted as a good practice. The CNSC will continue to use and improve this guide for use by applicants.	No additional action required.

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S T5	<p>The CNSC should consider developing specific assessment procedures, assessment criteria and decision sheets to be used by its transport specialists for all types of package design assessments based on the Regulatory Document RD-364. The CNSC should also consider the specific guidance on this subject given by IAEA in ‘Advisory Material for the IAEA Regulations for the Safe Transport of Radioactive Material’ (TS-G-1.1). Consideration should also be given to applying the same approach to assessment procedures for other types of approvals related to TS-R-1.</p>	<p>Under the CNSC regulatory regime for certification of transport packages, the technical assessments of certification applications are conducted using criteria based on Regulatory Document RD-364, in addition to IAEA TS-R-1 regulations, IAEA TS-G-1.1, and the CNSC <i>Packaging and Transport of Nuclear Substance Regulations</i>. In order to address the suggestion, which is administrative in nature, the CNSC will perform a gap analysis and prepare a plan to update the assessment procedures and criteria.</p>	<p>March 2013. The CNSC conducted a gap analysis and review. Documents containing all assessment criteria related to approval have been prepared and are in use.</p>
S T6	<p>The CNSC should consider options to systematically obtain, and utilize where applicable, feedback from inspection activities and results from local authorities.</p>	<p>The CNSC agrees with this suggestion and will engage with Transport Canada to participate in the Federal / Provincial / Territorial Transportation of Dangerous Goods Task Force and will initiate discussions with the relevant Provincial and Territorial authorities to explore options for sharing information on inspections related to radioactive material.</p>	<p>November 2012. The CNSC met with Transport Canada and identified inspection elements to be exchanged.</p> <p>The CNSC now participates in all Federal/Provincial/Territorial Transportation of Dangerous Goods (TDG) Task Force Meetings.</p>

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S T7	The CNSC should consider specifying in their package design approval certificates that the date of the next maintenance or servicing operation, according to the approved maintenance or servicing program, should be indicated on the packaging.	In order to address this suggestion, which is administrative in nature, the CNSC will, for clarity and in addition to its regular inspections, assess ways to improve the identification of the date of the next required maintenance or servicing operation of transport packages. Note that maintenance of packages is an established regulatory requirement.	October 2012. An assessment was completed and the CNSC has updated its verification procedures and assessment criteria, with respect to maintenance requirements for transport packages.
R T2	The CNSC should revise the PTNS regulations by implementing the current 2009 Edition of TS-R-1, and changes resulting from the latest edition of TS-R-1 expected to be published in 2012 should be taken into account.	<p>CNSC staff will, by June 2012, recommend that the Commission Tribunal issue an interim directive accepting as a matter of principle TS-R-1 (2009), stating it will apply to the extent that it is consistent with current PTNS Regulations. Should a new edition of TS-R-1 (likely 2012) be published during the process of preparing this recommendation to the Commission Tribunal, then the interim directive will refer to the new TS-R-1 (2012) instead of TS-R-1 (2009).</p> <p>In parallel to the above, the CNSC will amend the PTNS Regulations to refer to the latest edition of the TS-R-1 (likely 2012), at which time the amended regulations will replace the interim directive.</p> <p>The current Packaging and Transport of Nuclear Substances Regulations refer to the 1996 Edition of the IAEA TS-R-1 Regulations (Revised 2000) which are, in</p>	<p>March 2013. The CNSC conducted a gap analysis and review against 2009 and 2012 versions of TS-R-1, and an interim directive was issued by the Commission in June 2012.</p> <p>The amendment of the PTNS Regulations has been integrated into the CNSC's Regulatory Framework Plan.</p>

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		<p>some areas, more stringent than the 2009 Edition or the soon to be published 2012 Edition. The vast majority of changes made to the IAEA Regulations since the 1996 (Revised 2000) have been administrative in nature and as such the level of safety has never been compromised.</p>	
S T8	<p>The CNSC should consider options to increase clarity and user-friendliness of the PTNS regulations, including ease of access to TS-R-1 text, and to investigate enhanced harmonization between definitions in the PTNS regulations and definitions of TS-R-1.</p>	<p>The CNSC will develop a guidance document that includes the text of TS-R-1, as well as other regulations referenced in the PTNS Regulations, to assist users of the PTNS Regulations. The document will support the interim directive and the amended PTNS Regulations to implement the most recent version of TS-R-1.</p>	<p>November 2012. The CNSC conducted a gap analysis and review against the 2009 and 2012 versions of TS-R-1, and an interim directive was issued by the Commission in June 2012. A regulatory document (REGDOC) has been prepared to provide the needed guidance.</p>

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R T3	The CNSC, in conjunction with Transport Canada, should establish a formal procedure which provides for a parallel review and revision process of their regulations for Class 7 material to implement revised editions of TS-R-1 consistently.	The CNSC will work with Transport Canada to develop a plan to establish a procedure for parallel review and revision of respective regulations regarding radioactive material to address this administrative recommendation.	March 2013. A MOU with Transport Canada was signed on December 14, 2012. A joint procedure has been completed and approved by both the CNSC and Transport Canada.
R T4	The CNSC should identify and resolve inconsistencies in different CNSC regulations regarding transport during the process of revising and updating the PTNS regulations.	The CNSC is looking at all its regulations as part of the ongoing review of the PTNS Regulations (ref. response to R T2 above) and will address the administrative inconsistencies noted during this process all inconsistencies identified.	June 2012. The CNSC conducted a gap analysis and review against 2009 and 2012 versions of TS-R-1, and an interim directive was issued by the Commission in June 2012.

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R T5	The CNSC should ensure consistency between the TDG regulations and the PTNS regulations with regard to international shipments by implementing an adequate requirement as contained in the TDG regulations into the PTNS regulations which allow such shipments according to the latest edition of the applicable international modal transport regulation.	The CNSC is considering this recommendation as part of its ongoing review of the PTNS Regulations (ref. response to R T2 above). This recommendation is administrative in nature and does not have any impact on current application of the regulations.	June 2012. The CNSC conducted a gap analysis and review against 2009 and 2012 versions of TS-R-1, and an interim directive was issued by the Commission in June 2012.
R T6	The CNSC should ensure that the next revision of the PTNS regulations is consistent with competent authority approval requirements according to TS-R-1.	The CNSC is considering this recommendation to include other types of approvals as part of its ongoing review of the PTNS Regulations (ref. response to R T2 above). This is an administrative recommendation as these types of approvals are infrequently used.	June 2012. The CNSC completed a gap analysis and review against 2009 and 2012 versions of TS-R-1 and an interim directive was issued by the Commission in June 2012.
G T3	The Canadian Transport Emergency Center (CANUTEC) together with the 24 hour Duty Officer service of CNSC, the CNSC's ability and capacity to provide technical assistance and regulatory oversight at all times, the Emergency Response Assistance Plans (ERAPs) of carriers and the Federal Nuclear Emergency Plan (FNEP) provide an excellent system for emergency response.	Noted as a good practice. The CNSC and CANUTEC will continue to work closely together in order to maintain and improve this exceptional emergency response system.	No additional action required.

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IRRS – FUKUSHIMA MODULE

Suggestion / Recommendation / Good Practice	IRRS Text	CNSC Management Response	IRRS Action Completed
R F7	The Government of Canada should assure that the review and assessment of off-site emergency plans for nuclear power plants include all relevant authorities and are comprehensive, and that the relevant organizations which implement those plans are capable of performing the assigned duties.	This issue is being considered by the CNSC's Fukushima Task Force. The Task Force's report and recommendations have undergone extensive public review and comment and will be considered at a Public Meeting of the Commission Tribunal.	May 2012. Action has been integrated into the CNSC Fukushima Action Plan.
R F8	The Government of Canada should assure that full-scale exercises of off-site emergency preparedness plans be held on a periodic basis, including participation of the licensee and the municipal, provincial, and federal organizations.	This issue is being considered by the CNSC's Fukushima Task Force. The Task Force's report and recommendations have undergone extensive public review and comment and will be considered at a Public Meeting of the Commission Tribunal.	May 2012. Action has been integrated into the CNSC Fukushima Action Plan.
S F9	The Government of Canada should consider inviting an international peer review mission for emergency preparedness and response.	This issue is being considered by the CNSC's Fukushima Task Force. The Task Force's report and recommendations have undergone extensive public review and comment and will be considered at a Public Meeting of the Commission Tribunal.	May 2012. Action has been integrated into the CNSC Fukushima Action Plan.

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G F4	<p>The CNSC has performed a systematic and thorough review of the implications and the lessons learned from the TEPCO Fukushima Daiichi accident for the safety of the Canadian NPPs, making full use of all the information available, including the review of the actions taken by other international nuclear regulators. The CNSC has set up an Action Plan for addressing all the findings and recommendations arising from the review conducted under the CNSC Fukushima Task Force. The Task Force Report has been made publicly available.</p>	<p>Noted as a good practice. The CNSC will ensure that the action plan is implemented once approved by the Canadian Nuclear Safety Commission Tribunal.</p>	<p>No additional action required.</p>