

2<sup>nd</sup> Extraordinary Meeting of the Contracting Parties  
to the Convention of Nuclear Safety

27-31 August 2012  
Vienna, Austria

Final Summary Report

Mr Li Ganjie, President  
Mr William Borchardt, Vice-President  
Mr Patrick Majerus, Vice-President  
Vienna, 31 August 2012

## **A. Introduction**

1. As agreed at the 5<sup>th</sup> Review Meeting of the Convention of Nuclear Safety held from 4 to 14 April 2011, the 2<sup>nd</sup> Extraordinary Meeting of the Convention was held at the Headquarters of the International Atomic Energy Agency (IAEA) in Vienna, Austria from 27 to 31 August 2012. The President of the Extraordinary Meeting was Mr. Li Ganjie of The People's Republic of China. The Vice Presidents were Mr. William Borchart from the United States of America and Mr. Patrick Majerus from Luxembourg.

2. The objectives of the Extraordinary Meeting were to review and discuss lessons learned so far from the accident at TEPCO's Fukushima Daiichi nuclear power plant (hereinafter referred to as the Fukushima Daiichi accident), and to review the effectiveness of the provisions of the Convention. The Contracting Parties recognize that these objectives must be accomplished in addition to meeting the on-going safety obligations for currently operating facilities.

3. This report summarizes the key actions taken and challenges faced by many Contracting Parties that were identified at this Extraordinary Meeting. The observations and conclusions of this report are based on the discussions held in each of six working sessions, at which Contracting Parties discussed actions to enhance nuclear safety, taking into account the lessons learned from the Fukushima Daiichi accident. The six topical areas were: (1) external events, (2) design issues, (3) severe accident management and recovery (on-site), (4) national organizations, (5) emergency preparedness and response and post-accident management (off-site), and (6) international cooperation. The benefit to Contracting Parties of identifying and discussing key technical issues was to glean insights from one another's approaches, which would not have been possible by any one Contracting Party working in isolation. These actions will then be reflected in Contracting Parties' National Reports for the Sixth Review Meeting of Contracting Parties, thereby enabling a more robust peer review process.

4. This report also provides a summary of the results from the discussions on ways to enhance the effectiveness of the Convention. The steps suggested to strengthen the effectiveness of the Convention will serve to enhance national nuclear safety programmes by providing specific areas of focus for the conduct of these programmes. In addition, a working group open to all Contracting Parties was established with the task of reporting to the next Review Meeting on a list of actions to strengthen the CNS and on proposals to amend, where necessary, the Convention.

## **B. Background**

5. As of 27 August 2012, 74 States and one regional organization have become Contracting Parties to the Convention, which entered into force on 24 October 1996. Sixty-four of the 75 Contracting Parties participated in the Extraordinary Meeting, these were: Albania; Argentina; Armenia; Australia; Austria; Belarus, Belgium; Bosnia and Herzegovina; Brazil; Bulgaria; Canada; China; Croatia; Cyprus; Czech Republic;

Denmark; Estonia; Finland; France; Germany; Ghana; Greece; Hungary; Iceland; India; Indonesia; Ireland; Italy; Japan; Jordan; Kazakhstan; Republic of Korea; Latvia; Lebanon; Lithuania; Luxembourg; Malta; Mexico; Netherlands; Nigeria; Norway; Pakistan; Peru; Poland; Portugal; Romania; Russian Federation; Saudi Arabia; Senegal; Singapore; Slovakia; Slovenia; South Africa; Spain; Sweden; Switzerland; Tunisia; Turkey; Ukraine; United Arab Emirates; United Kingdom; United States of America; Vietnam; and EURATOM. Pursuant to Article 24.2 of the Convention, the OECD Nuclear Energy Agency attended as an observer.

6. Eleven Contracting Parties, namely Bahrain, Bangladesh, Cambodia, Chile, Kuwait, Libya, Mali, Republic of Moldova, Sri Lanka, The Former Yugoslav Republic of Macedonia and Uruguay, did not attend the Extraordinary Meeting.

7. As agreed at the 5<sup>th</sup> Review Meeting, Contracting Parties were to submit National Reports three months before the Extraordinary Meeting addressing the lessons identified from the Fukushima Daiichi accident. Most of the Contracting Parties submitted their National Reports in good time. In preparation for the Extraordinary Meeting, the Contracting Parties subsequently reviewed each other's reports. Unlike for Review Meetings of the Convention, Contracting Parties were not obligated to submit or respond to written questions. Fourteen of the 75 Contracting Parties did not submit National Reports for the Extraordinary Meeting, namely: Albania, Bahrain, Bangladesh, Cambodia, Chile, Kazakhstan, Kuwait, Libya, Mali, Republic of Moldova, Saudi Arabia, Singapore, Sri Lanka and Uruguay.

### **C. Overview of the Extraordinary Meeting**

8. At the opening plenary, the Director General of the IAEA, Mr Yukiya Amano, made opening remarks. In his remarks, the Director General noted that one year after the IAEA Action Plan on Nuclear Safety was adopted, the IAEA has made significant progress in several key areas, including: the assessment of safety vulnerabilities of nuclear power plants, strengthening IAEA peer review services, improving emergency preparedness and response capabilities and reviewing IAEA safety standards. The Director General urged "the Member States, the IAEA and other key stakeholders to maintain our sense of urgency and our commitment to implementing the Action Plan in full. Much work remains to be done and we must not relax our guard".

9. President Li Ganjie also made opening remarks. He noted that the Fukushima Daiichi accident has had a significant impact, not only on Japan, but on all nations with existing nuclear power plants as well as nations that are considering building new nuclear plants. Although the accident itself was a great disaster for the people of Japan, it also provided an opportunity for all Contracting Parties to think and reflect, and to identify areas for improvement that will be beneficial for us in the future. He focused on several key aspects of nuclear safety and looked forward to meaningful discussions during the week so that Contracting Parties can learn from one another and enhance the effectiveness of the Convention on Nuclear Safety.

10. At the opening plenary, Mr. Shinichi Kuroki, Deputy Director-General for Nuclear Power, NISA, provided a presentation on the status of the Fukushima Daiichi accident and the activities taken in Japan.

11. The President acknowledged the submission of statements from Contracting Parties (India and the Russian Federation) and from INRA, ENSREG and EdF.

12. During the first two days of the Extraordinary Meeting, the Contracting Parties participated in six working sessions based on six topical areas, to discuss and share actions taken or planned by the Contracting Parties in response to the Fukushima Daiichi accident. The six topical areas were: (1) external events, (2) design issues, (3) severe accident management and recovery (on-site), (4) national organizations, (5) emergency preparedness and response and post-accident management (off-site), and (6) international cooperation.

13. The Contracting Parties also participated in several plenary sessions to discuss proposals for enhancing the effectiveness of the Convention. During these sessions, the Contracting Parties discussed proposals to amend the text of the Convention and to amend the guidance documents INFCIRC/571, Guidelines regarding the Review Process under the Convention on Nuclear Safety, INFCIRC/572, Guidelines regarding National Reports under the Convention on Nuclear Safety, and INFCIRC/573, Convention on Nuclear Safety, Rules of Procedures and Financial Rules.

#### **D. General observations**

14. The Contracting Parties have already taken selected actions to enhance existing safety systems and processes. Most Contracting Parties having nuclear power plants have conducted targeted safety reviews of their nuclear power plants and are taking additional actions to enhance the protection of the reactor units from extreme natural hazards. Although different methods of review were used by the Contracting Parties, the reviews reached similar conclusions. Thus, many safety enhancements being implemented are common to many Contracting Parties.

15. The Contracting Parties continue to act upon the lessons of the Fukushima Daiichi accident. In line with their national responsibilities, Contracting Parties have already taken prompt actions to ensure the continued safety of their existing and planned nuclear power plants and will continue to take actions as appropriate as more lessons are learned.

16. The Fukushima Daiichi accident has raised important issues which are applicable to power reactor design, including those related to unfavourable natural and human induced external events and their possible combination. As was learned from experience with the Three Mile Island and Chernobyl accidents, full analysis of the Fukushima Daiichi accident could take several years. Thus, the Contracting Parties agreed that they

should continue to discuss what is learned from the Fukushima Daiichi accident over the next several Review Meetings.

17. The displacement of people and the land contamination after the Fukushima Daiichi accident calls for all national regulators to identify provisions to prevent and mitigate the potential for severe accidents with off-site consequences. Nuclear power plants should be designed, constructed and operated with the objectives of preventing accidents and, should an accident occur, mitigating its effects and avoiding off-site contamination. The Contracting Parties also noted that regulatory authorities should ensure that these objectives are applied in order to identify and implement appropriate safety improvements at existing plants.

18. In order to make further progress to strengthen nuclear safety, the Contracting Parties encourage networks of operators, regulatory bodies, international organizations and technical support organizations to cooperate on the lessons learned from the Fukushima Daiichi accident.

19. The improvements to the guidance documents for National Reports and for the conduct of Review Meetings that were approved by the Contracting Parties at this Extraordinary Meeting are to reinforce further the peer review process, strengthen national regulatory bodies, encouraged Contracting Parties to refer to the safety standards in their National Reports, improve the transparency of the review process, and reinforce efforts for continuous improvement by performing periodic reassessments of safety, through periodic safety reviews or alternate methods.

## **E. Topical Discussions**

### **Actions taken by Contracting Parties to address initial lessons learned from the Fukushima Daiichi accident**

20. Implementation of safety improvements in relation to severe accident management has been an important issue since the 1970s. However the Contracting Parties have addressed the risks of severe accidents to different degrees and have different starting points for new assessments. The Fukushima Daiichi accident has provided impetus for the Contracting Parties to re-assess the safety measures in place at nuclear power plants in the context of natural events and to identify new measures that may need to be implemented.

21. Significant activities and action have been or are being taken by various Contracting Parties. The following list provides examples of these activities and actions:

- re-evaluating the hazards posed by external events, such as earthquakes, floods and extreme weather conditions, for each nuclear power plant site through targeted reassessment of safety.

- upgrading safety systems or installing additional equipment and instrumentation to enhance the ability of each nuclear power plant to withstand an unexpected natural event without access to the electrical power grid for an extended period of time, including for an external event affecting multiple units.
- installing additional equipment and instrumentation in spent fuel pools to ensure cooling can be maintained or restored in all circumstances, or performing additional technical evaluations to determine if additional equipment and instrumentation are needed.
- performing or planning an evaluation of the guidance that is to be used by the operator to manage emergency situations resulting from severe accidents caused by extreme natural phenomena at nuclear power plants, including for low power and shutdown states. These documents include emergency operating procedures to prevent core damage, severe accident management guidelines to prevent containment failure, and extensive damage mitigation guidelines to address accidents that result in fires or explosions that affect a large portion of a nuclear power plant.
- developing probabilistic safety assessments to identify additional accident management measures or changes in radiation protection measures for workers on the site that might be needed to perform necessary activities in the event of a severe accident.
- reviewing and updating national, regional, provincial, municipal and local emergency plans and conducting exercises to encourage greater coordination among the different organizations.
- improving their radiation monitoring and communications capabilities, and enhancing public communications, such as via dedicated public websites.
- upgrading regional, off-site and on-site emergency response centres.
- undertaking review and revision of their legislative framework and undertaking changes to the functions and responsibilities of the regulatory body.

22. In addition, many Contracting Parties reported that they are strengthening bilateral and regional collaboration, hosting or planning to host international peer review missions, and participating in IAEA Action Plan activities and implementing recommendations of the WANO Fukushima Commission.

## Issues to be considered

23. At the Extraordinary Meeting discussions focused on a range of topics, which should be considered in the preparation of National Reports for the 6th Review Meeting. With the goal of better fulfilling the objectives of the Convention, the Contracting Parties agreed that in particular the National Reports should cover:

- a) For existing nuclear power plants, the results of reassessments of external events, of periodic safety assessments and of any peer reviews, and any follow-up actions taken or planned, including upgrading measures.
- b) For existing nuclear power plants, any actions taken or planned to cope with natural hazards more severe than those considered in the design basis.
- c) For new nuclear power plants, improved safety features and additional improvements, if any, to address external hazards and to prevent accidents and, should an accident occur, to mitigate its effects and avoid off-site contamination.
- d) Upgrading of accident management measures for extreme natural events, including for example measures to ensure core cooling and spent fuel pool cooling, the provision of alternate water sources for the reactor and for the spent fuel pool, the availability of the electrical power supply, measures to ensure containment integrity, and filtration strategies and hydrogen management for the containment; the development of probabilistic safety assessments to identify additional accident management measures should be considered as a possible future activity.
- e) Measures taken or planned to ensure the effective independence of the regulatory body from undue influence, including, where appropriate, information on the hosting of IRRS missions.
- f) Enhancements of emergency preparedness and response measures, including for example for multi-unit sites, approaches and methods of source term estimation and initiatives in the field of remediation. The enhancements should include defining the additional responsibilities up to appropriate levels of the national government and the development of procedures and joint actions of various agencies and improvements in international cooperation.
- g) Information on how IAEA safety standards are taken into account.
- h) Information on activities undertaken to enhance openness and transparency for all stakeholders.

24. Safety culture and human and organizational factors were identified as cross-cutting issues, which affect the consideration of external events, design, severe accident management, including operator training, the good functioning of national organizations and emergency preparedness and response. Particular attention should be given to these in preparation of National Reports for the next Review Meeting.

25. To facilitate the review of individual National Reports, a subchapter within the Summary (see the Guidelines regarding National Reports under the Convention of

Nuclear Safety, INFCIRC/572, paras 29-30) could be appropriate to summarize all actions taken in the light of the Fukushima Daiichi accident.

26. The full outcome of the topical discussions may be further studied by Contracting Parties and the conclusions drawn might be used for further improving nuclear safety at the national level. The results of this work could be reported on by interested Contracting Parties at the next Review Meeting of the Convention.

## **F. Conclusions**

27. To improve the effectiveness of the Convention peer review process, the Contracting Parties participated in several plenary sessions to discuss the proposals to amend INFCIRC/571, Guidelines regarding the Review Process under the Convention on Nuclear Safety, INFCIRC/572, Guidelines regarding National Reports under the Convention on Nuclear Safety, and INFCIRC/573, Convention on Nuclear Safety, Rules of Procedures and Financial Rules.

28. Eleven Contracting Parties (i.e. Australia, Canada, France, Germany, the Republic of Korea, Russia, Spain, Switzerland, the United Arab Emirates, the United Kingdom and the United States of America) submitted proposals to change the guidance documents. These Contracting Parties worked together to develop a first draft of the revised guidance documents in order to facilitate discussion with all the Contracting Parties at the Extraordinary Meeting.

29. Revisions to the guidance documents were undertaken to enhance the effectiveness of the review process and to make National Reports more comprehensive, as was committed to at the 5<sup>th</sup> Review Meeting. Each Contracting Party will reflect the revisions in their National Reports to the 6<sup>th</sup> Review Meeting. The proposed changes were discussed section-by-section and revised versions of the guidance documents were agreed by consensus.

30. Two Contracting Parties had proposed amendments to the text of the Convention on Nuclear Safety, INFCIRC/449.

31. Each Contracting Party had the opportunity to present their proposed changes to the Convention on the first day of the Extraordinary Meeting.

32. Contracting Parties considered a set of action-oriented objectives for strengthening nuclear safety, annexed to this Summary Report, concerning the use of IAEA safety standards, the enhancement of transparency, the regulatory effectiveness as well as the use of international peer review missions, whose primary importance has been highlighted by the first lessons learnt from the Fukushima Daiichi accident. They recognize the necessity to further improve the overall Convention review process.



33. In this regard, Contracting Parties decided to establish an ‘effectiveness and transparency’ working group, open to all Contracting Parties, with the task of reporting to the next review meeting on a list of actions to strengthen the CNS and on proposals to amend, where necessary, the Convention. The working group will take into account the overall output of this Extraordinary Meeting, including the initial proposals to amend the Convention submitted by Switzerland and by the Russian Federation.

Annex  
ACTION-ORIENTED OBJECTIVES FOR STRENGTHENING  
NUCLEAR SAFETY

Recognizing the importance of achieving the objectives of the International Atomic Energy Agency (IAEA) Action Plan on Nuclear Safety, which was endorsed at the IAEA General Conference in 2011;

Recognizing that strong and effective national regulation and independent regulatory bodies are critical to the safety of nuclear installations (that is any land-based civil nuclear power plant);

Affirming that the operator has the primary responsibility for the safety of the nuclear installation that it operates;

Recognizing the importance of openness and transparency as vital elements of a national framework regarding the safety of nuclear installations;

Noting that confidence in and acceptability of decisions concerning the safety of nuclear installations increase if the relevant parties are engaged in the decision-making process based on scientific and technical knowledge and if the process proceeds in an open manner;

Recognizing that it is essential to draw all possible lessons learned from the accident which occurred in Fukushima Daiichi Nuclear Power Station of Tokyo Electric Power Company (Fukushima accident) and that the comprehensive analysis of the feedback could take up to 10 years;

Noting that the Fukushima accident emphasized the importance of evaluating the likelihood and potential consequences of external events and taking the results of such evaluations into account in the design, siting, construction and operation of nuclear installations, as well as the development of procedures and implementation plans, including containment, for responding to any accident in an effective and coordinated manner and mitigating its consequences;

Recognizing that the IAEA Safety Standards can be used in conjunction with the adoption of best practices and the promotion of continuous improvement with respect to nuclear safety;

Acknowledging that IAEA Safety Standards are not legally binding on a Contracting Party, except to the extent that the Contracting Party has made specific provisions of the Standards legally binding under its national law;

Welcoming that the IAEA Safety Standards are being reviewed and revised especially in the light of the Fukushima accident and stressing the need for the Standards to be reviewed and revised as necessary in a continuous manner;

Recognizing that international peer review missions involving experts from other Contracting Parties can play an important role in achieving and maintaining a high level of safety with respect to nuclear installations;

Recognizing that fora of regulatory bodies, technical and scientific support organizations, and licensees can play an important role in advancing the culture of safety in countries by providing a forum for sharing best practices, and recognizing that these networks need to be strengthened;

Each Contracting Party is encouraged to:

1. Take the IAEA Safety Standards into account in enhancing nuclear safety.
2. Include information in its report under the Convention on Nuclear Safety (National Report) about how it has taken or intends to take the IAEA Safety Standards (including, in particular, the Safety Fundamentals and Requirements) into account in implementing its obligations under the Convention on Nuclear Safety.
3. Ensure that its regulatory body is effectively independent in making regulatory judgments based on scientific and technological grounds and taking enforcement actions and that it has functional separation from entities having responsibilities or interests, such as the promotion or utilisation of nuclear energy (including electricity production), that could conflict with safety or other important regulatory objectives or otherwise unduly influence the decision making of the regulatory body.
4. Ensure the effectiveness of its regulatory body by providing for adequate legal authority, sufficient human and financial resources, staff competence, access to necessary external expertise for its decision-making based on adequate scientific and technical knowledge, access to international cooperation, and other matters needed for fulfilling its responsibilities for the safety of nuclear installations.
5. Ensure that its regulatory body requires a licensee for a nuclear installation to have adequate expertise and resources to fulfill its responsibility for the safe operation of the nuclear installation, including effective response to any accident and mitigation of its consequences.
6. Ensure that its regulatory body operates in a transparent and open manner, taking into account legitimate concerns over security and other sensitive interests that might be adversely affected by the public disclosure of particular information.

7. Include information in its National Report on its efforts to ensure the independence, effectiveness and transparency of its regulatory body.
8. Host, as appropriate, an international peer review mission of its regulatory framework governing the safety of nuclear installations, if the Contracting Party has an operating nuclear installation.
9. Host regularly, as appropriate for the size and number of the nuclear installations within that Contracting Party, international peer review missions of the operational safety of its nuclear installations, if the Contracting Party has an operating nuclear installation.
10. Host international peer review missions on integrated nuclear infrastructure and other relevant matters, including site and design safety reviews prior to commissioning its first nuclear installation,
11. Include information in its National Report on any international peer review missions under paragraph 1, 2 or 3 of this section that the Contracting Party has hosted in the period between two review meetings of the Contracting Parties including a summary of the findings, recommendations and other results of the missions, actions taken to address these results, and plans for follow-up missions.
12. Make its National Report and any written questions and responses relating to that report publicly available, with the exception of any particular item of information that would adversely affect security or other sensitive interests if publicly disclosed and request the IAEA to maintain this information, other than any information covered by the above exception, on a website open to the public.
13. Make any international peer review mission reports, any follow-up reports or any national responses to such reports publicly available, with the exception of any particular items of information that would adversely affect security or other sensitive interests if publicly disclosed and request the IAEA to maintain this information, other than any information covered by the above exception, on a website open to the public.
14. Include information in its National Report on its efforts to enhance openness and transparency in the implementation of its obligations under the Convention on Nuclear Safety.
15. Enhance the robustness of the peer review of national reports submitted under the CNS through the preparation and submission of thorough reports that present successes and challenges and the frank discussion of these reports.



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## **CONVENTION ON NUCLEAR SAFETY**

### **Proposal for Amendments by the Swiss Confederation**

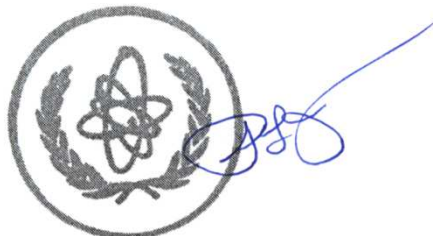
The Director General of the International Atomic Energy Agency, acting in his capacity as depositary of the Convention on Nuclear Safety (the Convention), communicates the following:

Reference is made to Article 32 of the Convention, whereby:

- “1. Any Contracting party may propose an amendment to this Convention. Proposed amendments shall be considered at a review meeting or an extraordinary meeting.
2. The text of any proposed amendment and the reasons for it shall be provided to the Depositary who shall communicate the proposal to the Contracting Parties promptly and at least ninety days before the meeting for which it is submitted for consideration. Any comments received on such a proposal shall be circulated by the Depositary to the Contracting Parties.
3. The Contracting Parties shall decide after consideration of the proposed amendment whether to adopt it by consensus, or, in the absence of consensus, to submit it to a Diplomatic Conference. A decision to submit a proposed amendment to a Diplomatic Conference shall require a two-thirds majority vote of the Contracting Parties present and voting at the meeting, provided that at least one half of the Contracting Parties are present at the time of voting. Abstentions shall be considered as voting.
4. The Diplomatic Conference to consider and adopt amendments to this Convention shall be convened by the Depositary and held no later than one year after the appropriate decision taken in accordance with paragraph 3 of this Article. The Diplomatic Conference shall make every effort to ensure amendments are adopted by consensus. Should this not be possible, amendments shall be adopted with a two-thirds majority of all Contracting Parties.
5. Amendments to this Convention adopted pursuant to paragraphs 3 and 4 above shall be subject to ratification, acceptance, approval, or confirmation by the Contracting Parties and shall enter into force for those Contracting Parties which have ratified, accepted, approved or confirmed them on the ninetieth day after the receipt by the Depositary of the relevant instruments by at least three fourths of the Contracting Parties. For a Contracting Party which subsequently ratifies, accepts, approves or confirms the said amendments, the amendments will enter into force on the ninetieth day after that Contracting Party has deposited its relevant instrument.”

In this connection, the Director General received on 26 April 2012 a letter on behalf of the Permanent Representative of the Swiss Confederation, transmitting the proposals for amendments to the Convention by the Swiss Confederation.

In accordance with Article 32, paragraph 2, of the Convention, the Director General is hereby circulating the proposed amendments to the Contracting Parties. As requested by the Swiss Confederation, the proposed amendments shall be considered at the extraordinary meeting of the Contracting Parties under the Convention, scheduled from 27 to 31 August 2012. Also, in accordance with Article 32, paragraph 2, of the Convention, any comments received from Contracting Parties on the proposed amendments shall be circulated by the depositary to the Contracting Parties in advance of the meeting.



2012-05-10

Enclosure: Proposals of the Swiss Confederation

## **Proposal to the Plenary Session on CNS Effectiveness Second CNS Extraordinary Meeting (August 2012)**

### **Background and Rationale of the Proposal**

Nuclear accidents have transboundary effects, politically and – in case of a major release of radioactivity – also radiologically. Therefore, the international nuclear community has a common interest and responsibility to prevent future accidents. Switzerland is convinced that this common responsibility requires the strengthening of the global nuclear safety regime by

- international leveling up of safety standards, taking into account the state of the art of science and technology, the operating and the regulatory experience;
- effective implementation of these safety standards in the countries;
- periodical reviews on the effective implementation of safety standards by international expert peer review missions in the fields of national regulatory framework and activities, NPP design and NPP operation.

Furthermore, the common international responsibility for nuclear safety requires full transparency in the reporting on these review missions and on the findings of the triennial CNS review meetings.

### **Proposed amendments to the CNS (changes in *italics*)**

*Art. 8 (Regulatory Body), new para. 3 and 4*

*3. Each Contracting Party shall take the appropriate steps to ensure that the regulatory body subjects itself periodically to a review by external experts with regard to its compliance with the requirements of the Agency.*

Reason: The Fukushima accident demonstrated the importance of the effective implementation of Art. 8, para. 1 and 2, stipulating a competent and independent regulatory body provided with adequate authority and resources. The IAEA Action Plan on Nuclear Safety calls for regular reviews of the regulatory bodies in this respect, including periodical IRRS missions to Member States. In WENRA Member Countries this suggested para. 3 is already a legal requirement.

*4. Each Contracting Party shall take the appropriate steps to ensure that the regulatory body's findings and decisions on the safety of nuclear installations are made available to the public.*

Reason: According to the IAEA Action Plan on Nuclear Safety, transparency, the effectiveness of communication and the dissemination of information should be improved. This should include the information of the public.

*Art. 14 (Assessment and Verification of Safety), amendment to sub-para. (i)*

Each Contracting Party shall take the appropriate steps to ensure that:

- (i) comprehensive and systematic safety assessments are carried out before the construction and commissioning of a nuclear installation and throughout its life. Such assessments shall be well documented, subsequently updated in the light of operating experience, *of hazard assumptions which are reconsidered according to the state of the art of*

*science and technology, and of other significant new safety information, and reviewed under the authority of the regulatory body;*

Reason: The Fukushima accident demonstrated the importance of updated safety assessments including state-of-the-art hazard assumptions.

*Art. 17 (Siting), amendment to sub-para. (iii)*

*(iii) for re-evaluating as necessary according to the state of the art of science and technology all relevant factors referred to in sub-paragraphs (i) and (ii) so as to ensure the continued safety acceptability of the nuclear installation;*

Reason: The Fukushima accident highlighted the importance of state-of-the-art re-evaluations of the site-related factors likely to affect the safety of a nuclear installation and of the likely safety impact of a proposed nuclear installation on individuals, society and the environment.

*Art. 18 (Design and Construction), new sub-para. (iv)*

*(iv) the design of a nuclear installation is reviewed by external experts with regard to its compliance with the requirements of the Agency.*

Reason: The Fukushima accident demonstrated the importance of the adequate design of NPPs against extreme natural hazards. The IAEA Action Plan on Nuclear Safety calls the Member States for reassessing their NPPs' design against site specific extreme natural hazards and the IAEA Secretariat for supporting the Member States in this respect. Furthermore, the Action Plan requires the IAEA to strengthen its peer review services, including design safety reviews. Accordingly, design reviews by external experts should be embedded in the CNS.

*Art. 19 (Operation), new sub-para. (ix)*

*(ix) the operational safety of a nuclear installation is periodically reviewed by external experts with regard to its compliance with the requirements of the Agency.*

Reason: According to the IAEA Action Plan on Nuclear Safety, OSART missions should be hosted by Member States on a regular basis.

*Art. 25, rename article ("Transparency" instead of "Summary Reports"), insert new para. on first position*

*1. The Contracting Parties make available to the public their reports to be submitted pursuant to Article 5 and the questions and comments received from other Contracting Parties during the review process pursuant to Article 20, paragraph 3;*

*2. ((previous para. 1)) The Contracting Parties shall adopt, by consensus, and make available to the public a document addressing issues discussed and conclusions reached during a meeting.*

Reason: According to the IAEA Action Plan on Nuclear Safety, transparency, the effectiveness of communication and the dissemination of information should be improved. The Action Plan already provides for a mechanism to publicly report on the IAEA peer review missions. INFCIRC/572/Rev.3 encourages Member States to make public their national CNS reports as well as the questions and comments received from other Contracting Parties during the review process of these reports. Considering the Action Plan's transparency goals, it would be a logical step to include this INFCIRC/572 commitment in the CNS.



*Art. 27 (Confidentiality), delete para. 3*

*3. The content of the debates during the reviewing of the reports by the Contracting Parties at each meeting shall be confidential.*

Reason: According to the IAEA Action Plan on Nuclear Safety, transparency, the effectiveness of communication and the dissemination of information should be improved. Keeping the expert debates at the CNS review meetings confidential would contravene the Action Plan's transparency goals.



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## CONVENTION ON NUCLEAR SAFETY

### Proposal for Amendments by the Russian Federation

The Director General of the International Atomic Energy Agency, acting in his capacity as depositary of the Convention on Nuclear Safety (the Convention), communicates the following:

Reference is made to Article 32 of the Convention, whereby:

“1. Any Contracting party may propose an amendment to this Convention. Proposed amendments shall be considered at a review meeting or an extraordinary meeting.

2. The text of any proposed amendment and the reasons for it shall be provided to the Depositary who shall communicate the proposal to the Contracting Parties promptly and at least ninety days before the meeting for which it is submitted for consideration. Any comments received on such a proposal shall be circulated by the Depositary to the Contracting Parties.

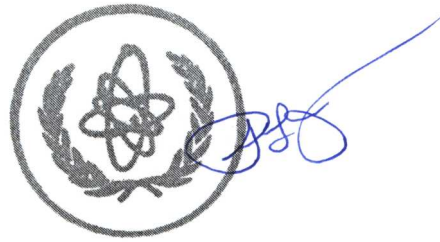
3. The Contracting Parties shall decide after consideration of the proposed amendment whether to adopt it by consensus, or, in the absence of consensus, to submit it to a Diplomatic Conference. A decision to submit a proposed amendment to a Diplomatic Conference shall require a two-thirds majority vote of the Contracting Parties present and voting at the meeting, provided that at least one half of the Contracting Parties are present at the time of voting. Abstentions shall be considered as voting.

4. The Diplomatic Conference to consider and adopt amendments to this Convention shall be convened by the Depositary and held no later than one year after the appropriate decision taken in accordance with paragraph 3 of this Article. The Diplomatic Conference shall make every effort to ensure amendments are adopted by consensus. Should this not be possible, amendments shall be adopted with a two-thirds majority of all Contracting Parties.

5. Amendments to this Convention adopted pursuant to paragraphs 3 and 4 above shall be subject to ratification, acceptance, approval, or confirmation by the Contracting Parties and shall enter into force for those Contracting Parties which have ratified, accepted, approved or confirmed them on the ninetieth day after the receipt by the Depositary of the relevant instruments by at least three fourths of the Contracting Parties. For a Contracting Party which subsequently ratifies, accepts, approves or confirms the said amendments, the amendments will enter into force on the ninetieth day after that Contracting Party has deposited its relevant instrument.”

In this connection, the Director General received on 21 June 2011 a letter from the Resident Representative of the Russian Federation, transmitting on behalf of the Russian Federation its proposals for amendments to the Convention.

In accordance with Article 32, paragraph 2, of the Convention, the Director General is hereby circulating the proposed amendments to the Contracting Parties. As requested by the Russian Federation, the proposed amendments shall be considered at the extraordinary meeting of the Contracting Parties under the Convention, scheduled from 27 to 31 August 2012. Also, in accordance with Article 32, paragraph 2, of the Convention, any comments received from Contracting Parties on the proposed amendments shall be circulated by the depositary to the Contracting Parties in advance of the meeting.



2011-08-02

Enclosure: Proposals of the Russian Federation

## **Proposals of the Russian Federation for amendments to the Convention on Nuclear Safety**

*The proposed amendments are marked in bold.*

### Proposal 1

#### ARTICLE 6. EXISTING NUCLEAR INSTALLATIONS

1) Reword Article 6 of the Convention to read as follows:

“**1.** Each Contracting Party shall take the appropriate steps to ensure that the safety of nuclear installations existing at the time the Convention enters into force for that Contracting Party is reviewed as soon as possible, **and to ensure that their safety level is subsequently regularly assessed.** When necessary in the context of this Convention, the Contracting Party shall ensure that all reasonably practicable improvements are made **and steps taken** as a matter of urgency to upgrade the safety of the **already operational** nuclear installation. If such upgrading cannot be achieved, plans should be implemented to shut down the nuclear installation as soon as practically possible. The timing of the shut-down may take into account the whole energy context and possible alternatives as well as the social, environmental and economic impact.”

2) Insert into Article 6 of the Convention an additional paragraph 2 to read as follows:

“**2. A Contracting Party planning to begin construction of a nuclear installation under its jurisdiction shall, prior to the commencement of construction of the installation, take all necessary steps with regard to long-term planning and establishment of the requisite infrastructure in conformity with IAEA recommendations.**”

### Proposal 2

#### ARTICLE 7. LEGISLATIVE AND REGULATORY FRAMEWORK

Reword Article 7.1 of the Convention to read as follows:

“1. Each Contracting Party shall establish and maintain a legislative and regulatory framework to govern the safety of nuclear installations **and to coordinate actions among State bodies and organizations operating nuclear installations with respect to the management of an accident and mitigation of its consequences.**”

#### ARTICLE 14. ASSESSMENT AND VERIFICATION OF SAFETY

Amend Article 14.ii to read as follows:

“ii. verification by analysis, surveillance, testing and inspection is carried out to ensure that the physical state and the operation of a nuclear installation continue to be in accordance with its design, applicable national safety requirements, and operational limits and conditions, **taking into account IAEA safety standards.**”

#### ARTICLE 16. EMERGENCY PREPAREDNESS

Insert into Article 16 of the Convention an additional paragraph 1 to read as follows:

“**1. Each Contracting Party shall develop procedures for joint action by State bodies and organizations operating nuclear installations in the event of a nuclear accident, based on the need to ensure that the licence-holder (or owner of the nuclear installation) has adequate resources and powers for the effective management of an accident and mitigation of its consequences.**”

Paragraphs 1, 2 and 3 of Article 16 should be renumbered 2, 3 and 4 respectively.

Proposal 3

ARTICLE 18. DESIGN AND CONSTRUCTION

Insert into Article 18 an additional paragraph iv to read as follows:

**“iv. the design of a nuclear installation takes account of the various possible combinations of unfavourable external factors of natural and man-made origin characteristic for the site location, including their combined impact on the nuclear installation, and ensures safety in such an event.”**

## **Explanatory note to the proposals of the Russian Federation for amendments to the Convention on Nuclear Safety**

The accident at the Fukushima Daiichi nuclear power plant in Japan has revealed certain deficiencies in the international legal regime for nuclear safety which is regulated principally by the Convention on Nuclear Safety (the Convention).

The Russian Federation, as a Contracting Party to the Convention on Nuclear Safety, pursuant to Article 32.1 thereof, is proposing the following amendments to the Convention.

### Proposal 1

In fully ensuring nuclear safety in connection with the operation of nuclear power installations, regular assessment of their safety and the taking of steps to enhance the safety of already operational nuclear power facilities is of prime significance.

We are proposing a strengthening of the obligation of Contracting Parties to the Convention planning to begin construction of a first nuclear installation under their jurisdiction to take all necessary steps prior to the commencement of construction of a nuclear power plant with regard to long-term planning and establishment of nuclear power infrastructure in conformity with IAEA recommendations.

In this connection, we are proposing appropriate amendments to Article 6 of the Convention.

### Proposal 2

Major accidents at nuclear power facilities occur extremely infrequently. However, the scale and consequences of such accidents from the point of view of the negative impact on human health and the environment are most significant. Clearly, from the earliest hours of an accident the State should bring to bear all its resources to support the nuclear power plant operator (operating organization) in order to minimize the negative consequences of the accident.

Given the clear responsibility of the organization operating a nuclear installation to ensure nuclear safety, and the lack in the international legal requirements of any standards regulating participation by the State in the management of an accident, clear coordination and cooperation procedures should be in place for the State, the operating organization and the regulatory body. Furthermore, nuclear safety should be regularly assessed taking into account IAEA standards.

In this connection, we are proposing amendments to Articles 7, 14 and 16 of the Convention.

### Proposal 3

Analysis of recent major accidents at nuclear power facilities shows that such situations may be caused not just by one factor but by several simultaneously of both natural and man-made origin.

The existing design requirements should be reviewed with the aim of taking account of a combination of external factors impacting on a nuclear installation, and taking steps to ensure nuclear safety under such circumstances.

In this connection, we are proposing amendments to Article 18 of the Convention.

The proposed amendments should remedy the deficiencies found in the international legal standards in the nuclear safety field.