

# General Conference

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(GC(51)/22)

COMMITTEE OF THE WHOLE

# Measures to strengthen international cooperation in nuclear, radiation and transport safety and waste management

**Draft resolution submitted by Argentina, Australia, France, Norway and the United States of America**

## **A.**

### **Measures to strengthen international cooperation in nuclear, radiation and transport safety and waste management**

#### The General Conference

- (a) Recalling resolution GC(50)/RES/10 and previous General Conference resolutions on measures to strengthen international cooperation in nuclear, radiation and transport safety and waste management,
- (b) Recognizing that a global nuclear, radiation and waste safety culture is a key element of the peaceful uses of nuclear energy, ionizing radiation and radioactive substances, and that continuous efforts are required in order to ensure that the technical and human elements of safety are maintained at the optimal level,
- (c) Emphasizing the important role of the Agency in enhancing nuclear, radiation and waste safety through its various safety programmes and initiatives and in promoting international cooperation in this regard,
- (d) Recognizing the importance of Member States establishing and maintaining effective and sustainable regulatory infrastructures for the promotion of nuclear, radiation and waste safety,
- (e) Noting with appreciation the Director General's report in document GC(51)/3 on measures to strengthen international cooperation in nuclear, radiation and transport safety and waste management,

- (f) Emphasizing the vital need for sustainable, appropriate and predictable resourcing, as well as efficient management, of the Secretariat's work in the field of nuclear, radiation, transport and waste safety,
- (g) Recalling the objective of the Convention on Nuclear Safety, to achieve and maintain a high level of nuclear safety worldwide through the enhancement of national measures and international cooperation, including, where appropriate, safety-related technical cooperation,
- (h) Recalling the objective of the Code of Conduct on the Safety of Research Reactors, to achieve and maintain a high level of safety in research reactors worldwide,
- (i) Underscoring the relevance to all Member States of the objective of the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (the Joint Convention), to achieve and maintain a high level of safety worldwide in the management of spent nuclear fuel and radioactive waste through the enhancement of national measures and international cooperation, including, where appropriate, safety-related technical cooperation,
- (j) Re-emphasizing the importance of education and training in establishing and maintaining an adequate nuclear, radiation, transport and waste safety infrastructure, noting the Secretariat's actions in developing strategies for sustainable education and training in nuclear, radiation and waste safety, including the safety and security of radioactive sources, and underscoring the importance of implementing relevant clauses of previous General Conference resolutions in this area,
- (k) Recognizing that potential nuclear and radiological incidents and emergencies, including acts with malicious intent associated with nuclear and radiological terrorism, may lead to significant radiological and other serious consequences over wide geographical areas, thereby requiring an international response,
- (l) Recalling the obligation of States Parties to the Convention on Early Notification of a Nuclear Accident (the Early Notification Convention) and the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency (the Assistance Convention) to notify the Agency of nuclear accidents and, within the limits of their capabilities, to identify and notify the Agency of experts, equipment and materials which could be made available for the provision of assistance to other States Parties in the event of a nuclear accident or radiological emergency, and recalling further the obligation of the Agency under the Assistance Convention to collect and disseminate that information to States Parties and Member States,
- (m) Noting with satisfaction the progress made by the Secretariat, Member States and other international organizations in the implementation of the International Action Plan for Strengthening the International Preparedness and Response System for Nuclear and Radiological Emergencies, and recognizing the need for the establishment of mechanisms to ensure effective and sustainable implementation of the Early Notification Convention, the Assistance Convention and the Action Plan,
- (n) Recalling its previous resolutions relevant to the safety and security of radioactive sources, and the objectives and principles of the non-legally-binding Code of Conduct on the Safety and Security of Radioactive Sources, recognizing the value of widespread and open information exchange on national approaches to controlling radioactive sources, and emphasizing the continuing need to protect individuals, society and the environment from the harmful effects of incidents and emergencies, and malicious acts, involving radioactive sources,

## **1. General**

1. Urges the Secretariat to continue and strengthen, subject to available financial resources, its efforts relating to nuclear, radiation, transport and waste safety, focusing particularly on mandatory activities and on technical areas and regions where the need for improvement is greatest;
2. Requests the Director General to continue the current programme to assist Member States in improving their national infrastructures for nuclear installation, radiation, transport and waste safety, including their legislative and regulatory frameworks;
3. Encourages Member States to continue requesting Agency safety review services and integrated regulatory review services, in order to improve regulatory effectiveness and to enhance nuclear, radiation, transport and waste safety continuously;
4. Requests the Secretariat to continue to establish its safety priorities using an integrated assessment process, and to incorporate the insights of this process into all of its review services, taking into account the advice of the relevant standing bodies, including the Commission on Safety Standards (CSS) and the safety standards committees;
5. Encourages the Secretariat and Member States, if they so desire, to make effective use of the Agency's technical cooperation resources for the further enhancement of safety;
6. Acknowledges that safety measures and security measures have in common the aim of protecting human life and health and the environment, calls upon the Secretariat to enhance the coordination of its activities and guidance in the areas of nuclear safety and security, and encourages Member States to work actively to maintain an appropriate balance between them so as to ensure that safety is not compromised;
7. Endorses the efforts of the International Nuclear Safety Group (INSAG), the CSS and the safety standards committees in promoting nuclear safety worldwide and looks forward to the publication of the forthcoming reports on the safety-security interface, on the enhancement of operational experience feedback and on the nuclear safety infrastructure needed for the safe utilization of nuclear installations;
8. Recognizes the importance of an effective regulatory body as an essential element of national nuclear infrastructure, urges Member States to continue their efforts to increase regulatory effectiveness in the field of nuclear, radiation and transport safety and waste management, urges Member States embarking on new nuclear power programmes to take timely and proactive steps to establish and sustain a competent regulatory body with effective independence from other organizations and the necessary human and financial resources to fulfil its responsibilities, and to consider availing themselves of the Secretariat's recently established Integrated Regulatory Review Service (IRRS), commends France for having hosted the first full-scope IRRS mission, and notes with satisfaction the growing interest of Member States in the IRRS;
9. Welcomes the increasing development of safety networks (notably the Ibero-American Radiation Safety Network of the Ibero-American Forum of Regulators, the Asian Nuclear Safety Network and the Radiation Safety Regulators Network), and encourages Member States to work with the Secretariat to support the further enhancement of the evolving web-based systems and networks for information exchange and co-operation in matters such as the implementation of nuclear safety-related conventions, cooperation on safety standards, the harmonization of safety approaches, the exchange of operational experience and the resolution of generic nuclear safety issues;
10. Welcomes the outcomes of the International Conference on the Challenges faced by Technical and Scientific Support Organizations (TSOs) in Enhancing Nuclear Safety, held in Aix-en-Provence,

France, in April 2007, and calls upon the Secretariat to consider the recommendations of the Conference and in particular to facilitate the establishment of new or the enhancement of existing networks of TSOs and other relevant bodies;

11. Welcomes the valuable work that the International Expert Group on Nuclear Liability (INLEX) has done over the past year to clarify the application and scope of the international nuclear liability regime, including its outreach workshop in Peru in December 2006, and looks forward to the continuation of INLEX's work, including its forthcoming outreach workshop in South Africa and its examination of possible ways in which identified gaps in the regime might be addressed;

12. Welcomes the Board's resolution of 11 September 2007 on the establishment of maximum limits for the exclusion of small quantities of nuclear material from the application of the Vienna conventions on nuclear liability;

13. Requests the Secretariat to provide to the Board of Governors in March 2008 a report, which may complement the forthcoming study on the Agency's programmatic and budgetary requirements over the coming decade announced by the Director General on 17 September 2007 (the "20/20 review"), on the adequacy and predictability of resources for the Agency's nuclear safety programme, and on the efforts made to achieve an adequate resource base through cost savings, prioritization and innovative means of financing;

14. Requests the Director General to report in detail to its fifty-second (2008) regular session on implementation of this resolution and relevant developments in the intervening period;

## **2.**

### **The Agency's Safety Standards Programme**

15. Welcomes the Board's decision to establish as an Agency safety standard, in accordance with Article III.A.6 of the Statute, the Safety Requirements "Safety of Fuel Cycle Facilities", and encourages Member States to use these Safety Requirements as a basis for their national regulatory programmes;

16. Welcomes the initiative of the CSS in relation to the overall structure and continuous improvement of the safety standards, and looks forward to the better integration of overall nuclear, radiation, waste and transport safety standards to be considered by the CSS in November 2007;

17. Notes that the Secretariat has commenced revision of the International Basic Safety Standards for Protection against Ionizing Radiation and the Safety of Radiation Sources (BSS) with the participation of co-sponsors and within the framework of the CSS and the safety standards committees, notes the report by the UN Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) contained in UN General Assembly document A/61/46 and the forthcoming publication of the 2007 recommendations of the International Commission on Radiological Protection (ICRP), and urges the Secretariat to consider carefully and justify any potential changes to the BSS, ensuring consistency with the UNSCEAR report and the ICRP recommendations and taking into account the implications for national regulations and the importance of maintaining stability in international standards;

18. Encourages the Secretariat to continue to provide for the application of Agency safety standards at the request of Member States, including through the development of supporting guidance;

## **3.**

### **Nuclear Installation Safety**

19. Notes with satisfaction that all States currently operating nuclear power plants are now Contracting Parties to the Convention on Nuclear Safety, and urges all Member States constructing or

planning nuclear power plants, or considering a nuclear power programme, to become parties to the Convention as part of the establishment and maintenance of the requisite nuclear power infrastructure;

20. Looks forward to the fourth Review Meeting under the Convention on Nuclear Safety, due to take place in April 2008, and notes that the effectiveness of that Meeting is dependent upon the willingness of Contracting Parties to continue reporting in a transparent manner and to participate fully in the Review Meeting;

21. Re-emphasizes the need for all operating organizations and regulatory authorities to retain nuclear safety as the foundation upon which development, design, construction and operational decisions relating to nuclear installations are based, and encourages the Secretariat to continue its efforts to provide assistance to Member States to establish and maintain adequate national safety standards and safety infrastructure, with regard to the needs of Member States with existing nuclear installations and in particular those considering the development of nuclear power as part of their national energy strategies;

22. Calls upon all Member States with nuclear installations to establish effective operational experience feedback programmes and to share their assessments and insights freely with all other countries with such installations;

23. Appreciates the efforts of the Secretariat in the development of safety standards and safety review services for fuel cycle facilities, commends Brazil for having hosted the pilot mission for such a review service, and urges other Member States to avail themselves of such services;

24. Commends the Agency's efforts to integrate safety culture assessments into its review services, commends Spain for its willingness to host a pilot mission for an operating nuclear power plant, and urges other Member States to avail themselves of such services;

25. Commends the Secretariat's efforts in the area of integrated management systems, recognizes the importance of strong leadership and effective management for the safe and reliable performance of nuclear installations, welcomes the Secretariat's efforts to merge the Agency's programmes in this area, and looks forward to the outcomes of the International Meeting on IAEA Standards on Management Systems, due to be held in Vienna in November 2007;

26. Commends the Agency's efforts in the area of plant life management for the long-term operation of nuclear installations, and calls upon all Member States with nuclear installations to consider the Agency's guidance as an integral part of their operational safety strategies;

27. Continues to endorse the principles and objectives of the Code of Conduct on the Safety of Research Reactors, encourages Member States constructing, operating or decommissioning research reactors or with research reactors in extended shutdown to apply the guidance in the Code, acknowledges the efforts of the Secretariat in organizing three regional meetings on the application of the Code, and looks forward to the outcome of the International Meeting on the Application of the Code to be held in Vienna in 2008;

28. Looks forward to the outcomes of the International Conference on Research Reactors: Safe Management and Effective Utilization to be held in Australia in November 2007, including discussion of the implementation of the Code of Conduct on the Safety of Research Reactors;

29. Supports the continuing assistance provided by the Secretariat to monitoring and improving the safety and security of all research reactors, especially those subject to IAEA Project and Supply Agreements, and calls upon Member States having Project and Supply Agreements, to review, in cooperation with the Secretariat, the appropriate application of current safety standards with regard to those agreements;

30. Encourages Member States to promote regional activities to enhance the safe operation, utilization, shutdown and decommissioning of research reactors;

31. Acknowledges the assistance that the Secretariat is providing to Member States by carrying out, based on the application of IAEA safety standards, safety reviews of existing reactor designs and generic safety aspects of new reactor designs, and urges the Secretariat to continue its efforts, subject to availability of funds, to develop services and tools that support Member States in promoting the safety of existing and new reactor designs;

32. Commends and encourages further strengthening of the Secretariat's efforts in fostering cooperation between Member States on the seismic safety of nuclear installations, commends Japan for inviting an expert mission in relation to the findings and preliminary lessons learned from the earthquake at Kashiwazaki-Kariwa Nuclear Power Plant on 16 July 2007, and urges other Member States to avail themselves of such services and to exchange relevant experience;

33. Looks forward to the outcome of the next International Conference on Topical Issues in Nuclear Installation Safety - Ensuring Safety for Sustainable Nuclear Development;

#### **4. Radiation Safety**

34. Welcomes the progress in the implementation of the International Action Plan for the Radiological Protection of Patients, especially the development of training material for health personnel who use fluoroscopy and the creation of a network in Asia of interventional cardiologists, welcomes the development of guidance documents on radiation protection in newer imaging technology, welcomes also the continued cooperation with the World Health Organization, the Pan-American Health Organization, the European Commission, the International Commission on Radiological Protection and relevant professional bodies, encourages Member States to continue supporting these activities, and to take advantage of the regional technical cooperation projects on medical exposure, and notes the desirability of an international conference on radiation safety in medicine, including new techniques of radiodiagnosis and radiotherapy, in order to share information and lessons learned about incidents and accidents in the medical applications of radiation;

35. Welcomes the Agency's good progress in implementing, jointly with the International Labour Organization (ILO), the International Action Plan for Occupational Radiation Protection, and encourages the Agency and ILO Secretariats to continue their productive cooperation;

36. Urges the Secretariat to continue to use the regional approach with emphasis on the sub-regional country groupings in its activities to promote the upgrading of radiation safety infrastructure, welcomes the contribution of the Regional East European and Central Asian ALARA Network (RECAN) to the promotion of occupational radiation safety regimes in Member States and encourages the Secretariat to establish, subject to availability of funds, similar networks in other regions;

37. Welcomes the Secretariat's continuing promotion of effective and sustainable national regulatory infrastructures for the control of radiation sources, in particular high-risk sources, and urges Member States to play an active role in the implementation of strategies to enhance the regulatory control of radiation sources;

38. Welcomes the Secretariat's progress in implementing the Plan of Activities on the Radiation Protection of the Environment contained in GOV/2005/49, and looks forward to the outcomes of the International Conference on Radioecology and Environmental Radioactivity to be held in Bergen, Norway, in June 2008;

39. Welcomes the Secretariat's efforts to ensure the wide participation of developing countries in the forthcoming XII<sup>th</sup> Congress of the International Radiation Protection Association, "Strengthening

Radiation Protection Worldwide” (IRPA 12), and urges the Secretariat also to take concrete measures to ensure the early dissemination of information on this event;

40. Encourages Member States, where necessary, to strengthen the development and implementation of appropriate safety standards in the area of uranium exploration and related resource development;

## **5.**

### **The Safety of Radioactive Waste Management**

41. Welcomes the increase in the number of Contracting Parties to the Joint Convention from 32 at the first Review Meeting, in 2003, to 45 in 2007, and appeals to all Member States which have not yet become party to the Joint Convention to do so;

42. Welcomes the continuing efforts of the contracting parties to the Joint Convention to enhance the transparency, efficiency and effectiveness of the review process, including the creation of a website to facilitate the sharing of information between Review Meetings, and encourages them to continue to pursue these efforts in preparation for the Review Meeting to be held in 2009;

43. Welcomes the work underway regarding the development of consolidated safety requirement on radioactive waste management and disposal and comprehensive safety guidance for all types of waste management and disposal facilities and on the assessment and demonstration of their safety, taking into account the need for consistency with past guidance;

44. Welcomes the Secretariat’s role in updating the inventories of radioactive wastes disposed of at sea and of accidents and losses at sea for the purposes of assessing the impact of radionuclide sources in the marine environment within the framework of the Convention on the Prevention of Marine Pollution by Dumping of Wastes and other Matter (London Convention 1972), and encourages Member States to participate actively in the Agency’s database on discharges of radionuclides to the atmosphere and the aquatic environment (DIRATA);

## **6.**

### **The Safe Decommissioning of Nuclear Facilities and Other Facilities Using Radioactive Material**

45. Encourages Member States to ensure that plans for the decommissioning of facilities are developed and mechanisms are put in place for establishment and maintenance of the necessary resources for the implementation of decommissioning activities;

46. Welcomes the outcomes of the International Conference on Lessons Learned from the Decommissioning of Nuclear Facilities and the Safe Termination of Nuclear Activities held in December 2006 in Athens, and notes that the Secretariat has reviewed and updated the International Action Plan on the Decommissioning of Nuclear Facilities in the light of the findings of the conference;

47. Welcomes the launch of the International Decommissioning Network to serve as a mechanism for exchanging information and providing practical training and demonstrations with a regional or thematic focus;

48. Encourages the Secretariat to continue its support for planning for the decommissioning of research reactors, specifically through the Research Reactor Decommissioning Demonstration Project;

49. Welcomes and encourages Member States’ continuing support for the decommissioning and remediation of former nuclear sites in Iraq, and encourages the Secretariat to continue its technical support to the project;

**7.**

**Education and Training in Nuclear, Radiation, Transport and Waste Safety**

50. Underlines the fundamental importance of sustainable programmes for education and training in nuclear, radiation, transport safety and waste management, remaining convinced that such education and training is a key component of any adequate safety infrastructure;

51. Welcomes the ongoing commitment of the Secretariat and Member States to the implementation of the Strategy for Education and Training in Nuclear, Radiation, Transport and Waste Safety for a long-term and sustainable programme of education and training, and calls upon the Secretariat to strengthen and expand this programme of activities to include nuclear installations, especially research reactors, subject to the availability of financial resources;

52. Supports the Secretariat's continued focus on developing sustainable educational and training programmes in nuclear, radiation and transport safety and waste management, including by identifying training needs through Education and Training Appraisal (EduTA) missions and drawing up programmes to meet training requirements, the ongoing efforts to provide up-to-date e-learning material, and the further development of a network of trainers, regional training centres and 'train-the-trainer' workshops, and urges the Secretariat to continue to strengthen its activities in these areas, subject to the availability of financial resources;

53. Urges the Secretariat to enhance and bring into effect its support for regional postgraduate training courses as requested in previous General Conference resolutions, including through the deployment of EduTA missions to assess and identify regional training centres, and to conclude promptly long-term agreements with the regional centres organizing such courses, inter alia to ensure their sustainability;

**8.**

**Nuclear and Radiological Incident and Emergency Preparedness and Response**

54. Urges all Member States to become parties to the Convention on Early Notification of a Nuclear Accident (the Early Notification Convention) and the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency (the Assistance Convention), thereby contributing to a broader and improved basis for international emergency response, to the benefit of all Member States;

55. Continues to encourage all Member States to enhance, where necessary, their own preparedness and response capabilities for nuclear and radiological incidents and emergencies, by improving capabilities to prevent accidents, to respond to emergencies and to mitigate any harmful consequences, and encourages the Secretariat to assist Member States in developing national capabilities consistent with international standards;

56. Welcomes the Secretariat's activities in assisting Member States to train first responders to radiological incidents and emergencies through the development of the IAEA Manual for First Responders to a Radiological Emergency and associated training tools;

57. Welcomes the Secretariat's efforts to implement a Response Assistance Network (RANET), emphasizes the importance of the RANET as a network of national assistance capabilities to facilitate rapid response to radiation emergencies, and strongly urges the States parties to the Assistance Convention and other Member States to support the Agency in fulfilling this obligation under the Assistance Convention by registering their response capabilities under RANET;

58. Requests the Secretariat to continue its support for the activities of the National Competent Authorities Coordinating Group (NCACG) and, in collaboration with the NCACG, Member States and



relevant international organizations, to continue the implementation of the International Action Plan for Strengthening the International Preparedness and Response System for Nuclear and Radiological Emergencies (2004-2009), and urges Member States to contribute to the implementation of the Action Plan;

59. Requests the Secretariat to continue evaluating and, as necessary, to enhance, subject to availability of resources, the capability of the IAEA Incident and Emergency Centre to fulfil its role as coordinator and facilitator of cooperation among Member States, and requests the Secretariat and Member States to continue reviewing and streamlining current mechanisms for reporting and sharing information about incidents and emergencies;

60. Requests the Secretariat to bring forward proposals with a view to enhancing the effectiveness of the international frameworks for emergency preparedness and response;

61. Calls on the Secretariat to continue its efforts to streamline mechanisms for sharing information on nuclear and radiological incidents and emergencies, welcomes in this regard its decision to develop a global, unified incident and emergency reporting system which combines the Emergency Notification and Assistance Technical Operations Manual (ENATOM) arrangements and the Nuclear Events Web-Based System (NEWS) mechanism, encourages the Secretariat to continue its efforts in consolidating the INES procedures for rating nuclear and radiological events into a revised manual, and encourages Member States to promote transparency in their nuclear activities by promptly reporting nuclear and radiological incidents and accidents to the Incident and Emergency Centre ;

## **9.**

### **Safety and Security of Radioactive Sources**

62. Takes note of the progress report submitted by the Director General in document GC(51)/3 on the safety and security of radioactive sources, and commends the Secretariat for the work it has undertaken in this respect;

63. Commends the many national and multinational efforts to recover and maintain control of vulnerable and orphan sources, and encourages the Secretariat to continue providing support to the efforts of Member States to strengthen control over radioactive sources;

64. Continues to endorse the principles and objectives of the non-legally-binding Code of Conduct on the Safety and Security of Radioactive Sources, welcomes the high level of global support for the Code, noting that, as at 12 July 2007, 89 States had made a political commitment to it in line with resolutions GC(47)/RES/7.B and GC(48)/RES/10.D, and urges other States to make such a commitment;

65. Underlines the important role of the Guidance on the Import and Export of Radioactive Sources for the establishment of continuous, global control of radioactive sources, notes that, as at 12 July 2007, 43 States had notified the Director General, pursuant to resolution GC(48)/RES/10.D, of their intention to act in accordance with the Guidance on a harmonized basis, reiterates the need for States to implement the Guidance in a cooperative, harmonized and consistent fashion, noting that the Guidance is supplementary to the Code, encourages those States which have not already notified the Director General to do so, recalling operative paragraph 6 of resolution GC(47)/RES/7.B, and encourages the Secretariat to make available relevant information that will facilitate States' implementation of the Guidance, subject to the consent of the States concerned;

66. Welcomes the progress made by many Member States in working towards implementing the Code of Conduct on the Safety and Security of Radioactive Sources and the supplementary Guidance on the Import and Export of Radioactive Sources, and encourages other States to do the same to ensure the sustainability of the control of radioactive sources;

67. Takes note of the report of the Chairman of the Open-ended Meeting of Technical and Legal Experts for Sharing of Information as to States' Implementation of the Code of Conduct on the Safety and Security of Radioactive Sources and its supplementary Guidance on the Import and Export of Radioactive Sources held in Vienna in June 2007, calls for its publication in the official languages of the Agency, notes the conclusions of the meeting, particularly those relating to sustainability of implementation of the Code and the value of regional meetings and regional partnerships, requests the Secretariat to take these conclusions into account in developing its future programmes in this area, and encourages the Secretariat to consider holding similar meetings in the future, perhaps on a triennial basis, subject to needs and availability of funds;

68. Welcomes the progress made by Member States in strengthening, as necessary, their regulatory infrastructures to ensure the sustainability of the control of radioactive sources, and requests the Secretariat to continue providing support for the efforts of Member States to strengthen those infrastructures, subject to the availability of resources;

69. Welcomes the publication of ISO Standard #21482: Ionizing-Radiation Warning – Supplementary Symbol to supplement the existing trefoil sign for ionizing radiation as a result of a multi-year effort of the Secretariat within the Agency's Revised Action Plan for the Safety and Security of Radiation Sources (Attachment to GOV/2001/29-GC(45)/12), encourages the Secretariat to assist Member States, subject to availability of funds, in the appropriate implementation of the new symbol, and commends the successful cooperation between the Agency and ISO on this subject.