

# General Conference

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## **Fifty-ninth regular session**

Item 14 of the agenda  
(GC(59)/25)

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

**Resolution adopted on 17 September 2015 during the eighth plenary meeting**

### The General Conference,

- (a) Recalling resolution GC(58)/RES/10 and previous General Conference resolutions on matters relating to measures to strengthen international cooperation in nuclear, radiation, transport and waste safety,
- (b) Acknowledging the Agency's statutory functions with respect to safety and welcoming the activities of the Agency in establishing Safety Standards,
- (c) Recognizing the central role of the Agency in promoting international cooperation and in coordinating international efforts to strengthen global nuclear safety, in providing expertise and advice in this field and in promoting nuclear safety culture worldwide,
- (d) Noting with appreciation the implementation of the IAEA Action Plan on Nuclear Safety (GC(55)/14), and the results achieved,
- (e) Recognizing the importance of fostering a culture that seeks the continuous improvement of nuclear, radiation, transport and waste safety and emergency preparedness and of taking appropriate subsequent actions after assessments (e.g. stress-tests) of nuclear power plants as well as further analyses of the lessons learned from operating experience,
- (f) Recognizing that a global nuclear, radiation, transport 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 to ensure its maintenance at the optimal level, and recognizing that improving nuclear safety is a continuous process,
- (g) Recognizing that nuclear safety and security have the common aim of protecting people and the environment, while acknowledging the distinctions between the two areas, and affirming the importance of coordination in this regard,
- (h) Recognizing the primary responsibility of operators for ensuring safety,

- (i) Recognizing the importance of Member States establishing and maintaining effective and sustainable regulatory infrastructures for nuclear, radiation, transport and waste safety and emergency preparedness,
- (j) Acknowledging that research, development and introduction of innovative technologies are of fundamental importance in improving nuclear safety worldwide,
- (k) Recalling the objectives of the Convention on Nuclear Safety (CNS), the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (Joint Convention), the Convention on Early Notification of a Nuclear Accident (Early Notification Convention) and the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency (Assistance Convention) and the respective obligations of States Parties, and recognizing the need to ensure effective and sustainable implementation of these conventions,
- (l) Recalling that States have under international law the obligation to protect and preserve the environment, including the marine and terrestrial environment, and emphasizing the importance of the Secretariat's continued collaboration with the contracting parties of international and regional instruments aimed at protecting the environment from radioactive wastes, in particular the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (the London Convention) and Protocol,
- (m) Recognizing that, historically, the safety record of civilian transport, including maritime transport, of radioactive materials has been excellent, and stressing the importance of international cooperation to enhance the safety and security of international transport,
- (n) Recalling maritime and air navigation rights and freedoms, as provided for in international law and as reflected in relevant international instruments,
- (o) Noting that the timely shipment of radioactive materials that meet the Agency's Regulations for the Safe Transport of Radioactive Material, particularly those having important uses in the medical, academic and industrial sectors, is being adversely affected by incidents of denial or delay of shipment,
- (p) Recalling resolution GC(58)/RES/10 and previous resolutions which invited Member States shipping radioactive material to provide, as appropriate assurances to potentially affected States, upon their request, that their national regulations take into account the Agency's Regulations for the Safe Transport of Radioactive Material and to provide them with relevant information relating to shipments of such material, and noting that the information provided should in no case be contradictory to the measures of safety and security,
- (q) Recognizing the importance of public awareness and outreach regarding nuclear safety in the context of peaceful uses of nuclear energy,
- (r) Recognizing that nuclear accidents may have transboundary effects and raise public concerns about nuclear energy and the radiological effects on people and the environment,
- (s) Recognizing that radiological emergencies also raise public concerns about the radiological effects on people and the environment,
- (t) Emphasizing the importance of Member States and relevant international organizations responding to nuclear and radiological emergencies in a timely and effective manner,

- (u) Recognizing the importance of well-developed communication arrangements and regular public information as an important component of effective planning and preparedness for and response to nuclear accidents and radiological emergencies,
- (v) Acknowledging the Secretariat's role in response to nuclear or radiological incidents or emergencies and recognizing the need to ensure the timeliness of the collection, validation, assessment and prognosis and dissemination by the Secretariat, in cooperation with the incident/accident State of incident or emergency information to Member States and the public, as well as seeking effective facilitation and coordination of assistance by the Secretariat, upon request,
- (w) Emphasizing the importance of education, training and knowledge management in establishing and maintaining an adequate nuclear, radiation, transport and waste safety and emergency preparedness infrastructure,
- (x) Recognizing ongoing efforts of the international community to enhance capacity-building and share knowledge in nuclear safety and radiation protection and strengthen international standards in nuclear safety, emergency preparedness and response, and the radiation protection of people and the environment,
- (y) Recognizing that regional organizations of regulatory authorities have been strengthening regional efforts through the exchange of information and experience and technical programmes, and recognizing also the transparent cross peer reviews among the respective members of the Ibero-American Forum of Radiological and Nuclear Regulatory Agencies (FORO), the European Nuclear Safety Regulators Group (ENSREG) and the Western European Nuclear Regulators' Association (WENRA) of targeted reassessments of their nuclear power plants in the light of the Fukushima Daiichi nuclear accident, and further recognizing that such activities can be of interest to other organizations or regulatory authorities,
- (z) Underscoring that medical uses of ionizing radiation constitute by far the largest source of man-made exposure, and emphasizing the need for enhanced efforts to optimize radiation protection for patients and health workers,
- (aa) Recognizing the need to enhance cooperation and coordination between the Agency and the relevant organizations at the intergovernmental, national, regional and international levels on all nuclear safety-related matters,
- (bb) Emphasizing the importance of the establishment, implementation, regular exercise and continuous improvement of national emergency preparedness and response measures, taking into account the IAEA Safety Standards and relevant action plans, including for communications, and contributing to the harmonization of national protective actions,
- (cc) Emphasizing the need to be prepared for remediation following a nuclear or radiological incident or accident, and the need for appropriate plans for the safe management of waste, including unusual waste forms and large volumes of waste,
- (dd) Recalling United Nations General Assembly resolution A/RES/69/84 of 5 December 2014 related to the effects of atomic radiation, and the Board decision in March 1960 on health and safety measures (INFCIRC/18),
- (ee) Recalling the IAEA Action Plan on Nuclear Safety's objective of establishing a global nuclear liability regime that addresses the concerns of all States that might be affected by a nuclear accident with a view to providing appropriate compensation for nuclear damage,

(ff) Recalling the Paris Convention on Third Party Liability in the Field of Nuclear Energy, the Vienna Convention on Civil Liability for Nuclear Damage, the Brussels Convention supplementary to the Paris Convention, the Joint Protocol Relating to the Application of the Vienna Convention and the Paris Convention, the protocols amending the Brussels, Paris and Vienna Conventions and recognizing the entry into force of the Convention on Supplementary Compensation for Nuclear Damage (CSC) and noting that these instruments can provide the basis for establishing a global nuclear liability regime based on the principles of nuclear liability law,

(gg) Stressing the importance of having in place effective and coherent nuclear liability mechanisms at the national and global levels to ensure prompt, adequate and non-discriminatory compensation for damage to - inter alia - people, property and the environment, including actual economic loss due to a nuclear accident or incident, recognizing that principles of nuclear liability, including strict liability should apply as appropriate in the event of a nuclear accident or incident, including during the transport of radioactive material, and noting that the principles of nuclear liability can benefit from the advances contained in the 1997 and 2004 instruments concerning broader definition of nuclear damage, expanded jurisdiction over nuclear incidents and increased compensation and from recommendations made by the International Expert Group on Nuclear Liability (INLEX) to provide better protection to victims of nuclear damage,

(hh) Recalling the central role of the IAEA in promoting adherence to all international conventions concluded under its auspices and related to nuclear safety and civil nuclear liability, and

(ii) Noting the discussion in INLEX regarding radioactive source insurance and the importance of further discussion on this and related matters,

## **1. General**

1. Urges the Secretariat to continue to strengthen its efforts to maintain and improve nuclear, radiation, transport and waste safety, focusing particularly on mandated activities and on technical areas;

2. Requests the Secretariat to continue to assist, upon request, Member States, particularly Member States considering and/or embarking on a nuclear power programme, in developing, utilizing and improving their national infrastructure, including legislative and regulatory frameworks, and knowledge management practices and procedures for nuclear, radiation, transport and waste safety;

3. Requests the Secretariat, while recognizing the distinction between nuclear safety and nuclear security, to continue facilitating in close cooperation with Member States a coordination process to address their interfaces, and encourages the Agency to develop safety and security publications accordingly;

4. Urges Member States receiving assistance from the Agency to update information in the IAEA Radiation Safety Information Management System (RASIMS) so as to enable the Secretariat to identify the technical assistance needed to strengthen radiation safety infrastructure in accordance with IAEA Safety Standards;

5. Welcomes the establishment of regional safety fora and related networks, requests the Secretariat to continue assisting such fora and networks, encourages Member States to join relevant regional safety fora and networks, and to participate and work in cooperation with other members so that the benefits of membership can be fully realized;

6. Requests the Secretariat to strengthen its cooperation with the regional regulatory organizations FORO and ENSREG in areas of mutual interest, and further requests the Secretariat to promote wide dissemination of technical documents and outcomes of projects developed by these organizations;
7. Requests the Secretariat to review the arrangements for reporting nuclear incidents and accidents with a view to harmonizing them;
8. Encourages Member States to continue sharing safety-relevant findings and lessons learned among regulators, technical and scientific support organizations, operators, industry and the public, as appropriate with the assistance of the Secretariat;
9. Encourages Member States in a position to do so to continue making the necessary expertise available to the Secretariat for effective implementation of the IAEA safety peer reviews;
10. Requests the Secretariat to report, upon consultation with Member States, on progress with recommended actions to further strengthen review services by incorporating lessons learned, ensuring that these reviews appropriately address regulatory and operational effectiveness;
11. Encourages the Secretariat and Member States to continue to make effective use of the Agency's technical cooperation resources for the further enhancement of safety;
12. Encourages Member States to actively participate in the Global Nuclear Safety and Security Network (GNSSN) and requests the Secretariat to continue to strengthen its effort in maintaining and developing the GNSSN, including the development of the knowledge platforms;

## 2.

### **Conventions, Regulatory Frameworks and Supporting Non-Legally-Binding Instruments for Safety**

13. Urges all Member States that have not yet done so, especially those planning, constructing, commissioning or operating nuclear power plants, or considering a nuclear power programme, to become Contracting Parties to the CNS;
14. Urges all Member States that have not yet done so, including those managing radioactive waste from the use of radioactive sources and nuclear energy, to become Parties to the Joint Convention;
15. Urges all Member States that have not yet done so to become Contracting Parties to the Early Notification Convention and the Assistance Convention, thereby contributing to a broader and stronger international emergency response capability, to the benefit of all Member States;
16. Calls on all Member States that have not yet done so to make a political commitment to implement the Code of Conduct on the Safety and Security of Radioactive Sources and its supplementary Guidance on the Import and Export of Radioactive Sources, further calls on all Member States to act in accordance with the Code and the Guidance, and requests the Secretariat to continue supporting Member States in this regard;
17. Encourages the Agency to promote the identification of actions to enhance the effective implementation of the Code of Conduct on the Safety and Security of Radioactive Sources and improve the long-term management of disused sources;
18. Urges Member States with research reactors under construction, in operation, being decommissioned or in extended shutdown to apply the guidance of the IAEA Code of Conduct on the Safety of Research Reactors;

19. Urges Member States that have not already done so to establish and sustain a regulatory body that is effectively independent in its regulatory decision-making, competent, and has the legal authority, and human, financial and technical resources organized as necessary for fulfilling its responsibilities;
20. Urges Member States to strengthen regulatory effectiveness in the field of nuclear, radiation, transport and waste safety, and emergency preparedness, and to continue promoting cooperation and coordination among regulatory bodies within a Member State, as appropriate, and among Member States;
21. Urges Member States to establish or maintain regulatory decision-making processes that take into account scientific knowledge and expertise, and, where appropriate, technical and scientific support organizations and other relevant institutions;
22. Requests the Secretariat to ensure ongoing consistency among safety-relevant aspects of nuclear power infrastructure publications;
23. Encourages Member States to work towards establishing a global nuclear liability regime and, as appropriate, to give due consideration to the possibility of joining the international nuclear liability instruments;
24. Encourages the Secretariat, upon request, in coordination with the OECD Nuclear Energy Agency (NEA), to assist Member States in their efforts to adhere to any international nuclear liability instruments concluded under the auspices of the IAEA and the OECD NEA, taking into account the recommendations of the INLEX in response to the IAEA Action Plan on Nuclear Safety;
25. Recognizes the valuable work of INLEX, and takes note of its recommendations and best practices on establishing a global nuclear liability regime, including through the identification of actions to address gaps in and enhance the existing nuclear liability regimes, encourages the continuation of INLEX, especially for its support for the IAEA's outreach activities to facilitate the achievement of a global nuclear liability regime, and requests the Secretariat to report on the continuing work of INLEX;

### 3.

#### **Action Plan on Nuclear Safety**

26. Acknowledges the efforts undertaken by Member States and the Secretariat to implement the Action Plan on Nuclear Safety, and welcomes the integration of projects/activities arising from the Action Plan into the Agency's regular programme;
27. Welcomes the publication of the IAEA Report on the Fukushima Daiichi nuclear power plant accident, consisting of the Director General's Report and five technical volumes and requests the Secretariat, in close consultation with Member States, to integrate actions arising from the Observations and Lessons in the Report into the Agency's regular programme;
28. Requests the Secretariat to continue follow-up on the projects/activities arising from the Action Plan and to build upon the findings, lessons learned, and measures implemented from the Fukushima Daiichi accident, and encourages Member States to continue to work and to share information on follow-up projects/activities carried out at the national level;
29. Requests the Agency to continue to build upon the 2011 Action Plan on Nuclear Safety, the experience of States in implementing the Action Plan, as well as the observations and lessons contained in the IAEA Fukushima Report and the principles of the Vienna Declaration, and use them

for defining its nuclear safety strategy and its programme of work and requests the Secretariat to report periodically to the Board of Governors;

#### 4.

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

30. Encourages Member States to implement measures nationally, regionally and internationally to ensure nuclear, radiation, transport and waste safety, as well as emergency preparedness, taking full account of IAEA Safety Standards;

31. Notes the establishment of the Emergency Preparedness and Response Standards Committee (EPreSC) (GOV/INF/2015/9) and calls on the Secretariat to consult with Member States on its role and operation and encourages Member States to actively participate in this Committee;

32. Requests the Agency to continuously review, strengthen and implement as broadly and effectively as possible the IAEA Safety Standards, and supports the Commission on Safety Standards (CSS) and the Safety Standards Committees in their review of the relevant Safety Standards in the light of the Fukushima Daiichi Nuclear Power Station accident, as well as the lessons identified in the IAEA Report on the Fukushima Daiichi Accident;

33. Requests the Secretariat to continue its close cooperation with the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR), the International Commission on Radiological Protection (ICRP) and other relevant organizations in the development of Safety Standards, including, but not limited to, the protection of the environment;

34. Encourages Member States to use the IAEA Safety Standards in their national regulatory programmes, as appropriate, and notes the need to consider the periodic review of national regulations and guidance against internationally established standards and guidance, and report on progress in appropriate international fora such as review meetings under the terms of the relevant safety conventions;

35. Requests the Secretariat, given the importance of the Safety Standards Committees, to promote the effective participation of all Member States in those committees;

#### 5.

#### **Nuclear Installation Safety**

36. Recalls the outcomes of the 6<sup>th</sup> Review Meeting of the Contracting Parties to the CNS, including the actions taken to strengthen the effectiveness and transparency of the Convention particularly when preparing for the 7th Review Meeting of the Convention, to be held in 2017, and further welcomes the adoption by consensus of the Vienna Declaration on Nuclear Safety at the CNS Diplomatic Conference of February 2015, encourages all Contracting Parties to report as decided by the Diplomatic Conference, and further encourages all Member States to contribute to the realization of its principles including through the implementation of the relevant provisions of this Resolution;

37. Welcomes in this regard the Informal Technical Meeting to be held in Buenos Aires on 16-17 November 2015 to exchange views on how to improve CNS reporting on the basis of the Vienna Declaration;

38. Requests the Secretariat, in consultation with all Member States, using the safety issues highlighted in the summary report of the 6th Review Meeting of the Contracting Parties of the CNS, to identify issues of particular relevance for civilian nuclear reactors not covered by the scope of the CNS;

39. Calls upon all Member States with nuclear installations that have not yet done so to establish effective operational experience feedback programmes, and to share freely their experience, assessments and lessons learned, including through the submission of incident reports to the Agency's web-based reporting systems related to operational experience;
40. Encourages all Member States with operating nuclear power plants that have experienced internal or external events beyond those considered in the design basis to share internationally their experience and the results of the review of the plant's condition, and requests the Secretariat to provide appropriate assistance programmes;
41. Encourages Member States who are constructing new nuclear power plants to share with other Member States, on a voluntary basis, their relevant constructing and commissioning experiences;
42. Encourages Member States to ensure regular self-assessments of their domestic nuclear, radiation, transport and waste safety, as well as emergency preparedness, using the IAEA self-assessment tools and taking into account relevant IAEA Safety Standards;
43. Further encourages Member States, on a voluntary basis, to regularly host Agency peer review services, to implement recommended actions, and to make publicly available in a timely manner the results of such self-assessments and peer review services;
44. Requests the Agency continue to strengthen its peer review services by incorporating lessons learned into its criteria and processes;
45. Encourages Member States to communicate effectively to interested parties, including to the general public, about regulatory processes and safety aspects, including health and environmental aspects of facilities and activities, and further encourages Member States to provide for consultation with their public as appropriate;
46. Requests the Secretariat to continue efforts in the area of ageing management for the long-term operation of nuclear power plants and research reactors, and invites all Member States with such nuclear installations to consider making use of the Agency's guidance and services in this area;
47. Renews its calls upon Member States to ensure that systematic and comprehensive safety assessments of nuclear installations are performed at regular intervals by the operating organizations throughout the installation's operational lifetime, with due account taken of operating experience and significant safety related information from all relevant sources, and further calls upon Member States to ensure that any necessary corrective actions and reasonably practicable modifications aimed at enhancing the safety of the plant are implemented in a timely manner;
48. Encourages Member States which have not already done so to perform safety assessments in accordance with international best practice and relevant IAEA Safety Standards, including at multi-unit sites, to evaluate the robustness of nuclear power plants against multiple extreme events, and share their experience and the results of such assessments with other interested Member States;
49. Acknowledges the Secretariat's efforts in assisting Member States with safety reassessments of their research reactors and fuel cycle facilities in light of the feedback from the accident at the Fukushima Daiichi Nuclear Power Station, and invites all Member States with such installations to consider the Agency's guidance and assistance in this area;
50. Encourages the Agency to extend the activities, safety services and External Event Notification System of the International Seismic Safety Centre to cover tsunamis and volcanoes, and encourages Member States to actively participate in this effort;



51. Requests the Agency to promote safety culture and further encourages Member States to continue to exchange regulatory information and share experience on the effectiveness of safety culture approaches, including the sharing of best practical examples, through multilateral, bilateral and other channels;
52. Further encourages Member States to exchange regulatory information and share experiences with regard to new nuclear power plants, taking into account that such nuclear power plants should be designed, sited, constructed, commissioned and operated with the objectives of preventing accidents, and, should an accident occur, mitigating possible releases of radionuclides causing long-term off-site contamination and avoiding early radioactive releases or radioactive releases large enough to require long-term protective measures and actions, and further requests the Agency to continue its review of existing standards, including analysing gaps if necessary;
53. Encourages the Secretariat to provide for the exchange of information and experience of conducting the safety assessment of the digital Instrumentation and Control system;
54. Encourages the Agency to facilitate the exchange of results of research and development on severe accident management strategies for nuclear power plants;
55. Recognizes that there are ongoing projects to construct transportable nuclear power plants, requests the Secretariat and Member States to continue considering the safety and security aspects related to such facilities throughout their life cycle, including through INPRO, and requests the Secretariat to organize a technical meeting for information exchange on safety aspects for such power plants;
56. Notes a number of States have plans to embark or are interested in embarking on nuclear power plants, and encourages Member States which have licenced similar types of reactors to share important nuclear safety knowledge and experience with international bodies and with other operating organizations and regulatory bodies, through bilateral and multilateral mechanisms;

## 6.

### **Radiation Safety and Environmental Protection**

57. Encourages Member States to align their national radiation protection regulatory programmes to the revised International Basic Safety Standards (BSS) (IAEA Safety Standards Series No. GSR Part 3), and requests the Secretariat to support the effective implementation of the revised BSS in relation to occupational, public and medical exposure, as well as protection of the environment, including the ongoing revision and development of new guidance in this respect;
58. Requests the Secretariat to continue supporting the IAEA-OECD/NEA Information System on Occupational Exposures (ISOE) programme, and invites Member States operating nuclear power plants, and those planning, constructing or commissioning nuclear power plants to encourage their utilities and authorities to become members of the ISOE programme;
59. Requests the Secretariat to promote the Information System on Occupational Exposure in Medicine, Industry and Research (ISEMIR) Programme to facilitate the implementation of As Low As Reasonably Achievable (ALARA) practices and effective exposure control, and encourages them to provide data on occupational exposure to the ISEMIR programme;
60. Requests the Secretariat, in cooperation with other international organizations, to assist Member States in the application of the guidance in the TECDOC on the implications for occupational radiation protection of the new dose limit for the lens of the eye, and encourages Member States to make arrangements for monitoring these doses for workers who may receive significant doses;

61. Requests the Secretariat to follow up, in consultation with Member States, on the actions identified by the 2014 IAEA International Conference on Occupational Radiation Protection: Enhancing the Protection of Workers – Gaps, Challenges, and Developments;
62. Requests the Secretariat to assist Member States, upon request, to strengthen their capabilities for the realistic assessment of radiological impacts of material containing enhanced levels of naturally occurring radioactive materials (NORM) and to continue to develop guidance to optimize radiation protection in the management of such materials, taking into account GSR Part 3;
63. Requests the Agency, in coordination with other international organizations, to continue implementation of the *International Action Plan for the Radiation Protection of Patients*, and the *Bonn Call for Action*, to strengthen the radiation protection of patients and health workers and to enhance the safety of radiological procedures;
64. Encourages the Secretariat, in cooperation with the World Health Organization (WHO), to develop further guidance on the radiation protection principles of justification of medical exposure and optimization of protection and safety in the medical field, including on radiation protection education and training for health professionals, and fully documenting the individual radiation procedure histories of patients;
65. Encourages Member States to take advantage of regional technical cooperation projects on medical exposure and to use safety reporting and learning systems developed by the Agency for radiological procedures and radiotherapy;
66. Encourages the Secretariat to develop radiation protection guidance for the regulatory control of the use of human imaging techniques for non-medical purposes;
67. Requests the Secretariat, in cooperation with Member States, as well as with the WHO and other relevant international organizations and Member States, to, as appropriate, assist Member States to reduce risks from public exposure due to radon indoors;
68. Strongly encourages the Secretariat to cooperate with relevant international organizations in developing a technical document on a harmonized framework for the current international standards relating to radioactivity in food and drinking water and urges the Secretariat to further develop a technical document on a harmonized framework for the current international standards relating to radioactivity in commodities;
69. Encourages the participation of Member States in the Modelling and Data for Radiological Impact Assessments (MODARIA) programme to foster, develop and maintain capabilities in assessing radiological impacts from radionuclides being released or extant in the environment;
70. Encourages the continuing activities of the Secretariat relating to the database on Discharges of Radionuclides to the Atmosphere and the Aquatic Environment (DIRATA) and further encourages Member States to provide data;
71. Notes the preparation of the *“Inventory of Radioactive Materials Resulting from Historical Dumping, Accidents and Losses at Sea (For the Purposes of the London Convention 1972 and Protocol 1996)”*, and looks forward to its publication as a TECDOC;

## 7.

### **Transport Safety**

72. Urges Member States that do not have national regulatory documents governing the safe transport of radioactive material to adopt and implement such documents expeditiously, calls upon all

Member States to ensure that such regulatory documents are in conformity with the applicable edition of the Agency's Regulations for Safe Transport of Radioactive Material, welcomes the ongoing comprehensive review of the Regulations to ensure that they remain relevant and up-to-date, and reiterates its request to the Secretariat to complete the update of document GOV/1998/17, entitled "*Safety of transport of radioactive material*";

73. Calls upon Member States and the Secretariat to continue, in as inclusive a manner as appropriate, the follow-up actions from the 2011 International Conference on the Safe and Secure Transport of Radioactive Material and as identified by annual Technical Meetings;

74. Welcomes the practice of some shipping States and operators of providing timely information and responses to relevant coastal States in advance of shipments in order to address concerns regarding nuclear safety and security, including emergency preparedness, and notes that the information and responses provided should in no case be contradictory to measures of nuclear security and safety of the shipment or of the shipping State;

75. Calls upon Member States to further enhance mutual confidence, such as through the use of guidelines, voluntary communication practices and tabletop exercises, including with Secretariat involvement, as appropriate;

76. Recalls the issuing of the Best Practices for Voluntary and Confidential Government to Government Communications on the Transport of MOX Fuel, High Level Radioactive Waste and, as appropriate, Irradiated Nuclear Fuel by Sea (INFCIRC/863) in 2014 and welcomes the test of the communications channels through the Tabletop Exercise of the Dialogue of Coastal and Shipping States held on 17 June 2015, which was recognized as successful by its participants, and takes note of the useful lessons learned during the exercise;

77. Recognizes the very positive developments since 2013 in the dialogue process between shipping and coastal States aimed at improving mutual understanding, confidence-building and enhanced communication in relation to the safe maritime transport of radioactive material and encourages the continuation of this positive dialogue;

78. Takes note that relevant shipping and coastal States invite other Member States to join in the informal dialogue process between coastal and shipping States to improve mutual understanding and confidence regarding shipments of radioactive material and to implement as appropriate, the best practices as contained in document INFCIRC/863, subject to confidentiality and security constraints;

79. Stresses the importance of having effective liability mechanisms in place to ensure prompt compensation for damage to people, property and the environment as well as actual economic loss due to a radiological accident or incident during the transport of radioactive material, including maritime transport, and notes the application of the principles of nuclear liability, including strict liability, in the event of a nuclear accident or incident during the transport of radioactive material;

80. Requests the Secretariat, Member States and relevant international organizations to emphasize the specific challenges and requirements for efficient international cooperation in response to nuclear and radiological incidents and emergencies relating to the transport of radioactive material, encourages Member States to register their national assistance capabilities in the field of transport under the IAEA Response and Assistance Network (RANET);

81. Calls upon Member States to use the relevant networks of competent authorities to build capacity for effective regulation of the safe transport of radioactive material;

82. Encourages efforts to address problems related to denials of and delays in the shipment of radioactive material, particularly shipment by air, calls upon Member States to facilitate the transport

of radioactive material when it is carried out in compliance with the Agency's Regulations for the Safe Transport of Radioactive Material, and to each identify, if they have not done so, a national focal point on denials on shipment of radioactive materials to assist the Transport Safety Standards Committee (TRANSSC) in its work on denials of shipment of radioactive material, as appropriate, to achieve a satisfactory and timely resolution of this issue;

83. Encourages the Agency and Member States to continue to strengthen and widen efforts to make available relevant education and training on the safety and security of radioactive material during transport, including through the Technical Cooperation Programme (TCP) and through the development of synergies between regional training courses and the Agency's work related to denials of shipment, involving to the extent possible experts from the regions concerned, acknowledges the progress made in that regard, including the preparation and translation of training materials into IAEA official languages, and looks forward to the completion of public information material on the safety and security of transport;

## 8.

### **The Safety of Spent Fuel and Radioactive Waste Management**

84. Calls upon Member States to work to continuously improve safety in the management of spent fuel and radioactive waste, in accordance with the relevant Safety Standards, including work on detailed plans for the decommissioning, storage and subsequent management and disposal of such material;

85. Takes note of the outcomes of the 5<sup>th</sup> Review Meeting of the Contracting Parties to the Joint Convention, including the action taken to promote adherence and active participation in the Joint Convention, and encourages further discussions in the Joint Convention on the safety of the back end of the nuclear fuel cycle;

86. Encourages Member States to plan for the management of waste arising from a nuclear or radiological emergency, including waste from damaged facilities, and/or fuel where routine strategies are impractical or less than optimal, and where the potential exists for large volumes of radioactive waste resulting from the emergency and/or environmental remediation;

87. Encourages Member States to share lessons learned about actions taken regarding the remediation of radioactively contaminated sites and the resulting waste, and encourages the Secretariat to further develop standards and guidance documents, as appropriate, on the management and disposal of radioactive waste arising from the remediation of existing situations;

88. Recognizes the crucial role of planning for post-accident situations, and requests the Agency to continue to strengthen its guidance on remediation and waste management after a radiological or nuclear accident to assist Member States in facilitating the return of affected areas to safe conditions;

89. Encourages the Agency to continue its activities relating to the safety of facilities for the geological disposal of high-level radioactive waste and, where appropriate, spent nuclear fuel, requests the Secretariat to undertake the further development of guidance on safety of geological disposal facilities, which encourages early engagement of the regulatory bodies in the period before the formal licensing process is launched and through all stages of the life cycle and encourages Member States to share lessons about their relevant regulatory experiences;

90. Welcomes the development of the ARTEMIS review service for radioactive waste and spent fuel management, decommissioning and remediation programmes, and encourages Member States to benefit from the service, including follow-up missions, as appropriate;

91. Encourages Member States to engage with all stakeholders, including the general public, in all aspects of radioactive waste management;

## 9.

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

92. Emphasizes the importance of the Agency's activities on decommissioning, and encourages the Secretariat to continue its efforts to facilitate international cooperation in safety assessment and risk management for decommissioning;

93. Encourages Member States to ensure that plans for the decommissioning of facilities are developed during the facility design phase and updated during subsequent facility construction and operational phases as necessary, and that mechanisms are put in place for establishment and maintenance of the resources necessary to implement these plans;

94. Encourages the Agency to share, as appropriate, the lessons learned from decommissioning activities and IAEA peer review missions, including from the decommissioning of TEPCO's Fukushima Daiichi Nuclear Power Station;

95. Requests the Secretariat to assist Member States, upon request, including those phasing out nuclear power and those with damaged facilities, with the identification of decommissioning strategies;

## 10.

### **Safety in Uranium Mining and Processing and Remediation of Contaminated Sites**

96. Requests the Secretariat to assist Member States, upon request, particularly those entering or re-entering the uranium mining industry, in implementing Safety Standards and recognized international best practices in uranium production, including management of the resulting waste (WS-G-1.2);

97. Commends the efforts of the Secretariat relating to technical coordination for multilateral initiatives to remediate legacy uranium production sites, notably in Central Asia, through the Coordination Group for Uranium Legacy Sites, and encourages the Secretariat to consult relevant Member States in Africa, upon request, with a view to implementing similar initiatives;

98. Requests the Secretariat to support the work of the International Working Forum on Regulatory Supervision of Legacy Sites and, in consultation with Member States, to incorporate the recommendations of the Forum into Agency standards and guidance documents;

99. Encourages Member States to ensure that plans for the remediation of contaminated sites are developed and mechanisms are put in place for the establishment and maintenance of the resources necessary for implementation;

## 11.

### **Education, Training and Knowledge Management in Nuclear, Radiation, Transport and Waste Safety**

100. Underlines the fundamental importance of sustainable programmes for education, training and knowledge management in nuclear, radiation, transport and waste safety, remaining convinced that they are key components of capacity-building for a sustainable safety infrastructure, and encourages Member States to develop national strategies for capacity-building through training, education and knowledge management;

101. Calls upon the Secretariat to strengthen and expand its programme of training and education activities, focusing on building institutional, technical and managerial capabilities in Member States, and to continue its efforts to preserve its knowledge and institutional memory relating to nuclear safety and the safe disposal of radioactive waste;

102. Encourages the Secretariat to support and coordinate regional and inter-regional efforts for the sharing of knowledge, expertise and experience on safety-relevant issues;

## 12.

### **Safe Management of Radioactive Sources**

103. Calls upon all Member States to ensure that their legislative or regulatory framework includes specific provisions for the safe management of radioactive sources through all stages of the life cycle;

104. Calls upon all Member States to ensure that there is adequate provision, including financial arrangements, as appropriate, for safe and secure storage and disposition pathways for disused sources so that such sources within their territories remain under regulatory control, and further encourages all Member States to develop arrangements, as practicable, to permit the return of disused sources to the supplier States or consider other options including the reuse or recycling of sources wherever possible;

105. Encourages the Secretariat and Member States to strengthen the national and multinational efforts to recover orphan sources and maintain control of disused sources, and invites Member States to establish radiation detection systems, as appropriate;

106. Calls upon all Member States to establish national registers of high-activity sealed radioactive sources;

107. Encourages Member States to support the dedicated international meetings under the auspices of the IAEA on the Code of Conduct on the Safety and Security of Radioactive Sources and its associated Guidance on the Import and Export of Radioactive Sources so as to ensure their continuing relevance, and requests the Secretariat to continue to foster information exchange on implementation of the Code of Conduct and its associated Guidance;

108. Requests the Secretariat to further develop detailed guidance for Member States to self-assess their level of implementation of the provisions of the Code of Conduct on the Safety and Security of Radioactive Sources and present it to Member States for consideration;

109. Requests the Secretariat to further facilitate, as appropriate, information exchange between interested Member States on radiation safety aspects of the management of movement of scrap metal or materials produced from scrap metal that may inadvertently contain radioactive material;

## 13.

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

110. Encourages Member States to strengthen their national, bilateral, regional and international emergency preparedness and response mechanisms, as appropriate, to facilitate timely information exchange during a nuclear emergency, and improve bilateral, regional and international cooperation to that effect;

111. Requests the Secretariat to work with Member States to further develop arrangements for assessments, prognosis and communication, while making effective use of Member States' capabilities and better defining the role of the Incident and Emergency Centre during an emergency, and encourages Member States to inform, and periodically update the Secretariat and other Member States of their capabilities;

112. Encourages Member States to establish and maintain effective communication channels between the responsible national authorities at all times, to ensure respective responsibilities are clear and improve coordination and decision-making process for all types of accident scenarios;

113. Encourages the Secretariat and Member States operating nuclear power plants to work together with a view to further developing arrangements for the timely sharing of relevant technical parameters during an emergency to support the assessment and prognosis processes conducted by the Secretariat and other Member States;

114. Requests the Secretariat to work with Member States to strengthen the IAEA Response and Assistance Network (RANET) to ensure that, if and when requested, timely assistance can be provided, and further requests the Secretariat to work with Member States to facilitate, as appropriate, bilateral and multilateral arrangements, and to enhance efforts to establish technical compatibility for international assistance, and encourages Member States to register national capabilities in RANET;

115. Recognizes that implementation of the Assistance Convention and the Early Notification Convention, notably in the areas of technical and administrative procedures, may be further enhanced, and requests the Secretariat to provide support to the Parties to the two conventions to strengthen technical and administrative procedures that enhance the implementation of both conventions effectively;

116. Requests the Secretariat, in close cooperation with Member States, to continue to develop an effective public communication strategy and to maintain and further develop arrangements to provide Member States, international organizations and the general public with timely, clear, factually correct, objective and easily understandable information during a nuclear or radiological emergency, including the analysis of available information and the prognosis of potential consequences;

117. Requests the Secretariat, in close cooperation with Member States and appropriate relevant international organizations, to continue a programme of international exercises to ensure a process for continued enhancement and effectiveness of the national, regional and international emergency preparedness and response programme;

118. Encourages the Secretariat to convene further discussions to improve the effectiveness of Emergency Preparedness Review (EPREV) missions, including their suitability for States with large nuclear programmes and further encourages interested Member States to host voluntary EPREV missions;

119. Encourages the Secretariat to continue utilizing the International Radiation Monitoring Information System (IRMIS) and further encourages Member States in a position to do so to provide data to the system;

#### **14.**

#### **Implementation and Reporting**

120. Requests the Secretariat to implement the actions called for in this resolution in a prioritized manner within available resources; and

121. Requests the Director General to report in detail at the sixtieth (2016) regular session of the General Conference on implementation of this resolution, and on other relevant developments in the intervening period.