

# General Conference

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Item 13 of the agenda  
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# Measures to strengthen international cooperation in nuclear, radiation, transport and waste safety

**Resolution adopted on 25 September 2014 during the seventh plenary meeting**

## The General Conference.

- (a) Recalling resolution GC(57)/RES/9 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 progress reports on actions taken so far by the Secretariat to implement the IAEA Action Plan on Nuclear Safety (GC(55)/14), which was endorsed in September 2011, at the 55th session of the General Conference, in the light of the accident at the Fukushima Daiichi Nuclear Power Station of Tokyo Electric Power Company,
- (e) Recognizing the importance of fostering a culture that seeks the continuous improvement of nuclear, radiation, transport and waste safety and of taking appropriate subsequent actions by recognizing the role that the targeted reassessments (e.g. stress-tests) of nuclear power plants as well as further analyses of the lessons learned from past experience, including the accident at the Fukushima Daiichi Nuclear Power Station, have to play in reinforcing national, regional and international nuclear safety frameworks that serve for the peaceful uses of nuclear energy,
- (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 human health, society 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,
- (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, 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),
- (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, particularly those having important uses in the medical, academic and industrial sectors, is being affected by incidents of denial and delay of shipment in circumstances where the shipment meets with the Agency's Transport Regulations,
- (p) Recalling resolution GC(57)/RES/9 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 Transport Regulations 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 that nuclear accidents may have transboundary effects and raise public concerns about nuclear energy and the radiological effects on people and the environment,
- (r) Recognizing that radiological emergencies also raise public concerns about the radiological effects on people and the environment,
- (s) Emphasizing the importance of Member States and relevant international organizations responding to nuclear and radiological emergencies in a timely and effective manner,

- (t) 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,
- (u) Acknowledging the Secretariat's role in response to nuclear or radiological incidents or emergencies and recognizing the need to continuously improve the timeliness of the collection, validation, analysis and dissemination by the Secretariat of incident or emergency information to Member States and the public, as well as the Secretariat's role in facilitating and coordinating assistance upon request,
- (v) Emphasizing the importance of education, training and knowledge management in establishing and maintaining an adequate nuclear, radiation, transport and waste safety infrastructure,
- (w) 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,
- (x) 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,
- (y) 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,
- (z) 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,
- (aa) Emphasizing the importance of the establishment, implementation, regular exercise and continuous improvement of national emergency preparedness and response measures, taking into account the IAEA's Safety Standards and relevant action plans, including in the area of communication, and contributing to the harmonization of national protective actions,
- (bb) 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,
- (cc) Recalling United Nations General Assembly resolution A/RES/67/112 of 18 December 2012 related to the effects of atomic radiation, and the Board decision in March 1960 on health and safety measures (INFCIRC/18),
- (dd) Recalling the IAEA's 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,

(ee) 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 Related to the Application of the Vienna Convention and the Paris Convention and the protocols amending these conventions and the Convention on Supplementary Compensation for Nuclear Damage, and noting that these conventions can provide the basis for establishing a worldwide nuclear liability regime based on the principles of nuclear liability law,

(ff) 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 reinforcements concerning broader definition of nuclear damage, expanded jurisdiction over nuclear incidents and increased compensation and by best practices identified by INLEX to provide better protection to victims of nuclear damage, and

(gg) 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,

## 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 and improving their national infrastructure, including legislative and regulatory frameworks, and knowledge management practices and procedures for nuclear, radiation, transport and waste safety;

3. Encourages 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. Encourages Member States receiving assistance from the Agency to update information in the IAEA's 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 further encourages Member States to participate and work with members of relevant associations so that the benefits of membership can be fully realized;

6. Requests the Secretariat to strengthen its cooperation with the regional regulatory organizations FORO, ENSREG and WENRA 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 between regulators, technical and scientific support organizations, operators, industry and the public, as appropriate with the assistance of the Secretariat;
9. Encourages Member States to perform regular assessments of their domestic nuclear, radiation, transport and waste safety and, on a voluntary basis, to make use of, where applicable, the IAEA self-assessment tools and review services, including regular follow-up reviews, and further encourages the Secretariat to make publicly available, in a timely manner, the results of such reviews, with the consent of the State concerned;
10. 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;
11. 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;
12. 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;

## 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 Convention on Nuclear Safety (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 on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (Joint Convention);
15. Urges all Member States that have not yet done so to become Contracting 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 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 identify a list 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 sealed radioactive sources;
18. Urges Member States with research reactors under construction, in operation, being decommissioned or in extended shutdown to apply the guidance of the non-legally-binding 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 the human, financial and technical resources necessary for fulfilling its responsibilities;
20. Urges Member States to strengthen regulatory effectiveness in the field of nuclear, radiation, transport and waste safety, 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. Encourages the Secretariat to ensure ongoing consistency among safety-relevant aspects of nuclear power infrastructure publications, including International Project on Innovative Nuclear Reactors and Fuel Cycles (INPRO) documents;
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, to assist Member States in their efforts to adhere to any international nuclear liability instruments concluded under the auspices of the IAEA, taking into account the recommendations of the International Expert Group on Nuclear Liability (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, encourages the continuation of INLEX, especially for its identification of actions to address gaps in and enhance the existing nuclear liability regimes, and 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. Calls upon the Secretariat and Member States to implement the Action Plan on Nuclear Safety as an overarching priority in a comprehensive and coordinated manner, recognizing that its success is dependent on the full cooperation and commitment of Member States;
27. Requests the Secretariat to continue reporting on the progress in implementing the Action Plan on Nuclear Safety and on remaining projects/activities that should be completed by the Secretariat under each action of the Plan, and encourages Member States to share information on projects/activities carried out at the national-level to meet the objectives of the Action Plan;
28. Calls upon Member States and the Secretariat to build upon the findings and lessons learned from the Fukushima Daiichi nuclear power plant accident reported by the IAEA and other relevant international organizations, particularly by UNSCEAR and ICRP;
29. Calls upon the Secretariat to continue organizing international experts' meetings on lessons learned from the Fukushima Daiichi accident, including to address the issue of accident analysis and prognosis with the focus on possible gaps;
30. Requests the Secretariat, in close consultation with Member States, to integrate the outcomes and future activities resulting from the Action Plan on Nuclear Safety and the forthcoming IAEA Fukushima Report into the Agency's regular programme;

#### 4.

### The Agency's Safety Standards Programme

31. Encourages Member States to implement measures nationally, regionally and internationally to provide the highest levels of nuclear, radiation, transport and waste safety, taking full account of IAEA Safety Standards;
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, in particular those pertaining to extreme events such as earthquakes and tsunamis resulting in multiple and severe effects, and requirements in siting, design and severe accident management;
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 facilitate the effective participation of all interested Member States in those committees;

#### 5.

### Nuclear Installation Safety

36. Takes note of the outcomes of the 6<sup>th</sup> Review Meeting of the Contracting Parties to the Convention on Nuclear Safety, 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 notes the decision to convene a Diplomatic Conference of Contracting Parties to further consider the proposal submitted by the Swiss Confederation for the amendment of Article 18 of the Convention, and encourages the Contracting Parties to actively participate in this Diplomatic Conference and its preparatory process;
37. 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 Convention on Nuclear Safety, to identify issues of particular relevance for civilian nuclear reactors not covered by the scope of the CNS;
38. 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 International Reporting System for Operating Experience;
39. Encourages Member States, in particular those with established nuclear infrastructure and those embarking on a new nuclear power programme, to ensure their regulatory bodies perform regular self-assessments, based on the IAEA safety standards and, where needed, to benefit from the Agency's peer review services on a regular basis, including follow-up missions, and requests the Agency to

further strengthen these review services by incorporating lessons learned and ensuring that regulatory effectiveness is addressed in an appropriate manner;

40. 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;

41. 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;

42. Calls upon Member States to ensure that systematic safety assessments of nuclear facilities are performed at regular intervals by the operating organizations throughout the plant'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 on the basis of these systematic safety assessments by the operating organization;

43. Encourages the Secretariat to continue developing, in consultation with Member States, the Periodic Safety Review peer review service, consistent with the related published safety guide;

44. Encourages Member States which have not already done so to perform safety assessments in accordance with international best practice, 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;

45. 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;

46. Encourages all Member States with operating nuclear power plants that have experienced a beyond-design-basis event 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;

47. 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;

48. Further encourages Member States to exchange regulatory information and share experience with regard to new nuclear power plant designs and design certification, taking into account that nuclear power plants should be designed, sited, constructed, commissioned, operated and decommissioned with the objectives of preventing accidents, and, should an accident occur, mitigating its effects and avoiding off-site contamination, and further requests the Agency to review the existing standards, conduct a gap analysis and to report on the need to develop quantitative requirements and technical criteria in that regard;

49. Encourages the Secretariat to provide for the exchange of information and experience of conducting the safety assessment of the digital Instrumentation and Control system;

50. Encourages the Agency to facilitate the exchange of results of research and development on severe accident management strategies for nuclear power plants;

51. Recognizes that there are ongoing projects to construct transportable nuclear power plants, and requests the Secretariat to facilitate information exchange on this issue and the Secretariat and Member States to continue considering the safety and security aspects related to such facilities throughout their life cycle, including through INPRO;

52. Notes a number of countries have plans 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 mechanisms;

## 6.

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

53. 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, including the development of new guidance in this respect;

54. Requests the Secretariat to continue supporting the IAEA-OECD/NEA Information System on Occupational Exposures (ISOE) programme, and invites Member States with nuclear power plants to encourage their utilities to become members of the ISOE programme;

55. Notes the publication of the TECDOC on the implications for occupational radiation protection of the new dose limit for the lens of the eye, encourages Member States to make arrangements for monitoring doses to the lens of the eye for workers who may receive significant doses to the lens of the eye, and requests the Secretariat, in cooperation with other international organizations, to assist Member States in the implementation of the guidance in the TECDOC;

56. 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 develop guidance to optimize the management of such materials, taking into account the Radiation Protection and Safety of Radiation Sources: International Basic Safety Standards (GSR Part 3);

57. Requests the IAEA to report on progress with its revision of the 2002 International Action Plan for the Radiation Protection of Patients, inter alia in light of the outcomes of the International Conference on Radiation Protection in Medicine, held in Bonn in December 2012, and its related *Call for Action*;

58. Encourages the Secretariat, in cooperation with the WHO, to develop further guidance on the justification of medical exposures and the optimization of protection, including on radiation protection education and training for health professionals;

59. Encourages Member States to take advantage of regional technical cooperation projects on medical exposure and to use safety reporting systems for radiological procedures and radiotherapy developed by the Agency;

60. Encourages the Secretariat to develop radiation protection guidance for the justification and use of human imaging techniques for non-medical purposes (e.g. airport scanners);

61. Requests the IAEA to cooperate with the WHO and other relevant international organizations, as appropriate, on reducing the risks from public exposure due to radon indoors;

62. Encourages the Secretariat to cooperate with relevant international organizations in developing a harmonized framework for the current international standards relating to radioactivity in food and drinking water;
63. Urges the Secretariat, in cooperation with other international organizations, to further develop a harmonized framework for the current international standards relating to radioactivity in commodities and to report on progress;
64. 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;
65. Encourages the continuing activities of the Secretariat relating to the database on Discharges of Radionuclides to the Atmosphere and to the Aquatic Environment (DIRATA) and further encourages Member States to provide data;
66. Supports the efforts of the Secretariat to prepare a technically accurate and objective report entitled “*Inventory of waste disposals, accidents and losses at sea involving radioactive materials*” for the purpose of the London Convention on the Prevention of Marine Pollution by Dumping of Wastes and other Matter;

## 7.

### **Transport Safety**

67. Urges Member States that do not have national regulatory documents governing the 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 Transport Regulations, welcomes the ongoing comprehensive review of the Transport Regulations to ensure that they remain relevant and up-to-date, and requests the Secretariat to update document GOV/1998/17, entitled “*Safety of transport of radioactive material*”;
68. Calls upon Member States and the Secretariat to continue, in as inclusive a manner as appropriate, the follow-up actions to the 2011 International Conference on the Safe and Secure Transport of Radioactive Material as identified by Technical Meetings in 2012, 2013 and 2014;
69. 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;
70. Calls upon Member States to further enhance mutual confidence, such as through the use of guidelines, the holding of tabletop exercises and voluntary communication practices, including with Secretariat involvement, as appropriate;
71. 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, taking into account necessary confidentiality for security purposes;
72. Takes note of the outcomes of the Working Group on “*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*”, which has been circulated to all Member States as a document referenced INFCIRC/863;

73. Takes note that relevant shipping and coastal States invite other Member States to join in the informal dialogue process between shipping and coastal States to improve mutual understanding and confidence regarding shipments of radioactive material and to implement, as appropriate, the best practices for Voluntary and Confidential Government to Government Communications recorded in document INFCIRC/863;

74. 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;

75. Requests the Secretariat, Member States and relevant international organizations also 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's Response and Assistance Network (RANET), and requests the Secretariat to continue its efforts to develop, in close cooperation with Member States, guidance for States on how to respond to a maritime emergency involving radioactive material, and to continue discussion with interested Member States on how appropriate preparedness and response information can be made available to appropriate authorities, taking into account the requirements as regards nuclear security and safety;

76. Welcomes the networks of competent authorities whose goal is to support the harmonized implementation of the Agency's transport safety standards, and calls upon Member States to use these networks to build capacity for effective regulation of the safe transport of radioactive material;

77. 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 Transport Regulations, and to each nominate a national focal point on denials of shipment of radioactive material to assist TRANSSEC in its work on denials of shipment of radioactive material, and looks forward to a satisfactory and timely resolution of this issue;

78. 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 requests the Secretariat to develop, in close cooperation with Member States, public information material on the safety and security of transport within available resources;

## 8.

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

79. 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;

80. 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;

81. 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;

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

83. 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, and 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;

84. 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**

85. Emphasizes the importance of the Agency's decommissioning activities, and 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;

86. Encourages the Secretariat to continue its efforts to facilitate international cooperation in safety assessment and risk management for decommissioning;

87. Encourages the Secretariat to share, as appropriate, the lessons learned from decommissioning activities, including the results of IAEA international peer review missions within the framework of the Mid- and Long-Term Roadmap towards the decommissioning of TEPCO's Fukushima Daiichi Nuclear Power Station Units 1-4;

88. 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, including when decommissioning ends;

## 10.

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

89. 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);

90. 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 do likewise in support of Member States in Africa;

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

92. 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**

93. 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;

94. 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;

95. 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**

96. Calls upon all Member States to ensure that there is adequate provision for safe and secure storage and disposition pathways for disused sealed radioactive 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;

97. 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;

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

99. Encourages Member States to support the review meetings 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;

100. Requests the Secretariat, in close cooperation with Member States, to develop more 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;

101. 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**

102. 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;

103. Requests the Secretariat to work with Member States to develop arrangements for assessments, prognosis and communication, making effective use of Member State capabilities that could be used during an emergency, and encourages Member States to inform, and periodically update, the Secretariat and other Member States of their capabilities;

104. Encourages the Secretariat and Member States operating nuclear power plants to work together with a view to 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;

105. Requests the Secretariat to work with Member States to strengthen the IAEA's 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;

106. 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, and also requests the Secretariat to improve the effectiveness of the international arrangements for communication during a nuclear or radiological emergency;

107. Requests the Secretariat, in collaboration with Member States, to address the conclusions of the Seventh Meeting of the Representatives of Competent Authorities, and to further enhance the international nuclear and radiological emergency preparedness and response system;

108. 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;

109. 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;

110. Encourages the Secretariat to convene further discussions to improve the effectiveness of EPREV missions, including their suitability for countries with large nuclear programmes; and

### 14.

#### **Implementation and Reporting**

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

112. Requests the Director General to report in detail at its fifty-ninth (2015) regular session on implementation of this resolution, including implementation of the Action Plan on Nuclear Safety, and on other relevant developments in the intervening period.