## IAEA Board of Governors

# Record of the 1227<sup>th</sup> Meeting GOV/OR.1227

Measures to strengthen international cooperation in nuclear radiation and transport safety and waste management: Nuclear Safety Review for the year 2008



# **Board of Governors**

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# Record of the 1227<sup>th</sup> Meeting

Held at Headquarters, Vienna, on Monday, 2 March 2009, at 10.45 a.m.

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<sup>&</sup>lt;sup>1</sup> GOV/2009/16.

#### Attendance

(The list below gives the name of the senior member of each delegation who attended the meeting, as well as that of any other member whose statement is summarized in this record.)

Ms FEROUKHI	Chairperson (Algeria)
Mr SHOOGUFAN	Afghanistan
Mr HOXHA	Albania
Mr KHELIFI	Algeria
Mr CURIA	Argentina
Mr SHANNON	Australia
Mr VALLIM GUERREIRO	Brazil
Mr DIALLO	Burkina Faso
Ms GERVAIS-VIDRICAIRE	Canada
Mr TANG Guoqiang	China
Ms GOICOCHEA ESTENOZ	Cuba
Mr STACEY MORENO	Ecuador
Mr FAWZY	Egypt
Ms KAUPPI	Finland
Mr CARON	France
Mr LÜDEKING	Germany
Mr BAAH-DUODU	Ghana
Mr KUMAR	India
Mr ALSHARIA	Iraq
Mr COGAN	Ireland
Mr AMANO	Japan
Mr MAKSIMOVAS	Lithuania
Mr ARSHAD	Malaysia
Mr DÍAZ	Mexico
Ms MACMILLAN	New Zealand
Ms LACANLALE	Philippines
Mr FERUTĂ	Romania
Mr BERDENNIKOV	Russian Federation
Mr AL-SAUD	Saudi Arabia
Mr MINTY	South Africa
Mr ROSELLÓ SERRA	Spain
Mr STEINMANN	Switzerland
Mr FIDAN	Turkey
Mr SMITH	United Kingdom of Great Britain and
	Northern Ireland
Mr SCHULTE	United States of America
Mr VEDOVATTI RAFFO	Uruguay
Mr ECHÁVARRI	Director General, OECD/Nuclear Energy Agency

#### Attendance (continued)

Mr ELBARADEI Director General

Mr TANIGUCHI Deputy Director General, Department

of Nuclear Safety and Security

Mr ANING Secretary of the Board

#### Representatives of the following Member States also attended the meeting:

Angola, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Cameroon, Chile, Colombia, Costa Rica, Côte d'Ivoire, Croatia, Cyprus, Czech Republic, Denmark, Dominican Republic, El Salvador, Eritrea, Ethiopia, Georgia, Greece, Guatemala, Holy See, Hungary, Islamic Republic of Iran, Israel, Italy, Jordan, Kazakhstan, Kenya, Republic of Korea, Kuwait, Kyrgyzstan, Latvia, Lebanon, Libyan Arab Jamahiriya, Liechtenstein, Luxembourg, Mali, Montenegro, Morocco, Namibia, Netherlands, Nicaragua, Nigeria, Norway, Pakistan, Panama, Paraguay, Peru, Poland, Portugal, Qatar, Republic of Moldova, Serbia, Singapore, Slovakia, Sri Lanka, Sudan, Sweden, Syrian Arab Republic, The Former Yugoslav Republic of Macedonia, Tunisia, Ukraine, United Arab Emirates, Bolivarian Republic of Venezuela, Vietnam, Yemen, Zimbabwe.

#### Abbreviations used in this record:

AIPS Agency-wide Information System for Programme

Support

Assistance Convention Convention on Assistance in the Case of a Nuclear

Accident or Radiological Emergency

Basic Safety Standards International Basic Safety Standards for Protection

against Ionizing Radiation and for the Safety of

**Radiation Sources** 

CPPNM Convention on the Physical Protection of Nuclear

Material

CSS Commission on Safety Standards

DPRK Democratic People's Republic of Korea

Early Notification Convention Convention on Early Notification of a Nuclear Accident

EFTA European Free Trade Association

FAO Food and Agriculture Organization of the United Nations

G-77 Group of Seventy-Seven

GIF Generation IV International Forum

HEU high-enriched uranium

#### Abbreviations used in this record (continued):

ICRP International Commission on Radiological Protection

INES International Nuclear and Radiological Event Scale

INLEX International Expert Group on Nuclear Liability

INSAG International Nuclear Safety Group

IRS Incident Reporting System

IRSRR Incident Reporting System for Research Reactors

ISIS IAEA Safeguards Information System

Joint Convention Joint Convention on the Safety of Spent Fuel

Management and on the Safety of Radioactive Waste

Management

LEU low-enriched uranium

NPT Treaty on the Non-Proliferation of Nuclear Weapons

OECD/NEA Nuclear Energy Agency of the Organisation for

**Economic Cooperation and Development** 

PACT Programme of Action for Cancer Therapy

PAHO Pan American Health Organization

SQP small quantities protocol

TACIS Technical Assistance to the Commonwealth of

**Independent States** 

Vienna Convention Vienna Convention on Civil Liability for Nuclear

Damage (May 1963)

WHO World Health Organization

<sup>\*</sup> Speakers under Rule 50 of the Provisional Rules of Procedure are indicated by an asterisk.

# Opening of the meeting

1. The <u>CHAIRPERSON</u> welcomed all participants, especially the new Governor, Mr Shoogufan of Afghanistan, and the new Resident Representatives, Mr Davidović of Bosnia and Herzegovina, Ms Rodríguez Mancia of Guatemala, Mr Kazykhanov of Kazakhstan and Mr Haddad of Tunisia.

# Adoption of the agenda

(GOV/2009/6/Rev.1)

- 2. The <u>CHAIRPERSON</u> invited the Board to adopt the revised provisional agenda contained in document GOV/2009/6/Rev.1.
- 3. The agenda was adopted.

### 1. Introductory statement by the Director General

- 4. The <u>DIRECTOR GENERAL</u> said that he was pleased to report that, as could be seen from the draft Nuclear Safety Review for the year 2008, nuclear safety performance worldwide was steadily improving. However, the risk of nuclear accidents or malicious acts could never be eliminated, and there was no room for complacency. Vigilance and continuous improvement were crucial, both at existing nuclear facilities and in respect of new facilities being planned in a growing number of countries. The drive to introduce, or expand the use of, nuclear power always needed to be matched by a strong commitment to safety and security as indispensable enablers of nuclear technology.
- 5. While substantial progress had been made in strengthening nuclear safety and security worldwide, much work remained to be done. Within the Agency, the focus should be on enhancement of the Incident and Emergency Centre's capabilities for responding to a large accident and providing more effective support for emergency preparedness and response capacity-building in Member States, especially ones just embarking on nuclear power programmes.
- 6. From the Nuclear Technology Review 2009, which highlighted ways in which nuclear techniques could make real and lasting contributions to development, it could be seen that, in therapeutic nuclear medicine, progress was continuing to be made in developing radiopharmaceuticals which killed cancer cells without damaging healthy tissue; nuclear imaging was playing a growing role in the development of new drugs; radiotracer tools were being used to measure the impact of climate change on marine biodiversity; and isotope techniques were helping to improve freshwater management.
- 7. There had been disruptions during the past year in the supply of a vital medical isotope, molybdenum-99, needed for diagnostic imaging; that had had a negative impact on patient services

throughout the world. There was an urgent need for enhanced international cooperation to ensure that adequate supplies of that isotope were available for all those requiring it.

- 8. Within the framework of PACT, now in its fourth year, partnerships designed to help combat cancer more effectively in the developing world were continuing to be built. The Secretariat was grateful for the support being provided by Member States for its initiatives in the cancer therapy area. He was pleased to announce that an agreement between the Agency and WHO for a Joint Programme on Cancer Control would be signed shortly.
- 9. He had reported to the Board in March 2008 that FAO had served notice of its intention to terminate the Joint FAO/IAEA Division of Nuclear Techniques in Food and Agriculture. There had been extensive consultations by the Secretariat with the FAO Secretariat and with Member States of both organizations, and he hoped that the work being done by the Joint Division an excellent early example of "Delivering as One" within the United Nations system would be recognized as indispensable by the Secretariat's counterparts in Rome and would continue.
- 10. The year 2008 had been a somewhat paradoxical one for nuclear power. It had been the first year since 1955 in which not a single new power reactor had come on line, but it had also seen construction start on no fewer than ten new reactors the highest number of construction starts since 1985, the year before the Chernobyl accident.
- 11. As the Nuclear Technology Review 2008 showed, the expectations regarding nuclear power were continuing to rise. The growth targets for nuclear power had been raised in China and the Russian Federation. The ending of restrictions on nuclear trade with India should allow an acceleration of its planned expansion of nuclear power. Asia remained the focus of growth in nuclear power: of the ten construction starts in 2008, eight had been in that region.
- 12. There had been important developments elsewhere as well. In the United States, the Nuclear Regulatory Commission had now received combined licence applications for 26 new reactors, and the Department of Energy had submitted a formal application to build and operate the long-planned high-level waste repository at Yucca Mountain, in Nevada.
- 13. The number of Agency technical cooperation projects on energy planning had increased from 29 to 41, and there had also been significant increases in the numbers of projects on uranium exploration and mining and on introducing nuclear power. In the nuclear power area, the interest of 'newcomer' countries in obtaining assistance through the Agency had increased substantially, and the Secretariat had a special responsibility to help them ensure that their nuclear programmes were well designed, well run, safe and secure. In December, the Secretariat had held a successful workshop on methods for the evaluation by 'newcomer' countries of their progress in nuclear infrastructure development against the *Milestones in the Development of a National Infrastructure for Nuclear Power*, published by the Agency in 2007.
- 14. In April, China would be hosting an International Ministerial Conference on Nuclear Energy in the 21<sup>st</sup> Century, organized by the Agency with the support of OECD/NEA. The conference would provide an opportunity to review the status and prospects of nuclear power, including the evolution of nuclear power technology. Also, it would offer a forum in which many countries considering the potential benefits of adding nuclear power to their energy mix might further assess its viability.
- 15. For a number of years, he had been advocating the establishment of multinational mechanisms to ensure access for all countries to nuclear fuel and reactor technology, as envisaged in the Statute. In September 2004, he had asked an international expert group on multilateral approaches to the nuclear fuel cycle to consider ways in which the Agency could facilitate the guaranteeing of supplies of nuclear fuel. One of the recommendations of that expert group, made in February 2005, had been to

consider the possibility of the Agency becoming the administrator of a fuel bank. The Secretariat had subsequently received several proposals concerning assurance of supply and international nuclear fuel centres, which had been compiled in a report to the Board issued in June 2007 (in document GOV/INF/2007/11).

- 16. In the report, which had described some common themes regarding assurance of supply of nuclear fuel services, a possible framework that included a reserve of LEU under Agency control had been suggested for discussion. He was pleased with the progress made with regard to two specific proposals for the establishment of a fuel assurance mechanism with the involvement of the Agency:
- 17. First, at the request of the Russian Federation, he had circulated, in document GOV/INF/2009/1, the outline of a proposal for the establishment of an LEU reserve for the use of Member States that the Russian Federation intended to present in detail in the near future. The proposal provided for assured export licences and covered all long-term costs. He hoped that the Board would consider the detailed Russian proposal positively and give due consideration to other proposals which might be forthcoming.
- 18. Second, there had been a positive initial response to the Nuclear Threat Initiative's offer of US \$50 million for the proposed establishment of an LEU reserve, contingent on the contribution of an additional \$100 million by others by the end of September 2009 and on the Board choosing to establish such a reserve of last resort under its auspices. With the contributions and pledges made to date by Norway (\$5 million), the United States of America (\$50 million), the United Arab Emirates (\$10 million) and the European Union (€25 million), the international community was quite close to meeting the target of matching contributions specified by the Nuclear Threat Initiative. Once the remaining funding was secured, he intended, with the Board's agreement, to develop a possible implementation framework for the Board's consideration.
- 19. He remained convinced that a multilateral approach had great potential for facilitating the expanded safe and secure use of nuclear energy for peaceful purposes while reducing the risk of nuclear proliferation. The ideal scenario, in his opinion, would be to start with a nuclear fuel bank, under Agency auspices, based on the following principles: any such mechanism should be non-political, non-discriminatory and available to all States in compliance with their safeguards obligations; any release of nuclear fuel should be determined by non-political criteria established in advance and applied objectively and consistently; and no State should be required to give up its rights under the NPT regarding any parts of the nuclear fuel cycle. The next step would be to agree that all new enrichment and reprocessing facilities should be placed exclusively under multilateral control, to be followed by agreement to convert all existing facilities from national to multilateral control.
- 20. That was a bold agenda, and it was clearly not going to be implemented overnight. However, bold measures, including assurances of nuclear fuel supply and multinationalizing sensitive parts of the nuclear fuel cycle, were vital for enlarging the contribution of atomic energy to peace, health and prosperity throughout the world while curbing the proliferation of nuclear weapons and eliminating them altogether.
- 21. The Board had before it a draft comprehensive safeguards agreement with a modified SQP for Djibouti and draft additional protocols for Djibouti, India and the United Arab Emirates. With the recent entry into force of several comprehensive safeguards agreements required under the NPT, the number of non-nuclear-weapon States parties to the NPT without such an agreement in force had now declined to 27. That encouraging trend needed to be maintained; for States parties to the NPT without the required comprehensive safeguards agreements in force, the Agency could not perform any safeguards activities or draw any safeguards conclusions. Moreover, he would like to see all States that had not yet brought an additional protocol into force doing so without delay, as additional

protocols were central to the Agency's ability to verify the absence of undeclared nuclear material and activities. To date, additional protocols were in force for 90 States.

- 22. In the DPRK, the Agency had continued to monitor and verify the shutdown status of the Yongbyon nuclear facilities. All of the fuel rods discharged from the 5 MW(e) reactor remained under Agency containment and surveillance.
- 23. The Board had before it, in document GOV/2009/8, his report entitled Implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions 1737 (2006), 1747 (2007), 1803 (2008) and 1835 (2008) in the Islamic Republic of Iran.
- 24. The Agency had been able to continue verifying the non-diversion of declared nuclear material in Iran, including all declared LEU. As stated in the report, contrary to the request of the Board of Governors and the Security Council, Iran had not suspended its enrichment-related activities or its work on heavy water-related projects. Nor had Iran implemented the additional protocol, which, as in the case of other countries with comprehensive safeguards agreements, was a prerequisite for the provision by the Agency of credible assurances about the absence of undeclared nuclear material and activities. Iran had not permitted the Agency to perform the required design information verification at its IR-40 reactor, currently under construction, and it had not implemented the modified text of its Subsidiary Arrangements General Part on the early provision of design information.
- 25. Because of lack of cooperation by Iran, the Agency had regrettably been unable to make any progress on the remaining issues that were giving rise to concerns about possible military dimensions of Iran's nuclear programme. For the Agency to be able to make progress, Iran needed to provide substantive information and access to relevant documentation, locations and individuals in connection with all of the remaining issues.
- 26. Unless Iran implemented the transparency measures and the additional protocol as required by the Security Council, the Agency would not be in a position to provide credible assurance about the absence of undeclared nuclear material and activities in Iran. Iran should implement all measures required for building confidence in the exclusively peaceful nature of its nuclear programme at the earliest possible date and unblock the stalemated situation. At the same time, the Member States that had provided information to the Agency should agree to the Agency's sharing that information with Iran.
- 27. He was hopeful that the apparent fresh approach of the international community to dialogue with Iran would give new impetus to the efforts being made to resolve what was a long-standing issue in a manner that provided the required assurances about the peaceful nature of Iran's nuclear programme while ensuring Iran's right to use nuclear energy for peaceful purposes.
- 28. With regard to the implementation of the NPT safeguards agreement in the Syrian Arab Republic, the Agency had continued to study all information available to it, including information from the 23 June 2008 visit to the Dair Alzour site. Further analyses of the environmental samples taken at the Dair Alzour site had been carried out, revealing additional particles of uranium that had been produced as a result of chemical processing. Those particles, and the ones identified as a result of the previous analyses, were of a type not included in Syria's declared inventory of nuclear material. Syria had stated that the origin of the uranium particles had been the missiles used to destroy the building at the site. In response to a letter from the Agency, Israel had denied that the uranium particles had originated in Israel. The Agency's current assessment was that there was a low probability that the uranium had been introduced by the use of missiles.
- 29. In a letter dated 15 February 2009, Syria had reiterated that the destroyed facility, like the present facility, at the Dair Alzour site had been a military installation and had not been involved in

any nuclear activities. The letter had not addressed many of the questions raised by the Agency. Syria's responses to some of the Agency's questions had been only partial and had included information already provided to the Agency.

- 30. The Agency expected Syria to provide additional information and supporting documentation about the past use and nature of the building at the Dair Alzour site, and information about procurement activities. Providing additional access to other locations alleged to be related to the Dair Alzour site would be a welcome sign of Syria's transparency. Such access, together with the sampling of destroyed and salvaged equipment and debris, was essential if the Agency was to complete its assessment. Syria should take the necessary measures at the earliest possible date, and Israel and other States that might possess relevant information including satellite imagery should make it available to the Agency and agree to the Agency sharing such information with Syria.
- 31. Two weeks earlier, members of the Board had received the Agency's draft programme and budget for 2010–2011 (contained in document GOV/2009/1). The proposal for a substantial budgetary increase had not been made lightly, particularly given the present financial climate, but the risks resulting from, among other things, years of zero-growth policies meant that there were critical needs that must be addressed with a sense of urgency.
- 32. For example, with nuclear terrorism the greatest threat to international peace and security, it was imperative that the Agency begin, now, a process of providing for adequate Regular Budget funding of its nuclear safety and security programme parts of which were currently as much as 95% dependent on insecure extrabudgetary resources.
- 33. Increasing demands for energy, and concerns regarding both climate change and security of energy supplies, had resulted in some 50 countries turning to the Agency for help as they explored the possible launching of nuclear power programmes. The Agency must have sufficient resources to help those countries and to ensure that any new programmes were implemented with the highest regard for safety and security. The Agency was, of course, mandated to effectively safeguard the steadily increasing amounts of nuclear material worldwide and respond to the clandestine spread of nuclear technology.
- 34. At the same time, calls from Member States for help in meeting basic human needs in areas such as the treatment of diseases, food production and the securing of drinking water supplies had never been more pressing or of higher priority.
- 35. In addition to its operational requirements, the Agency needed to undertake long-postponed capital investments in infrastructure and specialized equipment. The deteriorating conditions in the laboratories of the Agency, for example, threatened both its programme delivery capabilities and its independent analytical capabilities. Also, the Agency needed a mechanism a major capital fund that would facilitate rational planning and responsible resource accumulation for longer-term requirements. Projects vital for increasing efficiency and effectiveness included the ISIS Re-engineering Project (IRP), to upgrade the Agency's safeguards data systems and support the new State-level safeguards system, and AIPS, which would in addition bring greater transparency to the Agency's financial and procurement operations.
- 36. He hoped that the members of the Board would give the draft 2010–2011 programme and budget the earnest consideration that it deserved.

# 2. Measures to strengthen international cooperation in nuclear, radiation and transport safety and waste management: Nuclear Safety Review for the year 2008

(GOV/2009/2, 2009/Note 4, 2009/Note 5)

- 37. The <u>CHAIRPERSON</u> recalled that the draft Nuclear Safety Review for the year 2008 had been the subject of a Secretariat briefing for Member States given on 24 February 2009.
- 38. Mr TANIGUCHI (Deputy Director General for Nuclear Safety and Security) said that nuclear safety performance worldwide had remained good in 2008, but there was a still a need for continuous vigilance and improvement. The enthusiasm for nuclear technologies must be matched by a strong commitment to safety, from the initial design stage through to decommissioning and waste management.
- 39. During 2008, the international nuclear community had continued its efforts to strengthen the global nuclear safety and security regime, with further improvements made in peer review and self-assessment activities, as noted at the Fourth Review Meeting of Contracting Parties to the Convention on Nuclear Safety, and with further progress in areas such as the enhancement of international safety standards and security guidelines, knowledge sharing and networking. In the interests of continuously strengthening nuclear safety and security worldwide, he would like to see a widening of peer reviews and self-assessments to cover nuclear applications generally.
- 40. In 2008, INSAG had published a document of interest both to countries just launching nuclear power programmes and to countries wishing to expand their existing programmes. In that document, entitled *Nuclear Safety Infrastructure for a National Nuclear Power Programme Supported by the IAEA Fundamental Safety Principles* (INSAG-22), INSAG discussed important aspects of safety throughout the lifetime of a nuclear power programme.
- 41. The maintaining of adequate staffing and organizational competence continued to be a challenge in many Member States, for users of nuclear technology and nuclear safety regulators alike.
- 42. The nuclear technology business was becoming increasingly multinational, with just a few enterprises supplying major components to many countries. It was important that those suppliers meet the high standards of quality required for nuclear safety. The necessary oversight could and should be achieved through careful coordination among suppliers, utilities and regulatory bodies.
- 43. Nuclear safety and nuclear security had a common goal to protect the public and the environment. Regarding the synergy between them, awareness of the importance of nuclear security had been increasing in recent years, and nuclear security guidance was improving, but nuclear safety and security professionals were becoming increasingly aware of the need to ensure that nuclear security activities did not compromise nuclear safety and vice versa and that nuclear safety and security measures should be designed and implemented in an integrated manner.
- 44. The international nuclear community must continue to identify and close gaps in the global nuclear safety and security regime. The promise of nuclear technologies could be realized only through a strong commitment to safety and security. The proposed budget for Agency safety and security activities reflected the need to reduce the dependence of those activities on extrabudgetary funding, and to enhance the capabilities of the Incident and Emergency Centre for responding to a large accident and providing more effective support for emergency preparedness and response capacity-building in Member States, especially ones just embarking on nuclear power programmes.

- 45. Mr ECHÁVARRI (Director-General, OECD/NEA) said that in October 2008 OECD/NEA had commemorated its 50th anniversary at an event underlining the important contribution of the organization to the safe, economical and environmentally friendly utilization of nuclear power in OECD countries, where nuclear power accounted for about a quarter of electricity production. The Agency's Director General had delivered the keynote speech, recalling the good collaboration over the years between the Agency and OECD/NEA. In conjunction with that event he had addressed the OECD Council, describing the challenges that lay ahead for the Agency.
- 46. OECD/NEA had recently published its first *Nuclear Energy Outlook*, which contained inter alia projections of possible nuclear power growth to 2050 based on a low- and a high-growth scenario. Even in the low-growth scenario, the world's energy problems were so serious that nuclear power's absolute contribution would probably continue to increase, with the number of power reactors in operation rising from 439 in June 2008 to about 600 by 2050. In the high-growth scenario, the figure of 600 would be reached by 2030, the figure for 2050 being 1400. Until 2030, at least, the high-growth scenario seemed much more likely.
- 47. However, the economic recession due to the current financial crisis could have an impact on nuclear power planning in some countries. In addition, industrial infrastructure dating back 20-30 years had to be rebuilt, workforce skills had to be preserved, regulatory regimes had to be strengthened (or even established in some cases), progress had to be made in the area of high-level waste disposal, the non-proliferation regime also had to be strengthened and investors had to be assured of stability as regards matters such as taxation and nuclear power regulation. Those issues were to be discussed in Beijing from 20 to 22 April 2009 at a conference that OECD/NEA was co-sponsoring, the Agency was organizing and the Chinese Government was hosting namely, an International Ministerial Conference on Nuclear Energy in the 21st Century.
- 48. The Secretariats of the Agency and OECD/NEA were continuing to coordinate activities through mutual representation in committees and working groups. The latest annual coordination meeting, held in February 2009 and attended by Deputy Director General Taniguchi at the head of an Agency Secretariat team, had provided an excellent opportunity for sharing information on future activities of the two organizations.
- 49. Regarding nuclear safety, OECD/NEA's Committee on Nuclear Regulatory Activities had recently established a Working Group on the Regulation of New Reactors, which could count on the strong support of many regulatory authorities. The Working Group's members had agreed on the importance of developing a database on experience during the construction of and major modifications to nuclear power plants.
- 50. The year 2008 had marked the 50th anniversary of the Halden Reactor Project, sponsored by the Norwegian Institute of Energy Technology. All elements were in place for its continuation for a further three-year period (2009-2011).
- 51. In December 2008, OECD/NEA had organized a workshop on lessons learned from containment sump clogging at which the measures taken in various countries to prevent events similar to one that had occurred at Sweden's Barsebäck nuclear power plant had been discussed.
- 52. In June 2008, at a workshop held in Finland, ways of improving safety inspection programmes and safety inspector training, integrating inspection findings and inspecting plants under construction had been discussed.
- 53. In 2008, OECD/NEA's Working Group on Public Communication of Nuclear Regulatory Organisations had agreed that it should issue reports on transparency in regulatory activities, on local

public information activities, on the use of public perception surveys and on communication in emergency situations.

- 54. In 2008, OECD/NEA's Working Group on Integrity of Components and Structures had organized a workshop on probabilistic seismic hazard assessment methodologies and a workshop on the ageing management of thick-walled concrete structures.
- 55. Regarding OECD/NEA's Multinational Design Evaluation Programme (MDEP), significant progress had been made in harmonizing the regulatory requirements and practices of different countries, with for example the development of a comparison table for identifying the similarities and differences between the French, Japanese and Korean codes for Class I pressure vessels and comparing those codes with the ASME (American Society of Mechanical Engineers) code.
- 56. In support of attainment of the MDEP goal of closer cooperation between different countries, two design-specific working groups had been established the EPR working group (focusing on the European Pressurized Reactor) and the AP1000 working group (focusing on Westinghouse Electric Company's AP1000 reactor design). The EPR working group, which had already identified issues that were being fully addressed in some countries but not in others, currently consisted of representatives of the regulatory authorities of China, Finland, France, the United Kingdom and the United States of America. The AP1000 working group, established only in November 2008, currently consisted of representatives of China, the United Kingdom and the United States of America.
- 57. OECD/NEA attached great importance to the ongoing process of revising the Basic Safety Standards, of which it was a co-sponsor, and welcomed the issuing by the Agency's Secretariat on 2 July 2008 of the first full draft revision (Draft 1.0).
- 58. OECD/NEA had continued its dialogue with ICRP, reviewing and commenting in detail on draft ICRP documents relating to radiological protection of the environment, everyday exposure situations and the protection of individuals living in contaminated areas.
- 59. OECD/NEA had begun preparations for a further international nuclear emergency exercise, INEX-4, to be held late in 2010.
- 60. In a collective statement entitled *Moving Forward with Geological Disposal of Radioactive Waste*, OECD/NEA's Radioactive Waste Management Committee had concluded that sufficient information existed for the first steps to be taken in drawing up geological disposal plans commensurate with the current generation's responsibilities and that moving forward with the implementation of geological disposal was desirable from both the ethics and the safety point of view.
- 61. With regard to decommissioning, OECD/NEA, together with the Agency and the European Commission, had revised the 'Yellow Book' on decommissioning costs published in 1999, the aim being to provide a cost breakdown structure that would, regardless of the national reporting formats used, serve as a standardized basis for processing and reporting cost data.
- 62. With an expansion of nuclear power very likely, OECD/NEA was looking into the question of market competition in the nuclear industry the competition among suppliers of goods and services and, following electricity market liberalization in many OECD countries, the increased competitive pressure on nuclear power plant operators.
- 63. OECD/NEA was also looking into the question of the timing of high-level waste disposal. In a recent study it had explored the key factors involved and how societal acceptability, environmental responsibility, economic and technical feasibility and other considerations affected national strategies for high-level waste management and disposal.

- 64. The Agency and OECD/NEA had for many years been collaborating in the publication of the 'Red Book' (*Uranium Resources, Production and Demand*), the 22nd edition of which had been published in 2008. From the latest 'Red Book' it was clear that the uranium resource base was adequate for meeting the projected future demand, but mines would have to be developed and production increased in a timely manner. A continuing strong market and sustained high prices would be necessary if resources were to be developed within the time frame required for meeting the demand, a major challenge at a time of worldwide financial crisis.
- 65. In January 2009, with the assistance of the Agency, OECD/NEA had, at the request of the Canadian Government, organized a workshop on the security of supply of medical radioisotopes, particularly technetium-99m. The participants had identified measures that should be taken in order to help ensure adequate supplies of such radioisotopes in the short, medium and long term.
- 66. Some 95% of the world's technetium-99m supply was dependent on five ageing research reactors and on a complex processing and distribution chain for prompt delivery of that short-lived isotope to the health systems in different countries a chain whose vulnerability had manifested itself in several global and regional supply disruptions during the past decade. The participants in the workshop had recognized that it might take five to ten years for significant additional production capacity to be developed and had agreed that governments had a responsibility for establishing an environment conducive to the necessary private- and/or public-sector investments.
- 67. OECD/NEA was continuing to support the Generation IV International Forum (GIF), acting as its technical secretariat. In 2008, with the accession of South Africa, the number of full members of the GIF had increased to nine, and it was expected that the Russian Federation would soon become the tenth full member.
- 68. In closing, he thanked the Director General and the Secretariat of the Agency for their continued support of and collaboration with OECD/NEA.
- 69. Mr CURIA (Argentina), speaking on behalf of the G-77 and China, said that the Group, which greatly appreciated the Secretariat's efforts to strengthen nuclear safety worldwide pursuant to Article III of the Agency's Statute, welcomed the fact that the safety performance of the nuclear industry had remained high in recent years.
- 70. At the same time, the Group shared the view expressed in paragraph 21 of document GOV/2009/2 that, "As the uses and the introduction of nuclear technologies expand, the vigilance and concrete actions by the global nuclear community to enhance nuclear safety must continue." However, the Group continued to believe that the primary responsibility for the safety and security of nuclear and other radioactive materials rested entirely with States. It also continued to believe that nuclear safety and security considerations should not be allowed to hamper the utilization of nuclear technologies for peaceful purposes.
- 71. An adequate nuclear safety infrastructure was essential for every nuclear power programme, and the assistance provided through the Agency in that regard was of utmost importance, especially for developing countries. Although aware of other international initiatives relating to the establishment and strengthening of nuclear safety infrastructures, the Group attached great importance to the central role played in the nuclear safety infrastructure area by the Agency owing to its statutory functions, broad membership and long experience.
- 72. The Group was concerned about the global shortage of nuclear safety experts, which might hamper efforts to raise and even to maintain the present levels of safety performance, and it therefore welcomed the Agency's activities relating to the development of strategies for sustainable education and training in nuclear safety.

- 73. The Group shared the views expressed in section B.4 (Changing technology) of document GOV/2009/2 that vendors of new technologies had a responsibility to ensure the access of users to all information and resources necessary for safe operation and that it was important for countries contemplating the use of a new technology and the vendor countries to collaborate so as to ensure that nuclear safety knowledge was transferred effectively.
- 74. Regarding section C (Incident and emergency preparedness and response) of document GOV/2008/2, the Group was concerned about the fact that during 2008 the Agency had been informed or had become aware of 183 events involving or suspected to involve ionizing radiation. The corresponding figure for 2007 had been only 140.
- 75. The Group hoped that the lessons learned from the ConvEx3 emergency exercise conducted in Mexico in July 2008 would lead to improvements in the systems required in an actual emergency and to enhancement of the emergency preparedness of the Agency.
- 76. Although it attached great importance to the work of INLEX, the Group considered that the issue of nuclear liability was not directly related to nuclear safety and should therefore not be dealt with in the Agency's Nuclear Safety Reviews.
- 77. The Group, which was pleased that research reactors around the world had continued to operate safely in 2008, had noted that several Member States were planning to build new research reactors and/or upgrade existing ones. It looked forward to receiving information about the work programme established by the Secretariat for assisting those Member States.
- 78. In the Group's opinion, the international meeting held in October 2008 on application of the non-legally-binding Code of Conduct on the Safety of Research Reactors had provided an important opportunity for an exchange of views in the light of the renewed interest in nuclear technologies. The Group, while attaching great importance to the fact that adherence to the Code of Conduct was voluntary, welcomed the Secretariat's efforts in bringing together representatives of various Member States to share their experiences of operating research reactors and in identifying areas where Member States needed assistance.
- 79. Regarding fuel cycle facility safety, the Group continued to be interested in the benefits of the Safety Evaluation During Operation of Fuel Cycle Facilities (SEDO) service.
- 80. The Group, which shared the Secretariat's view regarding the proper use of radiation protection tools and techniques in the medical field, was pleased that the issue had been among those addressed at the Twelfth International Congress of the International Radiation Protection Association (IRPA), held in Buenos Aires in October 2008, and the technical meeting on radiation protection guidance for medical workers held in Vienna in November 2008.
- 81. The Group, which was concerned about the difficulties faced by developing countries in managing and controlling medical radiation exposures, would like the Secretariat to intensify its efforts to enhance the radiation exposure monitoring capabilities of developing Member States and it looked forward to learning about the outcome of the third meeting of the Steering Panel for the International Action Plan for the Radiological Protection of Patients.
- 82. The Group, which recognized the value of the non-legally-binding Code of Conduct on the Safety and Security of Radioactive Sources, welcomed the assistance provided in 2008 through the Agency to developing Member States, particularly ones in Africa, with a view to enhancing their capabilities as regards searching for and securing orphan sources.
- 83. The Group greatly appreciated the assistance being provided by the Secretariat to developing countries interested in the borehole disposal of disused sealed radioactive sources.

- 84. The Group, while greatly appreciating the initiatives of the International Steering Committee on Denials of Shipment of Radioactive Material that were aimed at achieving regional solutions to the shipment denials problem, would like to see a more concerted effort being made to address that problem.
- 85. The Group, which shared the view that confidence in the safety of radioactive waste management and disposal arrangements was important for the public acceptance of nuclear energy, welcomed the issuing in 2008 of a safety standard on the classification of radioactive waste that covered all radioactive waste types.
- 86. Mr OWOSENI (Nigeria)\*, speaking on behalf of the African Group, said that safety should be a fundamental consideration in all nuclear activities and that the African Group attached great importance to nuclear safety and greatly appreciated the technical assistance being provided through the Agency to Member States in the nuclear safety area.
- 87. While welcoming the good safety performance of the nuclear industry in recent years, the African Group agreed that it was important to avoid complacency; the international community must continue to be vigilant.
- 88. The African Group welcomed the publication in 2008 of the INSAG document *Improving the International System for Operating Experience Feedback* (INSAG-23) and the preparations being made for the establishment of a global nuclear safety network.
- 89. Although there existed a number of mechanisms for assisting countries interested in launching a nuclear power programme, the African Group believed that the Agency had a central role to play in helping such countries to establish the necessary national infrastructures.
- 90. The African Group, which attached great importance to human capacity-building, welcomed the Secretariat's efforts to help Member States faced with a shortage of skilled professionals in the nuclear field.
- 91. The Group welcomed the increase in the number of parties to the Early Notification Convention and the Assistance Convention, and particularly the accession of Gabon to the Assistance Convention and the ratification by Senegal of both the Assistance Convention and the Early Notification Convention.
- 92. The African Group looked forward to the publication of the emergency preparedness and response manual on communicating with the public during a nuclear or radiological emergency that was currently under development.
- 93. The Secretariat was to be commended for the assistance it had provided to Member States by organizing emergency preparedness and response training courses at the regional and the national level.
- 94. The African Group was looking forward to the introduction of a unified system that would replace the Early Notification and Assistance Conventions Website (ENAC) and the Nuclear Events Web-based System (News).
- 95. The African Group continued to attach great importance to the work being done by INLEX.
- 96. The African Group, which was pleased that research reactors around the world had in 2008 continued to be operated safely, was looking forward to examining the Agency work programme for the establishment of the necessary technical and nuclear safety infrastructures in countries planning to build their first research reactor.

- 97. The African Group, which was concerned about the radiation exposure of workers in the medical field, welcomed the technical meeting held in November 2008 on radiation protection guidelines for medical workers.
- 98. Regarding the radiation exposure of patients, the African Group, which was concerned about the situation in developing countries, would like the Secretariat to explore ways of ensuring that medical workers in developing countries received training that would enable them to improve that situation.
- 99. With regard to the safety and security of radioactive sources, the African Group greatly appreciated the assistance provided in 2008 to Burkina Faso, Cameroon, the Democratic Republic of Congo, Kenya, Mali, Nigeria and Zambia in establishing capabilities to search for and secure orphan sources.
- 100. Mr POCUCH (Czech Republic)\*, speaking on behalf of the European Union, said that the candidate countries Turkey, Croatia and the Former Yugoslav Republic of Macedonia, the countries of the Stabilisation and Association Process and potential candidates Albania, Bosnia and Herzegovina, Montenegro and Serbia, the EFTA countries Iceland and Norway, members of the European Economic Area, and Ukraine, the Republic of Moldova, Armenia, Azerbaijan and Georgia associated themselves with the statement he was about to make.
- 101. The European Union greatly appreciated the Agency's commitment to strengthening nuclear and radiation safety worldwide, as the development of nuclear energy should take place under optimum safety, security and non-proliferation conditions. The Agency was to be commended for its achievements in the nuclear and radiation safety area in 2008.
- 102. The fact that there had been no serious accidents at nuclear power plants, research reactors or other nuclear facilities in 2008 was very welcome. However, the international community should remain vigilant and pursue its efforts to strengthen the global nuclear safety regime with undiminished intensity. Many countries still faced challenges in areas such as the establishment of effective nuclear safety infrastructures, emergency preparedness and response, regulatory separation and independence, the staffing of nuclear industry enterprises and regulatory bodies, new reactor licensing, and spent fuel and radioactive waste management.
- 103. The European Union, which attached the utmost importance to a high level of nuclear safety worldwide, would like to see the Secretariat and Member States intensifying their cooperation in the nuclear safety field, with special attention paid to countries that were planning to introduce nuclear technologies for the first time. The Agency could count on the European Union's full support in that connection.
- 104. Under its TACIS and Phare programmes, the European Union had for nearly two decades been cooperating with many third countries in the improvement of nuclear safety. Pursuant to its recently established Instrument for Nuclear Safety Cooperation, it was cooperating with the Agency in helping third countries to improve their nuclear safety culture and the safety of their operating installations.
- 105. The protection of people and the environment should be the highest priority in every activity involving the use of radioactive sources, and the maintenance of comprehensive national registers was essential for the effective regulatory control of such sources. Well maintained registers and adherence to the Code of Conduct on the Safety and Security of Radioactive Sources nationwide were a solid basis for the minimizing of radiation risks, but that remained a challenge in many Member States.
- 106. The occupational radiation protection of medical workers and the optimization of patient exposures to radiation were issues deserving close attention, and, during the 2008 session of the General Conference, the Secretariat and the European Union had jointly hosted a round table on those issues. With a view to minimizing the radiation exposures of medical workers and optimizing patient

doses, the European Union advocated the wider implementation of quality assurance programmes in workplaces with radioactive sources.

- 107. European Union countries were assisting in the preparation of the Agency safety standards through the participation of experts in working groups, the Agency's safety standards committees and the CSS.
- 108. The European Union, which was closely following developments in the safety standards area and greatly appreciated the efforts and professionalism of the Agency's staff and the experts from Member States in drafting new standards and updating existing ones, was thinking of adopting a Union-level legal instrument on nuclear installation safety.
- 109. The recently formed European Nuclear Safety Regulators Group (ENSREG) would focus on the continuous improvement of nuclear safety within the European Union, with particular emphasis on new reactors. The Agency's safety fundamentals and safety requirements would play an important role in that connection.
- 110. The European Union, which believed that international cooperation was crucial to strengthening the global nuclear safety and security regime, was strongly committed to the Convention on Nuclear Safety, the CPPNM, the Early Notification Convention, the Assistance Convention and the Joint Convention. In accordance with their provisions, it was promoting the establishment and maintenance of a high level of nuclear safety in its Member States.
- 111. The participants in the Fourth Review Meeting of Contracting Parties to the Convention on Nuclear Safety, held in 2008, had recognized the importance of openness and transparency in the nuclear safety area, and the European Union would like to see all parties to the Convention being open and transparent in their nuclear activities.
- 112. The European Union hoped to contribute to the success of the Third Review Meeting of Contracting Parties to the Joint Convention, planned for May 2009. In its opinion, the preparation of national reports for peer review, as required by the Joint Convention, provided a good opportunity for frank self-assessment, which was important for the achievement of a strong safety culture.
- 113. Fulfilment of the obligations associated with the various safety-related conventions helped contracting parties to achieve high levels of safety and, through the sharing of experience and information about best practices, to keep abreast of relevant developments and thus maintain those high safety levels. The European Union would therefore like to see all countries, and particularly the ones planning to adopt nuclear technologies for the first time, acceding to those conventions, if they had not yet done so.
- 114. Mr KUMAR (India) said that high levels of safety in nuclear activities were essential if the full potential of nuclear technologies was to be realized something that was in the interests of all Member States. Consequently, although the continued good safety record of the nuclear industry in 2008 had further enhanced the industry's credibility, India shared the view that there was no room for complacency.
- 115. India, which had ratified the Convention on Nuclear Safety in 2005, was complying fully with all its requirements. The first national report prepared by his country pursuant to the Convention had been submitted for peer review at the Fourth Review Meeting of Contracting Parties.
- 116. His country, which welcomed the establishment of the Agency's International Seismic Safety Centre, attached great importance to the seismic safety of nuclear installations and had made experts available to participate in the work of the scientific committees established to address various specialized aspects of the subject.

- 117. Regarding the medical uses of ionizing radiation, the sharing of radiation safety experience among medical practitioners was still very limited. The Agency had an important role to play in helping to ensure that patients received no more than the recommended exposures. Quality assurance was very important in that connection, and quality assurance in radiation-based cancer treatment was a major priority in India, where the Tata Memorial Centre, in Mumbai, regularly conducted training courses on that subject for professionals from within India and from abroad.
- 118. Radiation protection in medicine had been one of the issues addressed during the Twelfth International Congress of the International Radiation Protection Association (IRPA), held in Buenos Aires in October 2008, the conclusions of which his country welcomed.
- 119. The poor quality of X-ray images in many developing countries, as a result of which patients often underwent additional avoidable radiation exposures, was a serious problem that should be addressed collectively.
- 120. India, from where experts had contributed to the development of Agency safety standards by serving in the CSS and the Agency's safety standards committees, believed that the Agency's safety standards should become the global frame of reference in safety matters and stood ready to assist the Agency in achieving that goal.
- 121. At the International Conference on Topical Issues in Nuclear Installation Safety: Ensuring Safety for Sustainable Nuclear Development, held in Mumbai in November 2008, participants from 33 countries and three international organizations had discussed a wide range of issues relating to nuclear safety and security.
- 122. Mr CURIA (Argentina) said that his country, which welcomed the fact that in 2008 the operational safety record of nuclear power plants had continued to be satisfactory, considered that satisfactory record to be due in no small measure to intensive exchanges of information about the operational experience in various countries.
- 123. Argentina shared the view that the Agency was the appropriate body to coordinate international efforts aimed at ensuring the safety and security of nuclear power programmes and the effective and efficient use of the internationally available resources.
- 124. His country, which had been engaging in nuclear activities for decades and whose good nuclear safety record was widely recognized, welcomed the successful outcome of the Fourth Review Meeting of Contracting Parties to the Convention on Nuclear Safety. It had taken a very active part in that meeting and had demonstrated that all its nuclear activities were being conducted in a manner fully compliant with the Convention.
- 125. His Government was following very closely the process of revising the Basic Safety Standards, as changes made to them could affect the legislation and regulations of most Member States. The utmost caution should be exercised in respect of what had been internationally agreed regarding effective doses per unit exposure, particularly in the case of radon. Although the values in question were not sacrosanct, any modification to them should be thoroughly justified.
- 126. Given the importance of the Basic Safety Standards, his Government believed that the Board should receive a detailed report on the revision process and that, whenever a draft revised version was submitted to Member States for comment, they should be allowed sufficient time to analyse it thoroughly.
- 127. The safety and security of radioactive sources, nuclear facilities and nuclear materials and the relationship between their safety and security were matters of great concern to Argentina. Accordingly, his delegation welcomed paragraphs 47 and 48 of document GOV/2009/2, which

represented a good attempt to describe that relationship — the synergy, the differences and the common elements. It hoped that the Secretariat would take a similar approach when drawing up its next report entitled "Nuclear security — measures to protect against nuclear terrorism" and place greater emphasis on the synergy.

- 128. As regards the security of radioactive materials, his country attached great importance to effective implementation of the Code of Conduct on the Safety and Security of Radioactive Sources and the supplementary Guidance on the Import and Export of Radioactive Sources.
- 129. Argentina agreed that the current resumption of uranium mining in many parts of the world required that in exploration, exploitation and production activities due attention should be paid to public health and safety and to environmental protection; before such activities began, an appropriate regulatory control system should be set in place. His country endorsed the Agency's efforts to establish programmes for the sustainable development of uranium mining that complied with the relevant safety requirements.
- 130. Argentina's National Atomic Energy Commission was engaged in a major programme of environmental remediation at former uranium mining sites a programme financed partly by a loan granted by the World Bank in 2008.
- 131. Argentina commended the efforts of the Secretariat in widely disseminating the *Manual for First Responders to a Radiological Emergency* and welcomed the endorsement for use of the INES User's Manual.
- 132. Argentina, which welcomed the ratification by the United States of America of the Convention on Supplementary Compensation for Nuclear Damage, believed that it would greatly facilitate the entry into force of that international instrument.
- 133. As a party to the Vienna Convention and to the Convention on Supplementary Compensation for Nuclear Damage, his country shared the concern of INLEX about the possibility of even greater fragmentation of the present international regime in the field of liability for nuclear damage and agreed that it was important to continue examining all available means of preventing such fragmentation and strengthening the regime.
- 134. Argentina, which was promoting application of the Code of Conduct on the Safety of Research Reactors, agreed that there was a need for a network for the exchange of nuclear safety information regarding research reactors and would support the efforts of the Secretariat in setting up such a network.
- 135. Argentina welcomed the fact that the Web-based version of the Fuel Incident Notification and Analysis System (FINAS), on a common platform with the IRS and the IRSRR, had become operational in 2008.
- 136. It also welcomed the fact that the technical meeting on radiation safety in new imaging and radiation therapy technologies in medicine hosted by its National Atomic Energy Commission in October 2008 had led to the identification of several measures that the Agency could take in order to improve radiation safety in the medical field.
- 137. In addition, it welcomed the progress made during 2008 by the Ibero-American Forum of Radiological and Nuclear Regulatory Agencies in advancing its technical projects, and also the results achieved with regard to the radiation protection of patients, the importance of which had been recognised by WHO and PAHO.

- 138. Argentina, which continued to be concerned about denials of shipment of radioactive materials, attached great importance to the work of the International Steering Committee dealing with that issue.
- 139. Argentina would like to see the Secretariat stepping up its efforts to find better ways of recycling and disposing of highly radioactive sources. For its own part; it was making continued efforts to improve its radioactive waste management facilities.
- 140. With the signing during the 2008 session of the General Conference of a long-term agreement between his country and the Agency, an Argentine institute had become a regional centre for education and training in nuclear and radiation safety and the safe transport of radioactive waste for Latin America and the Caribbean. The agreement was the first of its kind, and his delegation hoped that similar agreements would be concluded between the Agency and Member States in other regions.
- 141. While welcoming the inauguration of the Agency's International Seismic Safety Centre, Argentina was concerned about the excessive seismic safety requirements being considered for facilities located in non-seismic zones.
- 142. Over 1500 scientific papers had been presented in October 2008, in Buenos Aires, at the Twelfth International Congress of the International Radiation Protection Association (IRPA 12), the participants in which had arrived at a number of consensus conclusions that would be very important for the work of the Agency in the radiation protection field. His Government had transmitted all those scientific papers to the Secretariat, and his delegation hoped that, in accordance with the wish of the General Conference, which had urged the Secretariat "to ensure the prompt dissemination of the information produced at the event", the Secretariat would soon arrange for them to be printed and widely disseminated. Once the Secretariat had nominated an editor, his Government would nominate a counterpart to assist him/her.
- 143. Mr SCHULTE (United States of America), noting that the current meeting of the Board was its first meeting since the inauguration of President Obama, said that the present time was one of complex challenge for the Agency but also of unparalleled opportunity, with his country's new commitment to the United Nations and multilateral diplomacy. President Obama and his Administration would strongly support the Agency in all aspects of its mission, seeking to strengthen it and to ensure that it had the authority, the information, the people and the technology it needed in order to do its job.
- 144. The top priority for the United States was the Agency's verification role, which was essential to creating the confidence necessary if countries worldwide were to benefit from the peaceful uses of nuclear technology. That role would grow as more and more countries invested in nuclear power to provide clean energy for growth and development, and instruments such as additional protocols would become increasingly important not only for verification but also for building confidence among nations.
- 145. The United States supported the Agency's important role in the global efforts to help countries achieve the highest standards for nuclear security and the protection of nuclear materials, and President Obama had identified preventing terrorists from acquiring nuclear and radiological weapons as his number-one security priority. The National Nuclear Security Administration of the United States Department of Energy was already pursuing a major initiative the Global Threat Reduction Initiative to reduce the amounts of and to protect vulnerable nuclear and radiological materials located at civilian sites worldwide. His country would continue to look to the Agency for support in the global efforts to secure nuclear materials, to phase out the use of HEU in the civil nuclear sector, to strengthen international intelligence and police cooperation aimed at the prevention of terrorism involving weapons of mass destruction, and to help build the capacity of governments around the world to prevent the theft and diversion of nuclear materials.

- 146. President Obama had expressed strong support for the creation of an Agency-administered nuclear fuel bank; while still members of the United States Senate, he and Secretary of State Clinton had supported legislation providing \$50 million to the Agency in response to a grant made by the Nuclear Threat Initiative. His Administration wished to work with the Secretariat and with other Member States in establishing a fuel bank that would allow countries to benefit from the peaceful uses of nuclear energy without increasing the risks of nuclear proliferation. It welcomed the initiative by the Russian Federation in that connection.
- 147. The United States believed that preserving the credibility of the Agency in implementing NPT safeguards depended on success in dealing with the immediate challenges, specifically those posed by the DPRK, the Islamic Republic of Iran and the Syrian Arab Republic. The new Administration, which intended to strengthen diplomatic efforts to address each of those challenges, considered it essential to strengthen and revalidate the Agency rather than allow those who violated their obligations to discredit it
- 148. The new Administration recognized that the Agency's essential role in non-proliferation was part of a broader international effort that included diplomacy and disarmament. While the Agency must pursue its essential verification role, there was also a role for diplomacy in ensuring the viability of the NPT hence the readiness of the new Administration for direct engagement with the Islamic Republic of Iran as part of the international effort to convince the Iranian leadership to meet its responsibilities, the new Administration's use of dialogue with the Syrian Arab Republic to encourage its leaders to cooperate with the Agency, and the new Administration's commitment to the Six-Party process to pursue the denuclearization of the DPRK.
- 149. The new Administration recognized that NPT obligations encompassed disarmament as well as non-proliferation, and President Obama supported the goal of working towards a world without nuclear weapons. His Administration intended to renew the commitment of the United States to disarmament including dramatic reductions in United States and Russian stockpiles of nuclear weapons and material and a verifiable ban on the production of new nuclear weapons material.
- 150. President Obama believed that the best way to reduce global threats and seize global opportunities was to design and implement global solutions. His Administration looked forward to a close working relationship with the Secretariat and with other Member States in advancing the common objective of promoting the safe, secure and peaceful use of nuclear technology.
- 151. His country shared the Secretariat's vision of a global nuclear safety and security regime, as safety and security were closely related and together represented a global responsibility, and it commended the Secretariat for its significant role in improving that regime.
- 152. In the draft Nuclear Safety Review for the year 2008, countries were cautioned not to become complacent. Most of the 439 nuclear power plants operating in the world today had excellent safety records, and statistics showed that nuclear safety worldwide had steadily improved, but many plants were facing ageing issues as they approached the end of their design life. Also, many Member States were facing workforce issues as experienced plant operators and safety regulators reached retirement age, with few qualified people available to fill the gap. Those issues required a renewed commitment to safety as a top priority. It could not be assumed that past improvements in safety performance would continue. Member States must remain vigilant with regard to the safety of existing nuclear facilities, making use of Agency peer review services, drawing on lessons learned in other countries, sharing operational feedback information and increasing bilateral and multilateral cooperation.
- 153. The Secretariat was to be complimented on its efforts in helping Member States to develop the infrastructure needed for new nuclear programmes. The Secretariat had stressed that the high levels of safety and security that must apply at currently operating reactors must also apply at future reactors,

and the United States would like to see new entrants in the nuclear power field establishing rigorous nuclear safety and security legislation and regulations, creating strong and independent nuclear safety regulatory bodies and making nuclear safety and security a top priority.

- 154. The job of achieving high levels of nuclear safety and security could not be rushed; adequate time must be devoted to establishing the infrastructure necessary for the planning, bidding and construction stages of a reactor programme. The nuclear industry was already experiencing shortages of qualified personnel at existing facilities, so Member States wishing to embark on nuclear power programmes must focus early on human capacity-building. They should focus on safety and security during the planning and scheduling stages, participate in international safety and security cooperation activities, build robust safety and security infrastructures, and ratify international safety and security conventions.
- 155. Very recently a Member State that was not a party to the Convention on Nuclear Safety had announced the pre-commissioning of its first nuclear power plant, and the United States joined the European Union in calling upon that Member State to become a party to the Convention.
- 156. A great threat to international security and the continued expansion of nuclear power was the possibility of terrorists acquiring the materials needed for constructing and detonating a nuclear or radiological weapon. Like nuclear safety, nuclear security must be a core part of the Agency's mission, and the United States supported the Secretariat's proposal that Regular Budget support for nuclear security activities be increased.
- 157. The United States, which hoped that the recently launched World Institute of Nuclear Security would receive broad Member State support, considered nuclear safety and security to be a global responsibility and believed that the global nuclear safety and security regime could be strengthened only through close international cooperation.
- 158. Ms KAUPPI (Finland) said that her country, which greatly appreciated the Agency's activities in support of the global nuclear safety regime, considered nuclear safety to be a global issue because any major nuclear accident might have a serious major cross-border impact and even a minor, locally confined accident or incident might have a global influence on the public acceptance of nuclear power.
- 159. Public and political acceptance of additional nuclear power depended not only on domestic experience but also on safety records worldwide. It was therefore very much in the interest of the countries with a nuclear power programme and of those thinking of embarking upon such a programme that a high level of nuclear safety be achieved globally, without exception, and that the probability of an accident anywhere in the world be kept as low as possible.
- 160. The Agency was the international body entrusted with the task of helping countries to minimize nuclear accident risk through inter alia the setting of safety standards, the provision of assistance and the organization of peer reviews, but the responsibility for the safe and secure use of nuclear power lay solely with national regulatory authorities and facility operators.
- 161. A large number of countries had recently decided or were planning to construct nuclear power plants. For many of them, acquiring a nuclear power generation capacity would be a new experience, and for all of them it would mean a commitment for over 100 years; hence the need for strong nuclear safety infrastructures and a strong nuclear safety culture. However, much of the accumulated experience of the nuclear power sector had been lost in recent decades. Also, the complexity of the nuclear industry and of plant construction projects had increased. For example, over 1900 sub-contractors based in 28 different countries had been involved in the construction of Finland's Olkiluoto nuclear power plant. Accordingly, it was of the utmost importance that each national legislative and regulatory infrastructure be strong, with an independent regulatory body having

adequate authority and the financial and human resources to exercise its mandate, starting from the planning phase of the nuclear programme.

- 162. Managing spent fuel and radioactive waste in a safe manner was a technically and financially challenging issue, and it should be taken duly into account already when a nuclear power programme was being launched. A clearly defined policy and strategy, with solid financing arrangements enshrined in national nuclear legislation, were essential. Confidence in the safety of spent fuel and radioactive waste management was an important factor in the public acceptance of nuclear power.
- 163. The Agency had a key role to play in promoting efforts to harmonize spent fuel and radioactive waste management strategies, and Finland, whose preparations for the final disposal of nuclear waste were relatively advanced, stood ready to share its experience in that connection.
- 164. The safe decommissioning of nuclear facilities was becoming an increasingly important issue, and greater effort should be devoted to planning for it. Full use should be made of the experience gained through the first decommissioning projects again an area where the Agency had a key role to play.
- 165. A high level of nuclear security was essential for ensuring nuclear safety; the two should be handled together. The development of security requirements and implementation guidelines continued to be an area where more effort was needed in order to achieve, in the nuclear security area, a level as high as that existing in the nuclear safety area. At the same time, care must be taken to ensure harmony between nuclear safety and those aspects of nuclear security which related to the control of facilities and radioactive sources to ensure that safety activities did not compromise security and vice versa, and that optimum synergy was achieved.

The meeting rose at 1 p.m.