### IAEA Board of Governors

## Record of the 1200<sup>th</sup> Meeting GOV/OR.1200

Measures to strengthen international cooperation in nuclear, radiation and transport safety and waste management: Nuclear Safety Review for the year 2007



# **Board of Governors**

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# Record of the 1200<sup>th</sup> Meeting

Held at Headquarters, Vienna, on Monday, 3 March 2008, at 10.40 a.m.

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 $<sup>^{1}</sup>$  GOV/2008/8.

#### 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.)

Mr. SKOKNIC

Chairman (Chile)

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Mr. HOXHA	Albania
Ms. FEROUKHI	Algeria
Mr. CURIA	Argentina
Mr. SHANNON	Australia
Mr. STELZER	Austria
Mr. VALLIM GUERREIRO	Brazil
Ms. GERVAIS-VIDRICAIRE	Canada
Mr. LAGOS KOLLER	Chile
Mr. TANG Guoqiang	China
Mr. MATEK	Croatia
Mr. MOREJÓN-ALMEIDA	Ecuador
Mr. KEBEDE	Ethiopia
Ms. VÄÄTÄINEN	Finland
Mr. CARON	France
Mr. GOTTWALD	Germany
Mr. BEKOE	Ghana
Mr. KUMAR	India
Mr. ALSHARIA	Iraq
Mr. COGAN	Ireland
Mr. DE CEGLIE	Italy
Mr. AMANO	Japan
Mr. MAKSIMOVAS	Lithuania
Mr. DÍAZ	Mexico
Mr. ZNIBER	Morocco
Mr. OSAISAI	Nigeria
Mr. SHAHBAZ	Pakistan
Ms. DELA ROSA	Philippines
Mr. BERDENNIKOV	Russian Federation
Mr. AL-TAIFI	Saudi Arabia
Mr. MINTY	South Africa
Mr. STEINMANN	Switzerland
Mr. PANUPONG	Thailand
Mr. SMITH	United Kingdom of Great Britain and
	Northern Ireland
Mr. SCHULTE	United States of America
Mr. ECHÁVARRI	Director-General, OECD Nuclear
	Energy Agency
Mr. GÓMEZ-ROBLEDO	Deputy Minister for Multilateral
	Affairs and Human Rights, Mexico

#### Attendance (continued)

Mr. ELBARADEI Mr. TANIGUCHI

Mr. ANING

Director General Deputy Director General, Department of Nuclear Safety and Security Secretary of the Board

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

Afghanistan, Angola, Armenia, Azerbaijan, Belgium, Bosnia and Herzegovina, Bulgaria, Burkina Faso, Colombia, Costa Rica, Cuba, Cyprus, Czech Republic, Denmark, Dominican Republic, Egypt, Estonia, Georgia, Greece, Guatemala, Holy See, Hungary, Iceland, Indonesia, Islamic Republic of Iran, Israel, Jordan, Kazakhstan, Kenya, Republic of Korea, Kuwait, Latvia, Lebanon, Libyan Arab Jamahiriya, Liechtenstein, Luxembourg, Malaysia, Malta, Mongolia, Montenegro, Namibia, Netherlands, New Zealand, Nicaragua, Norway, Panama, Paraguay, Peru, Poland, Portugal, Qatar, Romania, Serbia, Singapore, Slovakia, Slovenia, Spain, Sri Lanka, Sudan, Sweden, Syrian Arab Republic, The Former Yugoslav Republic of Macedonia, Tunisia, Turkey, Ukraine, United Arab Emirates, Uruguay, Bolivarian Republic of Venezuela, Vietnam, Yemen.

#### 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
BSS	International Basic Safety Standards for Protection against Ionizing Radiation and for the Safety of Radiation Sources
CANDU	Canada deuterium-uranium [reactor]
DPRK	Democratic People's Republic of Korea
Early Notification Convention	Convention on Early Notification of a Nuclear Accident
EFTA	European Free Trade Association
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
GIF	Generation IV International Forum
GRULAC	Latin American and Caribbean Group
ICRP	International Commission on Radiological Protection
INLEX	International Expert Group on Nuclear Liability
INPRO	International Project on Innovative Nuclear Reactors and Fuel Cycles
INSAG	International Nuclear Safety Group
IPSAS	International Public Sector Accounting Standards
IRRS	Integrated Regulatory Review Service
IRS	Incident Reporting System
IRSRR	Incident Reporting System for Research Reactors
Joint Convention	Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management
Joint Division	Joint FAO/IAEA Division of Nuclear Techniques in Food and Agriculture
LEU	low-enriched uranium

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

MDEP	Multinational Design Evaluation Programme (of OECD/NEA)
NPT	Treaty on the Non-Proliferation of Nuclear Weapons
NPT Review Conference	Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons
NWFZ	nuclear-weapon-free zone
OECD	Organisation for Economic Cooperation and Development
OECD/NEA	Nuclear Energy Agency of the Organisation for Economic Cooperation and Development
OPEC	Organization of the Petroleum Exporting Countries
OSART	Operational Safety Review Team
РАСТ	Programme of Action for Cancer Therapy
PWR	pressurized water reactor
R&D	research and development
RANET	Response Assistance Network
SEDO	Safety Evaluation During Operation of Fuel Cycle Facilities
UNSCEAR	United Nations Scientific Committee on the Effects of Atomic Radiation
WANO	World Association of Nuclear Operators

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

## - Opening of the meeting

1. The CHAIRMAN welcomed participants, including the new Governor, Mr. Kumar of India, and the new Resident Representatives, Mr. Galanxhi of Albania, Mr. Bhattacharya of Bangladesh, Mr. Queisi of Jordan, Mr. Jansons of Latvia, Mr. Tan of Singapore, Mr. Marfurt of Switzerland, Mr. Bitahwa of Uganda and Mr. Uzcátegui Duque of Venezuela. He bade farewell to colleagues who had finished or would shortly be finishing their tour of duty: two Governors, Mr. Stelzer of Austria and Mr. Sharma of India; and Mr. Nezam of Afghanistan, Mr. Matek of Croatia, Mr. Madi of Jordan, Mr. Vovers of Latvia, Mr. Gafoor of Singapore, Ms. Wijewardane of Sri Lanka, Mr. Schaller of Switzerland and Mr. Mtesa of Zambia — Resident Representatives.

# - Adoption of the agenda (GOV/2008/6/Rev.1)

2. The CHAIRMAN invited the Board to adopt the revised provisional agenda contained in document GOV/2008/6/Rev.1.

3. The agenda was adopted.

# 1. Introductory statement by the Director General

4. The <u>DIRECTOR GENERAL</u> said that the agenda for the Board's meetings related to all areas of Agency activity — safety and security, technology and verification.

5. Referring to the draft Nuclear Safety Review for the Year 2007 (GOV/2008/2), he said that in 2007, the Agency's fiftieth anniversary year, the nuclear industry's safety performance had remained high on the whole. However, it was essential to maintain vigilance, continuously improve safety culture and enhance the international sharing of experience.

6. Changes in world markets and technology were having an impact both on the nuclear industry and on nuclear regulators as never before. A key challenge was to properly assess and address the safety implications of those changes. Member States embarking on nuclear power programmes must be active participants in the global nuclear safety regime. They had to establish the necessary technical and regulatory infrastructure and build the necessary qualified workforce.

7. In April 2008, the Agency would host the 4th Review Meeting of the Contracting Parties to the Convention on Nuclear Safety. As the Convention had matured, it had become an important part of the global nuclear safety regime. The peer review mechanisms provided important opportunities for making sure that everything possible was being done to improve nuclear safety and prevent serious accidents. A number of Member States that were considering the nuclear power option were not yet

parties to the Convention. He hoped that they would soon accede to it and participate fully in the global nuclear safety regime.

8. At the 4th Review Meeting, it would be necessary to address two important challenges — the large number of new nuclear power programmes under consideration around the world and ways of bringing new momentum and stronger focus to the review process. At the request of Contracting Parties, the Secretariat had prepared an issues and trends paper for countries to take into account when preparing their national reports.

9. Much progress had been made regarding emergency preparedness in recent years. Even so, many Member States still did not have an adequate nuclear and radiological emergency preparedness and response capability. Local emergencies involving ionizing radiation were continuing to occur, and the Secretariat had been assisting Member States within the framework of the Early Notification Convention and Assistance Convention. However, a major emergency involving ionizing radiation would strain the response systems of most Member States and of the Secretariat. More needed to be done in order to ensure that those systems were better resourced.

10. The draft Nuclear Technology Review 2008 (GOV/2008/3) indicated that rising expectations for nuclear power were starting to translate into increased construction. The growth prospects remained centred in Asia. In 2007, the Agency's projections for the future of nuclear power had been revised upwards, to between 450 GW(e) and 690 GW(e) of installed nuclear capacity by 2030. The draft Review also noted major consolidations and increased internationalization among the suppliers of nuclear reactor technology. Higher uranium prices had helped to prompt new exploration and reassessments, and the identified uranium resources reported in the latest edition of the Red Book would be 20% higher than those reported in the previous edition.

11. New reactors had been connected to the grid in China, India and Romania. Construction work had started on seven reactors in 2007, compared to just one-three in each of the previous five years. In the United States, the Nuclear Regulatory Commission had issued its first three early site permits, and it had received four licence applications — the first for new plants in nearly 30 years. In the United Kingdom, a policy review had led to the conclusion that nuclear power had a key role to play in the country's energy mix and to the recommendation that industry be allowed to build new nuclear plants, subject to normal planning and regulatory requirements.

12. Alongside the growing interest in the Agency's energy analysis and planning assistance, which covered all energy options, there was an increased demand for Agency missions to countries interested specifically in starting nuclear power programmes. There had been such missions to seven countries in 2007.

13. For some time he had been advocating the establishment of a multinational mechanism that would ensure access for all countries to nuclear fuel and reactor technology and simultaneously strengthen the non-proliferation regime. The ultimate goal should be to bring sensitive aspects of the nuclear fuel cycle under multinational control, so that no one country had the exclusive capability to produce the material for nuclear weapons. With that mechanism, no country would have to forfeit any of its rights under the NPT.

14. A number of Member States were working on proposals. In May 2007, Kazakhstan and the Russian Federation had established an International Uranium Enrichment Centre in Angarsk, Siberia, and Armenia had in December 2007 announced that it would join the project in question. Also, the Russian Federation was proposing to make available to the Agency 120 tonnes of LEU as a last-resort reserve. In addition, Germany was working on a Multilateral Enrichment Sanctuary Project under which an international enrichment centre would be set up, on an extraterritorial basis, to provide LEU and enrichment services.

15. The United States Congress had authorized a contribution of \$50 million to match the \$50 million offered by the Nuclear Threat Initiative in September 2006 to set up a nuclear fuel bank of last resort under Agency auspices. Another \$50 million was needed in order to move the project forward. During a visit he had made to Oslo the previous week, Norway had pledged \$5 million towards the establishment of the fuel bank. When the funds necessary for the establishment of the fuel bank had become available, he would request Board consideration of the project.

16. Referring to document GOV/INF/2008/2, he said that since 1964 the partnership between FAO and the Agency had been a successful example of collaboration within the United Nations system in helping Member States to apply nuclear techniques in the area of food and agriculture, in order to reduce hunger, poverty and environmental degradation. As pointed out in that document, however, FAO's management had served notice, subject to FAO Member State approval, of its intention — as part of its reform process — to terminate the Joint Division. In his view, termination of the Joint Division would have significantly negative consequences for developing Member States in fields such as animal disease control and insect pest eradication, land and water management, plant breeding and food safety. He hoped that Agency Member States' representatives at FAO would underline the importance of maintaining that valuable partnership.

17. Since March 2007, pledges, grants and donations amounting to over \$3 million had been secured for PACT Model Demonstration Sites and other PACT activities. In December 2007, on the basis of an assessment by the Agency and partners, the OPEC Fund for International Development had approved a low-interest loan of \$7.5 million for Ghana to expand and upgrade its cancer care — recognition by a non-traditional donor of the value of the Agency's contribution to cancer control in the developing world through PACT. Offers to support PACT had been received from over 20 Member States, with cancer treatment institutions making their hospitals and educational centres available. Model Demonstration Sites were now operational in Albania, Nicaragua, Sri Lanka, the United Republic of Tanzania, Vietnam and Yemen.

18. At the request of the DPRK, the Agency had been verifying and monitoring the shutdown and sealing of the Yongbyon nuclear facilities since July 2007.

19. However, the Agency had not been requested to undertake the disablement of those facilities, and he could therefore not update the Board on progress made. The Agency had been able only to observe and document the disabling activities while conducting facility monitoring activities. Just over one fifth of the spent fuel rods from the 5 MW(e) Experimental Nuclear Power Plant had been measured by the Agency upon discharge. Those fuel rods, as well as the four fifths remaining in the reactor core, were under Agency containment and surveillance. The nuclear material generated during the disabling activities at the Nuclear Fuel Fabrication Plant also remained under Agency containment and surveillance.

20. As he had stated on 9 July 2007, the funds needed in order to implement the Board-authorized ad hoc monitoring and verification arrangement in the DPRK had not been provided for in the Agency's budget. The arrangement was therefore being implemented using voluntary contributions from two Member States. That funding would run out in June 2008. He expected that money would be made available if the Agency was to continue carrying out the mandate given to it by the Board, but the situation was a clear example of the need for a contingency fund that would enable the Agency to respond effectively in such critical unforeseen circumstances.

21. Referring to the document entitled Implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions 1737 (2006) and 1747 (2007) in the Islamic Republic of Iran (GOV/2008/4), he expressed the hope that the Security Council would take account of the findings and conclusions presented there during its current deliberations. As Board members

would recall, the Agency had learned in 2003, through its inspection activities, that Iran had been conducting undeclared nuclear experiments and other nuclear activities for almost two decades. That had created a confidence deficit in the international community and had left the Agency with the daunting task of having to reconstruct almost two decades of undeclared experiments and other activities. The key task had been to establish the scope and nature of the enrichment programme, which had been the most advanced of Iran's sensitive nuclear activities at that time and had led to the referral of Iran's nuclear programme to the Security Council.

22. For about two years, Iran had applied the provisions of the Additional Protocol, which had helped to provide clarity about some of its nuclear activities. However, its announcement that it would cease applying those provisions after the matter had been referred to the Security Council had made the Agency's task with regard to both the past and the present activities of Iran much more complex.

23. In August 2007, Iran had agreed with the Agency on a work plan to clarify the last outstanding issues about its past activities and, to that end, on the application of the necessary transparency measures required by the Agency. As a result, the Agency had been able to clarify important outstanding issues regarding the scope and nature of Iran's declared enrichment programme — the acquisition of P-1 and P-2 centrifuge technologies.

24. As could be seen from document GOV/2008/4, the Agency had since been able to clarify all but one of the outstanding issues identified in the work plan. Although the Agency was continuing to seek corroboration of its findings and to verify the completeness of Iran's declarations, its technical judgment was that those issues were no longer outstanding at the present stage. That was obviously encouraging.

25. The one outstanding issue relevant to Iran's past activities was the so-called alleged studies involving possible weaponization activities. Those alleged studies, which were among the issues which the Security Council had directed the Agency to clarify, had come to the Agency's attention in 2005. After a period of reluctance, Iran had finally agreed, within the framework of the work plan, to address that issue. It was continuing to maintain that the alleged studies either related to conventional weapons only or were a fabrication. However, a fully fledged examination of the issue had yet to take place. The Agency had shared technical information with Iran on all allegations since 2005, and it had shown Iran actual documentation on the alleged Green Salt Project in 2006. However, it had been authorized only as recently as early February 2008 to show Iran actual documentation on the alleged high explosive studies, and only in mid-February 2008 to show it the documentation and material relevant to the alleged missile re-entry vehicle.

26. The Agency would follow the required due process in continuing to clarify, to the extent possible, both the authenticity of the documentation relating to the alleged studies and the substantive matters in question. Noting that the Agency had not detected any use of nuclear material in connection with the alleged studies, and had no credible information in that regard, he urged Iran to cooperate as closely as possible with the Agency in clarifying what was a matter of serious concern. That was necessary in order that the Agency might make a determination about the nature and scope of all of Iran's past nuclear activities.

27. With respect to its present nuclear activities, although Iran had not agreed to implement the Additional Protocol as required by the Security Council, it had agreed to provide certain information to which the Agency would have been entitled under the Additional Protocol, particularly information regarding R&D work on enrichment and laser activities.

28. As stated in document GOV/2008/4, the Agency needed Iran to fully implement the Additional Protocol in a sustained manner so as to enable it to start making progress — once the issue of the alleged studies had been clarified — in providing assurances about the nature of Iran's current nuclear

activities and confirming the absence of undeclared nuclear material and activities in Iran. Assurances by the Agency about the past and present nuclear activities of Iran were key to the process of restoring confidence in the nature of Iran's nuclear programme.

29. As the Board was aware, Iran had — contrary to the call by the Security Council — not suspended its enrichment-related activities and was continuing with R&D work on more efficient centrifuges. That was regrettable. However, the Agency had not observed any increase in the number of centrifuges in operation since he had last reported to the Board, in November 2007, and the level of feed was well below capacity.

30. He was continuing to call upon Iran to work with the Security Council and meet its requirements for building of the necessary confidence about that country's future nuclear activities. Building such confidence was more than a matter of inspections. Accordingly, he hoped that conditions would soon be created for a resumption of negotiations between Iran and the other relevant parties. As the Security Council had made clear, the goal should be a comprehensive agreement "which would allow for the development of relations and cooperation with Iran based on mutual respect and the establishment of international confidence in the exclusively peaceful nature of Iran's nuclear programme". That cooperation would cover — inter alia — regional security, trade and investment, civil aviation, energy, communications and agriculture. In his view, it was only through negotiations that confidence could be created and a comprehensive and durable solution to the Iran question be achieved. Such a solution would be good for Iran, good for the region and good for the world.

31. A background report entitled "20/20 Vision for the Future" had been prepared in order to assist the Commission of Eminent Persons in making recommendations on the future of the Agency. The Commission had just held its first meeting and would meet again in April 2008, and he expected to present its recommendations to the Board in June 2008. Its recommendations were intended to trigger discussion among Member States about how the Agency could best contribute in the years ahead to the efforts of the international community to achieve development, peace and security. He was grateful to the distinguished members of the Commission for agreeing to serve.

32. An Agency-wide Information System for Programme Support (AIPS) was critical for increasing efficiency and effectiveness in programme delivery. Its implementation would yield economies of around  $\in 6$  million, streamlining and modernizing the Secretariat's business processes in line with best practices and making the Secretariat better able to meet the needs of Member States. For prudent management, the AIPS project should have been launched very early in 2008 so that the Secretariat might maximize the synergy between the AIPS and the IPSAS and comply with the decision taken during the Board's June 2007 meetings to implement the IPSAS by 2010.

33. Many Member States had voiced strong support for the AIPS project. A few had already made contributions and more were considering doing so. However, only  $\in 1.4$  million of extrabudgetary resources had been officially pledged to date. That would not be enough for initiating the project, as the first phase alone — covering finance and procurement (and including the introduction of the IPSAS) — would cost approximately  $\in 10$  million. A number of Member States had urged the Secretariat to identify funds within the existing budget that might be used. The Secretariat would make every effort to identify such funds, but the more than  $\in 8$  million needed in order to get the AIPS project started could not be found through savings. If sufficient extrabudgetary resources were not forthcoming soon, the future of the AIPS and the IPSAS would be in jeopardy.

# 2. Measures to strengthen international cooperation in nuclear, radiation and transport safety and waste management: Nuclear Safety Review for the year 2007

(GOV/2008/2, 2008/Note 4, 2008/Note 5, GOV/INF/2008/1)

34. The <u>CHAIRMAN</u> recalled that the draft Nuclear Safety Review for the Year 2007 had been the subject of a Secretariat briefing for Member States given on 22 February 2008.

35. <u>Mr. TANIGUCHI</u> (Deputy Director General for Nuclear Safety and Security) said that the nuclear industry was continuing to demonstrate a high level of safety. However, there was no room for complacency, and vigilance at the national and the international level was necessary in order to detect early signs of safety problems and take corrective actions. For the future sustainable use of nuclear technology it was of vital importance to prevent serious nuclear accidents.

36. There was a continuing need for more and better sharing and feedback of experience worldwide in the areas of nuclear power and medical and industrial applications. It was essential to strengthen the reporting of operational events and take appropriate actions to prevent their recurrence.

37. The July 2007 earthquake near the Kashiwazaki-Kariwa nuclear power plant, in Japan, had far exceeded design levels, but thanks to the plant's design margins there had been no damage to safety systems. The Secretariat was working with nuclear power plant operators and nuclear regulators in Japan to ensure that the lessons learned from the event would be widely shared internationally.

38. There was currently much talk of new and reinvigorated nuclear power programmes, and the use of nuclear technology in non-power sectors was increasing significantly. However, for such programmes to be realized, adequate and sustainable safety infrastructures were essential. That implied — inter alia — the establishment of sound legislative and regulatory systems and qualified regulatory bodies. The Secretariat was helping Member States to establish regulatory bodies with high levels of technical competence, and cooperation between regulatory bodies of countries importing and exporting nuclear power plants was also important for capacity-building.

39. A large number of nuclear facilities had exceeded their original design lives of 30–40 years, and life extensions were being planned. The challenge was to ensure that the original design safety margins were maintained into the future.

40. Although radioactive materials were being used in almost all countries, less than one third of the Agency's Member States were Contracting Parties to the Joint Convention.

41. In the area of emergency preparedness and response, strengthening the capabilities of Member States and the Agency's Incident and Emergency Centre remained a high priority.

42. With regard to civil liability for nuclear damage, a major challenge for the existing international regime was implementation of the various international legal instruments adopted under the auspices of the Agency and of OECD. Some States were parties to all those instruments, but many were not, and the compatibility of the provisions of those instruments and the relationships between them were matters of considerable complexity. In June 2007, INLEX had, at its seventh meeting, addressed — inter alia — the question of possible insurance coverage gaps and ambiguities in the existing nuclear liability regime and further steps to deal with them.

43. The use of nuclear technology in medical areas was increasing and, according to UNSCEAR data, the per capita radiation dose to patients was on the rise. In 2007, Agency training initiatives had

been expanded to include medical doctors working in areas where training in radiation protection was normally not provided.

44. The safety record in the transport of radioactive material continued to be very good. In 2007, the International Steering Committee on Denials of Shipment of Radioactive Material had developed a comprehensive international action plan of activities that included reaching out to relevant organizations and increasing their awareness. The first in a series of regional workshops on denials of shipment, held in Uruguay for the Latin America region, had resulted in the formation of a regional communication network.

45. In 2007 there had been much international interest in the establishment of comprehensive national radioactive waste management and nuclear facility decommissioning policies and of implementation strategies.

46. In 2007 there had also been a rapid growth of interest in uranium mining around the world, and the Agency had received many requests for assistance in that regard.

47. Referring to document GOV/INF/2008/1, Adequacy and Predictability of Resources for the Agency's Nuclear Safety Programme, he said that, despite the long-standing general agreement about the importance of nuclear safety, the nuclear safety programme continued to account for less than 8% of the Agency's Regular Budget. The extrabudgetary resources generously provided in support of selected nuclear safety activities currently represented an additional 40% over and above the Regular Budget amount allocated to nuclear safety, but such resources were provided on a voluntary basis, were unpredictable and often had conditions attached. Although they were indispensable, they did not make for mid- and long-term planning in a consistent and balanced manner.

48. The safety programmes of Member States and the Agency needed enough resources to ensure that safety remained at the forefront of the nuclear agenda and that serious accidents were prevented.

49. <u>Mr. ECHÁVARRI</u> (Director-General, OECD/NEA) said that the OECD Council had in 2007 decided to open discussions with Chile, Estonia, Israel, the Russian Federation and Slovenia regarding negotiations on their future membership of OECD — a very important step as there had been no significant enlargement of OECD in more than a decade. The OECD Council had also decided to launch a process of enhanced engagement designed to increase cooperation with Brazil, China, India, Indonesia and South Africa. Once increased cooperation was firmly in place, the OECD Council would decide whether to open discussions on membership.

50. The joint declaration on cooperation between the Russian Federation and OECD/NEA, to which he had referred in 2007, had been signed as foreseen, and the Russian Federation had become a regular observer in all OECD/NEA standing technical committees and working groups. Slovenia was also now a regular observer in all OECD/NEA standing technical committees.

51. The Secretariats of the Agency and OECD/NEA were continuing to cooperate closely, with mutual representation in committees and working groups and many joint activities. An annual coordination meeting held in February had provided an excellent opportunity to share information on future activities of the two organizations and to look for potential synergies.

52. In October 2007, the 28 members countries of OECD/NEA had issued a statement on the need for qualified human resources in the nuclear field. The statement was important given the concern in many countries, regardless of nuclear policies, about the difficulties being experienced in recruiting nuclear specialists. The issue was a crucial one for the appropriate regulation and operation of existing nuclear facilities and for the further development of nuclear power in interested countries. The statement read as follows:

"Governments should regularly carry out assessments of both requirements for, and availability of, qualified human resources to match identified needs.

"Governments, academia, industry and research organisations should collaborate both nationally and internationally to enhance nuclear education and availability of nuclear expertise, including financial support to universities and scholarships to students.

"Governments, whether or not they chose to utilise nuclear power, should also encourage large, high-profile, international R&D programmes which attract students and young professionals to become the nuclear experts required for the future."

53. Thanking the Director General for nominating him to continue participating in INSAG, he said that the work of INSAG was very valuable for OECD/NEA as well as for the Agency.

54. In June 2007, a forum with top-level representatives of regulatory authorities, the nuclear industry and other stakeholders had addressed various aspects of ensuring nuclear safety, such as maintaining the safety focus at operating plants under changing circumstances, integrated safety assessments and the regulatory challenges in communicating safety. The findings from the forum had been used in finalizing a report entitled The Regulatory Goal of Assuring Nuclear Safety.

55. During 2007, a number of workshops had focused on the following areas: the use of international operating experience feedback in improving nuclear safety; defence-in-depth aspects of electrical systems; the transparency of regulatory activities; the uncertainty and sensitivity evaluation of best-estimate methods; the structural integrity of PWR pressure vessels; current experience with reliability modelling; human factors in the modification of nuclear power plants; the safety of present and future fuel cycle facilities; the reprocessing of nuclear fuel and the recycling of waste; and the role of research in a regulatory context.

56. Regarding OECD/NEA's Multinational Design Evaluation Programme (MDEP), the Stage 2 goal had been to more closely align differing national regulatory frameworks in the light of new reactor designs. To facilitate the attainment of that goal within one year, attention had focused on the regulatory requirements and the regulatory programmes and practices relating to severe accidents, emergency core cooling system performance, and digital instrumentation and control systems. The technical topics chosen for examination had included component manufacturing oversight, on which a working group had been established.

57. A pilot project, completed the previous month, had demonstrated that there would be significant benefit in continuing with multilateral, cooperative reviews of new reactor designs and had identified opportunities for technical cooperation within existing regulatory frameworks and areas in which cooperation would be facilitated by the introduction of reference regulatory practices.

58. The MDEP Policy Group, due to meet on 4 March 2008, would decide whether those opportunities should be pursued through the development and implementation of a revised MDEP.

59. Considerable activity had taken place in the field of radiological protection in recent years, focusing particularly on the development of new recommendations by the ICRP. After almost nine years of stakeholder dialogue, in which OECD/NEA had participated very actively, the ICRP's new recommendations had been approved in March 2007 and had become available in published form in December. From the feedback received, it seemed that the new recommendations were broadly understood and accepted, and OECD/NEA was pleased that, thanks in part to its contribution, the recommendations appropriately reflected the needs and concerns of governments and regulators. Attention was now directed to the regulatory interpretation of the new recommendations and to their codification and implementation.

60. The revision of the BSS, led by the Agency and co-sponsored by OECD/NEA and several other international organizations, was crucial to ensuring the harmonious international interpretation and implementation of a single system of radiological protection. Consequently, OECD/NEA had been participating very actively in the BSS Joint Secretariat's work. It would continue to cooperate with the Agency and the other co-sponsors in order to ensure that the revised BSS appropriately reflected the new ICRP recommendations and was a complete, self-standing document providing sufficient regulatory guidance for all radiation applications. All the co-sponsoring organizations, with their various mandates and constituencies, should continue cooperating so as to further increase the effectiveness and efficiency of the drafting and review process.

61. In the area of radioactive waste management, particularly with respect to the disposal of high-level waste and spent fuel, considerable progress had been made in Finland, France, Sweden and the United States. Also, after phases of reorientation and extensive consultation processes, important decisions had been taken in Canada and the United Kingdom, providing a stable basis for further developments.

62. The International Conference on Geological Repositories held in Bern, Switzerland, in October, which had been organized with the support of the Agency and OECD/NEA, had provided an important opportunity for decision- and opinion-makers from around the world to discuss differences in the political framework and factors influencing the decision-making process. The outlook for a positive conclusion to the disposal issue was now much better than in the past.

63. The next edition of the Red Book would be issued in a few months, and it was expected that the numbers regarding world uranium resources would be higher than in previous editions thanks to increased exploration efforts in recent years.

64. OECD/NEA was continuing to support the GIF, acting as its technical secretariat. Having signed the GIF Charter, China had recently sent its instrument of accession to the GIF Intergovernmental Framework Agreement to the Secretary-General of OECD, who was the depositary of the Agreement. Accordingly, China was now a full GIF member.

65. During the past 12 months, four project arrangements had been concluded between various GIF members, focusing on particular aspects of R&D relating to sodium-cooled fast reactors and very-high-temperature reactors. More project arrangements were being prepared.

66. As regards coordination between the GIF and INPRO, he welcomed the fact that a GIF/INPRO workshop had taken place in Vienna at the end of February. OECD/NEA was continuing to participate in the INPRO Steering Committee.

67. The 50th anniversary of the creation of OECD/NEA was going to be commemorated on 16 October 2008 in Paris at a high-level event held at the OECD Conference Centre. He was very pleased that the Agency's Director General had agreed to participate as a keynote speaker and would also be addressing the OECD Council. The event would be a good opportunity to underline the potential of nuclear power for helping to meet the challenges faced by energy policy-makers — particularly those of energy supply security and  $CO_2$  emissions reduction — and to reflect on the social issues associated with nuclear power.

68. In closing, he extended his thanks to the Director General and the Secretariat of the Agency for their continuing collaboration with OECD/NEA.

69. <u>Mr. GÓMEZ-ROBLEDO</u> (Deputy Minister for Multilateral Affairs and Human Rights, Mexico) said that, given the threats facing the nuclear disarmament and non-proliferation regime, the Agency's responsibility for ensuring that nuclear energy was used for exclusively peaceful purposes was an enormous one.

70. Mexico greatly appreciated the Agency's role in protecting the right of all States parties to the NPT to use nuclear energy for peaceful purposes and in promoting progress towards a world safer for all. It was supporting the Agency's efforts to strengthen the nuclear non-proliferation regime and would like to see all Member States complying fully with their safeguards obligations. It would continue to work constructively with the Secretariat in further strengthening the Agency.

71. His Government, which attached great importance to nuclear techniques as tools for sustainable development, believed that all Member States must be able to benefit from nuclear applications in areas such as food and agriculture, human health, water resources management, environmental protection and industry — applications that were contributing effectively to attainment of the objectives set at the World Summit on Sustainable Development and of the Millennium Development Goals.

72. The regime for ensuring the exclusively peaceful utilization of nuclear energy should be further strengthened, with safeguards designed to promote confidence-building and transparency. Only so could more people benefit from peaceful nuclear applications.

73. An expansion of nuclear power would have security implications and involve greater responsibilities for the Agency.

74. As regards the security implications, Mexico had noted with great interest the Director General's proposal relating to multilateralization of the fuel cycle in order to prevent the diversion of nuclear material to illegal activities. It would examine carefully the various ideas advanced in response to that proposal and looked forward to discussing them.

75. As regards the Agency's responsibilities, in the past ten years Mexico's contributions towards the Regular Budget of the Agency had increased enormously — out of all proportion to the real growth of the Mexican economy. None the less, Mexico would continue making every effort to pay its Regular Budget contributions on time. That having been said, his Government, with its policy of economic austerity and discipline in public spending, wanted the budgets of international organizations in general to be based on zero nominal growth, those organizations' administrative costs to be reduced as a result of savings, the making of voluntary contributions to be strongly promoted and mechanisms for the internal generation of financial resources to be established. It did not wish to see an irrational growth of international bureaucracies.

76. Very much aware of the challenges that the Agency would be facing in the future, Mexico was looking forward to examining the recommendations of the Commission of Eminent Persons, chaired by Mexican ex-President Ernest Zedillo.

77. Mexico, which greatly appreciated the Agency's role in the negotiation and application of safeguards agreements, continued to believe that the Agency was the sole body with the technical capacity for verifying the nuclear activities of Member States and determining the nature of nuclear programmes.

78. In support of the preparations for the 2010 NPT Review Conference, Mexico would promote the holding of a second conference on NWFZs. The first such conference had been held in Mexico City in 2005, with the participation of the Director General.

79. Impartiality, integrity and diplomatic experience were essential for maintaining the nuclear non-proliferation regime. With that in mind, Mexico would continue to support the Agency's efforts in the field of nuclear non-proliferation.

80. <u>Mr. SHAHBAZ</u> (Pakistan), speaking on behalf of the Group of 77 and China, said that nuclear safety was a global concern and should be a fundamental element of any nuclear programme. It was

therefore encouraging that the draft Nuclear Safety Review for the Year 2007 reported high levels of safety performance in the nuclear industry worldwide during the period covered by it.

81. With the renaissance of nuclear power, deriving from the pressing need for cleaner sources of energy and from increased confidence in the reliability and safety of power reactors, the Group was concerned about the shortage of skilled nuclear professionals, which might pose challenges with regard to the maintenance — and possible improvement — of the current levels of safety performance. The Secretariat should continue helping Member States to meet those challenges. In particular, more financial support should be provided for training activities, especially postgraduate training courses, and the Secretariat should consider concluding long-term agreements with institutions capable of hosting such courses.

82. Notwithstanding the good record in the field of nuclear safety and radiation protection, Member States should avoid complacency and — with the Agency's assistance — improve their relevant infrastructures in accordance with the latest Agency safety standards and in the light of technological developments.

83. The Group, which attached great importance to the Agency's safety review services, would like to see greater synergy between the safety evaluation activities of the Agency and those of WANO.

84. The Group was looking forward to the report on safety/security synergy currently being prepared by INSAG.

85. Regarding paragraph 29 of the draft Nuclear Safety Review for the Year 2007, the Group had noted with concern the statement that during 2007 the Agency's Incident and Emergency Centre "was informed or became aware of 140 events involving or suspected to involve ionizing radiation." If, as indicated in that paragraph, failure to follow established procedures in industrial radiography had continued to be the main cause of radiation exposure-related events, Member States and the Secretariat should step up their efforts aimed at the development and implementation of appropriate preventive measures and at the strengthening of radiological emergency response capabilities. Further upgrading of the Agency's Incident and Emergency Centre would help to increase the ability of Member States to respond adequately to radiological emergencies and security incidents.

86. The Group welcomed the publication by the Agency of the *Manual for First Responders to a Radiological Emergency* and was strongly in favour of information sharing by States through the IRS and the IRSRR. It attached great importance to Member States' cooperating with the Secretariat in bringing about full implementation of the Response Assistance Network (RANET).

87. Regarding paragraph 73 of the draft Nuclear Safety Review for the Year 2007, the Group hoped that the Secretariat would continue to assist Member States in applying the non-legally-binding Code of Conduct on the Safety of Research Reactors. The regional workshops held in 2007 had helped to identify areas where Member States might require Secretariat assistance.

88. With regard to the safety of fuel cycle facilities, the Group welcomed the conduct by the Agency, in China, of a first national training course on the operational safety of such facilities and the successful outcome of the Agency's first SEDO mission, to a uranium fuel fabrication facility in Brazil. It hoped that the Secretariat would organize further SEDO missions, particularly to interested developing Members States, and looked forward to the update of the SEDO Guidelines based on the lessons learned from the mission to Brazil.

89. The Group, which would like to see the Agency continuing to cooperate with other international organizations in promoting the harmonized implementation of radiation protection standards, was looking forward to examining draft revised BSS in 2009. It was also looking forward to further

Secretariat assessments of the radiation protection capacities of Member States and to the provision by the Secretariat of further assistance in the radiation protection area.

90. The Group, which was concerned about the increasing levels of radiation exposure resulting from medical procedures, hoped that the Secretariat would continue to organize radiation protection training for health professionals and welcomed the establishment of the Asian Network of Cardiologists in Radiation Protection. It also welcomed the Secretariat's intention to include information for patients on the Agency's 'radiological protection of patients' website.

91. The Group, which welcomed the action plan developed by the International Steering Committee on Denials of Shipment of Radioactive Material, agreed with the consensus on the need to disseminate accurate information about the transport of radioactive material reached at the regional workshop on denials and delays of shipment held in Uruguay in 2007. It had noted with interest the intention of the Secretariat to organize a similar workshop in the Asia and Pacific region.

92. <u>Mr. CURIA</u> (Argentina), speaking on behalf of GRULAC, expressed support for the Agency's activities relating to safety and security, radiation protection, radioactive waste management, emergency preparedness and response, nuclear safety infrastructure, nuclear knowledge management, and the establishment of safety networks.

93. GRULAC welcomed the Secretariat's efforts to improve the Agency's safety standards and promote their application, and it hoped that the Secretariat would continue to assist Member States in the safety area.

94. It was essential that technical assistance be provided through the Agency to Member States confronted with challenges arising out of the renaissance of nuclear power. GRULAC attached particular importance to training, especially through postgraduate courses, and to the conclusion of long-term agreements in that connection.

95. With the likely growing demand for uranium. GRULAC hoped that the Secretariat would respond positively to requests for safety assistance in uranium mining and related areas, in order that the States making such requests might establish the regulatory infrastructures necessary for the safe exploitation of uranium resources.

96. Regarding the fifth paragraph in the executive summary of the draft Nuclear Safety Review for the Year 2007, GRULAC agreed that changes in world markets and technology were having an impact on the nuclear industry and regulators as never before and that a key challenge now was to properly assess and address the safety implications of those changes. However, it was unhappy about the phrase "the consequent multinationalization of supply, ownership and operational management of nuclear power plants", which might lead to misunderstandings.

97. GRULAC, which attached great importance to the Agency's role in promoting safety culture, looked forward to examining the report on safety/security synergy being prepared by INSAG.

98. The importance attached in Latin America to emergency preparedness and response had been demonstrated in 2007 by Brazil's emergency preparedness activities before and during the XV Pan American Games, by the national nuclear emergency exercise conducted — with participation of the local population — at Argentina's Atucha nuclear power plant and by the initiation of a Latin American biological dosimetry network that would work in close cooperation with national emergency response networks. GRULAC was looking forward to the emergency response exercise to be conducted later in 2008 at Mexico's Laguna Verde nuclear power plant with the participation of representatives of Cuba, Canada and the United States.

99. GRULAC, which attached great importance to the Agency's activities connected with safety in the transport of radioactive material, was closely following the work of the International Steering Committee on Denials of Shipment of Radioactive Material and had noted with interest the consensus reached in the regional workshop on denials and delays of shipment held in Uruguay in July 2007.

100. GRULAC welcomed the success of the first SEDO mission, to a uranium fuel fabrication facility in Brazil.

101. Drawing attention to the activities of the Ibero-American Forum of Radiological and Nuclear Regulatory Agencies, he said that the establishment of an Ibero-American Radiation Safety Network should lead to the harmonization of different national regulatory practices in areas such as the radiological protection of patients, the safety of radiation sources, quality control, and education and training. GRULAC welcomed the Agency's support of the Forum and hoped that Agency Member States that were not Forum members would benefit from the synergy between the Forum and the Agency.

102. <u>Mr. PETRIČ</u> (Slovenia)\*, speaking on behalf of the European Union, said that the candidate countries Croatia, The Former Yugoslav Republic of Macedonia and Turkey, the countries of the stabilization and association process and potential candidates Albania, Bosnia and Herzegovina, Montenegro and Serbia, the EFTA country Iceland, member of the European Economic Area, and the Republic of Moldova and Ukraine associated themselves with the statement that he was about to make.

103. In the view of the European Union, which greatly appreciated the Agency's commitment to strengthening nuclear safety worldwide and attached great importance to the global nuclear safety regime, many Member States were still faced by the challenge of establishing, maintaining and improving technical competence in regulatory bodies and technical support organizations as experienced staff retired, facilities aged and the use of nuclear energy expanded. In 2007, the European Union had therefore set up a high-level group on EU-wide nuclear safety issues, with the task of creating a political framework for the technical activities of regulatory authorities aimed at the harmonization of the EU countries' approaches to nuclear safety and radioactive waste management.

104. The Convention on Nuclear Safety, the Early Notification Convention, the Assistance Convention and the Joint Convention, to which the European Union was strongly committed, were important for the continuous improvement of safety and for enhanced international cooperation in safety-related matters. In accordance with their provisions, the European Union was promoting the establishment and maintenance of an EU-wide high level of nuclear safety.

105. The 4th Review Meeting of the Contracting Parties to the Convention on Nuclear Safety, which was to be held in April 2008 and in which the European Union intended to participate very actively, would provide meaningful opportunities for self-assessment and peer review, both of which were effective tools for promoting and maintaining a strong culture of safety within a country. Also, it would permit the sharing of safety-related knowledge and of information about best practices, which was essential for continuous strengthening of the global nuclear safety regime. The European Union would like to see all States that had not yet done so acceding to all four safety-related conventions of the Agency without delay. Fulfilling the obligations that arose out of those conventions was important for ensuring that nuclear facilities were operated with full regard to safety.

106. The adoption of Safety Fundamentals by the Board in 2006 had been a major milestone, and the transition to a new safety standards structure had made good progress in 2007. The Commission on Safety Standards and the Secretariat were to be commended on the work they had been doing in developing an action plan that would respond to the emerging needs of Member States while maintaining a manageable set of safety standards. The European Union hoped that the Secretariat

would continue with its efforts to ensure that the Agency's safety standards were understood and applied by industry, users and operating staff at all levels in Member States.

107. <u>Mr. CURIA</u> (Argentina) said that the Department of Nuclear Safety and Security was to be commended on the work being done by it in developing safety standards and that Member States should bring their safety standards into line with those of the Agency. Also, the Secretariat should ensure that the Agency's safety standards were applied in all Agency technical cooperation programme activities.

108. As reflected in its national safety standards, Argentina shared the view that the primary responsibility for safety lay with the persons, organizations or institutions operating the facilities or conducting the activities that were giving rise to the radiological risk, and it welcomed the fact that the Secretariat had mechanisms for cooperating with Member States in accordance with that view. In the opinion of Argentina, which welcomed the Secretariat's efforts in support of countries wishing to embark on nuclear power programmes, supplier countries had a responsibility vis-à-vis the nuclear community and society in general to ensure that potential recipient countries had adequate safety infrastructures and that the facilities being supplied by them complied at the very least with their own safety requirements and the Agency's safety standards.

109. In that connection, his delegation welcomed the establishment of the Nuclear Power Support Group and looked forward to receiving a Board paper on its activities in due course.

110. Argentina, which had greatly appreciated the holding of an International Conference on the Challenges faced by Technical and Scientific Support Organizations in Enhancing Nuclear Safety in 2007, would welcome the establishment of a service for helping such organizations to achieve the quality standards required by the nuclear industry.

111. Following publication of a *Manual for First Responders to a Radiological Emergency*, the Secretariat should establish an intensive training programme for future emergency response instructors.

112. His delegation was pleased that the idea of drawing up an emergency-related code of conduct had been abandoned in favour of seeking other ways to facilitate implementation of the Early Notification Convention and the Assistance Convention. A code of conduct relating to issues already covered in binding conventions would detract from the obligations undertaken by the parties to those conventions.

113. In Argentina, towards the end of 2007 the first stage in upgrading the emergency control centre of the Nuclear Regulatory Authority had been completed under an agreement with the United States, bringing the centre's capabilities into line with the international state of the art for emergency control centres.

114. Argentina welcomed the fact that the Agency was participating in OECD/NEA's Multinational Design Evaluation Programme and looked forward to receiving, in due course, a Board paper on the results of its participation in that programme.

115. His country, which commended the Government of Japan on the manner in which it had reported on the earthquake damage at the Kashiwazaki-Kariwa nuclear power plant, was looking forward to the establishment within the Agency of a centre for seismic safety, tsunami hazard assessment and disaster mitigation management.

116. As regards research reactor safety, Argentina's RA-1 research reactor had now been operating for 50 years, with an excellent safety record. During those 50 years there had been several system

upgrades. As to Argentina' research reactors in general, the Code of Conduct on the Safety of Research Reactors was being complied with at all of them.

117. In October 2007, Latin American research reactor operators had exchanged information about operating experiences at a workshop organized by Argentina's National Atomic Energy Commission with assistance provided through the Agency's technical cooperation programme. His country would like such workshops to be held more frequently, with assistance provided by the Secretariat, which could perhaps support the establishment of a research reactor operators' liaison group in Latin America.

118. Argentina was grateful for the opportunity provided to it by Brazil and the Secretariat to participate as an observer in the first SEDO mission and looked forward to the introduction of the Fuel Incident Notification and Analysis System (FINAS) for fuel cycle facilities.

119. Argentina was following with interest the process of revising the BSS — a very important process as the changes made might affect the safety legislation and safety standards in most Member States. The Board should be provided with a comprehensive report on the matter, containing detailed references to the recent relevant documents of UNSCEAR and the ICRP, and Member States should be given sufficient time to thoroughly examine the draft of that report submitted to them for comment.

120. Regarding the important issue of the security of radioactive material, his country continued to believe that application of the Code of Conduct on the Safety and Security of Radioactive Sources and the Guidance on the Import and Export of Radioactive Sources was an effective means of addressing scenarios involving the malevolent use of such sources. At the same time, it also continued to believe that the non-legally-binding nature of those instruments should be borne in mind constantly, their provisions being implemented by each individual State in the light of its own domestic legislation.

121. The safety and the security of radioactive sources, nuclear facilities and nuclear material were a top priority for his Government. As a high level of security was a prerequisite for a high level of safety, the Agency's Nuclear Safety Reviews should include assessments of the world nuclear security situation as an integral part of the world nuclear safety situation.

122. The efforts being made by the Secretariat and Member States and by various other international organizations to resolve the problem of denials and delays of shipment of radioactive material were highly commendable.

123. In Argentina, the National Atomic Energy Commission was leading efforts to improve the country's radioactive waste management facilities, with the assistance of a Spanish facility operator of long experience.

124. In October 2008, Argentina would be hosting, in Buenos Aires, the 12th International Congress of the International Radiation Protection Association (IRPA-12), the theme of which would be "strengthening radiation protection worldwide". Pursuant to General Conference resolution GC(51)/RES/11, the Secretariat had sent to all Member States a note inviting them to attend.

125. The proceedings at IRPA-12 would be useful to the Agency in carrying out its statutory functions of providing for the application of its safety standards and fostering the exchange of scientific and technical information on peaceful uses of nuclear energy and in promoting the training of radiation protection experts. His delegation would therefore like to see a reference to IRPA-12 in the final version of the Nuclear Safety Review for the Year 2007 and a detailed account of the IRPA-12 proceedings in the Nuclear Safety Review for the Year 2008.

126. His delegation was pleased with the progress made in 2007 by the Ibero-American Forum of Radiological and Nuclear Regulatory Agencies in developing its technical programmes and welcomed the establishment of the Ibero-American Radiation Safety Network.

127. As regards education and training, his country was well on its way to establishing a regional centre for education and training in radiation protection and radioactive source safety based on the postgraduate course available in Argentina for many years. It hoped shortly to conclude with the Agency an agreement that would enable the entire Latin American region to benefit from that long-standing course and also from a number of other courses.

128. As regards section J of document 2008/Note 4, entitled "The evolution of the uranium market and its consequences on Agency Programme L", the views expressed there by the Secretariat were of great relevance to the Agency's safety-related activities, and the Secretariat should bear those views in mind when next drafting safety programme proposals. For its part, Argentina was supporting the Secretariat's efforts to establish programmes for the sustainable development of uranium mining that took due account of the requirements relating to radiation safety.

129. <u>Mr. BEKOE</u> (Ghana) commended the Secretariat on the way in which it responded to the emergence of areas where new safety standards and procedures were necessary and to the identification of the need to enhance safety in particular areas.

130. While welcoming the fact that in 2007 the safety performance of the nuclear industry had remained high, his delegation agreed that it was important to remain vigilant, seek further safety culture improvements and share experience internationally.

131. The Secretariat should continue facilitating the international sharing of experience, particularly in the interests of those countries which were thinking of embarking on nuclear power programmes or other peaceful applications of nuclear energy. For their part, the countries in question would have to adhere strictly to the relevant safety standards.

132. In Ghana, which recognized the need for international cooperation in the training of nuclear safety and security professionals, the Department of Nuclear Safety and Security of the Graduate School of Nuclear and Allied Sciences was currently running a radiation protection course based on Agency training modules, and it would shortly start developing a nuclear security training programme in consultation with the Secretariat. His country stood ready to share its training facilities with other African countries.

133. Significant progress had been made by Ghana in establishing a regulatory body independent of the Ghana Atomic Energy Commission. It was expected that the regulatory body would deal with all aspects of nuclear and radiation safety, providing strong leadership.

134. Ghana greatly appreciated the Secretariat's efforts to reduce the incidence of denials of shipment of radioactive substances and welcomed the establishment of the International Steering Committee on Denials of Shipment of Radioactive Material.

135. According to the draft Nuclear Safety Review for the Year 2007, "most Member States still need to attain and sustain a satisfactory level of nuclear and radiological emergency preparedness". That was a matter for some concern. The Secretariat should continue helping such Member States to establish the necessary emergency preparedness arrangements.

136. Many African Member States needed international assistance in the radioactive waste management area, particularly with implementation of the borehole disposal technology for the safe and secure long-term storage of disused radioactive sources.

137. <u>Ms. GERVAIS-VIDRICAIRE</u> (Canada) said that her country continued to attach great importance to sustainable safety infrastructure, harmonized safety standards, peer review mechanisms and the sharing of safety knowledge and best practices through networking — areas where the Secretariat had achieved notable successes.

138. As regards sustainable safety infrastructure, Canada would work with other Member States and the Secretariat to ensure that robust infrastructure existed to support expanding nuclear programmes.

139. A major challenge continuing to face many Member States, including Canada, was that of maintaining technical competence in the regulatory body, in technical support organizations and in the nuclear industry as experienced staff retired. With the expanding use of nuclear technology, regulatory bodies and operating organizations would often be competing for the same technical staff, sometimes even across national borders.

140. Canada agreed with the recommendation, made in 2007 at the International Conference on Knowledge Management in Nuclear Facilities, that the Agency remain the global forum for advancing the use of nuclear knowledge management. It would like future Nuclear Safety Reviews to include a section on nuclear knowledge management. Also, it hoped that in April 2008 the Contracting Parties to the Convention on Nuclear Safety would consider how to meet the nuclear knowledge management challenge.

141. Regarding section J of document 2008/Note 4, Canada, the world's leading producer of uranium, agreed with the Secretariat that there was an increasing need for safety-related support in Member States with uranium mining industries, especially those just developing such an industry. It would like to see close collaboration in the provision of such support between the Department of Nuclear Safety and Security and the Department of Technical Cooperation.

142. Canada's nuclear regulator, the Canadian Nuclear Safety Commission, was drawing on Agency safety standards in developing its regulatory guidance for new nuclear power plants, including NS-R-I, *Safety of Nuclear Power Plants: Design*, and NS-R-3, *Site Evaluation for Nuclear Installations*.

143. Canada welcomed the sharing of experience in the field of power reactor regulation and looked forward to the sharing of such experience during the 4th Review Meeting of the Contracting Parties to the Convention on Nuclear Safety.

144. The Canadian Nuclear Safety Commission, which had recently hosted the latest annual meeting of the CANDU Senior Regulators Group, was grateful to the Secretariat for supporting the work of the Group, which brought together senior regulatory officials from all the countries with CANDU reactors — Argentina, Canada, China, India, the Republic of Korea, Pakistan and Romania.

145. In Canada's view, the International Conference on Research Reactors: Safe Management and Effective Utilization, held in Australia in November 2007, had been very useful in promoting application of the Code of Conduct on the Safety of Research Reactors.

146. Canada, the world's largest manufacturer of risk-significant radioactive sources, was strongly in favour of the establishment of an effective and efficient international regulatory regime for such sources and was supporting multilateral efforts to achieve harmonization in the implementation of the Guidance on the Export and Import of Radioactive Sources. It hoped that there would be broad Member State participation in the technical meeting on lessons learned from implementing that guidance which the Secretariat would be hosting in May 2008.

147. Regarding the report on the adequacy and predictability of resources for the Agency's nuclear safety programme (GOV/INF/2008/1), in her delegation's view the conclusion in paragraph 10 was unduly alarmist.

148. The recent unexpected outage of the National Research Universal reactor at Canada's Chalk River Laboratories had required an urgent response on the part of the Canadian Government in order to prevent a lengthy interruption of medical isotope supplies. The Government had therefore quickly enacted the legislation necessary in order to enable the reactor to be restarted with only one seismically qualified pump in operation.

149. The issue had been one of licensing, not of nuclear safety, which had at no time been threatened, and the Canadian Nuclear Safety Commission had agreed that the reactor could be operated more safely after the restart than before it had been shut down. The medical isotope production situation had now returned to normal. On 4 February 2008, Atomic Energy of Canada Limited had announced that a second seismically qualified pump had been installed, so that the licensing requirement temporarily suspended by the legislation was being met.

150. Atomic Energy of Canada Limited and the Canadian Nuclear Safety Commission had launched a joint review of the event and of lessons learned that was due to be completed soon.

151. <u>Mr. AMANO</u> (Japan) said that his country, which attached tremendous importance to nuclear safety, was looking forward to the 4th Review Meeting of the Contracting Parties to the Convention on Nuclear Safety. It would like to see further States, especially ones planning to embark on nuclear power programmes, acceding to that international instrument.

152. In the interests of transparency in the nuclear safety area, Japan had in June 2007 hosted an IRRS mission. It would like to see many more Member States inviting the Secretariat to organize such missions.

153. Following a strong earthquake off the coast of Japan in July 2007, his Government had invited the Secretariat to send a team to work with the Japanese nuclear regulatory body in examining the situation at the Kashiwazaki-Kariwa nuclear power plant. It had since invited the Secretariat to send a team to carry out follow-up studies.

154. With the full cooperation of Japan's nuclear regulatory body, the Secretariat would in May 2008 be holding a workshop on seismic safety in Japan. His country, which had accumulated a great deal of experience relating to the seismic safety of nuclear power plants, stood ready to share that experience with other countries.

155. <u>Mr. DÍAZ</u> (Mexico) said that his country, which firmly supported the right of States to use nuclear energy for peaceful purposes, attached great importance to the work being done within the Agency framework to ensure the safety and security of nuclear material and nuclear facilities.

156. His country, which was closely following the work being done on the seismic safety of nuclear facilities, stood ready to make available the services of Mexican experts for management of the consequences of earthquakes in regions where nuclear power plants were located. It also stood ready to host regional and interregional activities within the framework of the Agency's extrabudgetary project on the protection of nuclear power plants against tsunamis and on post-earthquake considerations in the external zone. It had recently registered its emergency response capabilities in the Agency's Response Assistance Network (RANET).

157. Mexico had hosted OSART and WANO missions at its Laguna Verde nuclear power plant, and late in 2007 it had hosted an IRRS mission.

158. Given the expected growth of nuclear power generation in many parts of the world in the years to come, Mexico agreed that preserving — and increasing — nuclear knowledge should be a high international priority.

159. Mexico was currently adapting its domestic legislation and regulations in nuclear matters in order to comply fully with the international instruments relating to nuclear safety, radiation safety, safety in the transport of radioactive material and the management of radioactive waste. Also, it was playing a very active part in the development of safety standards and in the promotion of their application.

160. Regarding paragraph 34 of the draft Nuclear Safety Review for the Year 2007, Mexico looked forward to hosting, on 9 and 10 July 2008, the ConvEx-3 emergency response exercise at its Laguna Verde nuclear power plant.

161. <u>Mr. TANG Guoqiang</u> (China) said that his country greatly appreciated the Secretariat's efforts in promoting safety by — inter alia — helping to develop improved safety standards and offering safety review services. Those efforts were particularly important given the increasing demand for nuclear power and other peaceful applications of nuclear energy in support of sustainable development.

162. His Government, which attached great importance to strengthening China's nuclear safety capabilities, was cooperating closely with the Secretariat to that end. It agreed with the view, expressed in paragraph 19 of the draft Nuclear Safety Review for the Year 2007, that "Ultimately, safety is based on the quality of the workforce and the professional expert community", and considered the Secretariat's efforts in the training area to be especially valuable. His country was already benefiting from the training course on operational safety at nuclear fuel cycle facilities conducted in China in December 2007.

163. With more and more nuclear power utilities applying for plant life extensions, the need for periodic safety reviews would increase. The Agency symposium on nuclear power plant life management held in Shanghai in October 2007 had been particularly important in that context.

#### The meeting rose at 1.05 p.m.