IAEA Board of Governors

Record of the 1217th Meeting GOV/OR.1217

Nuclear security — measures to protect against nuclear terrorism

Strengthening the Agency's activities related to nuclear science, technology and applications

(a) Nuclear power applications, status and prospects of nuclear power



Board of Governors

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Record of the 1217th Meeting

Held at Headquarters, Vienna, on Tuesday, 23 September 2008, at 10.20 a.m.

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¹ GOV/2008/50.

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 COGAN | | Vice-Chairman (Ireland) | | |
|-----------------------|--------------|-------------------------------------|--|--|
| Mr HORVATIĆ | | Vice-Chairman (Croatia) | | |
| | | (ereunu) | | |
| Mr HOXHA | | Albania | | |
| Mr KHELIFI | | Algeria | | |
| Mr CURIA | | Argentina | | |
| Mr CAMERON | | Australia | | |
| Mr BÖCK | | Austria | | |
| Ms ESPINOZA PATIÑO | | Bolivia | | |
| Mr VALLIM GUERREIRO | | Brazil | | |
| Ms GERVAIS-VIDRICAIRE | | Canada | | |
| Mr LAGOS KOLLER | | Chile | | |
| Mr YANG Dazhu | | China | | |
| Mr HORVATIĆ | | Croatia | | |
| Mr STACEY MORENO | | Ecuador | | |
| Mr KEBEDE | | Ethiopia | | |
| Mr RAAPPANA | | Finland | | |
| Mr CARON | | France | | |
| Mr LÜDEKING |) | Commons | | |
| Mr SANDTNER | } | Germany | | |
| Mr BAAH-DUODU | | Ghana | | |
| Mr KUMAR | | India | | |
| Mr ALSHARIA | | Iraq | | |
| Mr COGAN | | Ireland | | |
| Mr AMANO | | Japan | | |
| Mr MAKSIMOVAS | | Lithuania | | |
| Mr CANCHOLA GUTIERREZ | | Mexico | | |
| Mr ZNIBER | | Morocco | | |
| Mr OSAISAI | | Nigeria | | |
| Mr SHAHBAZ | } | Pakistan | | |
| Mr AWAIS | <i>S</i> | 1 akistan | | |
| Ms LACANLALE | | Philippines | | |
| Mr BERDENNIKOV | } | Russian Federation | | |
| Mr KUCHINOV | 5 | Russian i cuciation | | |
| Mr AL-TAIFI | | Saudi Arabia | | |
| Mr GUMBI | | South Africa | | |
| Mr STEINMANN | | Switzerland | | |
| Mr PANUPONG | | Thailand | | |
| Mr SMITH | } | United Kingdom of Great Britain and | | |
| Mr DRAPER | <i>§</i> | Northern Ireland | | |
| Mr SCHULTE | | United States of America | | |
| Mr ELBARADEI | | Director General | | |
| Mr TANIGUCHI | | Deputy Director General, Department | | |
| | | of Nuclear Safety and Security | | |

Attendance (continued)

Mr SOKOLOV Deputy Director General, Department

of Nuclear Energy

Mr ANING Secretary of the Board

Representatives of the following Member States also attended the meeting:

Angola, Belgium, Bosnia and Herzegovina, Côte d'Ivoire, Cuba, Czech Republic, Denmark, Dominican Republic, Egypt, Greece, Holy See, Indonesia, Islamic Republic of Iran, Israel, Jordan, Kazakhstan, Republic of Korea, Kuwait, Libyan Arab Jamahiriya, Liechtenstein, Malaysia, Malta, Monaco, Namibia, Netherlands, New Zealand, Norway, Panama, Peru, Poland, Portugal, Romania, Singapore, Slovakia, Slovenia, Spain, Sri Lanka, Sudan, Sweden, Syrian Arab Republic, The Former Yugoslav Republic of Macedonia, Tunisia, Turkey, Uruguay, Bolivarian Republic of Venezuela, Yemen, Zimbabwe.

Abbreviations used in this record:

APEC Asia-Pacific Economic Cooperation

BSS 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

CRP coordinated research project

CSS Commission on Safety Standards

EU European Union

FAO Food and Agriculture Organization of the United Nations

G8 Group of Eight

GRULAC Latin American and Caribbean Group

HEU high-enriched uranium

INDAG International Nuclear Desalination Advisory Group

INIS International Nuclear Information System

INLEX International Expert Group on Nuclear Liability

INPRO International Project on Innovative Nuclear Reactors and

Fuel Cycles

Abbreviations used in this record (continued):

INSServ International Nuclear Security Advisory Service

IRRS Integrated Regulatory Review Service

LEU low-enriched uranium

OSCE Organization for Security and Cooperation in Europe

(earlier CSCE)

SIT sterile insect technique

SMR small and medium-sized reactor

TCF Technical Cooperation Fund

TECDOC IAEA Technical Document

Transport Regulations Regulations for the Safe Transport of Radioactive

Material

UNODC United Nations Office on Drugs and Crime

WHO World Health Organization

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

6. Measures to strengthen international cooperation in nuclear, radiation and transport safety and waste management (continued)

(GOV/2008/34, 26 and 27; 2008/Note 26)

- 1. <u>Mr TANIGUCHI</u> (Deputy Director General for Nuclear Safety and Security) thanked Board members for their encouraging comments and strong support for the Agency's safety programme.
- 2. There had been many comments on the importance of education and training for safety. The Secretariat could not agree more. Many Member States were facing the enormous challenge of building human and organizational capacity and a strong regulatory infrastructure for the construction and operation of nuclear power plants for the first time or after a long interval, or for the introduction of advanced radiation technology in medical and industrial practices. As the country using nuclear technology was primarily responsible for safety, and as operational safety could not be outsourced, building of safety expertise and a safety culture was an essential precondition for the introduction of nuclear technology.
- 3. The Secretariat had been trying to develop and implement a more comprehensive approach to meet that challenge by going beyond the traditional individualistic and one-way approach to training and education. It was therefore using all the instruments and tools available in the enhanced global nuclear safety regime, including safety standards, codes of conduct, safety conventions, peer reviews and advisory services, and the knowledge network, to share lessons and good practices.
- 4. He thanked Member States for their continued and increasing support for the Agency's safety standards and for their approval of the two Safety Requirements submitted. The Secretariat would further promote the improvement and application of the safety standards as the de facto global standards implementing the road maps agreed to by the CSS.
- 5. Several Governors had noted that the Agency's safety standards and codes of conduct were not binding on Member States. While it was correct that they were binding only on the Agency's activities or any activities under its supervision or control, more and more Member States recognized their usefulness in enhancing safety and were using them voluntarily. The application of safety standards through various review processes and feedback on their results was particularly important as a means of promoting continuous safety improvement. The Secretariat was therefore very pleased by the many supportive comments on the IRRS and by the increasing number of countries taking advantage of that and other review services.
- 6. There had been several comments on recent earthquakes and seismic safety issues and concern had been expressed at excessive seismic safety requirements. However, the major concern was that insufficient requirements were resulting in inadequate safety measures. The incidents in Japan and China went far beyond the design assumptions agreed upon by international experts decades previously. A new international consensus among the world's best experts was needed to address those difficult issues, hence the vital importance of the international seismic safety centre as the focal point for the development of adequate guidelines for both operating and new nuclear installations. The Secretariat greatly appreciated Member States' active participation in and generous contributions to that initiative.

- 7. Some Governors had commented on the Agency's Incident and Emergency Centre, the Response Assistance Network and the ConvEx-3 emergency response exercise. In his view, that was an area which required more attention. For the past decade, the Incident and Emergency Centre had responded well to many radiation accidents, assisting Member States at their request. However, it currently lacked the capacity to respond adequately to major events involving serious nuclear accidents, mainly because of resource constraints, and not many Member States had such capacity either. The Centre needed to be strengthened to respond to large-scale accidents and to assist Member States in building their own emergency capabilities.
- 8. There had been several direct and indirect comments on the important issue of regulatory effectiveness. The basic requirement for a legal and governmental safety framework was clearly set out in the Safety Fundamentals and safety conventions, namely the effective independence of the regulatory body and protection from undue pressure from interested parties. Recent discussions on the issue had focused on technical and managerial competence and human and financial resources rather than on legal aspects, particularly for countries launching new nuclear power programmes.
- 9. Lastly, as the Director General had mentioned in his opening remarks, as it moved forward the Agency had to ensure that safety and security measures were designed and implemented in an integrated manner. The Secretariat was preparing a report on how to achieve that goal, at the request of the CSS.
- 10. The <u>DIRECTOR GENERAL</u> said that, while it was true that the codes of conduct were not legally binding, the focus should not be on the legalistic aspect, which was a somewhat blinkered approach, but on the fact that they were intended to serve as benchmarks to prevent the occurrence of a nuclear accident. The codes had been adopted by consensus and, if Member States believed that their purpose was to ensure safety, efforts should focus on their universal implementation. If the existing rules were effective, that was well and good; if not, they could be changed.
- 11. With regard to the Incident and Emergency Centre, he continued to be deeply concerned that, in the event of a major nuclear accident, the Agency would not be able to respond adequately because, owing to a shortage of resources, it lacked the requisite capacity. Resources were badly needed to develop a state-of-the-art centre that could respond effectively to any nuclear accident.
- 12. The <u>CHAIRMAN</u>, summing up the discussion, said that the Board had commended the Secretariat on its continued efforts to strengthen its activities relating to nuclear, radiation and transport safety and waste management.
- 13. Support had been expressed for the Agency's activities aimed at enhancing the global nuclear and radiation safety regime. The IRRS was regarded as an effective tool for making improvements and for sharing regulatory experience, and IRRS missions had been welcomed.
- 14. Several members had taken note of the Agency's efforts to increase the number of parties to safety conventions and the number of States accepting the codes of conduct, and they had expressed support for those instruments. Several members had stressed that the codes of conduct were not legally binding instruments.
- 15. Several members had re-emphasized the importance of the Convention on Nuclear Safety and had welcomed the review process for that Convention. They had called on all States that had not yet done so to accede to the Convention.
- 16. Several members had invited the Agency to identify further possible synergies and areas of international cooperation in nuclear safety.

- 17. The Agency's important role in providing assistance for countries that were beginning to build the necessary infrastructure for a safe and secure nuclear programme had been emphasized.
- 18. Several members had underlined the importance of enhancing the Agency's assistance to developing Member States with a view to upgrading their national radiation protection and regulatory infrastructures, and the Agency's activities aimed at the radiological protection of patients.
- 19. Several members had emphasized the importance of the Agency's safety standards and had commended the Agency for continuing its work on the revision of the BSS. Some members had expressed the view that the interval between revisions of the safety standards should not be too short.
- 20. Several members had welcomed the Agency's efforts to promote a sustainable education and training programme in all safety-related fields, and also its efforts to enhance the implementation of safety standards through information and promotional materials.
- 21. Support had been expressed for the Agency's activities aimed at enhancing nuclear and radiological emergency preparedness and response, with the Agency's Incident and Emergency Centre being the focal point for such activities.
- 22. Several members had expressed support for INLEX and its efforts to continue providing authoritative advice on the nuclear liability instruments adopted under the Agency's auspices, as well as for its outreach activities, and had looked forward to discussing the lessons learned from such activities.
- 23. Several members had emphasized the importance of the issue of radioactive waste management and had welcomed the Agency's activities in that regard.
- 24. Some members had emphasized the importance of the safety and security of radioactive sources, including the combating of illicit trafficking in those sources, and Member States had been encouraged to continue working towards the voluntary implementation of the Code of Conduct on the Safety and Security of Radioactive Sources and its associated Guidance on the Import and Export of Radioactive Sources. Some members had encouraged information exchange among Member States and training by the Agency in that regard.
- 25. Several members had underlined the importance of the safe transport of radioactive material. They had expressed concern that the delivery of radioactive sources continued to be beset by denials of shipment, which adversely affected relevant project implementation. Several members had welcomed the Agency's holding of regional workshops and the establishment of databases in that connection and had looked forward to the outcome of the implementation of the action plan on denials of shipment of radioactive material. Some members had encouraged continued dialogue between coastal and shipping States on transport safety matters.
- 26. Some members had noted with satisfaction that operational safety performance remained high and that both nuclear power plants and research reactors had maintained a good record.
- 27. The Board had taken note of the responses of the Director General and the Secretariat on some of the points raised during the discussion.
- 28. The Board had noted the Director General's comments to the effect that treating the Agency's codes of conduct as legally non-binding was not the correct approach to their application. The codes of conduct had been agreed to by all Member States by consensus and had been promulgated in their interest and to improve their nuclear safety levels. Those should be the main criteria for their implementation.

29. With regard to document GOV/2008/34, he took it that the Board, bearing in mind the views and concerns expressed by Member States, wished to take note of the report.

30. It was so decided.

31. With regard to document GOV/2008/26, he took it that the Board wished: (a) to approve the proposed revisions to the 2005 edition of the Transport Regulations and to approve as an IAEA safety standard, in accordance with Article III.A.6 of the Statute, a Safety Requirements publication incorporating the proposed revisions to the 2005 edition of the Transport Regulations; and (b) to authorize the Director General to promulgate the Safety Requirements and to issue them as a Safety Requirements publication in the IAEA Safety Standards Series.

32. It was so decided.

33. With regard to document GOV/2008/27, he took it that the Board wished: (a) to establish as an Agency safety standard, in accordance with Article III.A.6 of the Statute, the draft Safety Requirements publication contained in that document; and (b) to authorize the Director General to promulgate the Safety Requirements and to issue them as a Safety Requirements publication in the IAEA Safety Standards Series.

34. <u>It was so agreed</u>.

Mr Horvatić (Croatia), Vice-Chairman, took the Chair.

7. Nuclear security — measures to protect against nuclear terrorism

(GOV/2008/35 and Corr.1; additional information available on GovAtom)

- 35. Mr TANIGUCHI (Deputy Director General for Nuclear Safety and Security) said that the Nuclear Security Report 2008 covering the period from 1 July 2007 to 30 June 2008 (GOV/2008/35 and Corr.1) provided a summary of the Agency's activities and future challenges and priorities.
- 36. Although the responsibility for nuclear security rested with individual States, the increasingly transboundary character of the nuclear security threat meant that the effective fulfilment of national responsibilities was greatly enhanced if they were implemented in synergy with international programmes to strengthen the protection of nuclear and other radioactive material by detecting and responding to malicious acts and collecting and sharing relevant information.
- 37. As in the past, the report provided an overview of the Agency's nuclear security activities, but the latest report provided a more comprehensive account of its accomplishments viewed in the broader context of challenges and priorities. It reported on increased participation in the illicit trafficking database programme, physical protection upgrades, the publication of additional documents comprising an important part of the nuclear security regime, the recovery, conditioning and repatriation of radioactive sources, action to address border control issues, the development of additional integrated nuclear security support plans and an aggressive human resources development programme, as well as other important activities. Analysis played an increasingly important role in defining and implementing new activities with clearer priorities and higher effectiveness. The

Secretariat planned to devote increased resources to the development of new and enhanced analytical tools and capacity.

- 38. Currently, the Agency's nuclear security programme was almost entirely dependent on extrabudgetary contributions. He thanked those States that had made financial and in-kind contributions to the Nuclear Security Fund. Member States and the Secretariat needed to continue to support the accelerating pace of the programme, mindful of the need for continuous improvement in addressing the persistent and complex security threat. The Secretariat would work to improve the effectiveness of programme implementation and would continue to explore synergies and to avoid duplication of the efforts of other international, regional and national security initiatives.
- 39. The Secretariat looked to Member States for assistance in developing the next Nuclear Security Plan, which would cover the period 2010–2013. In particular, it was hoping for either bilateral input or active participation in the nuclear security symposium to be held in March 2009.
- 40. Mr SHAHBAZ (Pakistan), speaking on behalf of the Group of 77 and China, said that the Group had always supported the Agency's nuclear security activities and noted with satisfaction that, according to the report, assistance was to be provided to Member States on request and that responsibility for the security of nuclear and other radioactive material rested entirely with the individual State. The Group further noted that the recommendations relating to enhancement of security were non-binding and that the primacy of the State in security issues was recognized. The Group strongly urged that the Agency should implement the additional approved activities, taking into consideration the confidentiality of information of relevance for security purposes.
- 41. The Agency's role in enhancing Member States' capabilities in the field of nuclear security, and the scope of its activities had to be determined by Member States through General Conference resolutions.
- 42. The Group regarded as essential the understanding that the implementation of the proposed activities for protection against nuclear terrorism should not interfere with the established priorities of the technical cooperation programme, in line with the principle laid down in document INFCIRC/267 that such priorities were to be defined by recipient Member States in the light of their national interests and socio-economic development plans.
- 43. The Group noted that the implementation of activities under the Nuclear Security Plan would continue to be funded from voluntary extrabudgetary contributions to the Nuclear Security Fund. It was concerned, however, that the conditions attached to 90% of such contributions limited the flexibility with which they could be used, as had been noted by the External Auditor.
- 44. Reiterating the importance of ensuring balance among the Agency's activities, he stressed that TCF resources had to be sufficient, assured and predictable and encouraged Member States to contribute their full share of the target.
- 45. The Group reiterated its opinion that voluntary codes of conduct such as the Code of Conduct on the Safety and Security of Radioactive Sources and its supplementary Guidance on the Import and Export of Radioactive Sources should not hamper the use of radioactive sources in medicine, agriculture, industry and education, especially in developing countries, and should not be invoked to prevent peaceful uses of atomic energy or the export of such sources for use in developing Member States. Furthermore, the fact that the Code and Guidance were not legally binding should be made clear in paragraph 15 of the report.
- 46. Mr CARON (France), speaking on behalf of the European Union, 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, and the Republic of Moldova and Ukraine, said that the importance attached by the European Union to the risk of nuclear terrorism would be reflected in the updating that was currently in progress of the European Security Strategy and the EU Strategy against Proliferation of Weapons of Mass Destruction. The European Union would again be submitting a draft resolution to the General Conference on measures to protection against nuclear and radiological terrorism. It shared the Secretariat's view that responsibility for nuclear security lay with individual States.

- 47. The Nuclear Security Report 2008 was a useful tool for assessing implementation of the Agency's activities and, in particular, the Nuclear Security Plan for 2006–2009. While recognizing the need to seek synergies between safety, security and safeguards, the European Union pointed out that the approaches to those issues differed widely.
- 48. The European Union's support for Agency activities aimed at preventing, detecting and responding to the risk of nuclear terrorism was reflected in three joint actions forming part of its strategy against proliferation of weapons of mass destruction, the aim being to strengthen nuclear security and the application of safeguards in the countries concerned by providing them with legal and regulatory assistance, and by helping them to enhance the security and monitoring of nuclear and other radioactive material and to build up their capacity to detect and prevent illicit trafficking. A fourth joint action adopted in April 2008 and allocated a budget of €7.7 million confirmed the European Union's status as the prime contributor to the Agency's Nuclear Security Fund. The beneficiaries of the joint actions were countries in the Caucasus, Central Asia, south-eastern Europe and the Balkans, the Mediterranean region of the Middle East, Africa and South-East Asia.
- 49. The European Union was also looking into the possibility of financing a radiological accident response capacity. It invited Member States to make voluntary contributions to the Nuclear Security Fund, since nuclear security, including the fight against illicit trafficking, should constitute a priority for all.
- 50. The integrated nuclear security support plans developed by the Agency were useful tools for long-term planning of a nuclear security support programme and contributed to the development of a security culture and to enhanced coordination among donors. The European Union encouraged the Agency to pursue its efforts to improve such tools and called on Member States receiving Agency assistance to put it to good use.
- 51. International legal instruments aimed at preventing nuclear terrorism had been strengthened in recent years. The European Union urged Member States to adhere to the amendment to the CPPNM, to accede to the International Convention for the Suppression of Acts of Nuclear Terrorism and to take the measures required by United Nations Security Council resolution 1540 (2004) to prevent illicit trafficking in nuclear and radioactive material and maintain a high level of physical protection for nuclear facilities.
- 52. The European Union expressed satisfaction at the quality of the discussions at the International Conference on Illicit Nuclear Trafficking held in Edinburgh in 2007 and, in particular, at the conclusion that priority should be given to improving exchange of information on and analysis of trafficking incidents.
- 53. The illicit trafficking database programme, which now had 100 voluntary participants, was a key Agency tool for identifying the needs and vulnerabilities of national security systems and could assist in the investigation and resolution of trafficking cases involving radioactive sources or nuclear material. The European Union encouraged Member States to participate in the programme.
- 54. The European Union supported the publication of the IAEA Nuclear Security Series and drew attention to the Agency's recommendations on physical protection of nuclear material and nuclear

facilities set forth in document INFCIRC/225. It welcomed the launching of a revision of that document, the need for which was highlighted in General Conference resolution GC(51)/RES/12. Such documents should be translated into the Agency's official languages.

- 55. The European Union was pleased that the Agency was coordinating its activities with those conducted under international initiatives such as the G8 Global Partnership against the Spread of Weapons and Materials of Mass Destruction and the Global Initiative to Combat Nuclear Terrorism, to which a majority of EU member States belonged.
- 56. The European Union would play an active part in the International Symposium on Nuclear Security to be held in Vienna in 2009, which it hoped would assist in establishing priorities for the next Nuclear Security Plan for 2010–2013.
- 57. Mr AMANO (Japan) said that his country shared the Agency's view that a potential malicious act involving nuclear or other radioactive material was a continuing worldwide threat, and that both legally binding and non-legally binding international instruments were relevant for nuclear security. Japan had actively supported countries in their efforts to ratify the International Convention for the Suppression of Acts of Nuclear Terrorism by holding seminars, and it had contributed to the Global Initiative to Combat Nuclear Terrorism as an initial partner.
- 58. Ensuring safety, security and safeguards was crucial when introducing or expanding a nuclear power programme. Japan, jointly with the Agency, had conducted a seminar on that issue for South-East Asian countries in August in Vietnam.
- 59. Mr CURIA (Argentina) said that his country supported Agency activities in the field of nuclear security, including by providing experts, facilitating use of its facilities and hosting regional training activities. The internal process required to approve the amendment to the CPPNM was under way.
- 60. The issues of security and safety were intrinsically linked and should be addressed together. Discussing them separately in the Board and the General Conference caused confusion and blurred the linkage between the two. In his country's view, there was no global security regime separate from the Agency's statutory function in the safety field. All activities relating to nuclear security should be fully in accord with the Statute. Prudence was needed and an approach which was commensurate with the different situations and scenarios, avoiding any statements that might undermine the peaceful and safe use of nuclear energy. It was important to remember that the primary responsibility for the security of nuclear and other radioactive material and radiation sources lay with the State concerned.
- 61. The procedure for developing documents in the IAEA Nuclear Security Series should be similar to that for the Safety Series. Wider involvement of Member States would make the Agency's activities in that area more transparent and help raise awareness.
- 62. Furthermore, the report would benefit if it included an overall conclusion regarding the effectiveness of the Agency's security activities during the reporting period, i.e. the degree to which they had contributed to improving nuclear security worldwide.
- 63. With regard to the content of the report, paragraph 11 cast doubt on the effectiveness of safeguards and ignored the fact that physical protection of nuclear material had to meet internationally accepted standards. His country would welcome additional information on the role of the Agency in the development of the nuclear security information architecture mentioned in paragraph 35. He also requested additional information concerning the two implementing guides referred to section D.2.2 and asked whether the drafting of such guides was coordinated with work done in the safety area. With regard to paragraphs 43 and 45, the indiscriminate use of the term 'physical protection' created confusion and tended to equate levels of protection and situations that were dissimilar. In the area of transport security, the Secretariat reported having started work on a methodology for verifying the

radioactive material content of shipments and his country would welcome additional information on the purpose and expected benefits of such a measure.

- 64. With those comments, he endorsed the recommended action.
- 65. Mr KUCHINOV (Russian Federation) commended the Agency's comprehensive approach to implementing the Nuclear Security Plan for 2006–2009, which aimed at providing assistance to States with the establishment and development of the necessary capacity to ensure reliable protection against malicious acts involving nuclear or other radioactive material.
- 66. On 30 July 2008, the Russian Federation had passed a federal law adopting the amendment to the CPPNM. He encouraged States that had not yet done so to accede to that important nuclear security instrument without delay. His country was pleased at the progress made by the Global Initiative to Combat Nuclear Terrorism, to which the Agency made an important contribution in its capacity as an observer.
- 67. With those comments, he endorsed the recommended action.
- 68. Ms GERVAIS-VIDRICAIRE (Canada) said that, while important progress had been made to reduce the risk of malicious acts involving nuclear and radioactive material, significant vulnerabilities still existed and needed to be addressed. Canada supported the Nuclear Security Fund in a variety of ways, including through financial and in-kind contributions and, to date, had contributed more than 8 million Canadian dollars to the Fund. The projects implemented with Canadian funding had made an important contribution to strengthening nuclear security in many areas and had been implemented by the Office of Nuclear Security with a high degree of competence and skill. The noteworthy progress made in strengthening nuclear security globally over the preceding six years would not have been possible without consistent and sustainable funding of the activities described in the Nuclear Security Plan. To maintain that momentum, more nuclear security activities should be funded through the Regular Budget.
- 69. Regrettably, the Nuclear Security Report made no reference to document INFCIRC/225/Rev.4, The Physical Protection of Nuclear Material and Nuclear Facilities, which contained a valuable set of recommendations used by many Agency Member States in the development of their physical protection programmes. Canada remained a committed and active participant in the further revision of that document and in the development of the series of reference documents on nuclear and radioactive material.
- 70. Mr SANDTNER (Germany) said that, given the continuing worldwide threat of potential malicious acts involving nuclear or other radioactive material, the Agency's efforts to improve the basis for effective prevention of such a scenario were particularly appreciated by his country. The measures outlined in the report strengthened the capacity to respond to that threat at global level. An effective system for information exchange between Member States participating in the illicit trafficking database was important for promoting awareness about the existing level of threat.
- 71. All parties to the amendment to the CPPNM should take the necessary steps to facilitate its early entry into force. Germany had concluded the legal procedures for ratification that summer and the amendment was already being applied.
- 72. Mr CAMERON (Australia) said that Australia's strong support for the Agency's efforts to combat the risks associated with nuclear and radiological terrorism was evidenced by its contributions to the Nuclear Security Fund and its continued provision of experts to assist the Agency in its activities.

- 73. His country was pleased that the Agency continued to enhance its nuclear security activities by cooperating internationally through a broad range of channels. Particularly noteworthy was the sustained interaction between the Agency and Global Initiative to Combat Nuclear Terrorism, and he thanked the Secretariat for providing experts to participate in the successful workshop on production of molybdenum-99 using low-enriched uranium which had been hosted by Australia and held in Sydney in December 2007 in conjunction with the United States National Nuclear Security Administration.
- 74. The progress made in developing the IAEA Nuclear Security Series was commendable. Document INFCIRC/225/Rev.4 was of great importance for ensuring the security of nuclear material and facilities and his country looked forward to its further revision and incorporation into the Nuclear Security Series as a recommendations-level document. The Secretariat should pursue its efforts to put renewed momentum into developing the top-level Fundamentals document that would elaborate the essential nuclear security principles, thereby providing a consistent and cohesive framework to facilitate development of the underlying recommendations. Preparation of that top-level security document would also provide an opportunity to ensure appropriate integration of security principles with the Agency's Safety Fundamentals.
- 75. Australia attached great importance to the Code of Conduct on the Safety and Security of Radioactive Sources and its supplementary Guidance on the Import and Export of Radioactive Sources and it urged Member States that had not yet done so to commit themselves to voluntary implementation of those documents.
- 76. Locating and securing radioactive sources which were out of regulatory control remained a priority. Australia had worked closely with its neighbours in the South-East Asia region to identify high-risk sources and enhance the necessary security infrastructure, notably through activities under the project on regional security of radioactive sources led by the Australian Nuclear Science and Technology Organisation. The project had supported the South-East Asia regional review meeting on the security of radioactive sources held in July 2008 in Indonesia. The participation of Agency staff in such regional efforts to improve the security of radioactive sources was essential and his country looked forward to building on such cooperation in the future.
- 77. Mr VALLIM GUERREIRO (Brazil) said that nuclear terrorism ranked high among the most prominent threats to international peace and security. While the most efficient manner of addressing such threats was to promote the total elimination of nuclear weapons, his country fully endorsed and supported the establishment of international standards aimed at ensuring long-term security and effective control of nuclear material and high-risk radioactive sources, and at strengthening capabilities to detect and respond to malicious acts involving such material.
- 78. Brazil was firmly committed to the framework of international legal instruments relating to nuclear security and terrorism. It was party to 12 out of 13 international conventions related to terrorism and the ratification process for the International Convention for the Suppression of Acts of Nuclear Terrorism was under way. While the Agency's activities to promote the international nuclear security regime and help States build relevant capacity were commendable, more emphasis should be placed on raising awareness of security issues.
- 79. With regard to paragraph 51 of the report, his country wished to clarify that, while it had sought cooperation from the Agency in order to repatriate high-activity radioactive sources to their country of origin, those had not been orphan sources as they had always been accounted for and properly and safely stored at facilities of the National Nuclear Energy Commission.
- 80. He recalled Brazil's successful cooperation with the Agency in the implementation of nuclear security measures during the 2007 Pan-American Games in Rio de Janeiro. Since then, Brazil had

shared its expertise with other countries hosting major events. The National Nuclear Energy Commission had organized three courses on detection of and response to nuclear and other radioactive material for Peruvian officials in the context of preparations for the Latin America and Caribbean-European Union Summit and for the APEC meeting held in Lima. In addition, Brazil had participated in the organization of a course, and had taken part in two assessment missions to China, in connection with nuclear security measures implemented for the 2008 Olympic Games held in Beijing.

- 81. Brazil supported the establishment of nuclear security support centres. The National Nuclear Energy Commission was currently engaged in discussions with the Agency with a view to hosting one such centre, which should help raise awareness and promote training of personnel on nuclear security issues.
- 82. Mr YANG Dazhu (China) commended the Agency on its achievements in promoting the application of international instruments relating to security, thereby helping Member States develop and improve their nuclear security legal framework and infrastructure, draw up nuclear security technical guides, train nuclear security personnel and upgrade their nuclear security capability. The Agency's illicit trafficking database had attracted support from a growing number of Members States and progress had been made in helping Member States repatriate HEU from research reactors and recover radioactive sources. The Secretariat should further reinforce internal coordination and cooperation with Member States, thus enhancing the effectiveness and efficiency of its nuclear security activities.
- 83. His Government had consistently supported the Agency's role in international nuclear security. It had participated actively in the revision of the CPPNM and had acceded to the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management. China was developing and improving domestic legislation on radioactive source management in line with the Code of Conduct on the Safety and Security of Radioactive Sources. It had joined the illicit trafficking database, was involved in the implementation of the Nuclear Security Plan, and had set up, in cooperation with Agency, a joint training centre for nuclear safeguards and security which played an important role in reinforcing nuclear security capacities in the Asia and Pacific region.
- 84. His country was grateful to the Agency and its Director General, and Member States, for their contributions to ensuring the nuclear security of the 2008 Olympic Games held in Beijing, inter alia by providing advice, running training courses and supplying radiation detection equipment. China stood ready to share its experience with other States in order to help facilitate an adequate response to the worldwide threat of nuclear terrorism.
- 85. Mr SCHULTE (United States of America) stressed the need to define priorities and increase transparency in nuclear security cooperation. Utilizing nuclear security instruments fully and effectively, while enlisting States to participate in nuclear security programmes, was crucial. Institutionalizing a security culture in nuclear operations was in the collective interest of all Member States. His Government fully supported the Agency's efforts to report on nuclear security frankly, in practical language, and with greater emphasis on outcomes, priorities and constraints. The transparency of the latest report was unprecedented and enabled donor and other Member States to assess the progress of the nuclear security programme and the extent to which their contributions had been well spent.
- 86. The Nuclear Security Report should be a tool for setting future priorities for the security programme and for identifying ways to meet them. The United States welcomed, in particular, the establishment of a methodology to determine which States should be given priority as regards the provision of support, taking into account such objective factors as the threat posed by particular security situations or the circumstances of the material. His Government would be drawing on the

report to plan its budget and in-kind support and improve bilateral nuclear security assistance programmes. While falling short of expectations in some respects, the report facilitated information sharing while respecting confidentiality issues.

- 87. He commended the Agency for defining a standardized process for Member States to review Nuclear Security Series documents. Referring to the Agency's bilateral and multilateral coordination efforts under international conventions, he encouraged it to expand its cooperation with UNODC and the OSCE. Additional details on specific cooperation activities undertaken by the Agency would be welcome in a future report.
- 88. With respect to the use of nuclear security instruments to enlist States to participate in nuclear security programmes, the Agency had appropriately established the groundwork in the 2006–2009 action plan, addressing the synergy between safety, security, safeguards and promotional activities. The Secretariat should consider the relationship of those elements in a comprehensive manner, so as to ensure optimal protection against potential threats while guaranteeing access to peaceful nuclear applications. In that connection, United Nations Security Council resolution 1810 (2008) reiterated the Council's resolve to fulfil the obligations imposed by Security Council resolution 1540 (2004) and extended the mandate of the Security Council committee established by the latter resolution. The committee's report of July 2008 specifically called on the Agency to assist States in meeting the provisions of the two resolutions. The Secretariat should provide assistance to Member States in fulfilling their commitments and his country was prepared to help the Agency fulfil that role.
- 89. The revision of document INF/CIRC/225/Rev.4 was a welcome step, in the interests of addressing more effectively the current threat environment. His country stood ready to assist other States in interpreting, developing, and implementing a physical protection regime.
- 90. Recognizing the significant contribution of the illicit trafficking database as a tool for detecting potential acts of nuclear terrorism and gauging the effectiveness of physical protection efforts, the United States applauded the Agency for welcoming all States to participate in the illicit trafficking database programme on a voluntary basis and for strongly encouraging them to report incidents to the database in a timely manner.
- 91. In addition to providing direct financial contributions to the Nuclear Security Fund, his country had been working with the Agency to assist States to reduce the potential for nuclear and other radioactive material to fall into terrorist hands. Those efforts included regional radiological security partnerships to help strengthen legal and regulatory controls over nuclear and other radioactive material within national borders and in international transit. The United States had been working closely with other donor countries and the Office of Nuclear Security to coordinate bilateral assistance programmes to address the threat of nuclear terrorism.
- 92. Other important efforts included the conversion of research reactors from the use of HEU to LEU fuel. In the United States, the conversion of two civilian HEU-fuelled research reactors to LEU fuel was within weeks of completion and the conversion of the remaining 11 was expected to be completed by 2014. He encouraged all other States with such reactors to follow suit.
- 93. The United States assisted the Agency by providing technical experts as trainers for Agency-sponsored courses and workshops. It had also contributed substantially to the development of many of the presentations used in those training courses.
- 94. His country was proud to play a leading role in the Global Initiative to Combat Nuclear Terrorism which had been endorsed by 75 nations. The Agency, in its capacity as an observer, had supported national efforts to fulfil commitments made under the Initiative. Most recently, the Director of the IAEA Office of Nuclear Security had spoken at the 4th meeting of the Initiative in June 2008 on

the importance of cooperation between the private sector, various levels of government and international organizations in their strategies against nuclear terrorism. He urged the Agency to continue to play that important role in the global fight against nuclear terrorism.

- 95. His Government commended the Agency on its accomplishments under the nuclear security programme and looked forward to working with the Secretariat and others in producing a new Nuclear Security Plan for 2010–2013 that reflected the changes in the security situation since 2001. The nuclear security symposium scheduled for early 2009 would provide valuable input in that regard.
- 96. The Agency's nuclear security programme, from uncertain beginnings, had become a maturing enterprise and his Government remained committed to working with the Secretariat and Member States to embed globally an integrated nuclear security culture that became part of the process in every national nuclear programme and not an afterthought. Given the importance of the Nuclear Security Fund, he encouraged Member States to contribute generously.
- 97. Mr DRAPER (United Kingdom) said that his country continued to be a strong supporter of the nuclear security programme and, in addition to providing voluntary contributions, took great care to coordinate its own bilateral nuclear security programme with that of the Agency. He congratulated the Agency on its achievements over the preceding year and endorsed the recommended actions set forth in document GOV/2008/35.
- 98. Paragraph 32 of the report mentioned a number of smuggling attempts but did not differentiate between radioactive and nuclear material. Bearing in mind the significantly different threats posed by those different types of material, there might be some merit in identifying how many of the cases involved nuclear material. His country had also noted that the Agency had been active in providing assistance with the upgrading of physical protection at various facilities and would welcome confirmation that it gave the highest priority to responding to requests for assistance in protecting significant quantities of sensitive nuclear material, subject of course to the availability of funds.
- 99. Mr CANCHOLA GUTIERREZ (Mexico) expressed satisfaction at the achievements in the field of nuclear security during the reporting period, notably the assistance the Agency provided to Member States to improve their national legislative and regulatory frameworks, and activities that enhanced the security of nuclear facilities and related material, which measures contributed to international disarmament and non-proliferation efforts. He also stressed the value of the Nuclear Security Plan for 2006–2009. Mexico was a party to the 13 international instruments in the security field and was complying with United Nations Security Council resolutions 1373 (2001) and 1540 (2004), and General Assembly resolutions 49/60 and 50/53.
- 100. His country had participated in a number of Agency training efforts, regional courses and events, and was involved in bilateral activities with the United States Department of Energy. In December 2008, the Agency would be sending an INSServ mission to Mexico to determine the vulnerability of and the risks associated with some of its strategic installations, such as ports, airports and border crossing points, as regards prevention of illicit trafficking in nuclear and/or radioactive material, and acts of terrorism.
- 101. Mexico encouraged the Agency to continue supporting activities to improve nuclear security measures undertaken by Member States and reiterated its support for the Agency's activities to promote the universal application of the relevant international instruments and the adoption of guidelines and technical documents. Such standards, guidelines and recommendations should be the outcome of consensus agreement among Member States and should comply fully with international law and the principles of international cooperation. It was essential to uphold the right of all Member States to engage in research on, and development and practical application of, atomic energy for peaceful uses. Thus, provisions to ensure control of material and radioactive sources should be

established through multilateral processes to ensure they were balanced, properly analysed, and in line with the interests of all Member States.

- 102. Mexico was interested in taking part in Agency activities under the Nuclear Security Plan for 2010–2013 in the area of human resources training and the review of guides.
- 103. Finally, he took note of the report, and supported its transmission to the General Conference.
- 104. Mr STEINMANN (Switzerland) reported that, on 13 June 2008, the Swiss parliament had ratified the Amendment to the CPPNM.
- 105. His country had been pleased to learn that two new guides had been published in the IAEA Nuclear Security Series and that others were to be published shortly. It supported the Agency in its training work and had noted with great interest the report's reference to a programme culminating in a master of science degree in nuclear security. Specific training would certainly improve the quality of implementation of security, but the number of potential candidates for such a degree course was rather limited in individual States so an international solution would be desirable.
- 106. The report rightly drew attention to the funding of the Nuclear Security Plan. Given the importance of nuclear security in the context of widespread use of nuclear energy, funding from the Regular Budget was clearly required. His country assumed that that matter would be dealt with in discussions of the Regular Budget and in the light of the discussions that would be held on the report of the Commission of Eminent Persons on the future of the Agency (GOV/2008/22).
- 107. Mr AWAIS (Pakistan) commended the Agency on the progress made during the reporting period, and for the assistance it had given to States with improving their legislative and regulatory frameworks, upgrading their physical protection systems, the recovery, conditioning and repatriation of radioactive sources, and supply of equipment for border monitoring.
- 108. Pakistan was fully committed to and actively participated in international efforts to combat nuclear terrorism, had promulgated the necessary legislation on export of items related to nuclear and biological weapons and their delivery systems, and had elaborated security arrangements for the physical protection of its nuclear facilities.
- 109. The Agency's efforts to consolidate the nuclear security needs of States into integrated plans for nuclear security improvements and assistance were praiseworthy and his country had established a cooperation agreement with the Agency that would facilitate programme implementation and the predictability of work. Pakistan supported cooperation among States at regional and international level and, in spite of financial constraints, had made a modest contribution towards the Nuclear Security Fund.
- 110. The Agency was also doing commendable work to strengthen States' capacity by holding training courses on physical protection and response to illegal acts involving nuclear and radioactive material and facilities. His country also looked forward to the outcome of its work on an educational programme on nuclear security.
- 111. Mr ALSHARIA (Iraq) said that his country attached great importance to protection against nuclear terrorism. It had taken many legislative and technical measures, had strengthened its borders, upgraded the qualifications of its experts and taken concrete steps to meet the provisions of the CPPNM. Combating nuclear terrorism required not only physical protection but also strengthening of a country's regulatory structure. It was essential that States exchange information to guard against terrorist activities. Iraq commended the Agency on its achievements in combating nuclear terrorism and called for greater investment to achieve greater protection.

- 112. Mr GUMBI (South Africa), noting with concern the increasing threat posed by nuclear terrorism, said that his country strongly supported the implementation of the Nuclear Security Plan for 2006–2009 and had repeatedly voiced its concern about the lack of assured and predictable funding to deal with the nuclear terrorist threat. He called upon donors to make appropriate funds available to enable the Agency to continue its activities in the field of protection against nuclear terrorism. He also welcomed the EU Joint Actions in support of the Nuclear Security Plan, the second of which covered the whole of Africa. However, further donations would be required to maintain their impetus and effectiveness.
- 113. The Agency's Nuclear Security Series publications provided excellent guidance and information to Member States, and his country welcomed in particular the handbook on illicit trafficking that had been published. South Africa participated in the Agency's illicit trafficking database and, in August 2007, a workshop had been held in South Africa on illicit trafficking information management and coordination at which information on unreported incidents had been presented and subsequently incorporated into the database.
- 114. His country acknowledged that clear concepts of nuclear security had to be developed well in advance, and that an appropriate knowledge base would have to be developed to facilitate safe and secure operation of any future nuclear facilities. In that connection, South African stakeholders had participated in training courses and workshops on the State system of accounting for and control of nuclear material with a view to implementing meticulously the country's obligations under its comprehensive safeguards agreement.
- 115. South Africa would also draw on the Agency's expertise in the area of nuclear security measures for big international events and had held initial discussions regarding nuclear security support for the 2010 World Cup football tournament.
- 116. Mr BAAH-DUODU (Ghana) said it was sad to observe that, in spite of the various measures that had been instituted, attempts were still being made to traffic illicitly in nuclear and other radioactive material. The statement in the report that between 1 July 2007 and 30 June 2008 there had been 243 reported trafficking incidents was alarming. His country was nevertheless greatly encouraged that the Agency continued to make significant progress with the collection of information on illicit trafficking incidents and other unauthorized activities involving nuclear and radioactive material. That was an area of the Agency's activities which demanded enormous support. It was against that backdrop that his country supported the Nuclear Security Plan for 2006–2009 and noted with concern the insufficiency of the funds contributed to the Nuclear Security Fund. He urged Member States to continue to support the efforts of the Agency to establish a sustainable global nuclear security regime.
- 117. For its part, Ghana had decided to work very closely with the Agency to establish and implement its national nuclear regime and it was committed to fulfilling all obligations, both binding and non-binding, under the relevant international legal instruments of the nuclear security framework. It would therefore welcome the Agency's assistance to develop the necessary expertise and capacity to support Agency nuclear security activities in Africa.
- 118. His country had hosted a number of short-term training courses and workshops on nuclear security for the African region and was keenly interested in running postgraduate nuclear security programmes when the teaching modules were developed. Ghana was committed to the nuclear security regime and would continue to host meetings and training activities in the African region.
- 119. In conclusion, he took note of the Nuclear Security Report 2008 and endorsed the recommended action set forth therein.

- 120. Mr PANUPONG (Thailand) said that his country, in introducing nuclear power a an alternative source of energy, recognized the challenge of incorporating nuclear security concepts that were aligned with safety and safeguards principles at the earliest possible stage of development, in keeping with the overall objective of the Agency's nuclear security programme, which was to contribute to achieving optimum worldwide security of nuclear and radioactive material in use, storage and transport, and of associated facilities.
- 121. Thailand acknowledged the increasing importance of the assistance provided to States under the Nuclear Security Plan for 2006–2009 with meeting their undertakings under relevant international legal instruments, which should enhance the capacity of the relevant authorities to deal with possible instances of nuclear terrorism. However, it noted that the provision of such assistance should be at the request of Member States.
- 122. He commended the Agency for putting in place its illicit trafficking database programme, given the threat posed by clandestine trafficking networks. Thailand had complied with all its obligations and commitments under United Nations Security Council resolutions, the NPT and its Agency safeguards agreement, it had signed the International Convention for the Suppression of Acts of Nuclear Terrorism and had initiated the process to become a party to the CPPNM.
- 123. Mr LIM Sang-Beom (Republic of Korea)* said that nuclear terrorism remained the most serious and dangerous threat to the peace and security of the international community. The revelation of the A.Q. Khan network in 2004 had brought home the real possibility of the acquisition of nuclear weapons by terrorists. The Republic of Korea strongly supported the need for collective action to respond to the current challenges and to keep pace with evolving circumstances. In that regard, his country recognized the important role of the Agency as a focal point to facilitate the enhancement of nuclear security at both national and international level. The Agency's experience should be shared through cooperation with other international organizations and relevant global initiatives. Considering the emphasis that had been given in the Nuclear Security Plan for 2006–2009 to measures to establish and enhance the capabilities of States, his country expected that due consideration would be given to sharing of experience when preparing the next Plan.
- 124. His country took note of the many important achievements mentioned in the report. It called on States to adhere to the amendment to the CPPNM, and to promote its early entry into force. Furthermore, the illicit trafficking database was an essential tool for the prevention of nuclear and radiological terrorism and he encouraged Member States to continue to contribute to it on a voluntary basis.
- 125. The Republic of Korea had updated its relevant laws and regulations with a view to strengthening control of, accounting for and physical protection of nuclear material, and to enhancing the security of civilian nuclear facilities. It had also contributed to the Nuclear Security Fund and would continue to consider positively further contributions. Noting that the Agency had provided various kinds of support for major public events, such as the recent Olympic Games in China, he said that the Republic of Korea would be hosting the 2011 International Association of Athletics Federations Athletics World Championships and the 2014 Asian Games and wished to cooperate closely with the Agency in that connection.
- 126. Mr GASHUT (Libyan Arab Jamahiriya)* said that his country supported and endorsed all international efforts to respond to and combat nuclear terrorism. He commended the Agency's role in strengthening the capacity of States to respond to and combat nuclear terrorism and illicit trafficking in nuclear and other radioactive material, but pointed out that the main responsibility in that area rested with the States themselves. They were responsible for providing rigorous, adequate and continuous protection to prevent material and devices from falling into the hands of terrorists.

- 127. The existence of nuclear weapons and material that could be used in explosive devices, as well as the existence of weapons of mass destruction in general, was in itself a source of fear and intimidation for developing countries. The only way of responding to and preventing nuclear terrorism was for those States that possessed nuclear weapons and material, and weapons of mass destruction, to set up internationally verifiable and effective programmes to eliminate such weapons and material. The world as a whole should also adopt a policy of mutual respect and avoid double standards.
- 128. The Agency's approach in cooperating with other international efforts in the field of nuclear security and nuclear terrorism promoted synergy and effective use of resources. His country supported the Agency's future plan of activities on nuclear security and it would be participating in the international symposium on the subject to be held in March 2009. The Libyan Arab Jamahiriya was a party to the CPPNM and was also set to join the Convention on Nuclear Safety and the Convention on Early Notification of a Nuclear Accident.
- 129. Mr TANIGUCHI (Deputy Director General for Nuclear Safety and Security) thanked Board members for their valuable comments and for the strong support they had given to the Agency's nuclear security programme. Future work under that programme would entail clearer prioritization, particularly in the preparatory work for the next cycle of the Nuclear Security Plan. He also expressed his gratitude for the continuing, generous financial and in-kind contributions mentioned by a number of delegations. The Secretariat fully agreed with those who had called for an increase in Regular Budget appropriations for nuclear security and would like to be able to count on the support of Member States for such a move. It would be proposing a partial regularization of the nuclear security budget in the programme and budget for 2010–2011. Moreover, the Secretariat continued to attach high importance to assistance to Member States in building and improving the capacity to prevent, detect and respond to malicious acts, and he had noted the broad support that had been expressed for more comprehensive and strategic approaches to that issue.
- 130. He welcomed the information provided on the progress made in a number of countries in connection with ratification of the CPPNM. The ratification process and the entry into force of the amendment to the Convention were vitally important for improving security and physical protection worldwide. He also underlined the vital importance of the coordination and complementarity of various Agency activities with national, bilateral and regional activities. The Secretariat particularly appreciated the joint work with Member States.
- 131. Furthermore, the Secretariat attached priority to the development and publication of guidance documents and wished to accelerate that process as much as possible, prioritizing areas where there was high demand, such as the Security Fundamentals and the latest revision of document INFCIRC/225. It also wished to promote information and knowledge sharing and to enhance analytical efforts, including further improvement of the illicit trafficking database, for which strong support had been expressed by Board members. There was still room for improving the coverage of and, in particular, the quality of the information that was submitted to the database, on which issue the Secretariat was working together with points of contact.
- 132. Turning to the comments that had been made regarding nuclear safety and security, he said that the Secretariat was now trying to promote a more integrated and synergistic approach to the safety and security issue, while continuing to pay very careful attention to the issue of confidentiality and the important role of security-specific activities such as law enforcement and border controls.
- 133. Responding to the questions raised by the representative of the United Kingdom, he said that 3 of the 14 cases of smuggling referred to in paragraph 32 of the report had involved radioactive sources and 8 had involved nuclear material. The other three cases had been assessed as scams. With regard to physical protection, need assessments were always made with the help of internationally

recognized experts. The Secretariat was eager to clarify the process further, as well as the usefulness and value of the assessment to a broader cross-section of States.

- 134. The <u>CHAIRMAN</u>, summing up the discussions, said that the Board had welcomed the annual report by the Director General on measures in the area of nuclear security, which provided a review of activities and achievements over the preceding year.
- 135. Some suggestions had been made for improving the structure and content of the report.
- 136. Several members had commended the approach taken by the Agency in implementing its nuclear security activities, including its Nuclear Security Plan 2006–2009 and the results obtained, and also the approach of seeking synergies and coordination among all Agency Departments.
- 137. Some members had encouraged the Secretariat to continue with the prioritization and streamlining of nuclear security-related activities to accelerate project planning and implementation.
- 138. Several members had expressed the view that the implementation of the proposed nuclear security activities should not interfere with the established priorities of the technical cooperation programme.
- 139. Several members had stressed the importance and usefulness of the Agency's illicit trafficking database and had encouraged members to participate in and benefit from that database.
- 140. Several members had agreed with the view that the primary responsibility for nuclear security measures and activities rested with Member States and that the role of the Agency was to assist with that. Several members had urged the Secretariat to take into consideration the principles of confidentiality when implementing nuclear security activities.
- 141. Several members had emphasized the importance of publishing the Nuclear Security Series and had underlined the usefulness of translating those documents into all of the Agency's official languages. Some members had encouraged the Secretariat to continue its efforts to develop the Nuclear Security Fundamentals, which would elaborate the essential nuclear security principles.
- 142. Several members had noted the global nuclear security initiatives involving the Agency. Several members had emphasized the importance of increased international coordination and assistance to strengthen global protection against nuclear terrorism and had underlined the Agency's key role in that regard, and also in helping States to develop and implement national and regional nuclear security frameworks.
- 143. Several members had outlined their national and regional efforts in support of the Agency's nuclear security activities and had emphasized the importance of ensuring safety, security and safeguards when introducing or expanding a nuclear programme.
- 144. Strong support had been expressed for the efforts to strengthen relevant international instruments, such as the International Convention for the Suppression of Acts of Nuclear Terrorism, the CPPNM and the Code of Conduct on the Safety and Security of Radioactive Sources. The hope had been expressed that the entry into force of the amendment to the CPPNM would be achieved as soon as possible.
- 145. Several members had reiterated their view that the voluntary codes of conduct should not hamper the wide use of radioactive sources and should not be used to deny the export of such sources for peaceful purposes.

- 146. Support had been expressed for the training activities provided by the Agency to Member States in the field of nuclear security, including the Secretariat's intention to establish regional training centres.
- 147. A view had been expressed in support of efforts to minimize the use of high-enriched uranium in the civilian nuclear sector and to facilitate its conversion to low-enriched uranium.
- 148. Appreciation had been expressed for the contributions, both financial and in-kind, made to the Nuclear Security Fund and for the high implementation rate of projects. Others had stressed the voluntary nature of the contributions to nuclear security activities. Others had stated that funding for nuclear security activities should be included in the Regular Budget.
- 149. Several members had expressed concern about specific conditions attached by States providing financial contributions to the Nuclear Security Fund.
- 150. The Board had noted the Secretariat's response on some of the points raised during the discussion.
- 151. With those comments, he took it that the Board wished to: (a) take note of the Nuclear Security Report 2008 on measures to protect against nuclear terrorism; (b) transmit the report to the General Conference with a recommendation that States continue to contribute to the Nuclear Security Fund, which was necessary for the continuation of the Agency's activities related to the measures to protect against nuclear terrorism; (c) call upon States to adhere to the amendment to the CPPNM and to promote its early entry into force; encourage all States to act in accordance with the object and purpose of the amendment until such time as it entered into force; implement the legally binding and non-binding international nuclear security-related instruments; and invite States to make full use of the assistance available for that purpose through participation in the Agency's nuclear security programme; and (d) encourage States to participate in the illicit trafficking database programme.
- 152. It was so decided.

8. Strengthening the Agency's activities related to nuclear science, technology and applications

(GOV/2008/36 and Mod.1)

(a) Nuclear power applications, status and prospects of nuclear power (GOV/INF/2008/10 and Mod.1; NG-T-4.2)

153. Mr SOKOLOV (Deputy Director General for Nuclear Energy) said that the basic message conveyed in the report on the international status and prospects of nuclear power contained in document GOV/INF/2008/10 was the same as that emphasized in the report of the Commission of Eminent Persons on the future of the Agency (GOV/2008/22) — growing energy demand, growing carbon emissions and growing interest around the world in nuclear power. The report noted that 43 Member States had, through requests to the technical cooperation programme, expressed to the Agency their interest in assistance regarding various aspects of nuclear power, and another 10 had indicated their interest without a formal technical cooperation request. Those numbers had risen further since the report had been finalized and would undoubtedly rise still further. The precise numbers were not critical, but the message was clear. Interest had increased and could be expected to rise further, and the Agency would continue to receive increasing numbers of requests for assistance.

The Secretariat had made significant adjustments in its work to respond to that growing interest and provide Member States with integrated services and advice on a holistic nuclear power infrastructure development process. That included the development of practical recommendations for self-assessment and the application of the document entitled *Milestones in the Development of a National Infrastructure for Nuclear Power* (NG-G-3.1), plus a mechanism to ensure an appropriate approach to new nuclear power implementation. An outline of the work done, together with current and future Agency activities, could be found in Annex 5 to document GOV/2008/36 entitled Supporting Infrastructure Development for Nuclear Power.

- 154. The basic message in the report entitled *Financing of New Nuclear Power Plants* (NG-T-4.2) was that there was no magic solution. Markets had changed since most of the existing plants had been built and those changes had affected the profit opportunities and financial risks facing current investors. Governments and investors would continue to adjust, but the underlying importance of basic factors like stability, long-term commitment, sharing financial risk wisely, and making sure that revenues covered costs, remained. The report had been specifically requested by the General Conference. In addition, as part of the regular 2008–2009 programme, the Secretariat would soon be publishing a document on infrastructure measures to improve prospects for financing nuclear power plants. It was also in the process of updating the Agency's document on inviting and evaluating bids for nuclear power plants.
- 155. As requested by previous General Conference resolutions, the reports on nuclear knowledge management, infrastructure development for nuclear power, innovative nuclear technology and producing potable water contained in document GOV/2008/36 summarized recent Agency activities in those areas.
- 156. Ms LACANLALE (Philippines), speaking on behalf of the Group of 77 and China, expressed appreciation for the Agency's continuing partnership with the African Union's Pan African Tsetse and Trypanosomosis Eradication Campaign and its contributions to the implementation of the action plan under that initiative through one regional and 10 national technical cooperation projects in Member States in Africa. In that connection, she thanked the Agency for developing several manuals and guidelines that had been particularly useful to the List-I countries, and for the technical support that had been provided, as needed, to ongoing tsetse projects in a number of Member States, including support for integrating the SIT in the Southern Rift Valley Tsetse Eradication Project.
- 157. The Group welcomed the Agency's support in building Member States' capacity in such areas as entomological baseline data, tsetse ecology and biology and relevant laboratory techniques. It also appreciated the CRPs carried out under the aegis of the Agency with the collaboration of the FAO/IAEA Agriculture and Biotechnology Laboratory and international counterparts such as the WHO and FAO, and with the help of several Member States' contributions. The Group further welcomed the various training courses held in Member States in 2007 and 2008.
- 158. She expressed appreciation to the Agency and to the Member States which had provided extrabudgetary contributions that had enabled the preparatory activities for the field pilots on SIT for the control of disease-bearing mosquitoes to be initiated in several Member States, and the related CRPs to be conducted.
- 159. With regard to nuclear power applications, the Group noted the continued interest of Member States in the introduction of nuclear power in their energy mix. It welcomed the integrated missions undertaken by the Agency in several developing countries to explain the Agency's guidance publications and available services. It also noted that the number of national and regional technical cooperation projects related to infrastructure development was expected to be more than double in the 2009–2011 technical cooperation cycle. The Group welcomed the Agency's plan for the preparation of

new documents to provide additional assistance on how to implement the guidance contained in the document *Milestones in the Development of a National Infrastructure for Nuclear Power*. It encouraged the Agency to enhance its support to developing countries interested in nuclear power to help them build the necessary nuclear infrastructure through increased technical assistance, expert missions and workshops, and new and updated documents.

- 160. The Group supported collaborative efforts with other international organizations on plant life management for long-term operation and, in that regard, it appreciated the 2nd International Symposium on Nuclear Power Plant Life Management held in Shanghai in October 2007.
- 161. The increasing interest in uranium exploration, mining and production was also involving new countries and the Group welcomed the Agency's efforts related to manpower training in that field.
- 162. On the issue of spent fuel storage and its long-term behaviour, the Group noted the publication of TECDOCs on the subject and encouraged the conduct of the education and training activities envisaged in that area.
- 163. With regard to the development of innovative nuclear technology, the Group encouraged the Agency's activities envisaged under INPRO. It noted that stage 1 of the activity on common user considerations for future nuclear energy systems that developing countries might deploy had been completed in early 2008 and looked forward to the report on that issue. The Group awaited the results of the assessments of the INPRO methodology applied in various Member States.
- 164. Out of 12 collaborative projects on advanced energy systems endorsed by the Steering Committee, the Group noted that four were operational with committed contributions from Member States and another eight projects had been finalized and were open for Member States to join.
- 165. The Group noted and supported the Agency's activities related to the development of advanced nuclear reactor designs and requested the Agency to keep Member States informed of progress in that area. It endorsed the Agency's efforts in support of education and training in the field of advanced and innovative fuel technology development and looked forward to the publication of a factbook on the topic aimed primarily at the new generation of scientists and engineers.
- 166. Referring to the report on the international status and prospects of nuclear power, she noted with concern the perception that the dissemination of nuclear technologies posed proliferation and security risks. The rise in such negative perceptions had led to various restrictions being imposed upon developing countries, which were the countries that most needed nuclear technology for the production of energy and for their socio-economic development.
- 167. In that connection, the Group reiterated its position regarding the various proposed multilateral approaches to the nuclear fuel cycle that purported to address non-proliferation and security concerns but impinged on the inalienable right of States to develop nuclear energy for peaceful uses. The Group requested the Secretariat to avoid including references to those initiatives in the Agency's reports and documents until their legal, technical, financial, economic and political aspects had been thoroughly discussed and agreed upon by all States.
- 168. The Group supported the Agency's activities in the area of non-electrical applications of nuclear energy, i.e. nuclear desalination and nuclear hydrogen production and activities related to SMRs. In that context, the Agency should facilitate technical, legal, regulatory and financial assistance to interested developing countries with small electricity grid sizes that were planning to introduce nuclear power as part of their energy mix. The Group looked forward to a detailed report on SMRs to be provided to the General Conference at its fifty-third session.

- 169. Turning to nuclear knowledge management, she welcomed the adoption of an Agency-wide approach and strategy for such activities and noted that the Agency had held two international meetings on trends and experiences in nuclear knowledge management worldwide, and had made recommendations on the tailoring of the Agency's programme to those developments.
- 170. The Group appreciated the Agency's support through its technical cooperation programme for the establishment or reactivation of INIS centres in Member States, and for the establishment of policies and strategies to preserve and enhance knowledge and expertise and practical guidance for nuclear knowledge management.
- 171. The Agency's support for various safety networks, including a number of networks for education and training, and for the World Nuclear University Summer Institute, was commendable. The Group looked forward to the outcome of a broad review to identify possible synergies among nuclear safety networks and information resources.
- 172. In the field of the production of potable water using nuclear reactors, the Group appreciated the efforts of INDAG in reviewing activities and progress at national, international and regional level.
- 173. The Group encouraged the work of the Agency on the development of a roadmap for nuclear desalination and the nuclear desalination toolkit, as recommended by INDAG. That would provide Members States interested in nuclear desalination with valuable information and guidance.
- 174. The Group noted the implementation of the activities and recommendations relating to nuclear desalination through ongoing national and bilateral projects worldwide and requested the Agency to continue informing Members States of the progress made in identifying potentially viable techniques.
- 175. Noting the interest expressed by several Members States in launching desalination plants, the Group also encouraged the Agency to launch an evaluation of the major environmental impacts of nuclear desalination and looked forward to its findings.
- 176. Mr UZCÁTEGUI DUQUE (Bolivarian Republic of Venezuela)*, speaking on behalf of GRULAC, welcomed document GOV/2008/36 which contained detailed, up-to-date information on major activities carried out by the Agency in the area of nuclear science, technology and applications in response to General Conference resolutions GC(50)/RES/13 and GC(50)/RES/14.
- 177. The Group supported the Agency's efforts to strengthen activities related to nuclear science and technology and their growing contribution to solving priority issues for Member States in such vital areas as agriculture and food, human health, energy production, water resources management and environmental protection.
- 178. The Group noted with satisfaction the Agency's work to address the renewed interest in nuclear energy and to ensure that the developments in that area were accessible to all interested users. It acknowledged in particular the ongoing work under INPRO and stressed the importance of atomic and nuclear databases and their updating.
- 179. Another aspect of special importance for GRULAC was nuclear knowledge management. In that connection, he drew attention to the Agency's efforts to preserve and improve nuclear knowledge and to ensure the availability of qualified staff. The Group noted with satisfaction the support lent by the Agency to various countries in the region to develop their quality assurance programmes in the nuclear knowledge management field.
- 180. GRULAC appreciated the Secretariat's efforts to strengthen the teaching of nuclear science and technology in Member States and noted in particular the establishment in different regions, including Latin America and the Caribbean, of two postgraduate programmes on radiological protection, with

the aim of establishing a group of safety specialists to ensure that skills were kept alive and knowledge was preserved and passed on.

- 181. Similarly, the document reflected the important cooperation between the Agency and other international organizations, in particular FAO, in the form of significant support for the transfer of nuclear science and technology know-how and their application in the field of agriculture and food to reduce hunger, poverty and environmental degradation. GRULAC therefore reiterated its support for the cooperation achieved via the Joint FAO/IAEA Division.
- 182. In the context of strengthening applications of nuclear science and technology, GRULAC wished to highlight the importance it attached to the contribution made by nuclear technology and stable isotope techniques to the search for solutions to nutritional problems and chronic disease in children and young people. On 9–13 June 2008, a meeting had been held in Valencia in the Bolivarian Republic of Venezuela to frame a project proposal on evaluation of micronutrient nutritional state and its relation to infection and immunity in schoolchildren and children of pre-school age in Latin America. The project would be submitted to the Board of Governors for possible inclusion in the 2009–2011 technical cooperation cycle.
- 183. Finally, he thanked the Secretariat for preparing and circulating the report on the International Status and Prospects of Nuclear Power contained in document GOV/INF/2008/10, which was a valuable tool for nuclear experts and authorities in GRULAC countries.
- 184. With those comments, GRULAC supported the recommended action set forth in document GOV/2008/36.

The meeting rose at 12.55 p.m.