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Held at the Austria Center Vienna
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President: Mr. GRÖNBERG (Finland)

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[*] GC(45)/28.

The composition of delegations attending the session is given in document GC(45)/INF/17/Rev.2.

Abbreviations used in this record

ABACC	Brazilian-Argentine Agency for Accounting and Control of Nuclear Materials
AFRA	African Regional Co-operative Agreement for Research, Development and Training Related to Nuclear Science and Technology
ARCAL	Co-operation Agreement for the Promotion of Nuclear Science and Technology in Latin America and the Caribbean
Basic Safety Standards	International Basic Safety Standards for Protection against Ionizing Radiation and for the Safety of Radiation Sources
Biological Weapons Convention	Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxic Weapons and on their Destruction
Buenos Aires Conference	International Conference of National Regulatory Authorities with competence in the Safety of Radiation Sources and the Security of Radioactive Material
BWR	Boiling water reactor
Chemical Weapons Convention	Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction
COP/FCCC	Conference of the Parties to the Framework Convention on Climate Change
Cordoba Conference	International Conference on the Safety of Radioactive Waste Management
CSD	Commission on Sustainable Development
CTBT	Comprehensive Nuclear-Test-Ban Treaty
CTBTO	Comprehensive Nuclear-Test-Ban Treaty Organization
EURATOM	European Atomic Energy Community
FAO	Food and Agriculture Organization of the United Nations
INPRO	International Project on Innovative Nuclear Reactors and Fuel Cycles
IRRT	International Regulatory Review Team
Joint Convention	Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management
Kyoto Protocol	Kyoto Protocol to the United Nations Framework Convention on Climate Change
LWR	Light-water reactor
Malaga Conference	International Conference on the Radiological Protection of Patients in Diagnostic and Interventional Radiology, Nuclear Medicine and Radiotherapy
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
OAU	Organization of African Unity
OECD/NEA	Nuclear Energy Agency of the Organisation for Economic Co-operation and Development

Abbreviations used in this record
(Contd.)

OPANAL	Agency for the Prohibition of Nuclear Weapons in Latin America and the Caribbean
RCA	Regional Co-operative Agreement for Research, Development and Training Related to Nuclear Science and Technology (for Asia and the Pacific)
SAGTAC	Standing Advisory Group on Technical Assistance and Co-operation
SIT	Sterile insect technique
TCDC	Technical co-operation among developing countries
TCF	Technical Co-operation Fund
Tlatelolco Treaty	Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean
UNFCCC	United Nations Framework Convention on Climate Change
WWER	Water-cooled and -moderated reactor (former USSR)

GENERAL DEBATE AND THE ANNUAL REPORT FOR 2000 (continued)
(GC(45)/4)

1. Mr. URRUELA PRADO (Guatemala), deploring the terrorist attacks on the United States just a few days previously, expressed his condolences and sympathy with the victims' families and the American Government. While Guatemala was used to the fear brought about by acts of terrorism, those had been on an inconceivable scale.

2. Guatemala was interested in using nuclear energy exclusively for peaceful purposes to promote its national development objectives to benefit the greatest possible number of Guatemalans and improve their quality of life. Under the general management of the Ministry of Energy and Mining, the technical co-operation received from the Agency had been integrated into the national development plan. The projects had helped to strengthen institutions, train human resources, introduce new technologies, solve health, agricultural and industrial problems, promote geothermal and oil exploration, and deal with environmental issues.

3. As the Guatemalan President had confirmed in his annual address to Congress, regional Model Projects to upgrade radiation protection infrastructure, to develop technical capabilities for a sustainable radiation and waste safety infrastructure, and to improve national regulatory control and occupational radiological protection programmes had strengthened the country's regulatory authorities and relevant legal framework. The national workshop on response to radiological emergencies, attended by participants from all sectors, had led to the elaboration of a national radiological emergency plan for incorporation by the National Co-ordinating Committee for Disaster Reduction (CONRED). The country had received equipment for its secondary standard dosimetry laboratory, which served the Central America region, and also support in nuclear waste management and the training of safety and radiation protection personnel. The Agency's mission to evaluate Guatemala's legislative and regulatory infrastructure and its radiation protection programme had been extremely useful and his delegation encouraged the Agency to continue such activities.

4. Under the regional project for geothermal development and environmental management, the National Institute of Electricity (INOE) had received support and training in geochemistry and reservoir engineering, as well as expert assistance in estimating the production potential - reckoned to be 430 MW(e) - of all Guatemala's known geothermal areas: Moyuta, San Marcos, Totonicapán, Tecuamburro, Zunil and Amatitlan.

5. Guatemala was grateful for the continuing assistance it received under ARCAL in such areas as human and animal health, industry and agriculture. All projects had a significant social impact and were consistent with sustainable development aims.

6. Approved national projects for 2001-2 included analysis of ecotoxic metals using X-ray fluorescence, strengthening of the national programme for neonatal hypothyroidism screening and quality assurance in the National Cancer Institute. They were being implemented using the new "outsourcing" modality, which had contributed to efficient implementation and strengthened bilateral co-operation with Mexico. There had been successful multilateral

co-operation with the United States of America, Mexico, the Agency and FAO under the medfly programme. His delegation hoped that that programme would be extended in due course to cover the entire territory of Guatemala.

7. Recognizing the contribution made by the Agency to the development of nuclear applications in Guatemala, his Government hoped that resources would continue to be distributed in a balanced fashion in order to meet the maximum number of requests for assistance.

8. Finally, with regard to the severe drought which had caused agricultural losses, famine and disease in Central America, he said that the situation could have been avoided if the region had had adequate irrigation systems and better knowledge and management of groundwater resources based on the use of isotope hydrology. He was therefore grateful for delegations' support of the relevant resolution.[1]

9. Mr. MOONESINGHE (Sri Lanka) expressed his Government's condolences to the delegation of the United States of America for the recent terrorist attacks in New York and Washington. Efforts to combat terrorism in Sri Lanka over the past 18 years had cost countless lives and led to tremendous economic losses.

10. Having read out the message sent by his President to President Bush of the United States affirming, inter alia, Sri Lanka's full commitment to all international initiatives to combat terrorism, he welcomed the adoption by the United Nations of the International Convention for the Suppression of the Financing of Terrorism. As Vice Chair of the United Nations Ad Hoc Committee on the Elimination of Terrorism, Sri Lanka had been at the forefront of the global effort against terrorism.

11. Sri Lanka had demonstrated its recognition of the importance of the CTBT by being among the first countries to sign it on 24 October 1996. It was now in the process of ratifying the Treaty and hoped for an early entry into force. Sri Lanka had entered into an agreement with the CTBTO aimed at setting up a monitoring station under the international monitoring system.

12. Nuclear facilities in the Middle East which were not subject to safeguards posed a security threat. The international community had addressed that issue with General Assembly resolution A/RES/53/74 to establish a nuclear-weapon-free zone in the Middle East.

13. He welcomed the Agency's initiative to place more emphasis on servicing immediate human needs as that would be beneficial to the developing Member States in terms of health and living standards.

14. With regard to gender equality and the status of women in the Secretariat, more attention should be given to the recruitment of women from developing countries, especially

[1] See resolution GC(45)/RES/12.E.

those which were under-represented or not represented at all. Gender differences did not play a prominent part in Sri Lanka where a number of high-level posts were occupied by women.

15. Although Sri Lanka had no nuclear plants in operation and no plans to use nuclear power, co-operation with the Agency had enabled it to use nuclear technology for a wide range of other purposes, mainly in the medical, agricultural and industrial sectors.

16. The Atomic Energy Authority of Sri Lanka had just completed the construction of a new building to house its laboratories and administrative offices. The Government of Sri Lanka had provided the funds, thereby acknowledging the contribution nuclear technology could make to national development. It had also provided other resources for the Authority's programmes, including an almost threefold increase in the scientific cadre during the last five years and more funds for recurrent and capital expenses. Furthermore, the Government had agreed to double its assessed programme cost payments to the Agency in order to settle its arrears in a shorter period.

17. Sri Lanka welcomed the Agency's initiatives to ensure greater socio-economic benefits and end-user orientation of the technical co-operation programme through the Model Project concept, Country Programme Frameworks and thematic planning. Sri Lanka, for its part, had made an effort to improve the project proposals it submitted to the Agency and to ensure that they were in line with national development priorities.

18. His delegation appreciated the Agency's efforts aimed at making national nuclear institutes self-reliant and sustainable. The Atomic Energy Authority, which was the focal point of the Agency's activities in Sri Lanka, had managed to increase its income substantially by initiating scientific services and training programmes. Both the seminar on self-reliance and sustainability of national nuclear institutes, held in Malaysia the previous year, and the regional project on self-reliance and sustainability were helpful in that regard.

19. His delegation appreciated the Agency's efforts to improve the radiation protection and waste management infrastructure of Member States. Technical assistance which Sri Lanka had received under the relevant interregional Model Project had resulted in the regulatory programme being improved. New radiation protection regulations conforming to the Basic Safety Standards were being introduced, all radioactive sources had been registered and procedures had been prepared for the notification, authorization and inspection of practices involving radiation and radioisotopes.

20. Regional co-operation under the RCA had proved to be very beneficial for Sri Lanka in a variety of fields.

21. He commended the Secretariat for its action plan for the safety and security of radioactive sources. With the rapid growth in the use of radiation therapy, care was needed to ensure that doses were delivered as prescribed.

22. The adverse effects of the use of fossil fuels on the environment would mean increasing reliance on nuclear energy in future. The challenge facing the Agency in the 21st century was

to satisfy the energy demands of the developing countries. The developed countries were responsible for climate changes since most greenhouse gas emissions were attributable to them; they should be made aware that non-compliance with the UNFCCC and the Kyoto Protocol would be catastrophic.

23. The Agency's historic task was to accelerate the utilization of nuclear energy, control nuclear proliferation, enhance nuclear safety and, above all, improve the economic competitiveness of nuclear energy. If it fulfilled that task, with fusion- rather than fission-based reactors, the Agency - together with all other relevant institutions - would be making a giant leap forward for mankind in the realm of energy.

24. Mr. KAKODKAR (India) said that his country had been shocked by the terrorist attacks in New York and Washington. The Indian Prime Minister, Mr. A.B. Vajpayee, in a message to the President of the United States of America, had expressed his confidence that the American people would find the strength and resilience to overcome the tragedy.

25. In spite of the Agency's programme on small and medium-size power reactors, access to affordable energy in a sustainable manner remained a distant objective for the vast majority of the developing world. On the other hand, many industrialized countries with the technological capacity to produce nuclear power had more electricity than they needed. Some Asian countries with growing energy demands, including India, had reached a significant degree of industrialization and had acquired the necessary capability to utilize nuclear power technology to meet their energy needs. If the global community wished to bridge the energy gap - an essential condition for ensuring peace in the world - there was no alternative to the large-scale use of nuclear energy, as had been confirmed by several studies.

26. He was gratified to note that the United Nations CSD had recognized the value of nuclear energy in the context of sustainable development and had agreed that the choice of appropriate energy sources should be left to the countries concerned. The nuclear option, however, had suffered a psychological setback at the recent meeting of the COP/FCCC in Bonn, which had decided that developed countries could not use the emission reductions obtained from nuclear facilities to meet their commitments under the Kyoto Protocol. It was ironic that a "clean" energy source should be discouraged by a body concerned with the reduction of greenhouse gas emissions. He praised the role that had been played by the Secretariat at the latest CSD and COP meetings in providing information on nuclear power and sustainable development, organizing side events and presenting case studies, all of which had had a considerable impact.

27. In that context, he commended the Secretariat's preparation of the "Nuclear Technology Review" contained in document GC(45)/INF/5, which cited studies by prestigious organizations indicating the inevitability of nuclear power as an important component in the energy mix in the long term. That document reported that, in 2000, 6 nuclear power reactors had been connected to the grid and another 31 were under construction. That, together with other programmed activities, clearly pointed to a revival in nuclear energy.

28. As nuclear power would continue to play an important role in meeting the energy needs of the world it was imperative to eliminate, through innovation and improvement, the remaining concerns surrounding it. Solutions were needed not only to achieve economical generation of nuclear power but also to deal with the questions of safety, sustainability, proliferation resistance and long-term waste management. The development of the advanced heavy water reactor was the first step India had taken in that direction. Also, the Agency's initiative in launching INPRO was highly laudable and deserved strong support from Member States. His delegation advocated improved funding for programmes of that kind, which addressed Agency objectives in the areas of nuclear energy, nuclear safety and safeguards at the same time. Whereas INPRO was currently being financed out of extrabudgetary resources - and India was actively participating in it by providing cost-free expertise - his delegation believed that inclusion under the Regular Budget would be the most cost-effective strategy in the long run without detriment to the balance between the Agency's promotional and safeguards activities.

29. Synergy between the various international organizations in the field of nuclear energy was desirable. It was important to recognize that increasing technological capability and providing access to the benefits of research through actual participation was the most effective approach and India would like to see greater opportunities for interested Member States in such participation.

30. India now had a total nuclear power capacity of 2720 MW(e) with 14 units in operation and that capacity was expected to reach 10 000 MW(e) in the coming 10 years. Self-reliance was the guiding principle of its nuclear programme. India planned to import LWR technology to increase the share of nuclear power rapidly. Its first nuclear power station at Tarapur consisted of two BWRs, which continued to operate extremely well, and two 1000 MW(e) WWERs were in the process of being set up in collaboration with the Russian Federation. Those reactors would be placed under facility-specific Agency safeguards, as would other plants imported in the future.

31. The RCA was an important mechanism for the growth and use of nuclear technologies for sustainable development in the region. In line with the Agency's efforts to transfer more and more management responsibilities and ownership to Member States, India had been continuously increasing its participation in the RCA programmes. It had expertise in various RCA-related activities and well-developed facilities, which it had made available as regional resource units. Furthermore, it was hosting more training/workshop events, increasing the expert services and fellowship training it provided, and had evolved suitable mechanisms for successful technology transfers to end-users.

32. The Agency had been created with the sole objective of accelerating and enlarging the contribution of atomic energy to peace, health and prosperity throughout the world. That objective could be met only through the advancement of technology. Technology must therefore become the central pillar of the Agency's activities; safeguards and safety, while important, could only be supporting activities.

33. States that had developed and used atomic energy should share their expertise with others. The theme of the Scientific Forum during the present session of the General Conference focused on social and economic development under the title "Serving Human Needs: Nuclear Technology for Sustainable Development". India knew from its own experience that development in the field of the peaceful uses of atomic energy provided the impetus for accelerated national development. The motto of the Agency's technical co-operation and technology transfer should be technological empowerment to meet human needs.

34. Ms. BECERRIL MARTÍNEZ (Spain) expressed her Government's condemnation of the terrorist attacks on the United States of America and condolences to the victims' families. Spain had offered to co-operate fully with the United States Government in that regard.

35. There had been significant developments in the Spanish nuclear sector in recent years as efforts were being made to meet the increased demand for electricity owing to economic development. Nuclear energy had contributed to a reduction in Spain's external energy dependence and diversification of its energy sources. In 2000, electricity generation had risen by 7.2% to 223 994 GWh. Of that, 27.8% was of nuclear origin, representing a 5.5% increase compared with 1999. At 91%, the availability factors for its nuclear power plants had been the highest ever, and other indicators confirmed the high levels of plant reliability, safety and competitiveness. In accordance with the General Radioactive Waste Plan approved by the Government in 1999, construction of an interim spent fuel storage facility at the Trillo power plant was nearing completion. It would ensure adequate storage capacity until 2013 when the pools at the other power plants would become full. Dismantling work had continued slightly ahead of schedule at the Vandellós I unit. It was hoped to complete the present phase by the end of 2002 after which there would be a planned halt of 30 years before total dismantling.

36. Turning to safeguards, she said that despite the Secretariat's efforts it was disappointing that only three countries - only one of which had nuclear facilities - had signed an additional protocol since the previous General Conference. That meant 22 countries with nuclear facilities had still not signed despite the fact that four years had passed since the protocol's adoption. Spain, convinced that universality was an essential condition, urged that greater efforts be made in that regard, particularly through Secretariat contact with countries with nuclear facilities. While her delegation was satisfied with the Secretariat's progress in strengthening the safeguards system, including the development of integrated safeguards, it would welcome more information regarding the costs of implementing the new measures to ensure that cost neutrality was maintained. All concrete proposals put before the Board of Governors should therefore be accompanied by cost estimates.

37. Regarding nuclear safety, her delegation was confident that the second review meeting of the Convention on Nuclear Safety would build on the positive results of the first review meeting and increase the Convention's credibility. Spain welcomed the entry into force of the Joint Convention. It hoped that as many countries as possible would have ratified it by the first review meeting in 2003, including all the major radioactive waste producers. Meanwhile Spain offered its co-operation for the preparatory meeting in December 2001.

38. One of the main conclusions of the Cordoba Conference related to the need to integrate social and technical aspects into the decision-making process for managing radioactive waste. While it was up to each country to deal with that issue as it saw fit, the Agency could assist by ensuring that individual countries' experiences benefited the rest of the international community. Thus Spain supported the actions proposed in document GC(45)/14 and offered its co-operation in putting them into practice.

39. Spain thought highly of the Agency's safety services and had not only requested several missions to its plants but also provided experts for missions in other countries. Spain endorsed the implementation of an international plan to enhance research reactor safety. On the home front, it was developing a strategy for updating research reactors, which also included dismantling and closure.

40. Her delegation welcomed the achievements of the Buenos Aires Conference and the Board's approval of the Agency's revised action plan for the safety and security of radiation sources. For its part, Spain had adopted a set of national measures to deal with that issue. It was also taking initiatives to share its experience and to encourage the widespread adoption of similar measures.

41. The Malaga Conference had recommended ways of reducing the risks to patients associated with the use of radiation for diagnostic and therapeutic purposes. The Agency, in conjunction with other relevant international organizations, should play a key role in the international co-operation required to follow them up.

42. Her country offered its support for Agency initiatives aimed at improved co-operation with other international organizations, particularly the OECD/NEA. It hoped that a memorandum of co-operation would soon be signed so that the resources of both organizations could be used more efficiently to benefit Member States.

43. Spain was pleased that the funding available for technical co-operation had remained at a high level in 2000 despite more restrictive national budgetary policies. That showed the importance accorded to Agency activities by the international community. However, any attempts to obtain more resources by raising the TCF target which bore no relation to development of the Regular Budget were unrealistic. Recipient countries should comply with their obligation to pay assessed programme costs. Also, the Secretariat should further reduce the cost of equipment procurement for technical co-operation expenditure and concentrate its efforts and financial resources on technology transfer and training.

44. Besides contributing to the TCF, Spain was always among the first to contribute to extrabudgetary projects (in 2000 it had given US $600 000), by receiving fellows and scientific visitors, supplying experts for missions or teachers for training courses, and hosting training courses in Spain.

45. Her delegation welcomed the initiative to produce the "Nuclear Technology Review". Periodical updates would give a clear view of global nuclear perspectives. One of the interesting topics it covered was the launching of INPRO. Spain, which had provided a cost-

free expert for that project, looked forward to its outcome and understood that efforts would be duly co-ordinated with those of other relevant bodies.

46. Ms. PELLICER SILVA (Mexico) expressed her delegation's sorrow at the attacks of 11 September and hoped that peace and stability would soon be restored.

47. Mexico appreciated the Agency's considerable efforts to improve the quality and impact of its technical co-operation projects over the previous year through successful application of such basic concepts as the central criterion of strong government commitment, the sustainability of projects and the logical framework methodology. Her delegation was pleased with activities to apply nuclear techniques to water resources management and to control and eradicate disease-transmitting mosquitoes. Mexico had extensive experience in application of the sterile insect technique and was willing to join international efforts aimed at pest control. Convinced of the advantages of TCDC, Mexico was - in co-operation with the Agency - supporting Guatemala in developing two technical co-operation projects and was also a firm supporter of and active participant in ARCAL.

48. As a country which contributed its annual share of the TCF target in full, Mexico was concerned that actual contributions fell far short of the 85% target set for 2002. That was undermining technical co-operation activities and was leading to a serious imbalance in the Agency's main functions. Her delegation appealed to Member States to make contributions according to their obligations under Article VI of the NPT and in the spirit of the Agency's Statute.

49. She welcomed the Agency's activities to raise nuclear safety levels, particularly through the development of a safety culture and a code of conduct for research reactors. In Mexico, the research reactor at the National Institute for Nuclear Research had been operating satisfactorily for 25 years. In 2000 a 1 million curie irradiator had been commissioned in San Juan del Río and was operating under the supervision of the National Commission for Nuclear Safety and Safeguards. Her country was keen to continue participating in expert meetings on irradiated food regulation. It was concerned that any incompatibility of national standards with such regulations might constitute a non-tariff trade barrier.

50. Acceptance of nuclear energy as a sustainable development option depended on safety issues, especially in relation to radioactive waste management and transport. It was therefore appropriate that they appeared on the General Conference's agenda. Mexico attached considerable importance to the safe management of radwaste and had just carried out a legal and technical analysis with a view to early adoption of the Joint Convention. It was revising and updating its national legislation on the maritime transport of radioactive material and hazardous waste and its nuclear regulatory authority was developing radioactive transport regulations which incorporated the most recent recommendations from the Agency and other international organizations.

51. Mexico had requested an IRRT mission at the beginning of the year, which had concluded that there was a definite safety culture at the Laguna Verde nuclear power plant and the National Commission for Nuclear Safety and Safeguards. Safe nuclear power plant

operation was a priority for her Government and it would, with Agency support, pursue activities to that end.

52. Her delegation endorsed the recommendations of the expert group convened to examine the need to strengthen the nuclear material protection regime, particularly the Convention on the Physical Protection of Nuclear Material. Mexico was interested in participating in discussions on a possible amendment to that Convention.

53. Having participated actively in the additional protocol negotiations and offered its territory for field trials, Mexico was eager to conclude an additional protocol without delay. It was now studying what legal and practical measures needed to be taken to ensure full compliance with it.

54. Her delegation welcomed the Agency's real-zero-growth budget. Annual salary increases should be calculated better beforehand to avoid any unforeseen budget adjustments as had happened recently. The scale of assessment applied hitherto for contributions towards the Regular Budget should be maintained.

55. Finally, she appealed to Member States not to lose sight of the need to ratify the amendments to Article VI of the Statute.

56. Mr. NOVKOVSKI (The Former Yugoslav Republic of Macedonia) extended condolences to the American people and the families of the victims of the terrorist attacks on New York and Washington. Those appalling attacks had shown the need to intensify co-operation in the fight against terrorism.

57. In Macedonia, legislation in the field of radiation protection was fast being brought up to internationally accepted standards. He was confident that, as soon as the political situation in his country allowed, the new law on ionizing radiation protection and the safeguards agreement with the Agency would complete the necessary parliamentary procedures. Once the safeguards agreement had been ratified, progress could be made regarding the additional protocol.

58. He regretted that the unexpected crisis in his country had impeded ongoing and planned co-operation activities with the Agency. Stressing that inter-ethnic strife was not a problem in Macedonia, he said that recent events would not detract the country from its main goal of building a strong democracy and becoming integrated into the Euro-Atlantic structures. He believed that the crisis would soon be over and that activities would resume as normal.

59. Macedonia was among the first Member States to prepare its Country Programme Framework, which had demonstrated that technical co-operation was more efficient when integrated into the national development plans. The ongoing national technical co-operation programme in Macedonia included projects on nuclear medicine, quality control and assurance in diagnostic radiology, dosimetry, and irrigation to improve nutrition. The projects for the forthcoming cycle would be defined with the assistance of an Agency pre-project

formulation mission and particular attention would be given to building national capacity to combat illicit trafficking in nuclear and radioactive material.

60. He emphasized the importance of the Agency's measures for strengthening regional co-operation. The successful completion of the regional project on study of the Prespa Lake phenomenon, implemented by Macedonia, Albania and Greece, was an example of close co-operation between neighbouring countries.

61. With regard to training courses for radiation protection in industrial and medical radiography, further efforts would be made to upgrade radiation protection knowledge on a regular basis. Macedonia would be grateful for support from the Department of Technical Co-operation in that endeavour.

62. Mr. AL-ATHEL (Saudi Arabia) expressed condolences for the thousands of victims of the recent terrorist attacks in the United States of America and said his country would help fight against terrorism.

63. He commended the Agency on its work in the area of safeguards: the strengthening of supervisory mechanisms; more rigorous assessment of States' reports and initial declarations concerning their nuclear programmes and facilities; the use of information technology to organize and process data, and the establishment of a database of commercially available satellite imagery; expansion of the scope of safeguards inspections; the development of techniques relating to environmental samples and remote monitoring; increased co-operation with national and regional systems for the control of nuclear materials; the development of integrated safeguards; greater frequency of inspection of irradiated fuel and unannounced inspections; and continued promotion of safeguards agreements and the implementation of additional protocols.

64. With regard to the application of Agency safeguards in the Middle East, his delegation shared the Director General's regret that he had been unable to make progress towards ensuring the early application of comprehensive safeguards to all nuclear activities in the region and the establishment of a nuclear-weapon-free zone, or to convene a meeting to draw on the experience of other regions in confidence-building through the establishment of such zones. Israel was the only State in the region that possessed nuclear weapons and ignored General Conference resolutions and international decisions calling for the immediate application of safeguards by the States of the Middle East to all nuclear activities and for the serious consideration of action to rid the region of nuclear weapons.

65. Obviously, the Agency's ability to carry out its mandate depended on its financial situation and the volume of work assigned to it. His delegation appreciated the Secretariat's efforts to adjust to the requirements of a zero-real-growth budget, which should be maintained. To maintain its credibility, the Agency should keep the prevailing circumstances in mind when planning its programme of activities so that they could be implemented without supplementary funding. The current financial deficit should be absorbed, inter alia, through economies, cutbacks and measures to reduce the cost of programme activities. Measures approved, on an exceptional basis, to meet the shortfall in the human resources required for

the technical co-operation programme should not serve as a precedent for the future. His delegation hoped that additional funding would be provided to purchase special monitoring equipment for the safeguards programme.

66. In conclusion, he stressed the need to place the TCF and the technical co-operation programme on a more secure financial footing, namely by incorporating the Fund in the Regular Budget, so that the Agency could effectively discharge its role as a promoter of development.

67. Mr. AMHA (Ethiopia) expressed sympathy to the American people and Government for the tragic loss of innocent lives in the recent terrorist attacks in the United States of America.

68. Ethiopia was using its Country Programme Framework to focus its technical co-operation activities on areas identified as having the highest priority. Primary importance was attached to national capacity building for the application of the sterile insect technology to eradicate tsetse flies from the infested lowlands of Ethiopia. That vector had significantly influenced the settlement pattern of Ethiopian farmers and the distribution of livestock. About 75% of the rural population, together with an estimated 30 million livestock, lived in Ethiopia's mid-altitude and highland areas, which represented only about 47% of the total land area. In the lowlands, productivity was extremely poor and production costs were high because of the large amounts of money spent annually on chemicals to combat the tsetse fly. Thorough eradication of the vector required an integrated area-wide approach and so the African countries had decided, at the 36th OAU Summit in Lomé in July 2000, to join together to tackle the problem. The vision was an African population freed from trypanosomosis under the Pan-African Tsetse and Trypanosomosis Eradication Campaign (PATTEC).

69. In the field of isotope hydrology, Ethiopia was making efforts to transfer the technology for day-to-day use in the water sector. The technique had so far been used to solve problems related to groundwater resource assessment, lake level rise, dam leakage and geothermal studies. As indicated by the Director General in his introductory statement, isotopic techniques had contributed to the study of the Akaki groundwater field supplying water to the capital, Addis Ababa. Also, Ethiopia was initiating an integrated groundwater study under a multi-year project in co-operation with the Agency and the US Geological Survey.

70. Ethiopia was building a sound national infrastructure for radiation protection, the safety of radiation sources and waste management. A well-functioning regulatory programme with adequate technical support services was in place and was being progressively upgraded to increase its effectiveness. In addition, Ethiopia had developed a national waste management strategy. In co-operation with the Agency, spent sealed sources had been collected, conditioned and safely stored in the interim storage facility which had been built for that purpose. In hosting the "First Africa Workshop on the Establishment of a Legal Framework governing Radiation Protection, the Safety of Radiation Sources and the Safe Management of Radioactive Waste" in April 2001, Ethiopia had demonstrated its commitment to the international safety regime.

71. His country, which also benefited from technical co-operation in radiotherapy, nuclear medicine, mutation breeding and nuclear instrumentation, commended the Secretariat on its continuing efforts to make projects more relevant to the needs of Member States. Ethiopia was an active member of the AFRA, which enabled African countries to share their experience in a wide range of areas.

72. Mr. de QUEIROZ DUARTE (Brazil) said that his country was profoundly shocked by the insane acts of terrorism perpetrated in the United States of America on 11 September. President Cardoso of Brazil had condemned all forms of terrorism and pledged his country's support for international co-operative efforts to eradicate such barbaric practices.

73. By promoting the peaceful uses of atomic energy and at the same time preventing the diversion of nuclear materials to the production of nuclear weapons, the Agency was making a significant contribution to the attainment of the objective of complete disarmament enshrined in Article VI of the NPT.

74. At the 2000 NPT Review Conference, the five nuclear-weapon States had for the first time entered into an "unequivocal" undertaking to totally eliminate their nuclear arsenals. Brazil attached great importance to the results of the Conference and remained committed to all the objectives set out in the final document, particularly the practical steps to achieve nuclear disarmament. It would like to see the countries concerned take the steps necessary for the early entry into force of the CTBT.

75. The failure in 2001 of major multilateral processes relating to disarmament and to the non-proliferation of weapons of mass destruction could only add to concerns about the evolution of the multilateral system as a whole. Firmly believing that global co-operation was essential for a stable and secure international system, Brazil would like to see all nations intensifying their efforts to reverse the present negative trends.

76. Nuclear safety in all its aspects was fundamental to public acceptance of the peaceful uses of nuclear energy. Brazil therefore appreciated the Secretariat's efforts to establish a global safety regime and to assist Member States in the application of state-of-the-art safety standards.

77. Because of its long coastline, Brazil remained concerned about the increasing frequency of maritime shipments of nuclear waste and other radioactive materials. Brazil and several other countries in the Latin American and Caribbean region were continuing to advocate the strengthening of the relevant international regime.

78. Brazil attached great importance to the Agency's technical co-operation activities. As both a donor and a recipient of Agency technical assistance, Brazil hoped that due priority would continue to be given to nuclear power generation, to the management and disposal of radioactive waste and to applications of radiation and isotope techniques, particularly in environmental studies, water resources management and medicine. Also, it believed that the interests of Member States should continue to be taken into account in the elaboration of

Agency technical co-operation programmes and when approving technical co-operation project proposals.

79. He acknowledged ARCAL's valuable contribution to the development of the participating countries and commended the Secretariat for its managerial role in that regard.

80. Agency safeguards were a major element of the nuclear non-proliferation regime, whose universality Brazil strongly advocated. In addition to providing verification, the safeguards system was helping to enhance international security and contributing to the achievement of nuclear disarmament.

81. Brazil welcomed the progress made in the process of integrating traditional and new safeguards measures and in streamlining safeguards implementation. In that regard, the close co-operation between ABACC and the Agency would continue to contribute to efficiency by, inter alia, avoiding unnecessary duplication.

82. Regarding the programme for 2002-2003, Brazil, which recognized the Secretariat's efforts to accommodate the views of Member States, would like to see further efforts to increase cost-effectiveness in all Major Programmes. To maintain the balance between verification and promotional activities, care should be taken to avoid channelling most resources into verification and there must be no relative reduction in the importance attributed to the peaceful uses of nuclear energy and to technical co-operation.

83. Regarding the budget for 2002, Brazil was - given the stringent fiscal adjustment measures currently being taken by its Government - not in a position to support any increases in the Agency's expenses.

84. In Brazil, commissioning of the Angra II nuclear power plant the previous year had meant the addition of 1300 MW(e) to Brazil's national power grid. Together, the Angra I and Angra II plants had an installed capacity of 2000 MW(e) and accounted for 50% of the power generation in Rio de Janeiro. A plant for the reconversion of uranium hexafluoride and for the fabrication of uranium dioxide pellets capable of meeting the needs of the Angra I and Angra II plants had recently gone into commercial operation. Also, work had started on the construction of a commercial plant for uranium enrichment by the centrifuge process. Brazil was continuing to invest in the production of radiopharmaceuticals and to develop new applications of nuclear techniques in industry, agriculture and environmental studies. As a reflection of the great importance attached by Brazil to the preservation of knowledge in the nuclear sciences, a postgraduate programme had recently been established at the Institute of Radiation Protection and Dosimetry. There were now about 400 students working for higher degrees in nuclear energy under that and five other programmes.

85. Mr. FIGUEROA (Argentina) joined others in commiserating with the United States of America.

86. Argentina valued Agency activities in the fields of nuclear non-proliferation, nuclear safety and co-operation in the peaceful uses of nuclear energy but considered that future

programmes and budgets should maintain the principle of zero real growth. He called for increased efficiency on the part of the Secretariat in the use of resources.

87. With regard to the strengthening of safeguards, real integration had to be achieved and not simply a combination of current measures with the measures included in the additional protocol. Argentina encouraged the Agency to increase its co-operation with national and regional safeguards systems, particularly in terms of traditional safeguards measures, so as to achieve greater efficiency and effectiveness. While Argentina intended to sign an additional protocol, further consultations with the Secretariat were necessary regarding, inter alia, the future role of ABACC.

88. ABACC symbolized the process of nuclear rapprochement between Argentina and Brazil and was a fundamental part of their more extensive commitment to nuclear non-proliferation. ABACC's experience in safeguards application had won it international recognition and had ensured the necessary transparency that the nuclear programmes of both countries were exclusively for peaceful purposes. Co-operation between ABACC and the Agency should be strengthened so as to prevent any duplication of effort. It was important to establish arrangements similar to those existing for other regional safeguards.

89. On 14 August 2001, Argentina's Minister of Foreign Affairs, International Trade and Worship, and Brazil's Minister of Foreign Affairs had signed a joint declaration on the setting up of a Brazilian-Argentine Agency for Nuclear Energy Applications (ABAEN). Its aim was both to strengthen co-operation between Argentina and Brazil in the field of nuclear energy application by identifying possible joint projects, and to establish mechanisms to facilitate their implementation.

90. Nuclear achievements in Argentina over the past year included the successful conclusion of the changeover at the Atucha I unit from a natural uranium to a low-enriched uranium fuel cycle. Nuclear energy continued to make a significant contribution to the electricity generated in the country. Argentina's two nuclear power plants, both of which used domestically produced fuel elements and heavy water, accounted for about 10.5% of total electricity generation.

91. Within the framework of international non-proliferation agreements, including export controls, Argentina remained ready to develop and strengthen ties with other countries. An example of that was the signing, in March 2001, of an agreement with Australia on co-operation in the peaceful uses of nuclear energy.

92. Argentina was following closely the issue of the safe maritime transport of radioactive material. It was important that dialogue be maintained between the countries involved with respect to the revision of the relevant regulations and their application.

93. The safety of radiation sources and radioactive material had to addressed and, in that context, he emphasized the importance of the conclusions and recommendations of the Buenos Aires Conference. Also, Argentina supported the Secretariat's actions relating to the safety of research reactors.

94. Mr. RAMAKER (Netherlands) said that his country had been shocked by the terrorist attacks carried out the previous week in the United States of America. Those attacks had shown once more that endeavours within the framework of the Agency were not taking place in a void. The Agency continued to be a cornerstone of efforts in the field of nuclear arms control and non-proliferation directed towards the achievement of a world where peace, freedom, democracy and justice reigned and such cowardly acts were a thing of the past.

95. The Netherlands, which was in the process of ratifying the protocol additional to the safeguards agreement between the non-nuclear-weapon States of EURATOM, EURATOM and the Agency, considered additional protocols to be very important for strengthening the global system of nuclear non-proliferation. Strengthened and integrated safeguards were essential for an effective and credible contribution by the Agency to a safer world. His country was therefore disappointed that the number of States which had concluded additional protocols fell far short of expectations. While welcoming the action plan for increasing the number of additional protocols concluded, it believed that the most important ingredient for success was political will, which was lacking in many cases. The Netherlands would like to see the Secretariat and many more Member States focusing on that point.

96. The Netherlands welcomed the idea of strengthening the physical protection regime by, among other things, extending the scope of the Convention on the Physical Protection of Nuclear Material to cover nuclear material in national storage and transport, as recommended by the open-ended expert group looking into the matter. It was regrettable that, as a result of the opposition of a number of Member States, the effect of any amendment to the Convention would clearly be very limited. Nevertheless, the Netherlands would continue to strive for an amendment.

97. Verification of nuclear material from dismantled nuclear weapons was an area where the Netherlands hoped to see the Agency expand its activities. For that reason, the Netherlands was following with keen interest the implementation of the agreement between the Russian Federation and the United States of America on the conversion to peaceful uses of weapons-grade plutonium from military stocks.

98. SAGTAC was reviewing the rules, regulations and procedures governing the provision of technical assistance to Member States, the aim being to increase efficiency and effectiveness and to reduce the workload for both the Secretariat and Member States. A major area being considered was the programming and budget approval cycle. SAGTAC considered that the present system could be enhanced and had made a number of recommendations; its views were endorsed by the Netherlands.

99. Competition, energy conservation and renewable energy had been central themes of his Government's energy policy for a number of years. In implementing that policy, it was trying to balance economic and environmental interests. Furthermore, the Netherlands had committed itself to ambitious targets regarding the reduction of greenhouse gas emissions; the pace of improvement in energy efficiency would have to increase from 1.5 to 2% a year, and the share of renewables in the energy mix was to grow to 5% by 2010 and 10% by 2020. Although the country's only remaining nuclear power plant was to be closed down at the end

of 2003, the Netherlands attached great importance to INPRO, to which it had made an extrabudgetary financial contribution. It continued to believe that maintaining and enhancing the existing levels of expertise was the best way of ensuring the future safety and efficiency of nuclear power generation.

100. The Netherlands had a successful nuclear industry, especially in the field of uranium enrichment. Also, the high-flux reactor at Petten, which had been in operation for 40 years, with an exceptionally high utilization factor, was the main European nuclear facility producing radioisotopes for use in medicine.

101. The Netherlands greatly appreciated all the Agency's activities but viewed its financial situation with increasing apprehension. Was it worthwhile contributing in full to the Regular Budget and the TCF when nearly half of the States benefiting from the Agency's activities did not? The balance between safeguards and technical co-operation and the principle of zero Regular Budget growth, neither of which was sacrosanct in his country's view, were continuing to impede the adequate financing of the Agency's verification activities. The fact that a large part of the verification programme was financed outside the Regular Budget was undesirable. It was not ideological straitjackets, but flexibility between budgets, results-based budgeting and a better insight into the costs of technical co-operation project management together with support from the Regular Budget that should ensure that the important activities of the Agency in all fields continued to be financed.

102. Mr. ALLOTEY (Ghana) expressed his condolences to the people of the United States of America and other countries for the heavy loss of life and property on 11 September in New York and Washington.

103. More than a decade after the end of the Cold War, the world community might have expected to be closer to adopting measures to eliminate nuclear weapons. Regrettably, they and other weapons of mass destruction posed as real a threat as they had done in 1945. There was an urgent need to harness all the opportunities provided by nuclear technology to promote the prosperity and survival of the human race, improving in particular the lives of those in the developing world, and to prevent the eruption of war. He therefore appealed to all States to sign and ratify the NPT, CTBT, the Biological Weapons Convention, the Chemical Weapons Convention and other relevant instruments to secure a world without destructive weapons. It was only lack of political will that stood in the way of the exclusively peaceful use of nuclear power.

104. Over the years the Agency had supported Member States through technical assistance and the transfer of technology. Education and adequate information on the many peaceful uses of nuclear energy were urgently needed, and it was up to nuclear and non-nuclear States alike to pool their resources and co-operate under the auspices of the Agency. Ghana was committed to the pursuit of the peaceful application of nuclear energy and realized that it could not reach that objective on its own. It appreciated the mutually beneficial relationship between the Agency and the Ghana Atomic Energy Commission in important projects in the fields of health, agriculture, industry, environment and energy. The various facilities operated by the Commission included: the National Nuclear Research Institute, which conducted

elemental analysis of industrial, biomedical, geological and biological samples; a gamma irradiation facility with the potential to reduce post-harvest losses drastically; the National Radiotherapy Centre, which treated nearly 500 new cancer cases - a number that was expected to increase with the opening of a second Centre in Kumasi; and the Nuclear Medical Unit, which cared for about 1000 thyroid and prostate patients. Other activities being pursued by the Commission despite financial constraints and a lack of qualified personnel included studying the storage of spices and dried seasoning, the irradiation of smoked fish to extend shelf-life, the classification of starch from different cassava cultivars, and the improvement of Ghana's artificial insemination programme using progesterone radioimmunoassay.

105. Finally, he confirmed Ghana's support for the work of the Agency and called on Member States to renew their resolve to promote peace, security, prosperity and progress.

106. Mr. VARGAS CARREÑO (Secretary General of the Agency for the Prohibition of Nuclear Weapons in Latin America and the Caribbean) expressed his condolences and solidarity with the Government and people of the United States of America following the tragic events of 11 September.

107. OPANAL had taken its origin in the 1967 Tlatelolco Treaty establishing the world's first inhabited nuclear-weapon-free zone. Most of the Latin American and Caribbean countries were Contracting Parties to the Treaty. Only Cuba, which had signed the Treaty in 1995, had not yet ratified it, but OPANAL hoped that it would do so soon.

108. The Tlatelolco Treaty had two additional protocols which had been in force since 1992. The first was to apply the statute of denuclearization in territories controlled, de jure or de facto, by foreign powers, namely France, the Netherlands, the United Kingdom and the United States of America. The aim of the second was for the nuclear powers - China, France, the Russian Federation, the United Kingdom and the United States of America - to guarantee the statute of denuclearization of Latin America and the Caribbean. The Treaty prevented any arms race in the region and thereby contributed to global non-proliferation and set an example to other parts of the world. The Treaty and OPANAL proscribed the use of nuclear weapons in Latin America and the Caribbean and controlled dual-use technologies that could be used for non-peaceful purposes. Thus, OPANAL had an important role to play as an international promoter of universal nuclear non-proliferation, disarmament, as well as peace and security.

109. The aims of the Tlatelolco Treaty remained valid and further strengthening of OPANAL was desirable. It could be achieved, inter alia, through closer links with other international organizations, particularly the Agency. In view of the similar objectives of both organizations, he believed that OPANAL should be involved in co-ordination of the Agency's technical assistance programmes in Latin America and the Caribbean.

110. In the light of the amendments made to the Tlatelolco Treaty ten years previously for the full entry of Argentina, Brazil and Chile, a new agreement between OPANAL and the Agency to facilitate the effective operation of the control system established by the Treaty had yet to be negotiated. That step should be taken soon. Under the Treaty, the Agency was permitted

to carry out inspections to verify possible transgressions of its control system. That showed the trust placed by the Latin American and Caribbean countries in the Agency.

111. Under Article 13 of the Treaty, the Contracting Parties were obliged to negotiate multilateral or bilateral agreements with the Agency for the application of its safeguards to their nuclear activities. Pursuant to that provision, 32 Latin American and Caribbean States had done so, many on the basis of that Article and the relevant NPT provisions. For more than 30 years, the Agency safeguards system had been providing assurance to the international community that non-nuclear-weapon parties to the NPT or treaties like the Tlatelolco Treaty complied with their non-proliferation obligations. Those safeguards now needed to cover the detection of undeclared nuclear material and activities, and considerably more information was required than previously. One way of strengthening safeguards was under the additional protocol to safeguards agreements with the Agency. OPANAL was lending its support to the seminar to be held in Peru later that year to promote those additional protocols.

112. Turning to the transport of radioactive material, he referred to the recent declaration by the Rio Group regarding its concern about the dangers posed by the maritime transport of such material and urging the international community to develop appropriate international safety measures. Two of the three most used routes for such transport were in the OPANAL region, namely the Panama Canal and Cape Horn. It was important that the Agency, as well as other organizations and competent forums, help stop the current gaps in international law in that regard. The coastal States' legitimate rights with regard to safety and the prevention of irreparable damage to their populations needed to be reconciled with legitimate rights to freedom of navigation.

113. Finally, he reiterated OPANAL's intention to establish the closest possible links with the Agency.

The meeting rose at 1.00 p.m.