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President: Mr. ADEKANYE (Nigeria)

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[*] GC(XXXVI)/1027

The composition of delegations attending the session is given in document GC(XXXVI)/INF/313/Rev.2.

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Abbreviations used in this record

ARCAL	Regional Co-operative Arrangements for the Promotion of Nuclear Science and Technology in Latin America
ASCOT	Assessment of Safety Culture in Organizations Teams
ASSET	Analysis of Safety Significant Events Team
CEC	Commission of the European Communities
CIS	Commonwealth of Independent States
DPRK	Democratic People's Republic of Korea
EURATOM	European Atomic Energy Community
FAO	Food and Agriculture Organization of the United Nations
G-7	Group of Seven
G-24	Group of Twenty-Four (countries)
NPT	Treaty on the Non-Proliferation of Nuclear Weapons
NUSS	Nuclear Safety Standards
OSART	Operational Safety Review Team
PHARE	Poland, Hungary: assistance for economic reconstruction
PHWR	Pressurized heavy water reactor
R&D	Research and development
RBMK	High-power channel-type reactor (Soviet Union)
RCA	Regional Co-operative Agreement for Research, Development and Training Related to Nuclear Science and Technology (for Asia and the Pacific)
RIA	Radioimmunoassay
TACF	Technical Assistance and Co-operation Fund
UNEP	United Nations Environment Programme
WAMAP	Waste Management Advisory Programme
WANO	World Association of Nuclear Operators
WHO	World Health Organization
World Bank (IBRD)	International Bank for Reconstruction and Development
WWER	Water-cooled and -moderated reactor

ABACC	Brazilian-Argentine Agency for Accounting and Control of Nuclear Materials
CSCE	Conference on Security and Co-operation in Europe
OPANAL	Agency for the Prohibition of Nuclear Weapons in Latin America and the Caribbean

GENERAL DEBATE AND ANNUAL REPORT FOR 1991 (GC(XXXVI)/1004) (continued)

1. Mr. GARCIA DE LA CRUZ (Cuba), having welcomed the Republics of Croatia, Slovenia and Uzbekistan as new Members of the Agency, said that Cuba had made considerable progress in the use of nuclear science and technology in areas such as public health, industry, agriculture and other socio-economic sectors. Over 180 institutions in Cuba were now using nuclear techniques in their work. In the area of medicine, pharmaceuticals and biotechnology, radiation was being used for sterilization purposes and for the activation of polymers. National production of labelled compounds and radiophamaceuticals was meeting a proportion of the requirements of Cuba's hospital and research institutes and, with the start of operation in the near future of a specialized centre, production would be increased. Radiometry and spectrometry equipment and other specialized nuclear medicine equipment were also being designed and manufactured locally. The high-technology low-cost systems developed would undoubtedly be of interest to many other developing countries and could be used in Agency technical co-operation projects.

2. In the area of food and agriculture, work was being intensified on the production of new plant varieties using radiation-induced mutation in conjunction with advanced propagation techniques. Progress had also been achieved in the optimization of fertilizers as a result of studies using nitrogen-15 and phosphorus-32 and in the application of the sterile insect technique to control the sugar cane borer. Furthermore, a start had been made on the manufacture of counters and kits to extend the use of RIA in livestock reproduction studies.

3. Some success had also been achieved in designing nucleonic equipment for use in the nickel industry and X-ray fluorescence and beta backscattering systems for use in the engineering industry and metallurgy.

4. Research and development work relating to nuclear power and nuclear sciences had continued to expand, with significant progress in such areas as reactor calculations, the development of software for probabilistic safety assessment, research into nuclear reactions, and studies of reactor structural materials. Much of that work had been conducted under research contracts with the Agency.

5. Physical and biological dosimetry studies had successfully been conducted on 5000 children from areas affected by the Chernobyl accident. Studies on environmental background radiation in Cuba had been performed and Cuba currently had a network of more than 50 monitoring stations. Cuba, which recognized the State's responsibility for environmental protection, had gained valuable experience in that field and was ready to make it available to the Agency and interested countries.

6. Nuclear power had an essential role to play in Cuba's development and Cuba was endeavouring to overcome problems hindering the expansion of its nuclear programme. It had been forced to suspend work on the Juragua nuclear power plant as a result of the changes that had taken place in the supplier country and the new unacceptable conditions which had been imposed for the continuation of the initial assistance provided. Nevertheless, his Government intended to do everything it could to complete the plant and put it into operation.

7. His country attached great importance to international co-operation in nuclear safety. It supported and was actively involved in the work on the revision of the Basic Safety Standards for Radiation Protection and believed that the revised document could serve as a useful basis for countries preparing their own regulations. The document would be taken into account by Cuba when it updated its basic safety regulations for radiation protection. Cuba had set up a centre for radiation protection and hygiene in 1985 and a national nuclear safety centre in 1991. A radioactive waste processing plant, designed entirely by Cuban experts, was close to completion and would play a crucial role in the management of the low-level waste generated by some 40 users of radiation sources in the country.

8. His country was also following with interest the preparation of a nuclear safety convention, which it believed should strengthen the international nuclear safety regime through the harmonization of binding principles and criteria. However, such a convention should not constitute an obstacle for countries with a lower level of development.

9. Training was another very important aspect of nuclear safety and radiation protection. His delegation highly appreciated the Agency courses which were held each year in the Latin American region and believed that similar courses should also be organized in other regions of the world.

10. Despite Cuba's desire to co-operate openly with all other countries in the peaceful uses of nuclear energy, the United States continued to obstruct the Cuban programme: its powerful media had recently been disseminating more and more distorted information to mislead international public opinion and to create anti-nuclear feeling among the Cuban population and mistrust in the region with regard to Cuba's nuclear programme. Also, some politicians and institutions had instigated investigations of the supposed danger from Cuba's nuclear activities and efforts had been made to hamper the exchange of information between Cuban and North American scientists. For example, entry visas had been refused to a Cuban technical delegation invited by the American Nuclear Society to participate in a meeting held in California at the end of August. Such a policy by the United States contradicted the fundamental principles of co-operation on which the Agency was based.

11. With regard to safeguards, his country continued to believe that there should be a fair balance between the Agency's promotional and regulatory activities. A solution must be found to the problem of the financing of safeguards, and any future formula should continue to give preferential treatment to developing countries. As to the strengthening of the safeguards system, it would be better to review the system as a whole rather than to analyse and discuss separate aspects in a piecemeal fashion. All Member States should be involved in that process. Cuba had no objection to special inspections being carried out in Member States whose safeguards agreements provided for such inspections, but found it unacceptable that the Agency should carry out such inspections on the basis of information provided by any other Member State.

12. Cuba welcomed the trend towards the greater integration of the Latin American region. Although its reasons for not signing the Tlatelolco Treaty remained valid, his Government had stated that, when all Latin American

countries had assumed their responsibilities under the Treaty, Cuba would also be prepared to sign it in the interests of regional unity.

13. As to the financing of technical assistance, his delegation considered the present mechanism of indicative planning figures to be suitable, provided that the needs of developing countries were met, that there was a systematic increase in indicative planning figures approved and that donor countries fulfilled their pledges. For its part, Cuba would pay in full its assessed share of the target for the TACF. Finally, his Government wished to express its appreciation of the technical assistance it had received from the Agency and its support for the ARCAL programme.

14. Mr. JANEV (Bulgaria) said that the profound social and political changes that had occurred in his country in recent years had led to a major reconstruction of the economy. Electricity production, which was one of the main branches of Bulgaria's economy, relied heavily on nuclear power. While that was cause for satisfaction, Bulgaria faced major operational safety problems resulting from design deficiencies in some of the older units at its Kozloduy plant.

15. In response to the concern expressed by the Bulgarian public and parliament, all aspects of safety at the Kozloduy plant had been thoroughly analysed by the national authorities and a number of international organizations, notably the Agency. Under its WWER-440 Model 230 project, the Agency had sent missions to assess plant-specific design deficiencies and the overall conduct of operations at Kozloduy. The issues of radioactive waste treatment and seismic resistance of the Kozloduy plant had also been considered. In addition, Agency OSART missions had made various important recommendations which his Government had done its best to comply with, despite their adverse effect on an already difficult economic situation. For example, it had closed down Units 1 and 2 at Kozloduy in order to take the steps needed to ensure their further safe operation.

16. He wished to thank the CEC, WANO, the World Bank and the consortium of mainly Western European nuclear regulatory authorities and technical support organizations for the financial and technical assistance they had provided

with the Kozloduy plant. He hoped that that co-operation would continue and looked forward to the Agency's taking the leading role in co-ordinating the assistance being provided to the countries of Central and Eastern Europe to improve the safety of their nuclear reactors.

17. His delegation attached great importance to the Agency's technical assistance programme and was gratified to note the considerable increase both in resources allocated under that programme to equipment purchase and in the number of specialists trained through Agency courses. It was a matter of concern, however, that some countries had consistently failed to contribute to the TACF. Despite its economic difficulties, Bulgaria had continued to pay its voluntary contribution.

18. As one of the first signatories of the NPT, Bulgaria had always believed that the Agency's safeguards system had a key role to play in preventing the proliferation of nuclear weapons and in monitoring the international exchange of nuclear material, equipment and technology. It took part in the Nuclear Suppliers Group and actively supported the policy agreement reached by the Group which required comprehensive Agency safeguards to be applied to all current and future nuclear activities as a necessary condition for new nuclear exports to non-nuclear-weapon States. His country considered that a system for informing the Agency of the import and export of nuclear and certain non-nuclear materials and equipment would help to promote transparency in States' nuclear activities and demonstrate their peaceful character.

19. Bulgaria had applied to become a full member of the Zangger Committee. The procedures for nuclear exports applied by countries belonging to that Committee had already been incorporated in the export control policy of the Bulgarian Government.

20. His delegation noted with satisfaction the Director General's visits to South Africa and the DPRK. South Africa's accession to the NPT, its signing of a safeguards agreement and the verification of the completeness of the inventory of South Africa's nuclear installations and material were vitally important for the consolidation of peace and the promotion of co-operation in

that region. He noted also the Agency's active role in exploring various options for the creation of a nuclear-weapon-free zone in the Middle East.

21. He welcomed the ratification of the NPT by France and China. The fact that all the permanent members of the United Nations Security Council had now acceded to that Treaty would undoubtedly facilitate the monitoring of compliance with it through the safeguards system.

22. Bulgaria was giving careful attention to the problems of the physical protection of nuclear material. It was looking forward to the forthcoming Review Conference on the Convention on the Physical Protection of Nuclear Material and considered that the Convention had a crucial role to play in promoting international co-operation in that area.

23. Mr. IYENGAR (India) said that the Agency was at a crossroads and that its Member States had to give the appropriate signals and provide the necessary thrust if their collective interests were to be realized. In 1990, there had been 426 power reactors in operation and 96 under construction; by the beginning of 1992, those numbers had dropped to 420 and 76. It was distressing to see very important facilities being abandoned for reasons other than scientific or technological ones. The facilities in question were of various kinds - ranging from small research reactors through nuclear power stations and fast reactors to reprocessing plants - and were located in countries belonging to different continents and at different stages of economic development.

24. Why had that happened? Had the original planning been wrong, or were there external influences which made it appear so? In India, it was felt that - in view of the long gestation periods for nuclear projects - investment in the nuclear field needed to be consistent and steady; frequent changes in the support for nuclear projects were counter-productive. At the present stage, the most important factor in developing nuclear technology was manpower - scientists and engineers whose commitment could not be switched on and off at will.

25. The events which he had in mind had been taking place at a time of significant re-orientation in world politics and within the Agency. In addition, it should be borne in mind that even now only about a fourth of the Agency's Member States were engaged in nuclear power programmes. Such was the present state of nuclear power, despite the fact that all those familiar with it still - he hoped - believed that it was a clean, safe and economically viable source of electricity.

26. It was political and economic factors - and to some extent problems of acceptability - that had constrained the growth of nuclear power, which was needed most by developing countries. It was a cause for immense concern that, owing to the constraints on nuclear power growth, the Agency was drifting away from its primary role - which was to devise and implement plans for enhancing the use of atomic energy. It was time to arrest the drift and to assist the Agency in stepping up its efforts to ensure the free flow of technology, to devise innovative schemes for the financing of nuclear projects and to promote the public acceptance of nuclear power. That called for collective political will in ensuring the Agency had the necessary financial resources, and he urged Member States to display such political will.

27. Some developing countries were still not benefiting from nuclear technology - even in such areas as radioisotope applications in medicine, industry and agriculture. The availability of radioisotopes was being affected by the closure of high-flux research reactors due to difficulties in obtaining fuel and financial support. If the momentum was lost in training personnel to operate and utilize research reactors, there would eventually be a tapering-off of nuclear science and its applications. He therefore urged the Agency to highlight the importance of training in research reactor operation and utilization through new programmes.

28. Besides the well-known applications of nuclear techniques in industry, medicine and agriculture, there were several applications in mining, environmental engineering and process control. The Agency should hold many more scientific meetings in developing countries in order to propagate the latter applications. The Agency's technical assistance programmes were very important in that context - hence the importance of assured funding for those

programmes. As a first step towards achieving assured funding, Member States should pledge their shares of each year's TACF target and pay in a timely manner. He pledged India's share of the TACF target for 1993.

29. Food preservation by irradiation in tropical countries was a good example of a new technology capable of displacing an older, more expensive and energy-intensive one - refrigeration. However, problems of public acceptance constituted an important obstacle which had to be overcome. He welcomed the food irradiation action plan prepared by the Secretariat and hoped the Agency would be able to develop standardized low-cost food irradiators with different capacities which could be installed in developing countries. His delegation looked forward to further vigorous action by the Agency in that field.

30. When one talked about enhancing the promotional activities of the Agency, an obvious question was where the funds were to come from. The logical answer was: from prioritizing the Agency's activities. In that context, he wished to emphasize that safeguards were an important and legitimate function of the Agency. However, extensive and intrusive safeguards monitoring in a large number of countries on the basis of suspicion was neither a feasible nor a desirable option. It would require vast manpower and financial resources, and that would ultimately hamper the utilization of atomic energy itself. To avoid such a waste of scarce resources, the Agency should adopt innovative approaches to safeguards, use random sampling techniques and concentrate on nuclear material of safeguards significance.

31. That raised the fundamental question of what the objective of safeguards was. If it was to prevent the diversion of nuclear material for non-peaceful purposes, why did the international community not face the issue of proliferation in a more serious and effective manner? As the Indian Prime Minister had stated to the United Nations Security Council summit meeting in January, the proliferation issue had assumed a qualitatively and frighteningly new dimension, and the only logical road available was to pursue a global approach based on international consensus on non-proliferation. The Prime Minister had stressed that, to be effective, such a global non-proliferation regime must be universal, comprehensive and non-discriminatory and linked to the goal of complete nuclear disarmament. The Indian delegation considered that, as non-proliferation and disarmament did not fall within the purview of the Agency, they should be dealt with in other international fora.

32. Where was the world heading with regard to the peaceful uses of atomic energy? The picture was discouraging. Various pressures were being applied to developing countries, which were unable to pursue their peaceful nuclear programmes. The growing list of dual-use items subjected to export restrictions was preventing developing countries from making technological progress - not only in applications of atomic energy, but also in fields such as health, industry and communications. In fact, a form of total technology denial was being introduced. For example, there was a growing, vocal demand to stop reprocessing, although certain countries needed to pursue the reprocessing route in order to fully exploit their nuclear material resources; moreover, there was a strong school of thought that the best way to dispose of plutonium was to burn it in a reactor and thereby generate power. In the short term, technology denial could undoubtedly slow down the technological growth of developing countries, leading to "technological apartheid". Even accession to the NPT did not seem to make any difference.

33. What should the role of the Agency be in that context? In India's view, the Agency should consider the particular needs of developing countries and take steps to ensure that all Member States had unhindered access to - and be free to acquire - technology, equipment and materials on a non-discriminatory basis for the peaceful uses of atomic energy. That view had been endorsed at the recent summit of the non-aligned countries.

34. During the past year, thanks to its indigenous capabilities India had made significant strides in the peaceful applications of atomic energy. Two pressurized heavy water reactors (PHWRs) had gone critical since the 1991 session of the General Conference - one at Narora and the other at Kakrapar. The Kakrapar unit was the first PHWR with thorium bundles in the initial fuel charge. In contrast to the long gestation periods experienced with India's earlier nuclear power projects, the Kakrapar unit had taken only eight years to complete. He hoped that the experience gained with the Kakrapar unit would enable India to build future reactors in even shorter times.

35. India was continuing to strengthen the infrastructure of its nuclear power programme: heavy water plants had been successfully commissioned; programmes for producing Zircaloy and natural uranium fuels were being stepped up; and new mining, exploration, processing and production facilities were being completed. A nuclear power programme was absolutely essential for a country of India's size and population and with such limited non-nuclear sources of energy. Its three-stage implementation - (i) PHWRs, (ii) fast breeder reactors for burning plutonium and (iii) the use of thorium - was firmly on course.

36. An advanced system for carrying out in-service inspections of coolant channels had been developed and successfully implemented at India's PHWRs. Work was proceeding on the design of an inherently safe advanced heavy water reactor system which would permit the extraction of a large fraction of the energy of thorium with minimum consumption of the plutonium driver fuel; it was expected that the design and the associated feasibility study would be completed within a few years.

37. In the safety area, India's regulatory mechanisms were functioning in such a manner as to permit speedy decision-making in the implementation of nuclear projects and the operation of nuclear facilities. India was following the major recommendations of the Agency's safety standards. Insistence on quality control and the inspection of operating systems, especially of PHWRs, ensured full protection against possible malfunctioning. He had full confidence in the safety and reliability of the power reactors that had been built and were being operated with Indian expertise. The radiation doses received by operating staff were well under control, and research into the effects of low-level radiation was continuing. Nevertheless, news media sponsored from outside India had attempted to create confusion by highlighting health problems which were unrelated to the operation of India's nuclear facilities.

38. India had developed sophisticated facilities for R&D relating to radioisotope applications and was continuing to meet its own requirements for radioisotopes, radiopharmaceuticals, radiographic equipment, nucleonic gauges and irradiators for a wide range of uses in industry and health care. A plant

for sewage treatment using irradiation - the first of its kind in Asia - had been set up and others were expected to follow. The emphasis on R&D had led to the development of new nuclear fuels, special-purpose machines, electronic equipment, high-yield varieties of pulses and cereals, etc. Indigenous know-how was being continuously generated in the areas of lasers, plasma physics, accelerators, high-temperature superconductivity, robotics and computer science.

39. India had always endeavoured to share its expertise with other Member States. In the past year a number of fellows had received training in India, which had also made available to the Agency the services of its experts. In addition, India had been offering training facilities and expertise on a bilateral basis to various developing countries. It appreciated the Agency's role in fostering technical co-operation through the regional co-operative agreement for Asia and the Pacific region (RCA), to which India was contributing by conducting training programmes and by providing equipment and experts' services.

40. India would continue to support the Agency in achieving its objectives. Special attention should be devoted to some of the issues mentioned by the Director General in his statement - for example, safety in nuclear operations and the question of nuclear materials from dismantled weapons.

41. Reverting to one of the earlier themes of his statement, he said that there seemed to be a great deal of anxiety in some developed countries about the widespread use of nuclear technology for peaceful purposes. The founders of the Agency had believed - and had made it clear - that nuclear power was the only alternative to energy famine. Unfortunately, even though 40 years of effort had proved that the use of nuclear technology could result in enhanced productivity and economic development in some advanced countries (where nuclear power accounted for 15-75% of the electricity produced), orchestrated policies were being pursued whereby the benefits of nuclear technology were being denied to developing countries. Every step taken in the name of preventing nuclear proliferation had resulted in a policy of preventing growth in the peaceful applications of atomic energy, especially among the under-

privileged. It was time that policy-makers found ways of achieving such growth while at the same time meeting the concern for self-preservation. There lay salvation for humanity at large, and all Member States should work together towards it.

42. Mr. SHTEYNBERG (Ukraine) said that Ukraine had recently celebrated the first anniversary of its independence. In that connection, he recalled that, in accordance with the provisions of the Declaration of Sovereignty of Ukraine and of the act proclaiming Ukraine's independence, his country intended to pursue a policy of strict neutrality and of non-participation in military blocks and to abide by three principles: not to accept, not to produce and not to acquire nuclear weapons. Ukraine had embarked resolutely on the path leading to non-nuclear status, systematically taking steps towards that objective. The withdrawal of tactical nuclear weapons from Ukraine's territory had been completed in May, and Ukraine had carefully monitored the dismantling process.

43. Having signed the Protocol to the Treaty on the Reduction and Limitation of Strategic Offensive Arms in Lisbon on 23 May, Ukraine had undertaken to ratify that Treaty and to accede to the NPT in the near future as a non-nuclear-weapon State.

44. The Ukrainian Government had submitted those legal texts to the Supreme Council of Ukraine for consideration, and it was expected that the decisions to ratify and accede would be taken during the current session of the Ukrainian Parliament.

45. The Agency was playing an important part in the implementation of the NPT, and Ukraine favoured the strengthening and further expansion - on the basis of the NPT - of the international non-proliferation regime, in which there was a special place for the Agency.

46. Ukraine greatly appreciated the Agency's activities in the safeguards area. Those activities were of particular importance in the context of nuclear disarmament, and Ukraine supported the efforts of the Agency to enhance the comprehensive safeguards regime.

47. At present, Ukraine was establishing a State system of accounting for and control of nuclear material and a nuclear export control system and making improvements in the physical protection area. Thus, intensive efforts were being made in all areas comprising the non-proliferation regime. Ukraine was aware that the international community was hoping for the early submission of all of Ukraine's peaceful nuclear activities to Agency safeguards - something which Ukraine also desired. It would be grateful to all States and to the Agency's staff for any support leading to the early creation, in Ukraine, of the organizational and technical conditions necessary for the signing of the NPT and the conclusion of a safeguards agreement. As that would take some time, his Government had declared its willingness to submit Ukraine's nuclear facilities to Agency safeguards. He was pleased that the matter had been resolved during the most recent session of the Board of Governors.

48. The member countries of the Commonwealth of Independent States had signed an agreement on fundamental principles for co-operation in the utilization of atomic energy for peaceful purposes. The agreement, which was based on the principles of nuclear non-proliferation, had already entered into force.

49. As the present session of the General Conference was the first one in which Ukraine was participating as a truly independent State, he wished to present some information about the prospects for nuclear power in Ukraine and the problems existing in that connection.

50. Five nuclear power stations were at present in operation in Ukraine. They comprised 15 units with a total capacity of about 14 000 MW. Three units were of the RBMK-1000 type, two of the WWER-440 type and ten of the WWER-1000 type. Pursuant to a decision of Ukraine's Supreme Council, the two last units of the Chernobyl plant were to be closed down for good in 1993. Unit 2 had been closed down the previous year. Six 1000 MW units were at the construction stage, but construction work had been frozen until 1995 under a moratorium proclaimed by the Supreme Council.

51. In 1991, nuclear power had accounted for 27% of the electricity generated in Ukraine. In the first quarter of the current year, it had accounted for 40% on certain days.

52. With regard to safety, Ukraine's power reactors could be divided into three groups. The RBMK-1000s fell furthest short of modern requirements. Large-scale reconstruction work had been done on those reactors following the 1986 accident. However, it was virtually impossible to bring them up to present safety standards at an acceptable cost. Their operation entailed higher-than-normal risks, and the Ukrainian Parliament had therefore decided to close down the Chernobyl plant for good.

53. The power stations with WWER-440 reactors had been designed in the 1970s. Numerous evaluations, including some carried out by Western experts, had shown that the safety of these units could be raised to an acceptable level. Ukraine was currently engaged in efforts to that end.

54. The power stations with WWER-1000 reactors came closest to meeting present safety standards. They accounted for 72% of the nuclear electricity produced in Ukraine - a figure which would rise to 92% after the final shutdown of the Chernobyl plant.

55. Ukraine was carrying out safety studies on its operating power reactors in co-operation with Russian, German, French and other experts.

56. In addition to power reactors, Ukraine had two research reactors in service. Also, uranium ore was mined and underwent initial processing in Ukraine. The country's uranium resources were sufficient to meet its nuclear fuel needs. Ukraine produced heavy water and a wide range of equipment for nuclear facilities.

57. It had to be admitted, however, that the nuclear sector in Ukraine was in a difficult situation. After the collapse of the Soviet Union, many long-standing scientific, technical and industrial links had been disrupted. The centralized system for nuclear safety control and monitoring had disintegrated. It was essential to establish a national system for ensuring the safe transport of radioactive items - a matter also of great importance for Russia, Czechoslovakia and Hungary, as many such items passed through Ukraine on their way to and from those countries. Ukraine had inherited numerous difficult problems relating to radioactive waste management and the creation of an independent fuel cycle.

58. Ukraine was having serious difficulties in resolving those problems and others relating to the utilization of atomic energy. The situation was exacerbated by deficiencies in the current laws and regulations and by a shortage of sufficiently qualified experts.

59. Ukraine was aware of its responsibility to the international community for the safety of its nuclear facilities and realized that the placing of those facilities under Ukrainian jurisdiction must not jeopardize their safety. Ukraine ought to close down a number of units in the near future, but it could not close them all down simultaneously as that would lead to a serious energy crisis. Some time would be needed in order to establish a legally sound regulatory basis, but Ukraine hoped to complete the task in the not too distant future with the help of foreign experts.

60. A State committee for nuclear safety and radiological protection had been set up in Ukraine to deal with nuclear regulatory matters. Administrative structures for the nuclear power sector had been created, and scientific resources were being brought together. Also, considerable work was being done on the development of research programmes for enhancing nuclear safety and resolving radioactive waste management problems.

61. Ukraine greatly appreciated the Agency's efforts to strengthen international co-operation in nuclear safety and radiological protection. At the General Conference's previous session, attention had rightly been drawn to the need to transform existing international activities in the field of nuclear safety into an international nuclear safety regime. Clearly, a serious accident at any nuclear facility would immediately discredit the very idea of the peaceful utilization of atomic energy. The Agency's efforts to develop basic principles of nuclear safety and radiological protection and to establish a co-ordinated programme for co-operation in that area were therefore well justified. He commended the Agency on its efforts relating to the drafting of a nuclear safety convention and to the revision of the Basic Safety Standards for Radiation Protection; he hoped that the work in question would be completed soon. Ukraine supported current efforts to introduce improvements in the field of liability for nuclear damage - a matter which would be covered in Ukraine's nuclear legislation. Also, it appreciated the

Agency's work in establishing a set of standards and guidelines for radioactive waste management. His delegation was sure that international practice and the Agency's activities would together ensure a very high level of safety worldwide and dispel public mistrust of nuclear power. Also, Ukraine considered it essential to reach international consensus on approaches to evaluating the safety and prospects of "old" power reactors and to determining the safety requirements to be met by the new ones which would constitute the basis for the development of nuclear power generation in the next century.

62. To the extent of its means and possibilities, Ukraine was participating actively in efforts to create an international nuclear safety regime. There had been several Agency missions to facilities in Ukraine. A week before, a regional seminar on the ASSET methodology had been concluded at the Khmelnitski nuclear power station. A seminar on reactivity accidents at nuclear power stations was to be held the following week in Kiev with the support of French and Russian specialists.

63. For the Ukrainian population, nuclear safety and radiological protection were not something abstract, but a harsh practical aspect of the everyday life of many people. Ukraine was still feeling the consequences of the Chernobyl tragedy, from which the population of Ukraine and its neighbouring countries had suffered to a greater or lesser extent. His Government was doing a great deal to overcome the consequences of the accident. Admittedly, its efforts were at present somewhat less effective than they had been, but Ukraine was going through a period of political and economic transition. However, Ukraine hoped to make up for lost time. It thanked the international community for its understanding and for the support it had given.

64. The results of the International Chernobyl Project had aroused great interest in Ukraine and elsewhere in the world. Admittedly, they had produced differing reactions, but he wished to acknowledge the enormous effort put in by the Agency in executing a project of very great scope within a very short time. Work was continuing at the Chernobyl Centre for International Research. Scientists and other specialists from various countries were

clearly attracted by the possibility of testing their skills in helping to resolve the safety problems associated with Unit 4 at the Chernobyl plant, better known as the "Sarcophagus".

65. The Agency's programme and budget for 1993 was generally well balanced. The structure of the budget in subsequent years should be based on the results of a comparative evaluation of projects aimed at focusing the Agency on activities of highest priority. Flexibility in the implementation of financial policy would significantly increase the effectiveness of the Agency's work. Unfortunately, the difficult economic situation in Ukraine had prevented his country from paying its contribution to the Regular Budget on time. His Government was examining ways of discharging its debt to the Agency the following year and was taking measures to that end.

66. Ukraine appreciated and supported the Agency's varied activities directed towards strengthening international co-operation in the peaceful uses of atomic energy and would help in every way possible to resolve the extremely important problems facing the Agency.

67. Mr. BALANESCU (Romania) said that, despite competing priorities and scarce financial resources, his Government continued to attach great importance to the peaceful uses of nuclear energy. Nuclear power was at the forefront of his country's efforts to assure a diversified energy supply which posed no danger to the environment. The nuclear option was a realistic and inevitable choice for Romania, which would be seeking to exploit fully partnership arrangements with foreign companies and to use its own industrial capacity to produce certain items of equipment, fuel and heavy water.

68. His delegation approved the draft programme for 1993-94 and the Regular Budget for 1993. It also endorsed the indicative planning figures for voluntary contributions to the TACF and was pleased to announce that Romania would pay its full assessed share of the TACF target for 1993.

69. His Government attached particular importance to the Agency's technical co-operation activities. In view of the close link between those activities and the safeguards and nuclear safety programmes, any expansion in those areas should apply equally to all three. Only in that way could fruitful international co-operation and a rapid advance of the peaceful applications of nuclear energy be guaranteed.

70. His country gave high priority to the Agency's efforts to improve the operation of the safeguards system, which was the key to preventing the proliferation of nuclear weapons and facilitated international co-operation and trade in nuclear material, equipment and technology. Recent events had shown that a sustained effort was needed in order to strengthen the nuclear non-proliferation regime and make the NPT a universal instrument. Some progress had been made in that respect in the past year, the most notable development being the accession of France and China to the NPT. Romania was convinced that the safeguards measures adopted by the Board of Governors since the previous session of the General Conference, together with other measures yet to be adopted, constituted a clear deterrent to any attempt at proliferation.

71. Romania urged all States to accede to the NPT and to accept comprehensive safeguards, which it regarded as a precondition for any co-operation or supply of material in the nuclear field. In that connection, Romania and the other adherents to the nuclear suppliers guidelines had circulated a statement on full-scope safeguards in May (INFCIRC/405). Also in 1992, Romania had subscribed to the Guidelines for Nuclear Transfers and the Guidelines for Transfers of Nuclear-Related Dual-Use Equipment, Material and Related Technology (INFCIRC/254/Rev.1/Part 1 and Part 2).

72. The Agency was to be commended for the competence it had demonstrated in implementing the mission entrusted to it by the Security Council under resolution 687. The results of the Agency's work had confirmed the need to strengthen the safeguards system and to make available to the Agency the necessary means to ensure that nuclear energy was not diverted from peaceful purposes.

73. In a world which needed energy but was concerned about pollution and the deteriorating environment, it was vitally important that the Agency continue to accord high priority to nuclear safety and radiation protection, which were prerequisites for the widespread use of nuclear power. The Agency had already done a great deal to promote co-operation in nuclear safety, and further efforts should be made, particularly in respect of reactors of older design which did not meet current safety standards.

74. Romania was participating actively in the preparation of an international nuclear safety convention. It intended to ensure that the safety of the Cernavoda nuclear power plant complied with international standards. His Government was planning to strengthen the national regulatory body in line with the recommendations of an Agency expert mission which had recently analysed the country's regulatory procedures with particular reference to the Cernavoda plant. Romania considered that an international nuclear safety convention would provide a suitable framework for tackling the problem of radioactive waste and that the Agency could play a vital part in co-ordinating a co-operative effort in that sphere.

75. Romania was deeply concerned at the poor condition of certain older nuclear reactors in the region. The Agency was to be commended for its efforts to evaluate and improve the safety of WWER-440/230 reactors and for its recent initiatives concerning the operational safety of other older types of reactor - for example, RBMKs. A shutdown of such reactors for good would undoubtedly create serious energy problems for the countries in question, but any accident would bring disastrous consequences.

76. The Romanian Parliament had recently ratified the Vienna Convention on Civil Liability for Nuclear Damage and the Joint Protocol Relating to the Application of the Vienna Convention and the Paris Convention.

77. The Agency had shown an exceptional capacity to assist Member States in all areas of the peaceful application of nuclear energy. His country appealed to the Agency for its help and advice in establishing national legislation and regulatory bodies on the basis of experience in countries with advanced nuclear programmes.

78. Mr. SANTANA CARVALHO (Brazil) warmly welcomed Croatia, Slovenia and Uzbekistan as new Members of the Agency.

79. His delegation was glad to note the change in attitude of countries whose significant nuclear activities had long been a source of concern to their neighbours and the international community. The recent submission of relatively advanced nuclear programmes to comprehensive safeguards and the early implementation of safeguards agreements were gratifying developments. However, any decision to undertake additional bilateral reciprocal safeguards

inspections should remain the prerogative of individual countries. The non-proliferation measures taken recently by various Member States showed that there was a growing political will to strengthen world security. Nevertheless, recent dramatic changes in the world - and in particular the disintegration of the Soviet Union - had aroused deep anxiety over the control of existing nuclear arsenals.

80. With regard to the control of nuclear exports, his Government's standpoint was that every country should adopt internal measures for the effective control of exports of sensitive technology, equipment and material related to weapons of mass destruction, especially nuclear weapons. Moreover, such controls should be applied universally. The Brazilian Congress was in the process of examining and updating comprehensive legislation on the matter. Stricter national control over exports, together with the application of comprehensive safeguards, should pave the way for closer co-operation between suppliers and importers and facilitate the access of the latter to sensitive technologies and equipment. In a wider context, his Government was also evaluating the Nuclear Suppliers Group's guidelines and its list of sensitive items.

81. The Agency had an important contribution to make to global security, co-operation and development. In the light of the Agency's many years of safeguards experience and the considerable advances made in safeguards methods and technologies, a general review of the entire safeguards system was called for.

82. Brazil and Argentina were continuing their co-ordinated efforts to strengthen non-proliferation and had attained all the objectives of the Joint Declaration of Foz do Iguaçu of November 1990. A bilateral agreement on the exclusively peaceful uses of nuclear energy, in force since December 1991, had led to the creation of the Brazilian-Argentine Agency for Accountancy and Control of Nuclear Materials (ABACC). A safeguards agreement which the two Governments, ABACC and the Agency had signed in December 1991 was currently being considered by the Brazilian Congress. Good progress was being made towards the achievement of the last goal established by the Joint Declaration, namely the entry into force of the Tlatelolco Treaty. At its General

Conference in August 1992, OPANAL had adopted by acclamation the amendments to the Treaty proposed by Argentina, Chile and Brazil, and the quick and full entry into force of the Treaty for those countries therefore seemed likely. With that step and the signing by France of Additional Protocol 1 to the Treaty, the establishment of a nuclear-weapon-free zone in Latin America was now closer to becoming a reality than ever before.

83. Brazil welcomed the work being done on an international nuclear safety convention. Such a convention should be based on the non-mandatory application of the NUSS safety principles and leave overall responsibility for safety with individual countries. Cumbersome details that would result in inflexibility and a low level of adherence should be avoided, and the convention should be such that small nuclear programmes could also reach the desired level of safety.

84. With reference to the work of the Standing Committee on Liability for Nuclear Damage, his delegation felt that regional interests should be taken into consideration in the matter of supplementary funding: the differing characteristics of regions could not be reflected in a single global mechanism. With respect to the settlement of disputes, preference should be given to proven mechanisms of international law. Innovations in that area might lead to conflict with existing constitutions and national legal frameworks. As to procedure, a more systematic and objective approach was desirable. Specific terms of reference should be given both to the working groups and the drafting committee, and proposals by Member States should be given priority.

85. Serious financial constraints were limiting the Agency's technical co-operation activities. Brazil was willing to make available to the Agency its facilities for training and education, as well as other non-financial assistance. Brazil was one of several developing countries now supplying equipment for Agency technical co-operation projects. The Secretariat's proposal for the promotion of commercial food irradiation was opportune and of relevance to his country.

86. As to the financing of technical assistance, his delegation was of the opinion that the traditional formula of funding through voluntary contributions was still the best approach.

87. The revision of Article VI of the Statute hinged on the concept of a geographical balance among Member States. That was very difficult to define at present, owing to the changes taking place in the world and the fact that several new countries were applying for membership of the Agency. Under the circumstances, it would be advisable to continue monitoring developments before proceeding with the matter.

88. He appealed to the Director General to look into the question of the late distribution of Agency documents. That practice left insufficient time for proper analysis and should not be allowed to become a habit.

89. Finally, he wished to refer to the United Nations Conference on Environment and Development, held in Rio de Janeiro in June 1992, where two important international conventions on world climate and biodiversity had been signed. The Conference had called the world's attention to the need to reconcile the availability of energy for development with the necessity of reducing carbon dioxide emissions. Since conservation and the exploitation of carbon-dioxide-free renewable sources would not be sufficient to solve the world's energy problems, nuclear power, and the Agency, would undoubtedly have an important role to play in the future.

90. Mr. ZILLER (Germany) said that the current nuclear energy situation in Germany was characterized by two fundamental trends: the process of integrating the two parts of Germany, and a growing awareness that the peaceful and safe use of nuclear energy was a matter of worldwide interdependence.

91. The amount of electricity generated by nuclear power plants in Germany had increased by about 10% during the first six months of 1992 compared with the same period in 1991. The number of installed nuclear units had remained unchanged. His Government was convinced that nuclear power would have to continue making a substantial contribution to electricity generation. No other energy source was as environmentally compatible and cost-effective while offering comparable security of supply. Nuclear power was needed to combat the greenhouse effect. His Government had set a target for reducing carbon dioxide emissions in the country by 25% by the year 2005. The Conference on

Environment and Development had confirmed that there was a growing consensus on the need to take joint action quickly to protect the global climate and that nuclear energy, used responsibly, could make an important contribution.

92. Important progress had been made in pursuit of a long-term energy source - nuclear fusion. He welcomed the agreement on the initiation of a new phase in the International Thermonuclear Experimental Reactor project and was pleased that a team of experts would again be working in Germany as part of that project.

93. A serious nuclear accident would have grave consequences for the future of nuclear power. All countries shared the risk and should therefore work together to overcome the problems. The participants in the Munich economic summit had agreed on a comprehensive programme to improve the safety of Soviet-type nuclear power stations. Priority had been given to short-term measures to improve operational and technological safety and to the strengthening of supervisory authorities. Bilateral measures were to be intensified, a supplementary aid fund was to be set up and the co-ordination of existing and planned measures was to be enhanced. The G-24 had approved that programme and its implementation had begun in July. It was crucial that clear aid measures be established and that there be a successful transition from analysis to effective action. He called on all those able to do so to assist in attaining that goal.

94. Germany considered nuclear safety a priority area for the Agency and one which ought to be developed further in close co-operation with other international organizations.

95. Germany urged all countries using nuclear energy to intensify their efforts to establish an international convention on nuclear safety, which would be an important tool for achieving the highest possible level of nuclear safety worldwide. With respect to the form and substance of a convention, it might be possible to dispense with detailed technical annexes but the convention should be broad in scope and should cover all nuclear reactors, facilities and activities in the civil nuclear fuel cycle. Requirements would have to be specified and, if the convention's goals were to be attained, peer review mechanisms would have to be enhanced.

96. Germany attached great importance to the improvement of international nuclear liability systems. The question of supplementary funding had given rise to some problems, and his delegation felt that the next step should be to discuss the principles involved on the basis of the draft prepared by the Secretariat.

97. The shock of discovering Iraq's secret nuclear weapons programme had helped bring about an international consensus on the urgent need for an even more effective international control mechanism. Germany therefore welcomed both the confirmation by the Board of Governors of the Director General's right to conduct special inspections aimed at detecting undeclared activities and the tightening of the obligation to provide early design information on planned nuclear facilities. However, those measures alone were not sufficient. The Agency's human and financial resources should be concentrated on those areas where there was the greatest need for confidence-building. His delegation therefore strongly encouraged the Agency and EURATOM to implement their new partnership approach without delay in order to avoid unnecessary duplication of safeguards activities. Full account should be taken of the fact that the far-reaching EURATOM safeguards system had proved effective and reliable over many years.

98. The past year had seen encouraging progress towards a strengthening of the non-proliferation system, notably the conclusion of a full-scope safeguards agreement with Argentina and Brazil and the speedy implementation of a safeguards agreement with South Africa. The full implementation of the agreement with the DPRK remained an important task.

99. At the same time, it was a matter of concern that some countries with major nuclear potential remained outside the non-proliferation system. Swift accession by the countries that had emerged from the dissolution of the Soviet Union was needed to build confidence. Germany therefore welcomed the announcements by the Governments of Ukraine, Belarus, Kazakhstan and Azerbaijan that they would accede to the NPT as non-nuclear-weapon States. It was important that accession procedures and the corresponding safeguards agreements be implemented without delay in order to facilitate co-operation in, for example, the field of reactor safety.

100. With the inspections carried out in Iraq in the past months, the Agency had given impressive proof of its unique competence and experience. The close and effective co-operation between the Agency and the United Nations Special Commission should continue.

101. The Agency's technical assistance programme demonstrated the important contribution made by nuclear science and technology to the economic and social development of a large number of Member States. Germany would continue its substantial support for the TACF, but felt that the level of the Fund needed to be brought in line with the ability of contributors to pay.

102. His Government remained committed to the principle of maintaining zero real programme growth in all international organizations. That principle was not the cause of the Agency's recent financial difficulties, which would be overcome only if all Member States paid their contributions to the Regular Budget in full and on time. Reliance on additional financial support from some Members was not a sound basis for the Agency's regular activities.

103. Mr. SANALAN (Turkey) warmly welcomed the admission of Croatia, Slovenia and Uzbekistan to the Agency.

104. The Agency had a paramount role to play in preventing the proliferation of nuclear weapons, and his country therefore welcomed all the initiatives taken by the Agency in the past year to strengthen the safeguards system. It also supported the Director General's efforts to achieve maximum effectiveness and efficiency in safeguards operations at a time of increasing demands and budgetary constraints. Clearly, wider accession to the NPT would contribute to the attainment of world peace. Regional approaches which included additional safeguards measures to suit local conditions and meet specific requirements would also serve non-proliferation objectives. However, those objectives could not be achieved through the verification of political commitments alone: tighter controls on nuclear exports were also needed.

105. The past year had been very eventful, with growing expectations and demands in the area of safeguards and new challenges in nuclear safety and radiation protection. Unfortunately, increasing financial constraints had made it more difficult for the Agency to discharge those new responsibilities. He therefore appealed to all Member States to give the Agency the

financial support it needed both to cope with its expanding workload in those areas and to meet the growing needs of developing countries for technical assistance.

106. In recent years more attention had been given to the safe operation of nuclear facilities in general and of nuclear power plants in particular. Nuclear events with transboundary radiological consequences, and especially the Chernobyl accident, had raised complex issues with economic, political, technical, social and legal aspects, some of which required international action and co-operation. One of the Agency's major tasks in that respect was to offer assistance in ensuring the safe operation of nuclear plants in the new republics of the former Soviet Union and in Eastern Europe. His Government urged the new republics to join the Agency so that they could benefit from its wide experience in that field. Nuclear safety was of such importance that it should be included among the Agency's statutory objectives.

107. He welcomed the progress made by the Standing Committee on Liability for Nuclear Damage. The Committee should be further encouraged to devise a contractual system of international nuclear liability which was acceptable not only to the parties to the relevant conventions but also to non-participating States. His Government remained convinced that a State liability regime could provide the solution to the important liability problems which would arise in the case of a nuclear accident causing damage in more than one jurisdiction.

108. He was pleased to note from the annual report that, as in previous years, the Agency had not detected any diversion of a significant amount of safeguarded nuclear material from peaceful activities in 1991. His country was conscious of the impact on the Agency of the increasing number of facilities coming under safeguards and commended the Department of Safeguards for the measures it had taken to increase its efficiency. There were, however, limits to what such measures could achieve, and budgetary constraints should not be allowed to cause a deterioration in the safeguards system.

109. The question of nuclear waste disposal should continue to receive careful attention. Nuclear waste technology had reached an advanced state of sophistication, yet much remained to be done. Public confidence in the nuclear industry could not be firmly established until mechanisms were in place for the safe and effective disposal of radioactive waste.

110. His country had taken an active part in the recent technical committee meeting on the physical protection of nuclear material and considered that a conference to review the implementation and adequacy of the convention on that subject should be convened as soon as possible.

111. His Government attached a great deal of importance to the Agency's technical co-operation activities and welcomed the increased attention being paid to the special needs of developing countries. His country had already pledged its voluntary contribution to the TACF for 1993. The Secretariat was to be commended for its efforts in implementing the major part of the technical assistance programme for 1991, despite the financial problems it had had to face.

112. In recent years, environmental problems had escalated to the level where they constituted a global threat. The crucial issue of environmental protection had been discussed at the United Nations Conference on Environment and Development and the Helsinki summit meeting of the Conference on Security and Co-operation in Europe (CSCE). In the final documents of both meetings, reference had been made to the need to develop efficient systems for monitoring and evaluating compliance with existing environmental commitments. It had also been emphasized that the integration of environmental protection in other policies and in the economic decision-making process was an essential condition both for sustainable economic development and for the prudent use of natural resources. It had been recommended that more States sign the relevant Agency conventions and that States actively support the early elaboration of an international convention on nuclear safety within the framework of the Agency. His delegation felt that those points could serve as a useful guide for future activities in that field.

113. In conclusion, his delegation believed that Member States could take pride in the Agency and its work. Despite its limited financial resources, the Agency was successfully transferring valuable knowledge and technologies to Member States through its technical assistance and other programmes, and thereby contributing to the technical, economic and social development of the world.

114. Mr. VIGASSY (Hungary) observed that significant political changes which affected the work of the Agency had been taking place all over the world. Despite the increase in political tensions in some regions of the world, in particular in the immediate neighbourhood of his own country, and also in the Middle East and Asia, indications were emerging of an overall strengthening of the nuclear non-proliferation regime: the accession of China and France to the NPT; the conclusion of a comprehensive safeguards agreement with Argentina and Brazil; the speedy conclusion and good start to the implementation of the safeguards agreement with South Africa; the declaration by supplier countries of their commitment to a policy of requiring full-scope safeguards as a condition for nuclear exports; and the ratification by the DPRK of its safeguards agreement with the Agency and the concrete steps already taken to implement it. With the NPT Extension Conference scheduled for 1995, those steps towards a genuine and universal non-proliferation regime were very heartening. In that context, he urged all States which had not yet done so - and especially the new independent States emerging from the former Soviet Union and former Yugoslavia - to accede to the NPT as non-nuclear-weapon States and to conclude comprehensive safeguards agreements with the Agency without delay. The safeguards agreements concluded with Estonia and Lithuania were an encouraging sign.

115. The call for resolute international action in response to Iraq's non-compliance with its safeguards obligations had been supported by Hungary in the United Nations Security Council, and his Government fully endorsed the action taken by the Agency to implement the relevant Security Council resolutions. The long-term monitoring of Iraq's compliance - a task entrusted to the Agency by the Security Council - was of vital importance. His Government continued to believe that the Agency's detection capabilities should be further strengthened in order to make the non-proliferation regime more credible.

116. An important element of the overall non-proliferation regime was the establishment of a properly functioning export control mechanism for nuclear material and technology and related dual-use commodities. The new control regime being introduced by the countries of the Nuclear Suppliers Group would fill a significant gap and help reduce the risk of nuclear proliferation. Hungary would participate fully in that regime.

117. Global interest in nuclear non-proliferation had been renewed in the aftermath of the Gulf conflict and the disintegration of the Soviet Union, and yet there seemed to be a lack of confidence in the Agency's safeguards system in its present form. That situation would have to be remedied. He commended the initiatives taken by the Director General to encourage Member States to reflect on that issue: the recent brainstorming session on safeguards, for example, had provided a valuable forum for discussing possible ways of strengthening the present safeguards system and reducing its costs. His country would continue to support the Agency's safeguards programme, notably by making Hungarian nuclear facilities available for testing and training purposes. With regard to short-term steps, Hungary had supported the Board of Governors efforts to improve the existing safeguards system through such measures as the early provision of design information, special inspections, universal reporting, and acceptance of information from Member States. It was in that context that the Hungarian Atomic Energy Commission was voluntarily offering to supply information to the Agency on all of its nuclear exports and imports, including ore concentrates. He hoped that offer would contribute to the establishment by the Agency of a universal register of exports and imports of sensitive nuclear equipment and materials.

118. An effective national and international accounting and physical protection regime for nuclear materials and equipment was of fundamental importance for the safe and peaceful use of nuclear facilities. His country would do what it could to ensure that the outcome of the forthcoming Review Conference on the Convention on the Physical Protection of Nuclear Material would further strengthen that regime. His Government would also do everything possible to prevent Hungarian territory from being used for the illegal transit of nuclear materials.

119. Hungary's energy needs could not be met without nuclear power. In 1992, the net electricity output of the four units of Hungary's nuclear power plant had accounted for almost half the country's total net electricity generation. That plant had an excellent operational record, having achieved an average load factor of over 86% in the past three years. Nevertheless, in the light of modern internationally recommended criteria and in accordance with the recommendations made by the Agency, the Hungarian Atomic Energy

Commission had decided to reassess the facility's safety and had launched a project for that purpose. The final report on the project would contain detailed analyses and documentation on the design basis accident, probabilistic safety assessment, and strategies for severe accident management. It would be submitted to the relevant national and international organizations, which would verify its conclusions.

120. His country would continue to rely on the Agency's services, including OSART and ASSET missions, to improve operational safety. The new ASCOT methodology would also be used to assess the safety culture of the regulatory body and the plant operating organization.

121. One of the most sensitive issues in terms of public acceptance of nuclear power was the management of spent fuel and the disposal of radioactive waste. He noted with satisfaction the positive experience of the Agency's WAMAP missions and urged the Secretariat to expand its services to Member States in that field.

122. The G-7 summit meeting in Munich in July 1992 had again stressed the urgent need to provide assistance to Eastern and Central European countries in improving nuclear safety. An extensive set of international and bilateral programmes had been launched with the participation of various international organizations and developed countries. Those programmes dealt mainly with generic studies, safety assessment, exchange of information and experience, and the overview of regulatory activities and training.

123. It was of vital importance that recipient countries participate actively in those programmes in order to ensure that assistance was focused on their interests and that their technical capabilities were used to the full. Recipient countries such as Hungary had valuable knowledge and expertise in areas such as the efficient and safe operation of WWER-213 plants and were willing to share it.

124. He welcomed the establishment of a co-ordination mechanism within the framework of the G-24 working group on nuclear safety intended to avoid duplication of effort and to enhance the effectiveness of technical assistance. However, greater efficiency in international efforts could be achieved by making more use of the Agency's experience and technical

information. Hungary had made a cost-free expert available to the Agency to strengthen those co-ordination efforts, and it strongly supported the Agency's active participation in the work of the CEC Secretariat in Brussels.

125. Hungary was deeply appreciative of the Agency's technical assistance activities, which had benefited its nuclear industry and nuclear research. In that connection, he was pleased to announce that his Government had decided to pledge its full voluntary contribution to the TACF for 1993.

126. Ms. DJURICKOVIC-TUVIC (Yugoslavia) expressed the hope that the membership of Croatia and Slovenia in the Agency would help to rebuild the co-operative relations which were so much needed after the tragic events that had occurred in the former Socialist Federal Republic of Yugoslavia.

127. With regard to the situation in her country, she wished to emphasize her Government's determination to end the civil war and free the country of sanctions and international isolation. In doing so, it would act in accordance with the principles of the United Nations Charter and the Helsinki Final Act. Her Government was fully committed to the decisions of the international conference on the former Yugoslavia held in London, and in particular to its decision that all outstanding issues should be resolved by peaceful means, on the basis of existing borders, and in a process of urgent and continuing negotiations. Her Government had pledged its co-operation in advancing the peace process, reducing the level of violence and curbing the flow of arms.

128. Her delegation felt it was vitally important for the current session of the General Conference to adopt measures which would enable the Agency to meet new demands at the international level for improved nuclear safety and radiation protection. The Agency also had a crucial role to play in the promotion of sustainable socio-economic development and in environmental protection through its technical co-operation programme.

129. In order to attract universal support for its programme and budget for the coming two-year period, the Agency should seek to establish a balance between its two main activities - safeguards and technical co-operation. Her delegation was able to support the budget proposed for 1993.

130. As a developing country with limited financial means, Yugoslavia paid close attention to the financing of technical co-operation. It stressed the need to secure predictable and assured resources for that programme and felt that those resources should be included in the Regular Budget.

131. With regard to the financing of safeguards, her country could support the recommendation that the present system should be extended for three years and that the contributions of Member States which qualified for partial relief in respect of their assessments for the safeguards component of the Regular Budget should continue to increase in step with inflation.

132. Yugoslavia had long enjoyed excellent co-operation with the Agency in a wide range of nuclear activities and was keen to continue that co-operation. It therefore deplored the sanctions which had been imposed on technical assistance to it and which had adversely affected existing projects and caused financial and other losses. The safe operation of its nuclear facilities was at risk. Her Government had expressed its firm resolve to fulfil all the requirements stipulated in the relevant Security Council resolutions, and she therefore hoped that the Agency and all the parties involved would soon see fit to lift sanctions, which were contrary to the spirit of the Agency.

133. Owing to its current financial difficulties, aggravated by the aforementioned sanctions, Yugoslavia had been unable to pay its outstanding contributions to the Agency before the General Conference, nor was it able at present to announce its contribution to the TACF. However, it intended to honour those obligations at the earliest opportunity, although that, too, was a matter on which the embargo had a bearing.

134. Mr. HOGBERG (Sweden) said that there had been a further strengthening of the non-proliferation regime over the past few years, a trend which his Government was confident would continue. With the accession to the NPT of China and France, all nuclear-weapon States were now parties to the Treaty. Sweden also welcomed the accession of Estonia, Latvia, Lithuania, Slovenia and Zimbabwe to the NPT and the recent progress made towards bringing the Ttalelolco Treaty into force. His country looked forward to the full and timely implementation of the safeguards agreement between the DPRK and the Agency. It urged all parties to the NPT which had not yet done so to conclude and implement the required safeguards agreements with the Agency without delay.

135. Iraq's failure to honour its commitments under the NPT and its safeguards agreement with the Agency had aroused grave concern in the international community. It was vital that the resolutions adopted by the Security Council be fully complied with. He commended the Secretariat for its strenuous efforts in carrying out the task entrusted to it by the Security Council.

136. A legally binding commitment to exclusively peaceful use was a prerequisite for the utilization of nuclear energy. All partners in international co-operation and trade should give an undertaking to ensure the full transparency - through comprehensive Agency safeguards - of all their nuclear activities. The recent decision by the 27 adherents to the Nuclear Suppliers Guidelines to adopt a policy of requiring full-scope safeguards as a condition for supply was an important step in that direction. Nuclear-weapon States had a special responsibility in that respect. For its part, Sweden was prepared to accept stricter regulations in the nuclear sphere and hoped that all other countries would adopt the same stance.

137. The strengthening of both the effectiveness and efficiency of Agency safeguards was of fundamental importance. He noted with satisfaction that the Agency's right to carry out special inspections had been reaffirmed and that significant improvements in efficiency had been achieved. The work begun on alternative safeguards approaches should be intensified with a view to supplementing the present safeguards regime. All elements which clearly contributed to increased transparency and flexibility should be considered, since greater openness would lead to improved effectiveness and efficiency. The question of the financing of safeguards remained unresolved and he urged all Members to approach that issue with an open mind and a determination to achieve results.

138. Welcome progress had been made towards a nuclear safety convention. The success of such a convention would depend largely on appropriate mechanisms for demonstrating compliance. Peer reviews could be an important instrument in that respect. There appeared to be a broad consensus on the fundamental safety and radiation protection principles on which the convention should be based, and he urged Member States to strive for its rapid

completion. The convention should cover not only the safety of nuclear power reactors but also radioactive waste management and the final disposal of nuclear waste. Furthermore, it should be designed in such a way that it could be extended in stages to other types of nuclear installation and activity.

139. Every effort should be made to improve the safety of power plants built to earlier standards, particularly those in Eastern and Central Europe. If an acceptable safety level for the long-term operation of such plants could not be achieved, they should be shut down. Sweden supported and looked forward to the rapid implementation of the strategy approved at the G-7 summit meeting in Munich in July 1992 and later adopted by the G-24 working group on nuclear safety.

140. In the field of civil liability for nuclear damage, Sweden was gratified that the Joint Protocol linking the Vienna and Paris Conventions had entered into force earlier in 1992. However, several States with nuclear plants had still not acceded to either convention. International efforts to upgrade the safety level of nuclear reactors built to earlier safety standards would benefit from the clarification of liability issues that would result from such accession. It was also important that States without nuclear power plants accede to one of the conventions, especially States located in regions where there was a high density of such plants. He hoped that work on the revision of the Vienna Convention and on the elaboration of a convention on supplementary funding would be accelerated to enable a diplomatic conference to be held in 1993.

141. Sweden looked forward to further progress with regard to resolution GC(XXXIV)/RES/532 on the important question of the safety of nuclear-powered vessels.

142. His country assigned high priority to the Agency's technical co-operation activities and noted the strong demand for assistance in such areas as food and agriculture, physical and chemical sciences, radiation protection, the safety of nuclear installations and the management of radioactive waste. The system of financing those activities needed to be put on a firmer basis given the uncertain nature of pledges and payments to the TACF. Sweden had pledged its share of the TACF target for 1993 and, in view of the

competence and efficiency with which technical co-operation activities were carried out, customarily made extrabudgetary contributions which exceeded its pledged share. He welcomed the broader co-operation between the IAEA and other agencies of the United Nations system, in particular FAO, WHO and UNEP.

143. Sweden attached great importance to the Agency's activities in safeguards, nuclear safety and technical assistance. In view of the financial constraints facing the Agency and most of its Members, the limited resources available should be used for high-priority tasks.

144. Mr. SANGIAMBUT (Thailand) said that his country attached particular importance to the Agency's technical co-operation activities, which benefited all developing countries and had contributed significantly to Thailand's development. As his country moved rapidly towards industrialization, the role of nuclear technology was expanding and co-operation with the Agency was proving of great value in the areas of industry, agriculture, health care and research.

145. He noted with concern that the rate of voluntary contributions paid to the TACF had continued to decline in the past year. He therefore urged all Member States, particularly those which were in a better position to do so, to contribute generously to the Fund. He was pleased to announce his Government's pledge of US $61 050 as its voluntary contribution to the TACF for 1993.

146. His delegation fully supported the Agency's proposal to assist developing countries in the field of food irradiation. In view of the imminent ban, for environmental reasons, on some widely used food fumigants such as methyl bromide, food irradiation could offer a much-needed alternative to fumigation. As one of the few developing countries where irradiated food had been marketed successfully, Thailand urged the Agency to increase its efforts to promote the public acceptance of that technology.

147. Over the past year, considerable progress had been made towards strengthening the safeguards system. His country believed that the early submission of design information on nuclear facilities and the exercise of the Agency's right to conduct special inspections would significantly increase the effectiveness of the safeguards system.

148. His delegation noted with satisfaction the report on the progress made in implementing the safeguards agreement with the DPRK. It also welcomed the joint declaration issued by the Republic of Korea and the DPRK on the denuclearization of the Korean Peninsula. That declaration would complement Agency safeguards and further strengthen the stability of the Korean Peninsula and the region as a whole. He therefore called on both countries to implement that bilateral arrangement as soon as possible.

149. In the light of their increasing need for energy to meet development requirements, many countries were seriously considering nuclear power as an energy option. Improved nuclear safety was a prerequisite for winning public support for nuclear power, and he therefore commended the Agency on its contribution to the progress made in that field in the past year.

150. Mr. TALIANI (Italy) said his delegation fully endorsed the statement made by the United Kingdom on behalf of the European Community and its member countries.

151. His Government welcomed the recent accession to the NPT of China, Namibia and Uzbekistan and viewed the ratification of the Treaty by France as confirmation of the constructive attitude always shown by that country in the field of nuclear non-proliferation. It also noted with satisfaction the recent decision of the Ukrainian Government to place under Agency safeguards all nuclear facilities under its jurisdiction or control pending the completion of the preparatory work for its accession to the NPT as a non-nuclear-weapon State.

152. The important agreements reached by the United States and the Russian Federation in the field of nuclear disarmament suggested that the remarkable changes which had taken place in the former Soviet Union had created a new co-operative environment which would lead to a better and safer world. The recent agreement on the use of highly enriched uranium was especially welcome. In the past few years his Government had encouraged studies on the peaceful use of military nuclear materials which had been carried out by a group of Italian scientists and supported by leading Italian corporations. An international gathering on that subject had taken place in Rome in June 1991, attended by representatives of the political and scientific worlds.

153. His Government was also conducting preliminary talks with the Russian authorities concerning the most suitable way of offering technical assistance to the Russian Federation for the dismantling and safe storage of nuclear warheads, in full accordance with the NPT. A further meeting on that subject was scheduled for the beginning of October.

154. The decisions taken by France and the Russian Federation concerning a moratorium on nuclear tests and also the decision of the United States to limit the total number of such tests per year would have great political impact and would pave the way for a more consistent approach to nuclear non-proliferation in the run-up to the NPT Extension Conference to be held in 1995.

155. The uncontrolled movement of sensitive materials - presumably, although not necessarily, originating in the former Soviet Union - was a matter of deep concern to his Government. The Agency had a specific role to play in that area, and he invited every country which was able to do so to provide the Agency with all relevant information in order to put an end to such illegal activities.

156. His Government noted with satisfaction the progress made by the Agency in implementing the measures required under Security Council resolutions 687, 707 and 715. Italy would continue to support the Agency's activities in Iraq by providing, inter alia, the services of the leader of the action team established for that purpose.

157. His Government continued to assign high priority to nuclear safety and radiological protection and fully supported the numerous initiatives taken and services introduced by the Agency over the years to enhance the safety of nuclear facilities worldwide. The unfortunate and drastic curtailment of those essential activities as a result of the Board of Governors decision to cut the 1993 budget was a matter of great concern to his delegation. Savings had been made in the worst possible areas, indicating the short-sightedness of some members of the Board.

158. A number of initiatives had been launched with the aim of improving safety levels at nuclear facilities in the countries of Central and Eastern Europe and the CIS. The G-7 had approved a programme of action on the safety

of Soviet-designed nuclear power plants at its recent summit meeting in Munich. Responsibility for co-ordinating that programme had been assigned to the G-24, and a workable and effective structure must now be established if the programme was to succeed.

159. His country was currently assessing how it could best participate in the programme. Its present lack of a national nuclear power programme should by no means be viewed as limiting its ability to make an effective contribution in that area, since its technical knowledge and industrial capabilities were fully adequate for the purposes of the G-7 programme. Italy intended to play an active role through both bilateral initiatives and active involvement in programmes funded by the European Community.

160. The importance of the Agency's role in that context could not be overestimated. The Agency had been analysing the safety problems of Soviet-designed reactors for some years. The recently completed comprehensive safety assessment of first generation WWERs showed how much the Agency's activities - particularly its OSART, ASSET and engineering safety review missions - had contributed to the identification not only of deficiencies but also of urgently needed corrective actions. The Agency had built up a wealth of data and experience that should be exploited to the utmost and further enhanced by extending the assessment work to the other types of Soviet-designed reactor. The G-7 programme would be effective only if it had a sound base of technical information to draw on, and the Agency's experience was essential to extending that base. The programme's success also depended on the extensive participation of the beneficiary countries, which bore ultimate responsibility for the safety of their facilities. Those countries should contribute to the G-24 co-ordination mechanisms; the Russian Federation, which had developed the technology on which all those plants were based, would have a particularly important role to play.

161. Despite the valuable efforts of the Agency and some of its Member States, the creation of an international safety regime remained a distant objective. The elaboration of a convention on nuclear safety would be an important step in the right direction, provided that it did not turn out to be merely a compendium of good intentions. The convention should establish

precise safety standards, and all signatory countries should give an undertaking to observe them. Furthermore, it should assign to the Agency a well-defined role in verifying compliance with those freely undertaken obligations.

162. Unfortunately, that did not appear to be the direction being taken in the expert group set up to prepare the convention. Negotiations would not be easy, nor could they be concluded rapidly, but success was much more important than speed. The aim was to create a comprehensive international instrument that would meet the expectations of the public worldwide. Hopes for relaunching nuclear power rested largely on the Agency's ability to meet the strong and growing demand for internationally agreed and verified safety standards.

163. His delegation had the same concerns with regard to the protocol on nuclear safety currently being drawn up for inclusion in the European energy charter. The protocol was essential for strengthening nuclear safety in Central and Eastern European countries and the CIS.

164. The Agency's international regulatory review service was of special importance among the various initiatives to strengthen national infrastructures. It was unfortunate that only two Member States had thus far made use of that important tool, and he urged all Member States to take advantage of that service.

165. With regard to the activities of the Standing Committee on Liability for Nuclear Damage, his country felt that it would be counterproductive to speed up negotiations with a view to convening a conference to review the Vienna Convention in 1993. Member States were still far from agreement on some essential points that would add new and more forward-looking elements to the present outdated instrument - in particular, the international liability of States and the creation of an international tribunal with mandatory jurisdiction. Once again, obtaining good results was more important than speed.

166. Finally, many speakers had rightly pointed out that the main responsibility for the Agency's serious financial situation lay in the non-payment or late payment by Member States of their assessed contributions. However, the Secretariat should consider streamlining its structure, which had scarcely

changed over the past two decades. It might be more efficient, for example, if the transfer of technology was the responsibility of a single department instead of the three that currently dealt with technical assistance. That situation had arisen as a result of historical developments, and it was time for the Director General to tackle the matter.

167. Mr. NIEWODNICZANSKI (Poland), having welcomed Croatia, Slovenia and Uzbekistan as new members of the Agency, noted with satisfaction the accession of China and France to the NPT and, in Latin America, the imminent entry into force of the amended Ttaleloco Treaty. Despite those positive developments, which augured well for the 1995 NPT Extension Conference, it was important not to lose sight of the new security problems and threats that had arisen in some regions. The case of Iraq had alerted the world community and prompted it to take action. Poland commended the Agency for its highly successful contribution to the implementation of Security Council resolution 687 and supported the Secretariat's initiatives to strengthen the safeguards system and achieve greater transparency through enhanced reporting, wider use of special inspections and the early provision of design information.

168. Poland noted with satisfaction the recent decision of two of its neighbours, namely Ukraine and Lithuania, to invite the Agency to inspect their facilities, even before concluding safeguards agreements with the Agency. It also noted the progress made in implementing the safeguards agreements with South Africa and the DPRK and supported the Director General's intention to step up efforts to bring about the application of comprehensive safeguards in the Middle East.

169. Although Poland had no nuclear power plants of its own, it was surrounded by countries where a large proportion of energy needs was met from such plants. That was one of the reasons why problems of nuclear safety and emergency procedures in the event of a severe accident were of interest to Poland. It therefore supported all Agency activities aimed at strengthening nuclear safety, particularly in Central and Eastern Europe.

170. Poland's own nuclear power programme had been deferred for 10 to 20 years. However, there was reason to believe that environmental considerations would cause it to be revived earlier. The poor state of the environment in Poland resulted largely from the burning of coal to produce

electricity. If environmental protection costs were included in the price of energy and nuclear safety was assured, nuclear power plants might well be a viable alternative to coal. Poland was already considering creating research and development programmes in the field of new-generation reactors and would appreciate Agency assistance in that connection.

171. Because of its environmental problems, Poland was very interested in the use of electron beam technology to remove sulphur dioxide and nitrogen oxides from flue gases. The pilot installation constructed near Warsaw with the Agency's technical assistance had been very successful and had become a centre of intensive international co-operation involving Japan, the United States and Germany. As a result of that co-operation, preparations were now being made for the full-scale industrial application of the installation, which was also being used as a training centre. Other technical assistance projects of importance to Poland were those relating to nuclear methods for coal seam identification, for the evaluation and control of coal quality and for the study of the environmental impact of coal mining and processing, and to radioactive waste disposal technologies and methods. Finally, as in the past, Poland would continue to do its best to contribute to the Agency's technical assistance programme.

172. Mr. WILSON (Australia), after welcoming Croatia, Slovenia and Uzbekistan as new Members of the Agency, drew attention to the difficulties faced by the Agency as a result of the late payment or non-payment of contributions by a number of Member States. There were two ways to deal with the problem. The most desirable way was for all Member States to pay their contributions to the Regular Budget in full and on time. The alternative was to cut Agency programmes. If that proved necessary, priorities should be established, since across-the-board cuts of the kind made in 1992 were unsatisfactory. His delegation was making its own analysis of Agency programmes in preparation for its consideration of the 1994 budget and it urged other delegations to do likewise. It would also like to see the Board of Governors resume consideration of the Medium-Term Plan soon.

173. Australia's commitment to the Agency's technical co-operation programme remained firm. In the past year, it had hosted and funded two Agency training courses on the use of computers in nuclear medicine imaging and on the

development of training methods for ensuring radiation protection. It had also held a workshop on nuclear instrument maintenance. Places had also been provided for some 30 Agency fellows for on-the-job training on such topics as industrial tracers, radiation protection, nuclear medicine and neutron activation analysis. Australian scientists had undertaken 15 expert missions for Agency technical assistance projects and his country had supplied a range of equipment for such projects. In addition to its annual payment to the TACF, his country would continue to contribute substantial extrabudgetary funding for technical co-operation programmes, including 1.5 million Australian dollars for the next three years to the RCA programme and about 300 000 Australian dollars to a co-ordinated research programme on the use of nuclear and isotope techniques in studies on coral reefs, climate and global environmental change.

174. An independent nuclear safety bureau had recently been established in Australia, underlining the importance which Australia attached to nuclear safety. His country strongly supported the Agency's involvement in nuclear safety and the expansion of certain of its safety-related activities - subject to a thorough examination of the budgetary implications. If the Agency's resources were not adequate to meet its responsibilities in the area of safety, extrabudgetary funding should be provided. Australia was actively involved in work on the proposed international convention on nuclear safety and was also making a significant contribution to the revision of the Basic Safety Standards for Radiation Protection. The revision of the Standards required careful and thorough consideration and an unrealistic deadline should not be set for the completion of that work.

175. Australia welcomed the recent initiatives to reduce nuclear weapon stockpiles. However, it was essential that the resulting nuclear material be managed in such a way as to ensure that it was not used again for weapons. Also, the availability of the highly enriched uranium from dismantled weapons must not be allowed to disrupt nuclear trade. The nuclear industry relied on stable and secure supplies of fuel which should not be put at risk.

176. It was a matter of satisfaction that the NPT continued to attract growing international support and that, following the accession to the NPT of China and France, all permanent members of the United Nations Security Council

were now parties to the NPT. His country also welcomed the accession to the NPT of the Baltic States and the commitment to early accession of Ukraine, Belarus and Kazakhstan, and looked forward to the accession of other States which had recently become independent.

177. While it was desirable for those countries which had not yet done so to accede to the NPT, it was also important that all parties to the Treaty should fulfil all their obligations under it. It was therefore a matter of concern that some 50 States party to the NPT had still not concluded the required safeguards agreement. Since controls on nuclear exports formed part of the non-proliferation obligations of nuclear suppliers, the agreement reached by nuclear suppliers regarding controls on nuclear-related dual-use items and the requirement that full-scope safeguards be a precondition for the supply of significant nuclear items was an important development. He urged the few suppliers which had not yet done so to adopt the same position.

178. Australia commended the co-operation shown by South Africa and the DPRK in implementing their NPT safeguards agreements. In the latter case, the process was not yet complete, and questions concerning spent fuel, the future of a reprocessing plant and the possibility of a pilot reprocessing plant remained unresolved. Australia looked forward to the early and full implementation of the safeguards agreement with the DPRK. It would be helpful if countries like South Africa and the DPRK which had previously operated unsafeguarded advanced fuel cycle programmes went beyond the strict requirements of the safeguards system and afforded greater transparency by providing whatever additional information they could. In that context, there was widespread interest and support among the international community for the early implementation of the joint bilateral nuclear inspection regime agreed upon by the DPRK and the Republic of Korea.

179. The Agency was to be commended for its work on the application of full-scope safeguards in the Middle East. The attainment of that goal would have major positive implications for the security of the region.

180. His country continued to be concerned by Iraq's attitude to inspections and urged Iraq to co-operate completely with the Agency and comply fully with the relevant Security Council resolutions. Since questions remained unanswered about the Iraqi nuclear programme, it was important for the Agency

to maintain a monitoring role in Iraq. Iraq's extensive clandestine nuclear programme had demonstrated shortcomings in the Agency's safeguards system. There was a need to strengthen the Agency's ability to deal with undeclared nuclear activities. In that connection, he welcomed the action taken in the past year with regard to special inspections and the earlier provision of design information and the examination - still in progress - of a comprehensive reporting system. Nevertheless, much remained to be done.

181. In addition to strengthening safeguards, it was also important to improve the efficiency of the system. In doing so, care should be taken to ensure that savings did not damage the system's integrity and that the funding required to enable the Agency to meet its international safeguards obligations was assured. Involvement in safeguards research and development activities was one way in which Member States could contribute to a more cost-effective system. For its part, Australia remained committed to providing such support to the Department of Safeguards.

The meeting rose at 6.55 p.m.