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RECORD OF THE TWO HUNDRED AND FIFTY-SEVENTH PLENARY MEETING

Held at the Neue Hofburg, Vienna
on Monday, 24 September 1984, at 10.20 a.m.

Temporary President: Mr. KEBLUSEK (Czechoslovakia)

President: Mr. BARREDA DELGADO (Peru)

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**/ GC (XXVIII)/711.

The composition of delegations attending the session is given in document GC (XXVIII)/INF/223/Rev.4.

OPENING OF THE SESSION

1. The TEMPORARY PRESIDENT declared the twenty-eighth regular session of the General Conference open.

2. In accordance with Rule 48 of the Rules of Procedure he invited the delegates to observe one minute of silence dedicated to prayer or meditation.

All present rose and stood in silence for one minute.

3. The TEMPORARY PRESIDENT welcomed the delegates, observers, representatives of the United Nations and its specialized agencies and representatives of other intergovernmental organizations.

4. The significance of the present session was emphasized by the participation of ministers from a large number of countries. The Directors General of the Food and Agriculture Organization of the United Nations and of the Agency deserved congratulations on twenty years of successful co-operation in the Joint FAO/IAEA Division of Isotope and Radiation Applications of Atomic Energy for Food and Agricultural Development.

5. The experience of the past year had shown that the Agency had consolidated its position in a number of areas and emphasized the importance of the tasks facing the Agency and its Members. Unfortunately, international tension and the threat of nuclear war had increased, so that the Agency's work on behalf of the non-proliferation of nuclear weapons, aimed at preventing the emergence of new nuclear-weapon States, would have to be strengthened. There would have to be close co-operation in the peaceful uses of nuclear energy, a field in which the Agency was a recognized international body with substantial authority, and the preservation of a climate conducive to discussion of the complex problems arising in that sphere was bound to have particular importance.

6. He hoped that the present session of the General Conference would assist the Agency in carrying out its tasks and enhance the practical value of nuclear energy for all mankind, ensuring at the same time that it would never be used for destruction and annihilation. In its multilateral activities, the Agency could contribute to the cause of peace and help to remove the threat of war.

ELECTION OF THE PRESIDENT

7. The TEMPORARY PRESIDENT invited nominations for the office of President of the Conference.

8. Mr. CASTRO DÍAZ BALART (Cuba), speaking on behalf of the Latin America regional group, proposed Mr. Barreda Delgado, delegate of Peru, as President of the General Conference at its twenty-eighth regular session. Mr. Delgado's wide experience, among other things as President of the Peruvian Nuclear Energy Institute, justified every confidence that he would guide the work of the Conference to a successful conclusion.

9. Mr. NISIO (Italy), speaking on behalf of the Western Europe regional group, seconded the nomination of Mr. Barreda Delgado and assured him of the full co-operation of the delegates of the West European Member States.

10. Mr. OSZTROVSZKY (Hungary), on behalf of the Eastern Europe regional group, Mr. BADDOU (Morocco), on behalf of the Africa regional group, Mr. RAMANNA (India), on behalf of the Middle East and South Asia regional group, Mr. ONGKILI (Malaysia), on behalf of the South East Asia and the Pacific regional group, and Mr. SIAZON (Philippines), on behalf of the Far East regional group, supported the nomination.

11. Mr. Barreda Delgado (Peru) was elected President of the General Conference for its twenty-eighth regular session by acclamation.

12. The TEMPORARY PRESIDENT congratulated Mr. Barreda Delgado on his election.

Mr. Barreda Delgado (Peru) took the Chair.

13. The PRESIDENT thanked the representative of the Latin America regional group for nominating him and expressed his gratitude to the delegates from the other regional groups who had supported the nomination. His election gave him personal satisfaction and was also a recognition of the efforts being made by Peru in the peaceful uses of nuclear energy. Through the work of the Agency, a tool first used for military purposes had been converted into an instrument for the tasks of peace; in that way, the Agency's activities had contributed to the technical, economic and social development of Member States.

14. The General Conference had to examine the best ways in which the Agency could fulfil its objective of enlarging the contribution of nuclear energy to human well-being and prosperity, and he appealed to delegates to approach their work in a spirit of co-operation which would make it possible to establish programmes well adapted to that objective.

OPENING STATEMENTS

15. The PRESIDENT proposed that, in view of the fact that consultations were still being held on the composition of the General Committee, the Conference waive Rule 42(a) of the Rules of Procedure and proceed immediately to items 2, 3, 4 and 6.

16. It was so decided.

MESSAGE FROM THE SECRETARY-GENERAL OF THE UNITED NATIONS

17. Mr. ALLAF, the representative of the Secretary-General of the United Nations, said that, at a time when doubts were being expressed about the capacity of multilateral institutions to deal effectively with the world's complex problems, the Agency had demonstrated that such institutions could in fact bring substantial benefits to the world community.

18. The management of nuclear energy should be such as to ensure that the benefits to be gained from its peaceful uses were accessible to all countries and that the dangers inherent in its use for military purposes were first controlled and then eliminated. Although the threat posed by nuclear weapons had continued to grow, it might have been still more grave without the Treaty on the Non-Proliferation of Nuclear Weapons and the safeguards provided by the Agency.

19. For 27 years, nuclear-weapon and non-nuclear-weapon States had worked together effectively in the Agency. It was essential that Member States should not allow political tensions to jeopardize the Agency's work and it was equally important that ways be found to enhance still further the benefits which the Agency could confer on countries in need of peaceful nuclear technology and the assurances it could give to the world community. The safety of peaceful nuclear installations needed to be improved and the problem of nuclear waste still had to be resolved.

20. The United Nations was going ahead with plans for its Conference for the Promotion of International Co-operation in the Peaceful Uses of Nuclear Energy and was also deeply involved in preparations for the Third Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. The co-operation and assistance of the Agency was essential for both Conferences. Each Conference could be expected to highlight the indispensable role that the Agency played in a nuclear world.

21. If multilateral institutions such as the Agency and the United Nations itself were fully supported, international security and confidence would be enhanced. Increased confidence was essential in order to reduce nuclear arsenals and to facilitate the enjoyment by all countries of the benefits to be gained from the peaceful and well-considered utilization of atomic energy, a purpose which both Conferences would pursue.

22. He wished the General Conference success in improving the capacity of the Agency to fulfil the great tasks which lay ahead and personally congratulated Mr. Barreda Delgado on his election to the post of President of the General Conference.

STATEMENT BY THE DIRECTOR GENERAL

23. The DIRECTOR GENERAL said that, from the beginning of human cultures, exchange of experience and the transfer of knowledge had been among the strongest promoters of development. That remained so at the present time, although now experience was exchanged and knowledge transferred not so much in market places, in ports and at caravan crossings as at thousands of meetings between persons with specialized professions, in the pages of scientific publications, through the use of computer-stored scientific information and data, and through the visits of experts and students.

24. One of the main functions of the IAEA was to promote the peaceful development and uses of nuclear energy through the exchange of knowledge, experience and technology, and one very important way of achieving that exchange was through the organization of meetings. Indeed, the General Conference itself was a meeting place for the governmental sector of the nuclear world, and it was to be hoped that, apart from fulfilling its constitutional and policy-making tasks, it would serve as an instrument for contact at the professional and political level.

25. The General Conference was the biggest and most representative meeting place of the Agency's Members, but most of the meetings organized by the IAEA were technical. Some 290 technical meetings had been organized during the previous year under the auspices of the Agency. The important transfer of knowledge in the nuclear field that had been initiated so magnificently by the Geneva Conferences was thus continuing on a large scale, though in a less spectacular manner.

26. The impact of the meetings organized under the auspices of the Agency was usually enhanced by the publication of proceedings, technical reports or conclusions; the experience reported at Agency meetings was thus disseminated to many who were unable to attend them. During the past year the Agency had published over 150 separate books or journal issues.

27. Another powerful means of exchanging knowledge was the International Nuclear Information System (INIS). Research and development was rapidly expanding knowledge and capabilities in the nuclear field. Traditional libraries were no longer sufficient, but through the "computerized central library" researchers all over the world could have rapid access to the latest literature in the nuclear field from anywhere in the world. At present INIS contained some 860 000 items, and some 6000 to 7000 items were added each month. An exchange of information also took place through the Agency's nuclear data programme, whose principal objective was to provide the best available data to scientists and engineers in Member States. In response to more than 5000 requests during the past 20 years, over 6000 technical reports, almost half a million sets of numerical data and some 500 data processing computer codes had been distributed. Two thirds of those services had been requested by developing countries.

28. Much of the Agency's activity in technical co-operation with developing countries involved the transfer of knowledge and technology for development - through expert missions, fellowships, scientific visits, seminars and courses. The International Centre for Theoretical Physics had been and remained a remarkable instrument for the exchange of knowledge and experience which had brought together thousands of scholars and researchers and stimulated them to further work in their own countries.

29. Other Agency activities did not aim primarily at the transfer of technology, but helped to create conditions under which technology transfer through international trade and co-operation in the nuclear field was facilitated. The elaboration of norms of various kinds - guides, standards, recommendations, conventions - in the areas of waste management, transport and safety facilitated international transfers of equipment and materials. Also, the operation of the Agency's safeguards system had a vital role to play in creating the confidence necessary for trade and co-operation in the nuclear field.

30. All the Agency's activities served the same two aims - namely, to promote the peaceful uses of nuclear energy and to help prevent the further spread of nuclear weapons. Those two aims were linked. If the spectre of vertical and horizontal nuclear weapons proliferation could be removed, then there would be less hesitation about the acceptance of all the peaceful uses of the atom. At the same time, full access to the tremendous resources of the atom for power and heat generation and for agriculture, medicine and industry would help to create conditions conducive to peace.

31. The impression might sometimes arise that the Agency, in dealing with a highly sophisticated technology, was far removed from the grim realities of many Member States: poverty and under-nourishment. It was true that the Agency was dealing with some of the most advanced techniques in the world, but it had to be made clear that many of those techniques could be both useful and cost-effective in the fight against starvation, illness and under-development.

32. For many years the Agency had engaged, together with the Food and Agriculture Organization of the United Nations (FAO), in efforts to promote world food production, and the present year marked the twentieth anniversary of the Joint FAO/IAEA Division of Isotope and Radiation Applications of Atomic Energy for Food and Agricultural Development. The Agency was privileged to celebrate that anniversary together with the Director General of FAO, Dr. Edouard Saouma, who would soon be addressing the Conference. For two decades FAO and the Agency had been linked in close and harmonious collaboration, achieving results which they could not have achieved singly. Through that collaboration they had also set an example of how international organizations should act when their mandates touched or overlapped.

33. The Agency and FAO were co-operating in the use of the "sterile insect technique", based on sterilization by irradiation, to combat the Mediterranean fruit fly, which spoiled large quantities of fruit, and the tsetse fly, which still plagued huge tracts of land in Africa. The results so far were very promising. The Agency, through its Laboratory at Seibersdorf, was also collaborating closely with FAO in the use of the new and far-reaching possibilities offered by biotechnology in agricultural research and development, where nuclear techniques could make unique contributions. Irradiation was, of course, one of the main methods of inducing mutations in plants, and the employment of radioisotopes had created vast and valuable opportunities for crop plant improvement. In the field of biotechnology, where training had been stepped up, close contact was also maintained with the United Nations Industrial Development Organization (UNIDO), which was launching a major effort to establish international centres for biotechnology and genetic engineering.

34. During 1984 interested Member States had established an International Consultative Group on Food Irradiation to provide advice in the field of food irradiation to the Agency, FAO and WHO. The technique of food irradiation was evoking increasing interest, not least because it offered an alternative to chemical additives for food disinfection and shelf-life extension. The latest issue of the Agency's Bulletin, which was devoted to applications of nuclear science in food and agriculture, contained reports on food irradiation activities.

35. The Agency's programme for technical co-operation with developing countries was a mechanism for facilitating the acquisition not only of technology relating to nuclear power but also - indeed primarily - of nuclear techniques employed in areas such as agriculture, medicine and industry. The Agency's technical co-operation activities had expanded considerably. In 1982 the Secretariat had been engaged in implementing about 500 projects, whereas the corresponding figure for 1983 had exceeded 700, and the Agency was at present implementing more than 800 projects. The growth in actual assistance delivered could be illustrated by comparing the first six months of 1983 and the same period in 1984, between which there had been an increase of 35% in expert assignments, of 24% in dollars spent on equipment, and of 13% in

the number of fellows in the field. That increase had been achieved without increasing the number of staff involved in the administration of the programme. However, more staff resources would be needed if the larger programme was to maintain its effectiveness.

36. More than half of the resources for technical co-operation came from Member States' pledges of voluntary contributions to the Technical Assistance and Co-operation Fund. By the end of June 1983, 83% of the 1983 target of US \$19 million had been pledged; by the end of June 1984, 91% of the 1984 target of US \$22.5 million had been pledged. However, it was somewhat disappointing that, at the end of July 1984, 50 Member States had still not pledged their contributions for the current year.

37. While, in absolute terms, the Agency's technical co-operation programme had expanded considerably in recent years, it had been rightly pointed out in a recent report by the United Nations Joint Inspection Unit (JIU) that account must be taken of inflation, of the Agency's increased membership and of the decline in resources available through UNDP. Nevertheless, as had been also pointed out by the JIU, the rate of growth of technical assistance funds had been more pronounced in the case of the Agency than in that of other UN organizations and the share of the Agency's total resources allocated to technical co-operation was among the highest in the UN system.

38. A year ago he had mentioned a number of measures approved by the Board of Governors to enable the Agency to respond more quickly to the changing needs and priorities of developing Member States. Among those measures, the introduction of dynamic programming had already resulted in a more effective utilization of resources. During the current year it had already been possible to make 13 footnote a/ projects operational with funds released by rephasing projects. The Joint Inspection Unit had commented favourably upon that as a more realistic form of project budgeting which enabled more effective use to be made of the funds available for technical co-operation.

39. Another of the policy measures which had been approved by the Board of Governors in June 1983 was the placing of increased emphasis on regional and interregional projects. In that context two regional endeavours which included both technical co-operation and co-ordinated research programmes deserved specific mention.

40. The first of those, the Regional Co-operative Agreement (RCA) for Asia and the Pacific, was continuing to serve as an important vehicle for the development of nuclear science and technology in the region covered by it. It was a matter for satisfaction that India was continuing in the role it had recently assumed as one of the donor countries, along with Australia and Japan. The 15 projects being carried out within the framework of the RCA, including the large-scale UNDP project on applications of isotopes and radiation in industry, were proceeding on schedule. It was to be hoped that regional participation in the RCA would be further enhanced in the not too distant future through the membership of the People's Republic of China.

41. The second regional endeavour was generally referred to as ARCAL - the Spanish acronym for a kind of RCA which had been established in Latin America. During the current year, several projects had been initiated within the framework of ARCAL by five Andean countries which had taken the lead in forming the nucleus for a broader programme at present envisaged for the region. Contributions from donor countries would be greatly appreciated at the present juncture in order to help the programme gather momentum.

42. It was in the interest of all - developing countries, donors and the Agency - that development co-operation resources be used effectively. One mechanism which had been set up to that end, the Technical Co-operation Evaluation Unit, was now starting on its second year of operation. It would soon have completed a comprehensive review of all Agency training courses held during the period 1977 to 1983 and it was hoped that useful lessons could be drawn from it. The questionnaire designed by the Agency for that evaluation exercise had already been taken as a model by other United Nations agencies undertaking similar reviews.

43. The JIU report, which praised the Agency's technical co-operation programme, nevertheless contained a number of recommendations as to how the programme could be improved. Governments had been sent copies of the report along with the Secretariat's comments earlier in September and the JIU's recommendations would be submitted to the Board's Technical Assistance and Co-operation Committee for detailed examination when it met in December.

44. In spite of the lower than expected growth in electricity demand accompanying the recession, nuclear power had maintained its position as a safe, economic and reliable source of energy in 1983. Twenty-five new nuclear power plants had gone into operation, bringing the total to 313. Nuclear power plants represented over 8% of worldwide electrical power generating capacity and accounted for about 12% of the electricity generated during 1983. In the past year, seven Member States - France, Belgium, Finland, Sweden, Bulgaria, Switzerland and Japan - had produced between 20% and 50% of their electricity by nuclear power.

45. There had been some set-backs, however, caused mainly by a decline in the growth of electricity demand, by political constraints and difficulties with public acceptance, and by financing problems. Orders for eight plants already under construction had been cancelled and some projects had been postponed. Those developments, together with the paucity of new orders, would inevitably lead to a "flattening" of the curve for world nuclear capacity growth.

46. The nuclear industry, after a period of very rapid growth, had entered a period of slower expansion. Several countries had already begun to use the "breather" in order to devote more attention to simplifying regulatory procedures and standardizing nuclear plants. They were taking a serious look at the possibility of broadening the nuclear energy market through the inclusion of district heating and process heat production schemes. Also, they were examining ways of further improving the efficiency and performance of power reactors. Information collected by the Agency through its Power Reactor Information System (PRIS) showed a trend towards steadily improved plant reliability, which was an important factor in the economics of nuclear power. That information also pointed to significant variations in performance in different countries, thus demonstrating that there was room for improvement and an opportunity for learning from one another.

47. In the longer term, however, the resumption of economic growth would increase electricity needs and nuclear plant orders would pick up again in countries where ordering had been suspended. There was a growing awareness of the need to reduce emissions of sulphur oxides and other pollutants from fossil fuel plants, and one means of doing that was to include more nuclear plants in the energy mix. Moreover, to quote Mr. Petrosyants, Chairman of the USSR State Committee on the Utilization of Atomic Energy, at the celebration

of the thirtieth anniversary of the world's first nuclear power station, at Obninsk, burning oil in boiler furnaces was "rather like burning banknotes".

48. Nuclear power trends in developing countries remained very uncertain. Only three new units had been connected to grids in developing countries during 1983, and most of the growth of nuclear power capacity in developing countries up to the year 2000 was likely to be in the ten Third World countries which already had nuclear power plants either in operation or under construction. The constraints lay in different areas - infrastructure, personnel and finance.

49. One constraint was the size of most of the units commercially available at present, which were too large for the grids of most developing countries. Over the past year, the Agency had devoted considerable attention to a proposed study of small and medium power reactors (SMPRs) - a concept which might help to overcome the size constraint. It was gratifying to be able to report that the study had been launched, largely on the basis of contributions in cash and in kind from a number of Member States.

50. Reactor suppliers would want to see a clear potential market for SMPRs before they committed themselves heavily in that area; so far, however, the response of potential buyers to a questionnaire distributed by the Agency had been disappointing. More data would be needed from interested countries if the study was to be completed successfully.

51. One of the most important areas in which the Agency served as an instrument for the exchange of experience and for the joint elaboration of guidelines of various kinds was nuclear safety.

52. The annual Nuclear Safety Review, initiated three years earlier, summarized safety-related events and developments on a global basis. It had been designed to provide an open and dispassionate account of nuclear safety worldwide. The account could be open because nuclear power had nothing to hide, and it could be dispassionate because the safety record was in fact very good. The 1983 review showed that, with more than 300 nuclear power plants in operation, there had been no accidents at any nuclear plant which had jeopardized human health or threatened the environment. However, some accidents associated with nuclear activities other than nuclear power had taken place, which underscored the need for devoting more attention to

radiation protection in areas not related to power generation. He would return to that problem later.

53. The Agency had initiated an operational safety review team (OSART) scheme a year earlier, and the third OSART review had been completed recently. The response from the Member States visited indicated that the teams, which visited Member States on request and examined the operational safety of nuclear power plants in order to provide recommendations to their regulatory bodies, could make a valuable contribution to reactor safety. Not only were problem areas noted, but the team of experts also identified good practices deserving of consideration in other power plants. It must be made clear, however, that the teams by no means relieved the State authorities concerned of their basic responsibility for safety. Their functions were purely advisory.

54. The IAEA Incident Reporting System, which was still at an early stage of development, now had the full or partial participation of more than 20 Member States. The potential of the system for assisting in learning as much as possible from operational experience by collecting, assessing and distributing information on plant operation had been discussed in July 1984 at a joint meeting of the IAEA and the Nuclear Energy Agency of OECD at which representatives of 14 countries belonging to OECD, CMEA and the developing world had presented reports on significant abnormal events.

55. In that connection, the Agency was active in the preparation of guidelines aimed at facilitating mutual assistance among Member States in the event of a nuclear accident or a radiological emergency - including co-operation between Member States when such incidents occurred in border areas.

56. Over the years, one of the most successful areas of activity within the Agency had been the development of regulations for the safe transport of radioactive materials. He was glad to report that an important updating and revision of the Agency's regulations had been completed in the past year and was soon to be published in the Agency's Safety Series.

57. Following discussions the previous year in the General Conference and in the Scientific Advisory Committee, consultations with a group of distinguished experts and discussions in the current year within the Board of Governors, he intended to set up an International Nuclear Safety Advisory Group dealing with

broad safety issues. The Advisory Group, which would report to the Director General, would review and analyse safety information, provide a forum for exchange of information on generic issues and, if possible, formulate commonly shared safety concepts. Only experience would show whether the latter task was feasible, given the wide differences in technological background and in political and socio-economic conditions between countries.

58. The Advisory Group, which would be set up for an initial period of three years, would not deal with licensing policy, would not interfere with the work of national regulatory bodies and would not involve itself in the development of standards. Its main functions would be to examine current and evolving safety issues which could have an international impact and to advise the Director General on the best way of securing progress in nuclear safety.

59. The Agency's Basic Safety Standards for Radiation Protection, jointly sponsored by the Agency, ILO, WHO and NEA, had been updated at the end of 1982 so as to implement the new system of dose limitation recommended by the International Commission on Radiological Protection. However, the updated standards had not yet been fully incorporated into the national practices of Member States, particularly where there was a shortage of trained radiation protection personnel. Moreover, some Member States did not as yet have effective mechanisms for promulgating standards and regulating practices which involved the use of ionizing radiation.

60. That situation, together with the fact that there had been several serious accidents in recent years due to the erroneous handling of radiation sources used in medicine and industry, raised the question whether more could not be done to ensure better radiation protection and thereby to reduce the risk of further accidents which might undermine public confidence in nuclear activities.

61. One way of further assisting Member States to implement the Basic Safety Standards was to send radiation protection advisory teams on request to Member States in order to help them to identify potential or existing radiation protection problems and draw up plans for the solution of those problems.

62. Such teams would consist of people with expertise relevant to a wide variety of radiation protection measures - ranging from regulatory to technical preventive and emergency measures - and would cover all uses of radioactive materials and other sources of ionizing radiation in a country.

63. It was not expected that additional costs to the Agency's budget would arise from such a scheme, as the work of the advisory teams would reduce the need for groups which, under the Agency's current practice, were set up on an ad hoc basis. The ideal solution would be to have a tailor-made, long-term radiation protection component built into the technical co-operation programme for any country so wishing.

64. Two topics on which the General Conference had adopted resolutions in 1983 had a bearing on nuclear safety. The International Convention on the Physical Protection of Nuclear Material had already been signed by 38 States and one international organization and ratified by 10 States. Eleven instruments of ratification were still needed for its entry into force. In response to a note verbale sent to those Member States which were not yet parties to the Convention, a number of Governments had indicated that they were taking steps to become parties.

65. With regard to developments in the area of the protection of nuclear installations devoted to peaceful purposes against armed attack, discussions within the framework of the Conference on Disarmament had continued during the year. The Conference had considered the possible scope of a prohibition of attacks on such installations and had looked into relevant legal questions, but a consensus on the approach to be taken in that important matter had not yet been reached.

66. In spite of the consensus in the scientific community that there were no technical barriers to the adequate and safe management of nuclear wastes, the question was still a highly emotional one for segments of public opinion in several countries. Public concern had had a positive effect in prompting utilities and atomic energy authorities to work out policies and plans for the long-term disposal of nuclear wastes. It was lamentable, however, that legitimate concern had sometimes been replaced by politically or emotionally motivated obstructionism directed against any activity relating to the nuclear fuel cycle, including steps to find suitable repositories for nuclear wastes.

67. He remained optimistic that, in the long run, the environmental advantages of nuclear power would be generally recognized. The wastes arising from the use of nuclear power were very limited in volume and could therefore be isolated from the environment. The handling of nuclear wastes had always been

subject to strict regulations, which was unfortunately not the case for the toxic wastes of some other industries.

68. While responsibility for waste management and disposal would and must remain in the hands of States - i.e. in the hands of Governments - internationally developed guidelines were of assistance to national authorities and might contribute towards harmonizing approaches among nations. International codes and standards for waste disposal might also help to increase public confidence that the wastes would be dealt with safely. In that connection he pointed out that, NUSS documents aside, more than one third of the documents in the IAEA's Safety Series dealt with various aspects of radioactive waste management.

69. A Code of Practice on the Management of Radioactive Wastes from Nuclear Power Plants was being completed by the Secretariat for issue as a Safety Series document. It defined the minimum requirements for the design and operation of systems involved in the management of wastes produced at nuclear power plants. It was expected that the Code of Practice would provide Member States, and especially those just embarking on nuclear power programmes, with useful general guidance on related safety matters.

70. The need for internationally accepted standards and criteria for the underground disposal of high-level radioactive wastes had been increasingly recognized in recent years. Such standards and criteria would be useful both to regulatory authorities and to national organizations with direct responsibility for waste disposal. The Secretariat had begun work relating to underground disposal; as a first step, a comprehensive report on relevant policies and proposals was being prepared. The aim was to highlight areas of agreement and issues which needed to be resolved.

71. Lastly, as many older reactors were approaching the end of their useful service life there was an increasing interest in Member States in the decontamination and decommissioning of nuclear facilities. The Secretariat was accordingly stepping up its activities in that area and intended to publish documentation designed to help ensure that decommissioning was done in a timely, safe and cost-effective way.

72. Having dealt with a wide range of applications of atomic energy, he turned to the Agency's safeguards verification system, which helped States to create confidence in the peaceful nature of those applications.

73. There might sometimes be a tendency to view Agency safeguards as a kind of appendage to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), especially at a time when the preparations for the Third NPT Review Conference were accelerating and the Treaty was increasingly at the focus of attention. The Treaty had in fact enabled a very large number of non-nuclear-weapon States, larger than the number of Agency Member States, solemnly to commit themselves to foregoing nuclear weapons and to ensure that their compliance was verified through safeguards. At the request of the Preparatory Committee for the Third NPT Review Conference, the IAEA Secretariat had submitted, in provisional form, three papers dealing with the Agency's activities related to Articles III, IV and V of the Treaty since the 1980 Review Conference.

74. However, notwithstanding the very great importance of NPT, it should be borne in mind that IAEA safeguards were based directly on the Agency's Statute. NPT made use of the Agency's safeguards, as did the Tlatelolco Treaty, and most safeguards agreements with the Agency were concluded pursuant to obligations entered into by States parties to those two Treaties. It should not be overlooked, however, that a State so wishing could still, through a bilateral agreement with the Agency, commit itself to safeguards verification that all its present and future nuclear activities were for peaceful purposes.

75. The organization and administration of safeguards, and especially matters relating to costs, continued to provoke discussion among Member States. While a special payment schedule substantially reduced the amount that most developing countries contributed for safeguards, it was universally acknowledged that safeguards operations, and hence the safeguards budget, should contain only what was strictly necessary. Safeguards were not an end in themselves. Their purpose was to enable States to create confidence in their respective regions and in the world at large that all the nuclear activities which they had placed under safeguards were being conducted without any diversion of fissionable material.

76. It was in the interest of all that the best possible instruments and techniques be employed in the Agency's verification activities, and appreciation was due to the many Member States - and EURATOM - which were helping to design improved instruments and to work out improved techniques. Appreciation was also due to the two States - Canada and Japan - which had

invited the Agency to operate safeguards offices in their territories; he was confident that those arrangements would result in reduced operating costs, and he knew that they had already had a beneficial effect on efficiency.

77. While it was certainly useful to discuss how extensive and intensive verification needed to be for different types of nuclear activities, it was also important that discussion should not be allowed to undermine the broad support which existed for the only universal verification system that had so far been developed in the nuclear field. Given the vital interest of the entire world in having a verification system that functioned well and provided confidence, the costs of safeguards were relatively small. If the Agency was to err in its ambitions, they should be set a little too high rather than a little too low.

78. The rapid expansion of the Department of Safeguards necessitated by the rapid expansion of nuclear power had brought with it some growing pains. The reorganization of the Department was now almost complete, however, and it was looking forward to a period of consolidation.

79. He was pleased to report that negotiations with the Soviet Union on its voluntary offer to submit some nuclear installations to safeguards were proceeding well and that an agreement was in sight. The negotiations on the text of the main agreement had been concluded successfully the previous week and referendum. Such an agreement was most welcome, not only because it would broaden the Agency's safeguards experience, but also because it would strengthen the precedent of verification measures being carried out in nuclear-weapon States.

80. Lastly, he wished to refer to another development which related to safeguards and which would certainly be considered under one of the Conference's agenda items. In resolution GC (XXVII)/RES/408, the General Conference had the previous year requested the Director General to take measures to ensure that South Africa submitted all its nuclear activities to safeguards. While the response from South Africa to the General Conference resolution had so far been negative in that respect, negotiations had recently started between the Agency's Secretariat and representatives of the South African Government on the submission of a semi-commercial enrichment plant to safeguards. For the Secretariat, those negotiations were without prejudice to its requests for discussions on comprehensive safeguards.

81. On another matter which related to South Africa and which had been taken up the previous year in the General Conference resolution just referred to, he could report that there were no longer any technical groups, sponsored or co-sponsored by the Agency, in which South African experts were participating. A group that was preparing for the 27th International Geological Congress had finished its work and the Agency had withdrawn from the joint IAEA/NEA working groups on uranium. However, it was intended that the so-called "Red Book" on uranium resources, which was regarded as a valuable publication by many Member States, would continue to be produced through co-operation between the Secretariats of NEA and the Agency.

82. There was a further agenda item which he wished to mention. In 1983 the General Conference, in resolution GC(XXVII)/409, had requested the Director General to "report to the Board of Governors with respect to Israel on the Agency's research contracts, purchase of equipment and materials, and the holding of meetings outside Agency Headquarters" and to report to the Conference itself "on the consequences of an armed attack on peaceful nuclear installations and the threats thereof on the Agency safeguards system and the peaceful applications of atomic energy". In June, the Board had decided that the report submitted to it pursuant to the former request should be transmitted to the General Conference, and that report was now before the Conference together with the report prepared in response to the latter request.

83. The Agency had stepped up its activities in nuclear safety, nuclear waste disposal, safeguards and technical co-operation. Efforts to secure broad agreement on the principles of nuclear trade, however, had made little progress which he could report. There was a demand, on the one hand, for unfettered access to all technologies relevant to the nuclear fuel cycle, but concern, on the other, about any technology transfers that might facilitate the spread of nuclear weapons. The Agency's Committee on Assurances of Supply (CAS) had not been able so far to reconcile the conflicting positions on that central issue, although it had made some progress in other matters. The Third NPT Review Conference and the United Nations Conference for the Promotion of International Co-operation in the Peaceful Uses of Nuclear Energy might also face that intractable issue.

84. He had no recipe for its solution and could only point to a few elements of significance. First, and most evidently, tangible progress among the

nuclear-weapon States towards nuclear disarmament would increase support and understanding among non-nuclear-weapon States for conditions and restrictions which aimed at ensuring horizontal non-proliferation. Second, there needed to be an increased awareness that, frustrating and frightening as the current failure in the field of nuclear disarmament might be, it was in no way a reason for relaxing efforts, which were really in the interests of all, to prevent a further horizontal spread of nuclear weapons. Third, while present restrictions in nuclear trade might well constitute an inducement to autarchy, economic considerations certainly pointed to advantages in international trade and co-operation in the fields of enrichment, reprocessing and waste disposal. The degree of dependence which was inevitable in international nuclear trade and co-operation could conceivably be somewhat mitigated if the economic management of enterprises providing nuclear fuel cycle services were opened to a measure of user participation. Also, dependence in the field of fuel services might be more attractive if such services were coupled with services related to waste disposal.

85. The current period was one of political and economic friction. Payments problems and budget deficits in many countries had imposed restrictions on expenditure and were affecting, among other things, States' contributions to international organizations. Technical international organizations were not immune to the repercussions of political conflicts, nor - just because they financed international co-operation - were their budgets immune to cuts. The famous Spirit of Vienna and the understanding atmosphere in the host country and host city could not shield the Agency from the cold gusts of wind that reached it from the prevailing international climate. However, he knew that Member States considered the Agency's work to be of vital importance, and he trusted that they would make every effort to avoid jeopardizing the co-operation that took place within and through the Agency; indeed, he was confident that they would wish to strengthen such co-operation.

86. For its part, the Secretariat had tried to meet the budgetary concerns of many Member States and had submitted to the Board what was essentially a zero-real-growth budget for 1985. The Secretariat's restraint was not due to any dearth of ideas for new or expanded activities which might be useful to Member States; in fact, expansion had been possible in a few areas, thanks to economies elsewhere - particularly in the administrative sphere. The

presentation of the budget had been significantly changed so as to focus on the allocation of resources to various programmes rather than on their allocation to various organizational units. He believed that that new approach would make it easier for Governments to assess the Agency's programmes from the viewpoint both of usefulness and of implementation costs. He hoped that it would thus facilitate decision-making, lead to greater overall efficiency in the organization and make the organization even more responsive to the needs of Member States.

87. While the short-term perspective that he had described was characterized by stringency, he had no doubt that in the longer run there would be more - not less - co-operation between States in the nuclear field, more transfer of knowledge and technology, more trade. He had no doubt that there would be greater use of nuclear power and wider applications of nuclear methods in agriculture, medicine and industry. Lastly, he had no doubt that Governments would turn to the Agency which they had created and to the competent and dedicated staff that served it and that they would find in it a vital tool for further expanding the safe and peaceful uses of nuclear energy.

STATEMENT BY THE DIRECTOR GENERAL OF THE FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

88. Mr. SAOUMA (Director General, Food and Agriculture Organization of the United Nations) said that in 1945 the world had had its first glimpse of the destructive force of the atom. Today the nuclear arsenal was sufficient to obliterate civilization several times over. Some scientists had predicted that following a nuclear conflict the entire planet could be plunged into a long dark winter with devastating impact on human life and the environment.

89. Those were sombre thoughts and one could not ignore them, not only because the arms race could only end in global catastrophe, but also because it was absorbing enormous resources which could be spent on ending famine and hunger. The ideas of "atoms for peace", a slogan from the 1950s, however, still survived. And nowhere was their survival better shown than in the application of nuclear energy to agriculture, as pioneered by the joint programme of FAO and the IAEA.

90. The FAO/IAEA programme for the application of atomic energy in food and agriculture had begun on 1 October 1964, with the establishment of the

Joint FAO/IAEA Division of Isotope and Radiation Applications of Atomic Energy for Food and Agricultural Development.

91. Previously, both organizations had had limited programmes exploring the use of nuclear techniques in agriculture. It said much for the wisdom and vision of their respective heads, Dr. Binay Rajan Sen of FAO and Dr. Sigvard Eklund of the IAEA, that they had chosen to pool resources and establish a joint approach that had more than stood the test of time.

92. The Joint Division carried out a single programme of work, which was approved by the governing bodies of both organizations. While that formula had proved successful from an organizational point of view, the key to the continuing support enjoyed by the Joint Division was the problem-oriented nature of its work. There could be no interest in applications of nuclear tools and techniques unless they had real practical value in food and agricultural development.

93. That pragmatic approach was exemplified by research programmes which brought some of the world's best brains and research institutions within the orbit of the Division's work. At present, more than 360 research contracts were being undertaken in some 50 countries. The network approach, involving institutions in both the developing and the developed world, also brought nuclear and related techniques within the experience of developing countries and encouraged the establishment of "centres of excellence", where basic research was linked to studies and applications of a practical nature.

94. Practical assistance and the full use of resources - guiding principles for the Joint Division - had never been more important. During the 1980s, one had witnessed a serious decline in multilateral funding for development and far too many people had yet to secure the basic human right of an adequate daily diet.

95. Seldom in recent history had the world food situation shown so many contradictory tendencies. In 1983, production had declined for the first time since the food crisis a decade before. Yet in the Far East, whose vast population was perhaps the most important single element in the world food problem, output had made a major recovery from the set-backs of the previous year.

96. The United States of America, Japan and the European Community had continued to grapple with the problem of cutting surplus production while maintaining farm incomes. At the same time, Africa was struggling to maintain agricultural output in the face of drought, pests and diseases.

97. The same contradictory picture was mirrored in the movements of the world economy as a whole. The strong recovery now under way in the United States had yet to spread convincingly to the rest of the industrialized world. Some economists argued that the combination of a strong United States dollar and high interest rates was hampering recovery elsewhere. Certainly, there were few signs of an early solution to the debt problems that had beset many developing countries.

98. Although no region, developed or developing, had escaped the recession, the situation in Africa was particularly acute. While Africa's economy had been battered by the storm of recession, its agriculture had had to contend with a no less hostile environment, and in many areas the internal conflicts and tensions of the continent had kept farmers from the land.

99. The present food emergency had begun to take shape about a year and a half earlier. In February 1983, FAO had issued an alert regarding the drought in Southern Africa and FAO's first general appeal for aid had been made in May the same year. The donor community had responded generously to appeals for help and the efforts of the international community had been instrumental in averting a major disaster. Though drought had remained the principal enemy, widespread damage had also been caused by plant diseases and pests, and by livestock diseases, 24 countries being particularly hard hit.

100. Conditions during the 1983/84 growing season were now being anxiously monitored, though recovery seemed to be well under way in West Africa. That was unfortunately not the case in Southern Africa, where drought had shattered the hopes of farmers for the third year running, and in some parts of East Africa. The preliminary estimate was that 1.3 million tons of food aid would be required.

101. Unfortunately, the short-term problems confronting agriculture in Africa reflected much deeper issues. A major policy reorientation in Africa toward strengthening domestic food production was clearly called for. But such an undertaking could not be regarded solely as an exercise in planning the food

sector, or even agriculture as a whole. It was the entire development model that needed changing. Africa would also have to face up to the problems of high population growth rates, urbanization and increasing dependence on imported foods not growable locally.

102. Action to cope with drought and other disasters was particularly urgent, but FAO's principal task in Africa and elsewhere in the developing world was to achieve a long-term strengthening of agriculture and food production. It was in that respect that advances of the kind being explored by the Joint Division world-wide could come into play.

103. Since its inception, the Joint Division had been instrumental in helping to eliminate the Mediterranean fruit fly in Mexico, to control the tsetse fly in parts of Nigeria, to increase the productivity of the water buffalo, and to develop new crop varieties. It had improved knowledge of the fate of fertilizers in the soil and plants, devised techniques for monitoring pesticide residues and developed ways of preserving food.

104. Those highlights demonstrated that the Joint Programme focused directly on prevailing problems in agricultural and food production. The following examples showed how its work fitted into the much wider priorities and programmes of FAO. The first was the tsetse fly and the parasitic disease, trypanosomiasis, which it transmitted to cattle and humans. Since 1980, FAO had had in operation a Special Action Programme for the Control of African Animal Trypanosomiasis and Related Development, the aim of which was to open up a new frontier in Africa - a vast tract of land totalling seven million square kilometres - to agriculture and permanent human settlement.

105. The Joint Programme was helping efforts to control the tsetse fly by investigating the value of the sterile-insect technique, which involved releasing millions of sterilized male flies into the wild where they bred with females, which then failed to reproduce successfully. It was also helping to assess how trypanocidal drugs work. At present, some 25 million doses of such drugs were being given to livestock annually in Africa.

106. Radiotracer research into the fate of fertilizers in the soil and plants was complementary to FAO's efforts to encourage the effective use of fertilizers in the developing world. But it also touched upon broader issues of concern to it.

107. About 2% of the world's fossil fuel was used to produce artificial fertilizer, and its cost was now a major drain on foreign exchange in many developing countries. And yet, with conventional applications, only 30-50% of the nitrogen in the fertilizer was actually taken up by the crop. By following the pathway between the fertilizer and the plant, more effective means of applying it had been devised. The savings from that work were now estimated at millions of dollars worth of fertilizer every year.

108. In the mid-1980s, the relationship of those and other techniques to the "peaceful atom" of the 1950s tended to have become obscured. For example, radioactive tracers now had a wide range of applications in research. Similarly, the use of radiation to increase the variation in potential plant-breeding material was commonplace and the use of radiation to preserve food, despite some suspicion by the general public, was gaining acceptance.

109. Today, those applications of nuclear and non-nuclear techniques were usually grouped together as biotechnology. Interpreting the term broadly, the majority of the programmes of the Joint Division and nearly all of its supporting activities at the IAEA Laboratory at Seibersdorf involved biotechnology.

110. The role of nuclear techniques and biotechnology in agricultural development and the food-processing industry seemed assured. One had to be realistic, however. Nuclear techniques and biotechnology had a great potential for the future; but for the time being - and for some time to come - developing countries were a long way behind in support for the more traditional forms of research and in ensuring the availability of existing research results. Governments of the poorer countries should not be lured into expensive endeavours which did not meet their needs or were beyond their means.

111. Within that context, the growing militarization of the world economy presented a serious threat. As an ever larger proportion of the world's raw materials, labour and capital was spent on the production or purchase of arms, it was increasingly difficult to find the resources necessary to finance essential investments in agriculture and other key economic sectors.

112. Considering the parlous state of the world economy and what was needed to ensure secure supplies of food for all, the continuing growth in military

spending, which now stood at well over one million dollars a minute, was completely unjustified. Equally disturbing was the fact that, in addition to the major powers, a number of Third World countries were acquiring arms.

113. During the 20 years since the formation of the Joint FAO/IAEA Division, the vision of nuclear energy as a panacea had dimmed. The early promise of an abundance of cheap energy had never been fulfilled. Instead, people had become obsessed with the relationship between nuclear power and weapons materials and with the vexing question of how to dispose of nuclear wastes.

114. No one would deny that such issues were of global concern, nor doubt the need for public debate. But, equally, in working to discard the sword one should not forget the ploughshare. When it was considered what nuclear and related techniques had achieved and still had to offer, not just in food and agriculture, but in many other fields of human endeavour, it was perhaps time to revive the "atoms for peace" slogan.

VOLUNTARY CONTRIBUTIONS TO THE TECHNICAL ASSISTANCE AND CO-OPERATION FUND FOR 1985

115. The PRESIDENT said that in 1982 the Agency's Board of Governors had agreed to continue - for the years 1984, 1985 and 1986 - the practice of recommending indicative planning figures to serve in fixing targets for voluntary contributions to the Fund in order to allow a certain degree of predictability in the financing of technical assistance.

116. As early pledging was extremely helpful for the Secretariat, he urged all delegations in a position to do so to notify the Secretariat, before the end of the current session, of voluntary contributions to be made by their Governments to the Fund in 1985. He hoped that towards the end of the current session he would be able to report that a large percentage of the target figure for 1985 had been pledged.

ELECTION OF OFFICERS AND APPOINTMENT OF THE GENERAL COMMITTEE

117. The PRESIDENT proposed that, in conformity with Rule 34 of the Rules of Procedure of the General Conference, the delegates of the following Member States be elected as Vice-Presidents of the General Conference: Australia, Canada, France, Iraq, Japan, Uruguay, the Union of Soviet Socialist Republics and Zambia.

118. Pursuant to Rule 40 of the Rules of Procedure, he proposed Ambassador J.K. Umar, the delegate of Nigeria, as Chairman of the Committee of the Whole and the delegates of the following States as additional Members of the General Committee: Bulgaria, Czechoslovakia, the Islamic Republic of Iran, the Federal Republic of Germany and the United States of America.

119. The General Conference accepted the President's proposals.

120. The General Committee was thus duly appointed.

GENERAL DEBATE AND ANNUAL REPORT FOR 1983

121. Mr. KENNEDY (United States of America) read out the following message to the Conference from President Reagan:

"Mr. President, Mr. Director General and distinguished delegates, on behalf of the people of the United States of America, I salute your continuing efforts to support the International Atomic Energy Agency and to strengthen its important programmes. In an increasingly interdependent world, we are all beneficiaries of the vital work pursued by the IAEA. The quality of life for many peoples has been significantly enhanced by IAEA programmes designed to make the benefits of the peaceful atom ever more widely available. At the same time, the world has been made safer and more secure as a result of the IAEA safeguards system, which assures that nuclear activities remain dedicated to peaceful purposes.

"Since its inception, the Agency's safeguards system has played a vital role in reinforcing international security and facilitating peaceful nuclear co-operation and commerce among nations. Strengthening this role and maintaining our shared efforts to restrain the further spread of nuclear explosives remain of highest priority to the American people and to me personally.

"Since the establishment of the IAEA over 25 years ago, working together we have accomplished much in pursuit of the goals and objectives envisaged by the Agency's founders and embodied in its Statute. The United States is proud to have been able to contribute to that enviable record of accomplishment. We must redouble our efforts, however, if we are to preserve and strengthen the IAEA so that it can serve our common goals while respecting our diverse interests. To this end, the United States is committed to continue working closely and actively with all Member States in the important work of the IAEA, and I offer my sincere best wishes for a successful General Conference."

122. When President Eisenhower had launched the Atoms for Peace Programme in 1953, he had envisaged a world in which all nations could, in peace, reap the benefits of the awesome technology of the atom and hoped that the nations of the world would work to curb the spread of nuclear weapons.

123. It was no coincidence that the dual mission of the Agency essentially corresponded to the indispensable notion of that time: that peaceful uses of nuclear energy and the undertaking of good faith and verifiable commitments to those peaceful uses were inseparable. The tandem mission of the IAEA was purposeful and had for the most part been successful - only a few States possessed nuclear weapons, while numerous others had foresworn the option, and many of those which had not so pledged had submitted their nuclear facilities to IAEA safeguards. At the same time, great progress had been made in developing applications of nuclear energy in a wide variety of fields, including medicine, agriculture, the life sciences and industry.

124. The longer-term success of the Agency would, in the last analysis, depend on the Member States' commitment not only to its principles but also to the universality of its membership. Welcoming the accession to membership by the People's Republic of China, he pointed out that it was an important step towards the realization of that goal. That country was embarking on an extensive programme of peaceful uses of nuclear energy. Moreover, with its accession all nuclear-weapon States were now Members of the Agency and the United States was looking forward to working with the People's Republic of China in a co-operative and constructive manner.

125. The United States also attached great significance to the adherence by the Agency and its Members to the organization's Statute and rules. Attempts either to deny membership or limit the rights and privileges of a Member for political reasons could only damage the credibility of the Agency and weaken it to the detriment of all of its Members.

126. Referring to the peaceful use of nuclear energy in his country, he pointed out that although the achievements in its nuclear power programme had been substantial in the preceding year, the earlier expectations about the role of nuclear power had not been wholly realized because of institutional, regulatory and economic factors, including a recession in the general economy in the 1970s and a consequent general slowdown of energy consumption. There had also been an unmistakable erosion of public confidence, compounded by extraordinary delays and cost overruns in recent plant construction.

127. Nevertheless, there were reasons for optimism. Of the 25 new plants which had gone on line in the preceding year, five or 20% had been in the

United States. Although a number of plants had recently been cancelled or delayed, the United States had 86 plants in operation and 48 more under construction. Moreover, the United States Nuclear Regulatory Commission estimated that as many as nine additional reactors were expected to be licensed by the end of 1984, which would bring the 1984 total to 16. That would be no mean achievement. At present, nuclear energy supplied about 13% of the country's electrical generating needs and was expected to deliver over 20% when the plants now under construction were commissioned. Furthermore, the economics of nuclear power in America continued to be favourable: the production cost of a kilowatt-hour of electricity from nuclear sources was slightly less than that from coal and less than half that from oil.

128. Optimism about the future of nuclear power in the United States was based in part on the fact that the economic slowdown of the preceding few years seemed to have ended. With economic recovery under way, the annual rate of growth in the demand for electricity had increased from about zero to nearly 3%. A sustained growth of 3% meant that the generating capacity had to be doubled over the following 25 years, to say nothing about replacement of retired plants. At the same time, the comprehensive nuclear regulatory reform legislation now under consideration by Congress would streamline the licensing process and should lessen the delays in bringing new nuclear power plants on line.

129. The extent of the United States' commitment to nuclear power was amply demonstrated by the resources which it was investing on research and development: over \$500 million by the Government and an additional \$100 million by private industry (including about \$60 million by the Electric Power Research Institute). Nuclear power in America was not an option but a necessity and would continue to be an important part of the energy mix of the United States.

130. Apart from nuclear power, his country was actively engaged in increasing the use of radioisotopes in agriculture and medicine.

131. The field of nuclear medicine was expanding almost exponentially and the peaceful atom was assuming an ever greater role in the diagnosis and treatment of disease. Increasing numbers of doctors, nurses and medical technicians were being trained in the use of the many new and vital tools now available in

that field and even greater benefits could be expected in the treatment of some of the most pressing problems of human health.

132. The peaceful atom was also playing an increasingly important role in agriculture. The Director General had in his statement referred to the 20th anniversary of collaboration between the IAEA and FAO in the use of isotopes and radiation in agriculture, including uses in insect and pest control and plant cultivation. An informative report on the subject had also been made by the Director General of FAO. The United States commended the Agency's work in that area, and intended soon to join the International Consultative Commission on Food Irradiation.

133. The United States was pleased to be an important contributor to those activities of the Agency. That technology could not only increase the shelf-life of food but also provide useful plant mutations and help to eradicate the insect pests which inhibited the transport of food across national and regional borders. The United States Food and Drug Administration had recently approved the use of radiation to assist in eliminating insect infestations in the country. It was hoped that the new tool would reduce the dependence on environmentally damaging pesticides.

134. Turning to the Agency's accomplishments, he said that his delegation had appreciated the comprehensive review of the Agency's activities by the Director General. The Agency's accomplishments had been in many areas. It had developed ways of reducing hunger, alleviating malnutrition, increasing food production, and improving the world's health. It had facilitated the introduction of safe nuclear power into areas with critical energy shortages, had developed standards which had contributed to the safe transport of nuclear materials, had elaborated techniques for safe handling and storing of nuclear waste and had drawn up an effective safeguards system.

135. Over the past year there seemed to have been an increasing willingness among Member States to put contentious political issues of little relevance to the Agency behind them and to focus on the urgent matters that demanded their attention. It was to be hoped that the trend would continue. For, were the Agency's deliberations to become mired in political issues unrelated to its basic purposes, the achievements and spirit of co-operation that long characterized the organization would be endangered. Nothing would more

discredit the Agency and erode its essential base of support that had been built up over many years than for it to surrender to a process of politicization and to turn its back on the original ideals and principles of its founders. The mission of the IAEA was to function basically as a technical agency with a narrowly defined mandate, and attention should not be diverted from its statutory responsibilities.

136. Turning to the Agency's major programme, he said that the IAEA's record in promoting technical co-operation was impressive. The Director General's report had not only set forth an impressive array of technical assistance projects, but had shown the Secretariat's dedication to improvement of the Agency's performance in that area. The expansion of the Agency's activities in the last year or two had been particularly impressive. The United States wished to commend the Secretariat on its vigorous efforts in making the Agency's technical assistance programme more efficient and effective. The programme was an essential part of the Agency's mission. Nevertheless, it must be borne in mind that more than half of the funds for technical assistance and co-operation projects derived from voluntary contributions. The fact that the IAEA currently had 800 projects under way was impressive, but the reduction in the number of countries supporting footnote a/ projects was a matter for concern.

137. His Government also welcomed the emphasis on nuclear safety in the Director General's report. It was becoming evident that completion of the IAEA's work in devising safety codes and guides would provide an opportunity for Member States to consider other directions for the Agency's nuclear safety work. Noting with interest the progress reported by the Director General in the creation of an international nuclear safety advisory group, he commended him on his proposal that the Agency make available nuclear safety teams to assist Member States in identifying and dealing with potential or existing radiation protection problems.

138. The United States had already expressed its views to the General Conference on the importance of the Agency's safeguards system on many occasions. Effective IAEA safeguards were essential if the benefits of the peaceful atom were to be realized throughout the world. Nuclear commerce could flourish only when all had confidence that nuclear energy intended for

peaceful purposes would not be misused. Safeguards were, indeed, a lynchpin of nuclear commerce, and they enjoyed broad international support. Because of the importance of safeguards, a commitment needed to be made to continued improvement and reforms in the safeguards system itself. Safeguards must be made as efficient and effective as possible.

139. For its part, the United States provided substantial support that took many forms. A major aspect of that support was the training of inspectors. His Government provided regular courses at nuclear facilities and it also made technical experts available to assist on particular topics or problems. In addition, United States technical staff had developed equipment that had helped to make safeguards more effective.

140. The Agency's credibility was an essential ingredient for the success of international safeguards. Although improvements could and certainly should be made - in better communications, improved management, greater numbers of better trained inspectors, and wider use of more advanced safeguards equipment - to dwell perpetually on earlier or alleged failings, without fair recognition being given to the progress being made to overcome them, could irreparably damage that credibility and decrease the effectiveness of Agency safeguards activities.

141. Similarly, there should not - indeed, there could not - be a conflict between the resources dedicated to the safeguards programme and those to technical co-operation. Both programmes were vital to the organization and it was not possible for one to be carried out without the other.

142. It had been particularly gratifying to hear the Director General's report on the progress made in the negotiations with the Soviet Union regarding its voluntary offer to submit certain of its nuclear reactor facilities to Agency safeguards, and he hoped that the offer would soon be extended to additional types of facility. His Government also looked forward to the time when all nuclear-weapon States volunteered to place civil nuclear installations under IAEA safeguards. The safeguards agreement with the Agency arising from the United States' voluntary offer was being implemented. His Government took its obligations under that agreement very seriously indeed, and all civil nuclear facilities in the United States had been opened to Agency inspectors. Among those facilities were several plants incorporating advanced technology, such as the gas centrifuge enrichment plant currently under construction at Portsmouth, Ohio.

143. The strengthening of technical safeguards was, of course, only part of the task. The political and institutional framework that supported safeguards also needed to be fortified if public confidence in the use of nuclear energy were to be maintained. That could best be done through universal adherence to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). That Treaty, with 124 parties, was the arms control treaty with the largest membership in history and it made a vital contribution to the security of all its parties. Adherence to the Treaty of Tlatelolco could, of course, serve the same goal. It was to be hoped that those countries that had not yet become party to either Treaty would soon do so.

144. At the same time, he noted the Director General's observation that States which, for whatever reason, were not party to NPT or the Tlatelolco Treaty could voluntarily accept IAEA safeguards on all their nuclear facilities. The IAEA was both willing and able to apply safeguards to all facilities not yet covered. He urged countries which did not wish to join NPT or the Tlatelolco Treaty to submit all their nuclear facilities to IAEA safeguards. It was by such means that safeguards would continue to be strengthened, and the confidence needed for realization of the benefits promised by nuclear energy would be fostered.

145. In conclusion, he congratulated the Director General on the work of the Secretariat over the past year, which had been a year of continued progress for the Agency. It had not been without difficulties, but it had been a period in which the Agency had fulfilled its responsibilities and made progress. He looked forward to another year in which the Secretariat continued its efforts to increase its effectiveness. His Government remained dedicated to the Agency's Statute and to the principles on which it was based, and it renewed its pledge of support to the Agency and its mission.

The meeting rose at 12.50 p.m.

