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President: Mr. MALU wa KALENGA (Zaire)

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The composition of delegations attending the session is given in document GC(XXII)/INF/179/Rev.2.

GENERAL DEBATE AND ANNUAL REPORT FOR 1977 (continued)

1. Mr. de BOER (Netherlands) said that the current session of the General Conference was taking place at a time when the peaceful uses of nuclear energy were being intensely debated. It was regrettable there were more misunderstandings than agreements on a subject which was crucial for mankind's future well-being. The Director General had quite rightly pointed out the need for a new international consensus which would permit more harmonious relations between the suppliers and recipients of nuclear equipment and technology. His delegation agreed that such a consensus should be based on free non-discriminatory access and self-restraint by all concerned and that it was necessary to strike a balance between those two potentially contradictory requirements, which matter lay at the heart of the controversy on non-proliferation. There should be freedom to apply and develop nuclear energy for economic and social development, but freedom without restraint might create nuclear anarchy. However, restraints had to be voluntary in order to be effective. The Agency could play a vital role in finding a way between those extremes. The Netherlands, for its part, was always ready to participate in the common search for a new international consensus on effective measures to minimize the danger of proliferation without jeopardizing access to much-needed energy supplies.
2. His Government wished to express its support for the continuing efforts to refine the Agency's safeguards system and commended in particular the Director General's innovative approach in preparing the study on international plutonium management; an agreed set of rules on such management could indeed significantly contribute to improving the Agency's safeguards system.
3. The Netherlands took a keen interest in the matter, as was shown by its agreement with Brazil, the Federal Republic of Germany and the United Kingdom, and hoped that an international plutonium storage regime could be established in conformity with Article XII.A.5 of the Agency's Statute. It also wished to participate in the meetings of the consultants' group which the Director General might convene.
4. He considered that the establishment of regional nuclear fuel cycle centres would strengthen the non-proliferation regime and welcomed the study which the Agency had completed on the subject. He was confident that the Director General would once again show his innovative spirit in giving practical shape to the results of the study and thereby make a concrete and effective contribution to non-proliferation. It was hoped that the subject would also receive due attention during the International Nuclear Fuel Cycle Evaluation (INFCE).

Expressing appreciation of the valuable contributions made by the Agency's Secretariat to the work of INFCE, he urged all INFCE participants to avail themselves as much as possible of the Agency's services and experience in order to avoid duplication of efforts and to save time and resources in bringing INFCE to a positive conclusion. His Government regarded INFCE as an important exercise because the development of nuclear energy and technology and also the rapid expansion of their use in many countries had reached a point where important decisions must be taken on the future course to follow as regards the fuel cycle. INFCE was providing an opportunity to the international community to have a discussion in depth, especially on the non-proliferation aspects of the present and future use of nuclear energy. It was to be hoped that the INFCE study would significantly contribute to reaching a new international consensus on the peaceful uses of nuclear energy and provide a starting point for a more harmonious international co-operation in that sphere.

5. His Government was gratified to note the ever growing support for the Treaty on the Non-Proliferation of Nuclear Weapons (NPT)<sup>1/</sup>, as was evidenced by the accession to the Treaty of three more States and by the entry into force of six additional NPT safeguards agreements during the preceding year; a number of non-NPT safeguards agreements had also been concluded. Since the broadening of the scope of the Agency's safeguards involved a considerable expansion of the work of the safeguards staff, there was full justification for the increase in the number of inspectors, who performed a vital function.
6. One of the most serious obstacles to further development of nuclear energy was the problem of nuclear waste management, and the delays in many national nuclear programmes could be overcome only when an effective solution, also acceptable to public opinion, had been found to that problem. The Netherlands Government had therefore made further expansion in nuclear power generating capacity dependent on finding such a solution.
7. The problem of nuclear waste management, given its nature and complexity, transcended national boundaries and for that reason the initiative had to be taken by several international bodies in carrying out activities including research programmes. In that context the Agency's initiative was laudable since it was one of the best equipped organizations to deal with that matter. The Netherlands was particularly interested in, and would gladly participate in the preparation of, codes concerning criteria for waste acceptance and codes concerning siting, both of which were mentioned in the Agency's programme for 1979-84.

<sup>1/</sup> Reproduced in document INFCE/140.

8. As regards the Agency's work in the field of technical assistance, his delegation had pleasure in announcing the Netherlands' decision, subject to Parliamentary approval, to contribute US \$129 000 to the General Fund for 1979, which amount was based on its rate of assessment for the Regular Budget.
9. His Government had noted with great interest the Agency's activities in 1977 and especially approved of the fact that considerable assistance had been provided in the applications of isotopes and radiation in agriculture, for agricultural production was of paramount importance in developing countries. By helping those countries to improve their knowledge of soils, plants, animals and food, and also of health problems, the Agency could contribute to the betterment of the living conditions of the poorest people in the world.
10. The Netherlands had always advocated the central role of the United Nations Development Programme (UNDP) within the United Nations system for the provision of technical assistance, and it therefore welcomed the current trend of increase in UNDP-financed activities.
11. His Government viewed with some concern the Agency's continuing problems resulting from contributions to the General Fund in non-convertible currencies. Although the situation was not new to many of the organizations in the United Nations system, it could have serious implications for the Agency's future ability to implement its programme, and his delegation hoped that all Member States would co-operate with the Agency so that it could fully discharge its obligations in future.
12. Referring to a resolution, adopted at the 32nd session of the United Nations General Assembly, on the restructuring of the economic and social sectors of the United Nations system, which strongly emphasized the cohesion of the United Nations system, including the Agency, particularly with respect to the drafting of programmes, budgets and medium-term plans, the role of the Economic and Social Council of the United Nations (ECOSOC) and inter-agency co-operation in general, he said that the Netherlands Government supported the recommendations in question. It was in favour of harmonization of the programme budgets of the agencies, although each agency could follow its own approach to a certain extent. That would enable individual governments to comment more meaningfully on the programme budget and have a better understanding of the problems involved.
13. As for the Agency's programme for 1979-84, his delegation felt that the concept of a medium-term plan had been interpreted rather restrictively and that

- the activities for those years were often indicated very briefly and superficially so that there hardly seemed to be a clear plan at all. It was hoped that the Director General would be able to improve the situation in the future.
14. The Netherlands approved the Agency's budget for 1979, as recommended by the Board, and considered the increase in the appropriations to be justifiable. In conclusion, he assured the Agency of his country's fullest co-operation.
15. Mr. SALLEH (Malaysia) said that his country, having provided the Chairman of the Board of Governors during the past year, had been able to study closely the developments within and outside the Agency and to contribute to them. It noted with satisfaction and reassurance, on the twenty-first anniversary of the Agency, that the latter had, during its lifetime, developed an effective safeguards system, as was shown by the conclusion of the Special Safeguards Implementation Report for 1976, to the effect that no significant quantity of safeguarded nuclear material had been diverted.
16. On the other hand, progress in expanding the use of atomic energy to promote peace, health and prosperity throughout the world had been unduly slow. In vast areas of the world there was still no routine application of nuclear techniques in food and agriculture, medicine and industry. There was a disquieting lack of international co-operation to enable the Agency effectively to tackle the problems of poverty, hunger, malnutrition and disease which had long beset the overwhelming majority of its Members. Moreover, on account of the link between nuclear energy and nuclear weapons proliferation, a growing number of developing countries were finding difficulty in co-operating with advanced countries with a view to making nuclear power a significant part of the response to their energy requirements.
17. It was timely to recall, therefore, the foresight of the Agency's founders in realizing that, in order to gain the adherence and confidence of the Agency's whole membership, the importance of both areas should be acknowledged.
18. His Government, as a signatory of NPT, welcomed the fact that 104 countries had now ratified that treaty and the fact that a growing number of nuclear facilities, even in countries not party to NPT, were being safeguarded by the Agency. In that connection, his Government firmly believed that universal adherence to NPT was one way in which the international community could effectively contribute to international peace and security; it was firmly committed to helping the Agency play its rightful and crucial role for that purpose. NPT still

represented the most effective international consensus to date and should be upheld, therefore, by recipient and supplier States alike. It would not be fair to expect those countries - most of them developing countries, like his own - which had forsworn nuclear weapons to relinquish their rights or to bear any longer the discrimination of the past three decades. Countries already having the technology had a moral, and indeed statutory, obligation and responsibility to see that the benefits of nuclear energy were shared widely and fairly, as stated in Article II of the Statute and Article IV of NPT. The dwindling world resources of fossil fuels made it all the more important for nuclear power to be speedily established as part of the future energy plans of many nations, particularly the developing countries.

19. Therefore, it was disconcerting to many delegations that the Board - the Agency's executing and policy-making organ - was still being hampered by disputes about targets for voluntary contributions for technical assistance programmes and about relatively small programme increases in promotional activities. It was hard to understand why, when countries were being advised to submit large-scale multi-year projects for national, socio-economic development plans, a shortage of funds had forced the Agency to reject a number of small but viable projects; in that connection, his delegation fully endorsed the Director General's appeal for generous contributions by all Members.

20. A further growing constraint on developing countries was that they lacked skilled manpower, an adequate industrial infrastructure, access to advanced technology and an assured supply of nuclear fuel and fuel cycle services. It was difficult for the Agency and its Member States even to obtain a speedy transfer of research reactors using low-enriched fuel.

21. Therefore, it was clear that the Agency community, after two decades of experience, had still not found a means - or perhaps the political will - to ensure the transfer of nuclear technology within the existing framework, although such transfer was, in his delegation's view, the best way to prevent the independent development of such technology, which might well lead to proliferation. Renewed effort aimed at international co-operation, both within and outside the scope of the Agency, was required but could be achieved only through a sincere desire, on the part of the entire membership of the Agency and the international community as a whole, to ensure a fair balance between promotional and regulatory activities. Any unilateral attempt to impose decisions on others would be

counterproductive and could cause ill will. The fact that the General Assembly of the United Nations, at its thirty-second session, had adopted several resolutions having a direct bearing on the Agency reflected the international community's desire for democratic decision-making. Likewise, the proposal to amend Article VI of the Agency's Statute reflected the sponsors' desire for fuller participation by Member States in the Board's decisions.

22. Although Malaysia had only recently started to participate in INFCE, it viewed it as a commendable form of international co-operation; INFCE gave cause for hope that the developing countries' particular needs, including an assured long-term supply of nuclear technology, nuclear fuel and fuel cycle services, would receive due attention. His delegation was pleased to note that the Agency was identifying and protecting the needs and interests of developing countries. His Government fervently hoped that INFCE would, following the Agency's International Conference on Nuclear Power and its Fuel Cycle, help to restore the credibility of the peaceful uses of nuclear energy and would pave the way to a new and workable international agreement, acceptable to recipient and supplier States alike and providing a legal and moral basis for a new nuclear world order.

23. Malaysia had acted as host for the first regional training course on nuclear laboratory technicians' training, in October and November 1977, and the seventh meeting under the Regional Co-operative Agreement with Member States in Asia and the Pacific for Research, Development and Training Related to Nuclear Science and Technology (RCA), in June 1978 - the first RCA meeting held in that region. In hosting the RCA meeting, Malaysia had demonstrated its support for that collective endeavour and its commitment to regional co-operation. In that connection, it called upon the Agency to seek ways to increase the funding of that activity and to strengthen the institutional structure within the Agency in order to foster the programme; it also appreciated the action taken by Japan in that regard and hoped that the rich members of RCA would make appropriate contributions.

24. Mr. GROZA (Romania) said that, in the present era of scientific and technical revolution, the peaceful application of nuclear energy was one of the cornerstones of programmes for the economic and social development of nations. Romania considered, as had been stated by its President, Mr. Ceausescu, in his message to the 21st regular session of the General Conference, that the Agency bore a great responsibility and should work towards putting an end to the nuclear arms race, eliminating the monopoly of certain States with regard to the production and utilization of nuclear energy and facilitating the free access of nations to the use of nuclear energy for peaceful purposes, in order to accelerate the progress of all countries, particularly developing countries, and to raise the standard of living and level of civilization of all mankind.

25. In the international sphere a new policy of collaboration between States on the basis of principles of full equality and respect for national independence and sovereignty, non-interference in the internal affairs of others and mutual advancement was in the emergence. That was the only policy which could assure democratic development of the world, friendly and co-operative relations between all nations, security, peace and progress. It was Romania's firm conviction that the adoption of effective disarmament measures would pave the way for the establishment of the new international economic and political order. Romania also felt strongly that efforts aimed at achieving disarmament should be concentrated on nuclear disarmament in view of the great threat which nuclear weapons posed to the future of humanity.

26. At the same time, he wished to stress that the measures aimed at reducing the nuclear arms race should not be allowed in any way to impede the use by States of nuclear energy for peaceful purposes. In that context he wished to stress the need to assure free access of all States to the latest advances in the peaceful uses of nuclear energy, the unhindered large-scale transfer of nuclear technology, material and equipment, and the reduction and elimination of the gap existing between the developed and developing countries. To that end the Agency should give more effective assistance to developing countries endeavouring to obtain the full benefits of the peaceful applications of nuclear energy, particularly as regards the introduction of nuclear power programmes.

27. The Romanian delegation considered that the Agency should involve itself more closely in the efforts being undertaken within the United Nations system to bring about a new international economic order. It was in that context that his country had proposed the elaboration and adoption of a comprehensive action programme under the auspices of the Agency for international collaboration in the field of the peaceful uses of nuclear energy and declared itself ready to join with other Member States in setting up such a programme.

28. In the past year the Agency had achieved significant results in its efforts to support the activities of Member States, in particular through its technical assistance programme. Significant results had likewise been achieved in fields such as training of personnel, nuclear safety and radiological protection.

29. At the same time, Romania shared the conviction that the Agency should and could respond to a greater degree to the legitimate requests of Member countries, particularly developing countries, for an increase in technical assistance, which had suffered in recent years as a result of the trend within the Agency to concentrate resources on the safeguards function. The time had arrived when the proposals that had been made for restoring the balance between the promotional and control aspects of the Agency's programme should be examined and acted upon.

30. The Romanian delegation supported the Agency's draft programme for the six coming years because it contained numerous activities corresponding to the principal requirements of developing countries, including Romania, with respect to the peaceful uses of nuclear energy. In particular, Romania welcomed the priority accorded to nuclear power, nuclear technologies, nuclear safety and nuclear physics training activities. His delegation felt that of all the activities being pursued by the Agency the highest priority should be accorded in the years ahead to the technical assistance programme. If the Agency were to fully discharge its obligations in the field of technical assistance, it would be necessary to increase the resources allocated for that purpose to the level of those expended on safeguards.

31. The Romanian delegation supported proposals to establish large-scale projects which, being spread over several years, could help resolve some of the major problems of the recipient countries.

32. The adoption of new guiding principles for the provision of technical assistance should help to strengthen the Agency's activities in that field.

33. Romania would contribute to the General Fund for 1979 in an amount corresponding to its base rate of assessment.

34. Romania, a developing socialist country, was convinced that the peaceful application of nuclear energy was very important if not indispensable for rapid technical progress and for harmonious and dynamic development of the national economy.

35. In Romania the peaceful uses of nuclear energy were being applied to resolve problems in the most diverse sectors of the economy, particularly in fields of scientific research and engineering of direct application to industry, agriculture, medicine, biology, hydrology etc.

36. As a result of concerted efforts significant progress had been made in Romania in the fields of nuclear physics, solid-state physics, plasma physics and neutron physics. That had made it possible to resolve a number of problems in various branches of industry, produce a wide range of isotopes for domestic application and design equipment and facilities for use in that area.

37. The technical assistance and support which Romania had received from the Agency and UNDP in connection with the introduction of certain nuclear techniques had proved of particular value.

38. In order that the basis might be established for wider participation of developing countries in the activities of the Agency and its decision-making processes, the Romanian delegation had supported and would continue to support recent initiatives aimed at achieving more equitable representation of those countries on the Board of Governors and the General Committee of the General Conference.

39. In the same spirit the Romanian delegation was pleased to see the delegation of the Socialist Republic of Viet Nam present at the General Conference for the first time and extended to it a warm welcome.

40. In conformity with the position adopted by the Romanian Government, his delegation wished to express its solidarity with the people of Korea in their quest for peaceful unification without any external interference in accordance with the proposals put forward by the Government of the Democratic People's

Republic of Korea, and in consequence it contested the right of the delegation of South Korea to speak in the name of the whole of Korea.

41. The particular importance of the peaceful application of nuclear energy was also evidenced by the role it was accorded at the United Nations, where a large number of actions had been initiated aimed at promoting international co-operation in that area and increasing the contribution of the atom to the process of development and to reducing and eliminating the gap between the developed and the developing countries.

42. That concern with the peaceful uses of nuclear energy as a means of promoting economic and social development was reflected by Resolution 32/50 adopted by the General Assembly of the United Nations at its 32nd session, inviting all States to consider convening an international conference, under the auspices of the United Nations, aimed at promoting the peaceful uses of nuclear energy. The Romanian Government supported that initiative, as it considered that such a conference could play an important role in assuring the access of developing countries to the peaceful applications of nuclear energy and the unhindered transfer of nuclear technology, materials and equipment on a large scale to those countries.

43. The Romanian delegation valued highly the contribution being made by the Agency to the INFCE programme and hoped that all the objectives drawn up at the initial INFCE conference would be achieved.

44. Mr. EILAM (Israel) said that his country regarded nuclear power as an economically acceptable solution to the world's energy requirements in general, and to Israel's national needs in particular. Since the 1960s, Israel had considered various types of nuclear plants, with special emphasis on dual-purpose types. The first plants considered had been those with a capacity of 200 MW and able to desalinate  $150 \times 10^6 \text{ m}^3$  of water a year. During the past decade the Israeli Atomic Energy Commission had examined the possibility of installing bigger reactors in order to keep up with the new national energy programme. Economic surveys had shown later that capacities of 600 MW, or even 900 MW, possessed considerable advantages; it would be possible to desalinate  $100 \times 10^6 \text{ m}^3$  of water a year in the case of each 900 MW reactor, only 8% of the installed capacity being lost.

45. Israel was convinced that nuclear power programmes could be implemented in developing countries only within the framework of wide-scale international co-operation and under the auspices of the International Atomic Energy Agency. Furthermore, because of the experience required, the Agency was the most appropriate international body to promote the study, development and utilization of other, non-conventional energy sources, from wind power to nuclear fusion.

46. It was encouraging to see that, in spite of difficulties, the Agency's technical assistance programme had led to the successful implementation of national nuclear programmes in a number of other developing countries. He had followed with great interest the efforts made and the results gained by the Division of Technical Assistance in improving its operational system, and it was to be hoped that the new criteria for evaluating national requests for technical assistance would be applied in the future on an equal basis in all cases in order to reduce inconsistencies to a minimum.

47. The Member States of the Agency were looking forward to the re-unification of the Agency's different functions under one roof during the coming year, and there was no doubt that the transfer to the UNO City and the physical re-grouping of the various units would increase its efficiency to the benefit of all Member States.

48. He noted with satisfaction the Agency's training programme in general, and the special emphasis placed on training courses in the field of nuclear power plants, from which Israel had itself benefitted in the past, and would surely do so in the future.

49. The Agency was to be commended on the initiative taken in sponsoring deliberations on a convention for the physical protection of nuclear materials. It was only natural that certain differences existed in the approach adopted by suppliers and consumers of nuclear materials in defining the scope of such a convention, but all countries were clearly convinced that the world should stand united against all forms of terror that might threaten and endanger the existence of a community, a nation or even the whole of humanity if nuclear materials were not ensured of the appropriate physical protection.

50. In conclusion, he stated that Israel, for its part, would do everything possible to promote international and regional co-operation in all fields of energy and overall progress. The recent discussions held at Camp David would hopefully help in that endeavour and also in combatting what the Director General had termed "the pollution of poverty" in order to create a better world.

51. Mr. CAGIATI (Italy), after congratulating the President on his election, recalled that at the last General Conference the Italian delegation had emphasized the important aims which it believed the Agency would have to pursue in the immediate future, such as contributing to the widest possible dissemination of nuclear information and technology, promoting the availability of nuclear materials and verifying that nuclear technologies and materials were not diverted to non-peaceful ends. Those aims had been stressed because of the fear that the so-called non-proliferation policies being developed in certain States might have negative effects on nuclear development at the very time when the international community was becoming aware that it would inevitably have to make use of the new energy source.

52. Italy fully shared the current anxiety about proliferation and realized that certain States might feel a special sense of responsibility. However, there was no reason to seek new unilateral solutions outside international

agreements already in force. Such solutions might, in fact, give rise to doubts as to whether there was any real intention of collaborating actively in the solution of one of the most serious contemporary problems, namely the provision of adequate energy supplies.

53. The fundamental task remained that of implementing, and if necessary improving, the existing international instruments, especially NPT, which continued to be the basic defence against the risk of proliferation. The new non-proliferation policies had only arisen because of the obvious intrinsic weakness of NPT, a weakness which was essentially due to two causes: the fact that the Treaty was not universal and the disparity in the treatment of nuclear-weapon and non-nuclear-weapon countries. The first factor had led to discrimination between those non-nuclear-weapon countries which had acceded to NPT and those which remained outside it and in practice enjoyed greater liberty to develop their own nuclear activities.

54. The Italian delegation fully agreed with the Director General's remark that the real threat to peace was represented by the existing nuclear weapons arsenals that were continuing to grow steadily. Moreover, the nuclear-weapon States were, at least potentially, the largest suppliers of facilities and technology. They were therefore in the best position to remedy the situation by abolishing the discrimination created by NPT, reducing their national nuclear arsenals and collaborating actively in the development of the peaceful applications of nuclear energy. If Articles IV and VI of the Treaty were put into the fullest possible effect, there would no longer be any temptation to retain the option of developing nuclear weapons and remaining outside the Treaty.

55. The fact that the United States, the United Kingdom and France had voluntarily concluded safeguards agreements with the Agency was a first step towards eliminating the discrimination. The nuclear-weapon States must show they had the political will to end the nuclear and conventional arms race and to proceed along the road to general and complete disarmament under strict and effective international control. The Agency had an important role to play in seeing that nuclear development was not endangered in that procedure.

56. Italy was convinced that if the current INFCE studies were carried out effectively and with strict objectivity and a sense of responsibility, they would prove a useful attempt to find optimum solutions which might satisfy both

exporting and recipient countries. For its part, Italy was ready to contribute to the study of any initiative, such as the creation of regional fuel cycle and excess plutonium storage centres, which might truly contribute to halting proliferation while guaranteeing rapid supply at competitive prices of the fuel required by countries undergoing nuclear development. Some of those initiatives raised considerable political, legal and economic difficulties whose solution required the maximum goodwill and collaboration from all concerned, but if a price had to be paid for reducing the risk of proliferation, that price must be equitably divided, because peace and security were assets which belonged to the whole international community.

57. Among the various activities undertaken or initiated by the Agency, special mention should be made of the preparation of an international agreement on the physical protection of nuclear material, since that was a measure which had been urgently needed.

58. Italy had noted with satisfaction the principal conclusions of the Safeguards Implementation Report, including the fact that the number of facilities and the amount of material under safeguards were showing a constant and substantial increase. However, the quantification of such extremely difficult concepts as "threshold amount", "quantities of safeguards significance" and "conversion time" was too difficult a problem to be left to the limited number of experts in the Standing Advisory Group on Safeguards Implementation (SAGSI). The concepts should be developed and approved at the highest international level so that universal agreement could be achieved. In drawing up its safeguards policies and procedures, the Agency should also bear in mind possible contributions that might be made by other systems. In that respect, the supranational experience of the European Atomic Energy Community (EURATOM), which covered a period of 20 years, was unique.

59. During 1978, hundreds of scientists from all over the world, had taken part in the numerous activities organized by the Trieste International Centre for Theoretical Physics, thus confirming its unique role as a meeting point and scientific facility for scientists from the developing countries. It was because the Italian Government realized the importance of the Centre and the

need for it to continue its activities that it had decided to increase its financial contribution to more than US \$700 000 as from 1978.

60. Italy, which at the beginning of the 1960s had, together with the United States and the United Kingdom, been at the forefront of world nuclear power production, had during 1978 approved a major programme for the construction of new nuclear power stations to be added to the four already in operation and the additional four ordered in 1974. The Caorso power station, which had attained criticality at the end of 1977, had started generating power in May from an 850 MW(e) boiling-water reactor (BWR). The construction of the plant had taken only seven years and brought the country's total installed nuclear capacity to 1400 MW(e). In spite of serious difficulties, the Montalto di Castro power station, which was to be equipped with two BWRs of approximately 1000 MW(e) each, was finally under construction. The siting details of a further station were on the point of being decided. The National Energy Programme approved in December 1977 foresaw the construction of a further eight nuclear reactors and the relevant tenders had been invited. Steps had been taken to enable the nuclear industry to respond more fully to the national needs, especially with regard to the rapid implementation of the National Energy Programme.

61. Finally, Italy wished to congratulate the Agency on its activities and on the contribution it was making day by day to the solution of serious world problems. In reconfirming its full support, Italy hoped that the Agency would continue to be in a position to meet its important responsibilities.

62. Mr. GEORGE (Australia), after congratulating the President on his election, thanked the Director General for the stimulating account given in his opening statement on the situation in the nuclear power industry today. The Director General's opinions were valuable and all would, he was sure, take careful note of his imaginative and penetrating approach and advice.

63. The Director General, in common with the rest of the world, had witnessed over the past year an increased world-wide interest in nuclear power generation and nuclear matters despite a downward revision of the projected growth rates of nuclear power programmes by some advanced industrial nations; he had pointed out some of the difficulties faced by the nuclear industry, as also what was needed to remove those difficulties. Without going over the same ground, he would like to point to some of the matters that had caused that increase of interest

both in nuclear matters and in the Agency itself, and then to outline briefly relevant developments in Australia since the last General Conference session.

64. All were aware that during the past year the range of issues and tasks that the Agency had been called upon to deal with had broadened. The main new task had been associated with the Agency's valuable support of INFCE. As the Director General's statement indicated, a decisive stage had been reached in INFCE. For its part, Australia was encouraged at the progress made. The work seemed to be going well and many of the Agency's Member States were working co-operatively and productively.

65. The Agency had continued to carry out its traditional roles in the promotion of the use of nuclear energy and the application of nuclear techniques for peaceful purposes and in the strengthening of a comprehensive safeguards regime. Technical assistance was a vital activity of the Agency and Australia strongly supported the programme in that area. It was glad to see so much effort being put into the task. Australia also attached vital importance to effective Agency safeguards. It was necessary that safeguards should be continually revised and improved; the Safeguards Implementation Reports constituted a valuable means to that end, as well as serving to provide significant assurance to the international community. Australia welcomed the conclusion in the Annual Report for 1977 that in none of the 40 States in which inspections had been carried out in 1976 had there been any diversion of a significant quantity of safeguarded nuclear material. It noted with satisfaction that, on the basis of the Safeguards Implementation Report for 1977, a similar conclusion was possible in respect to inspections carried out in 1977.

66. In common with other nuclear suppliers, Australia recognised that it had a responsibility to ensure that adequate safeguards were applied in respect to any nuclear material it exported. Australia regarded the action taken in January 1978 by major nuclear supplier countries in notifying the Director General of common guidelines for their nuclear exports as a significant and welcome development. For its own part, Australia had indicated that its nuclear export policy encompassed, among other things, all of the elements comprising the common guidelines in question.

67. The Agency had had an important role to play in the negotiations designed to lead to the conclusion of a convention on the physical protection of nuclear materials, facilities and transports, to which Australia attached great importance. With the progress made recently in discussion on the scope of such a convention, it was to be hoped that an agreed text would emerge early in 1979.

68. The Agency's budget for 1979 had been the subject of strong criticism. Australia recognised that the Agency was engaged in carrying out important tasks, as also that certain factors, such as the transfer to the Donaupark and currency fluctuations, had greatly increased its costs. Obviously all costs should be kept under strict review but, given that the Member States themselves had imposed those important tasks on the Agency, the funds to do the job had to be forthcoming.

69. In 1977, he had attempted to inform the General Conference about the background to Australia's decisions on the development of its uranium resources and the strengthening of non-proliferation and nuclear safeguards regimes, and he would like to bring it up to date about some of the developments since then.

70. As a major source of uranium, his country accepted that it had a responsibility to help provide the world with its uranium requirements in order that the world's legitimate energy needs might be met. In the past 12 months shipments of uranium totalling over 1300 tonnes to meet approved export contracts had been exported from the re-commissioned Mary Kathleen mine and from the Government's stockpile of yellow cake. At the past weekend the Australian Government had been able to announce agreement with the aboriginal members of the Northern Land Council which would allow the Ranger Uranium Project in the Northern Territory to proceed. The Ranger project was one of the largest in the world and it was hoped that construction of the mine would start before the beginning of the wet season about six weeks ahead, so that the first production would come on to the market by 1981.

71. On 1 June 1978, the Deputy Prime Minister of Australia had announced the general guidelines that would govern the commercial arrangements relating to the export of Australian uranium. To ensure the orderly development and export of Australia's uranium resources, shipments would be controlled on the basis of individual consignments for which export certificates would be issued once all aspects of Government policy were satisfied, including compliance with the regulation that the consignment was in accordance with an approved contract relating to an approved project. In addition, Australia's safeguards policy had to be fully complied with.

72. At an appropriate time a Uranium Export Authority was to be established, to advise the Minister for Trade and Resources on those matters and to carry out other functions related to the supply of, demand for, and development of uranium resources. That machinery would ensure that the Government maintained strong regulation and control over uranium exports in the national interest, in a manner consistent with its policy on uranium development as announced in August following receipt of the Ranger Uranium Environmental Inquiry results.

73. Australia had already signed bilateral safeguards agreements with Finland and the Philippines and negotiations were under way with other potential customers. In accordance with its approach to the matter of risk of nuclear weapons proliferation, Australia would continue to work vigorously for a workable international regime. Its exports were directed towards countries that were signatories of NPT.

74. As he had said, Australia strongly supported technical assistance in the nuclear field. It had given support to Agency programmes in that area and would be making its voluntary contribution to the General Fund target of US \$8.5 million in accordance with its base rate of assessment.

75. In 1977, it had acceded to the Regional Co-operative Agreement for Research, Development and Training Related to Nuclear Science and Technology for South Asia, South-East Asia and the Pacific (RCA) and that agreement was providing a focus for its special support to technical assistance, over and above its contribution to the Agency's voluntary funds. An RCA meeting had been held recently in Kuala Lumpur and the proceedings had proved most helpful in identifying activities to which Australia felt it could usefully contribute. Australia would be making specific proposals to RCA members at a meeting to be held later in the week. It also had under

study a major training scheme for Malaysian scientists and technicians to staff the new nuclear institute in that country. Finally, it noted with satisfaction that Japan had decided to join the RCA, a development which would further strengthen that exciting regional initiative.

76. In conclusion, he said that everyone knew that nuclear issues affected the whole of mankind. Australia recognized that there were issues yet to be resolved and that one of the great needs was to gather information on which to base balanced judgements. All were agreed, he thought, on the need for winning public support. Australia had become involved in many activities in the nuclear field. As one of the co-chairmen of Working Group 3 of INFCE and a participant in the other working groups, Australia was trying to contribute to the search for a system which, apart from providing for the world's energy needs would be acceptable to all and harmful to none. It recognized that the work being done in INFCE supplemented the work of the Agency in that area. The following year would bring INFCE to the culmination point and that would herald a time of decision-making for all. It was to be hoped that deliberations at the present session would contribute to those decisions.

77. Mr. KOLYKHAN (Byelorussian Soviet Socialist Republic) said that his delegation welcomed the representatives of the Socialist Republic of Viet Nam at the present session of the General Conference. The courage and steadfastness of the Vietnamese people in their long struggle for freedom and national unity, and their present struggle to preserve the inviolability of their territory and their independence, had given Viet Nam well deserved international authority. His delegation was convinced that the participation of Viet Nam in the Agency's activities would further enhance the Agency's role in promoting the peaceful use of nuclear energy.

78. In the third decade of its highly varied and fruitful work, the International Atomic Energy Agency now found itself at a juncture where the need to stop the arms race and achieve ultimate disarmament, through the efforts of the socialist countries and of all peace-loving States, stood at the centre of international politics. The special session of the General Assembly of the United Nations on disarmament and the decisions taken in the course of that session - including the decision to convene a universal conference on disarmament in the very near future - testified to the earnest desire of the peoples of the world to curb the dangerous arms race. "To stop the arms race, to make progress towards reducing and ultimately eliminating the threat of a nuclear catastrophe" was, in the emphatic words of Leonid Brezhnev, General Secretary of the Central Committee of the Communist Party of the Soviet Union, "the main problem on the agenda of our lives". At the special session of

the General Assembly of the United Nations on disarmament the Soviet Union had addressed itself to all States of the world with the appeal that agreement should be reached on a number of urgent measures capable of halting the arms race.

79. Reports about the development and imminent manufacture of a neutron bomb were causing profound alarm throughout the world. The conclusion of a convention prohibiting that weapon would be practical evidence of the determination of States to halt the nuclear arms race and save the world from nuclear war.

80. The Soviet Union persistently emphasized how vital it was not to allow the development of new types of weapons for mass destruction; it urged that negotiations should be started with a view to halting the production of nuclear weapons of all kinds and gradually reducing the stocks of such weapons until they were ultimately eliminated altogether, and urged likewise that further efforts should be made to strengthen the international non-proliferation regime. The Soviet Union had, moreover, declared that it would never use nuclear weapons against States which renounced the production and procurement of such weapons and did not possess them on their territory.

81. On the eve of the 33rd session of the General Assembly of the United Nations the Soviet Union had come forward with a new initiative in the interests of peace, proposing the inclusion on the agenda for the session, as an important and urgent question, of an item entitled "Conclusion of an international convention to strengthen guarantees for the safety of non-nuclear-weapon States", and at the same time submitting the draft of such a convention. Thanks to the firm and consistent efforts of the Soviet Union and other countries belonging to the socialist community, together with all peace-loving countries on earth, some progress had already been made towards curbing the nuclear arms race.

82. Fifteen years before, the Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water (the Partial Test Ban Treaty)<sup>2/</sup>, to which more than 100 States had subsequently adhered, had been signed in Moscow. At the present time trilateral negotiations were continuing between the Soviet Union, the United States of America and the United Kingdom with a view to drafting an agreement for a complete and general prohibition of nuclear weapons tests.

83. The past decade had shown that the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) had become an important barrier to the spread of nuclear weapons and

<sup>2/</sup> The text of the Treaty is reproduced in Legal Series No. 9 (STI/PUB/387).

had ushered in a qualitatively new era in the peaceful utilization of atomic energy. However, serious concern was felt at the nuclear preparations of South Africa and Israel, which were supported by imperialist circles and were in flagrant contradiction to the efforts of the Agency aimed at eliminating the danger of nuclear proliferation. Those activities were not compatible with the stand taken by the independent countries of Africa and the Near East, which were aimed at turning the African continent and the Near East into a non-nuclear zone. One could not help being perplexed, too, by the position of the non-nuclear-weapon States Members of EURATOM, which in every possible way were deferring the effective application of Agency safeguards to their nuclear industry and were thereby seeking special privileges for themselves.

84. The Byelorussian SSR actively favoured all proposals aimed at limiting the arms race and achieving disarmament. Colossal financial and material resources would then be liberated for peaceful uses.

85. At present and in the foreseeable future, further development of nuclear power was clearly essential; power reactors and research reactors were needed in larger sizes and greater numbers, as were fuel reprocessing plants and supplies of fuel. Verification procedures could be applied to such operations with the requisite efficiency and reliability only on the basis of automated systems for the collection, transmission, storage and processing of information. Byelorussia accordingly supported the organizational changes that had already been carried out or were being planned in the Department of Safeguards, and it was also in favour of activities aimed at further technical development of safeguards procedures.

86. Attributing great importance as it did to the provision of technical assistance to developing Member States, Byelorussia would be making a voluntary contribution of 20 000 roubles (in national currency) for that purpose; an effective combination of technical assistance with essential safeguards measures would further strengthen the nuclear non-proliferation regime and would accordingly allow further accomplishment of the tasks arising out of the Agency's Statute and out of NPT. Thus Byelorussia supported the proposal that safeguards should be applied in connection with technical assistance. Indeed, it believed that safeguards should be applied in connection with all forms of technical assistance, but particularly in sensitive areas such as fuel reprocessing, uranium enrichment and plutonium production technology.

87. Byelorussia objected to the provision of technical assistance to Israel, the Chilean Junta and the South Korean regime.

88. His delegation had carefully studied the Agency's programme for 1979-84 which was now before the Conference. It considered that the programme was, on the whole, in line with the requirements of Member States, the Agency's capabilities, and the organization's goals and tasks as they emerged from the Statute. The very considerable and successful work done by the Secretariat in preparing the Agency's programme in such highly important areas as safeguards, nuclear power and reactors, and nuclear safety and environmental protection deserved commendation.

89. The chapter on nuclear power and reactors gave, in the opinion of his delegation, a correct reflection of current trends in power generation; it took account of the increasing difficulty of forecasting the development of nuclear power and the rate at which it would be introduced in various branches of the economy; and it dealt satisfactorily with fuel cycle questions and the technical problems associated with the development of new reactor types. Thus, a growth in the programme entitled "Energy forecasts and the economic assessment of nuclear power and its fuel cycle" was justified.

90. The Agency was doing excellent work in the collection, evaluation and annual publication of data on operating experience with power reactors of "proven types". At the same time it would be extremely useful to have more abundant information on the development and operation of experimental (demonstration) power plants using breeder reactors of various kinds and reactors designed to produce low-temperature and high-temperature nuclear heat.

91. Among the most important tasks under the programme on nuclear safety and environmental protection was the gradual production of clear, comprehensive and internationally acceptable codes and guides on questions related to nuclear safety. Another important task was the provision of up-to-date information on what had been achieved in that field in Member States.

92. The Agency's work on the physical protection and safety of nuclear materials was vital to international security and the preservation of human life and health. Of undoubted importance, too, was the study of all questions connected with the establishment of regional fuel cycle centres.

93. Further improvements in the International Nuclear Information System (INIS) designed to provide Member States with comprehensive information on nuclear subjects deserved universal support and approval.

94. However, while the technical aspects of the programme could in principle elicit no objections, the planned budgetary increase for 1979 of 26.9% and the corresponding increase of assessed contributions by 30.2% - with an increase of only 5-6% for actual programme expansion - was something that could not but cause serious concern. It would be useful to review the programme for the years ahead and either reduce or exclude activities which could be carried out by other international organizations or on the basis of agreements between States, and also to curtail those activities which had already become common in the majority of developed countries - in particular work in certain fields of biology, the food industry and agriculture.

95. The Byelorussian SSR was moving, in the full bloom of creative power, towards a glorious jubilee - the sixtieth anniversary of its foundation as a Soviet Socialist Republic. Sixty years of building socialism and communism, the practical realization of Lenin's programme on the national question - those achievements had confirmed the Byelorussian people's sense of national identity and had abolished its economic and cultural backwardness.

96. Within the harmonious family of Soviet peoples, Byelorussia had met with outstanding success in economic and cultural development and had become a highly-developed industrial and agrarian socialist republic. By 1940 industrial production in Byelorussia had grown to more than eight times the 1913 level.

97. The homeland had suffered severely during the Second World War. The fascists had demolished and burnt 209 towns and district centres and 9200 villages in Byelorussia alone. But the whole country had helped to overcome the consequences of destruction, and by 1950 Byelorussia's industrial production had risen above the pre-war level.

98. The emphasis in the Republic's industry now lay on machine and instrument construction, petroleum chemistry, radio electronics, the production of mineral fertilizers and other branches of production in the forefront of modern science and technology.

99. In the years of Soviet power industrial production in Byelorussia had increased by a factor of 192, agricultural production by a factor of 3.5, and the national income - in just the last 20 years - by a factor of 4.8. Among the Republic's workers, 72% had enjoyed intermediate and higher education, whereas before the Revolution eight out of ten Byelorussians could neither read nor write.

100. Socialism had created unlimited possibilities for science to flourish, too, in all national regions of the Soviet State. The country's vast and steadily growing potential enabled Byelorussian scientists to work productively in all branches of the natural sciences and the humanities.

101. In some branches of scientific research the institutes of the Byelorussian Academy of Sciences were leading the field; the Republic had established authoritative schools in such disciplines as spectroscopy and luminescence, heat exchange and mass transfer, differential equations, computer techniques, the mechanics of metallic polymers, nuclear power and so on.

102. Radioisotopes and irradiation techniques were being used extensively in the most various branches of science and technology, medicine and agriculture, to produce new engineering and construction materials or to modify old materials. Unique irradiation facilities were being installed for those purposes.

103. Work in the nuclear power field was being pursued in two directions: firstly, the development of nuclear plants using proven reactor types to supply low-potential heat to Minsk and other industrial centres, and, secondly, the development of plants using a radically new coolant and working fluid - nitrogen tetroxide. In the latter sphere a broadly based programme of fundamental research and design work was being carried out at the Institute for Nuclear Power of the Byelorussian Academy of Sciences. Nuclear power stations using a gas-cooled fast reactor had been shown, by the studies carried out in Byelorussia, to have a number of advantages over plants using liquid metal and helium coolant. As a necessary stage on the road to building large power plants of that type, a pilot plant with a capacity of 300 MW was being designed which would enable the systems and equipment needed for the large commercial power stations of the future to be developed.

104. The peaceful utilization of nuclear energy constituted one of the most important tasks of the modern era; it was a task that could be accomplished for the good of mankind only through broad international co-operation, in a world enjoying a stable peace and security for all. That being so, Byelorussia attached great value to the Agency's activities and itself took an active part in them. His delegation accordingly wished the Agency every success in its future work.

105. Mr. CHAGULA (United Republic of Tanzania), after congratulating the President on his election, expressed his gratitude to the Government of Austria for the facilities it had placed at the disposal of the Agency since its inception. He also commended the efforts made in securing the Agency's Permanent Headquarters. He then congratulated the delegation of Viet Nam, which was participating in the General Conference for the first time after a long and successful struggle against imperialist aggression.

106. Turning to the needs of the developing countries, which formed the greater part of the Agency's membership, he said that they were mainly attracted by the Agency's technical assistance programme and particularly by the aid given in the form of training, equipment and the services of experts. Their concern, however, was that too little technical assistance had so far been provided to the developing countries and the Agency had been unable to meet the expectations of most of the recipient countries. The usual policy had been to associate technical assistance provided by the Agency with a project. That was a fair policy so long as the recipient country had the capacity to continue with a project after the departure of the Agency's expert. There was also a small group of Member States who were engaged in the first stages of developing their nuclear programmes and, in his view, the Agency should not overlook their needs. Their priority was the development of the necessary manpower to carry out the projects associated with the peaceful uses of atomic energy for their country's development; his country belonged to that group. Projects were limited not only by the lack of manpower but also because the short-term training courses organized by the Agency were not designed to cater for their needs and therefore Member States just beginning to develop their nuclear power programmes found that their effective participation in the Agency's technical assistance programme was very limited. He pointed out, however, that his observations on technical assistance had been partially overtaken by recent events. In 1977 the Agency had noted with concern that most developing countries were not benefitting sufficiently from the technical assistance available. The Secretariat had, therefore, appointed a team of experts to explore and recommend a course of action to help developing Member States and it was gratifying to note that no time had been lost in implementing the Expert Group's recommendations. Among the latter's recommendations had been the introduction of programming missions aimed at assisting Member States to formulate

their requests to the Agency and to identify areas for the provision of medium- and large-scale technical assistance. In July 1978, Tanzania had been visited by a programming mission, which had concentrated mainly on agriculture, health and mining. The visit had afforded his country a rare opportunity to collaborate in formulating projects in each of those three sectors - for the development of the phosphates and uranium deposits at Minjingu, the establishment of a nuclear medicine facility for diagnostic, treatment and research purposes, and the establishment of a radiation protection service unit. However, from the little experience of technical assistance which had been gained over the past two years, and taking into consideration some of the problems of recipient countries, he felt that the Agency should make a greater effort to achieve a more effective technical assistance programme. In many developing countries the problem was a lack of sufficient trained manpower, of equipment and of the scientific and technological basis necessary for the effective application of atomic energy, and he strongly requested that the Agency should give priority to those Member States which were just beginning to build up their nuclear energy capabilities, particularly in training and in the procurement of equipment. His country was of the opinion that the Agency's technical assistance programme should be accorded a high priority in the Agency's budget and that its dependence on the voluntary contributions of Member States should be reduced.

107. Turning to the question of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), he said that from its inception the United Nations had been very seriously concerned about weapons of mass destruction. Although since then the United Nations had considered the subject to be most urgent, the threat of nuclear war on a world-wide scale had increased considerably and after the General Assembly's resolution on disarmament in 1946 no concrete action on disarmament had been agreed upon until 1965, when the Partial Test Ban Treaty (PTBT) was concluded. By then the five permanent members of the United Nations Security Council possessed nuclear weapons. PTBT had been the result of long and difficult negotiations, but those negotiations had produced a treaty prohibiting tests only in the atmosphere and had not resulted in an agreement on the prohibition of underground testing. The United States and the Soviet Union had already developed the technology for the underground testing of nuclear weapons, and therefore the ban on nuclear weapons testing in other environments did not put an end to their tests. France and China had not developed underground nuclear weapons testing technology and consequently they did not sign PTBT.

108. Tanzania signed PTBT, however, and the rest of the United Nations and other non-member States had welcomed it because it constituted a gesture of intent by the United States and the Soviet Union towards the elimination of nuclear weapons. However, no agreement to destroy existing nuclear weapons or even to ban underground nuclear weapons testing had been reached. With NPT, an attempt had been made in 1968 only to prevent the spread of nuclear weapons to those who did not possess them. NPT did not require States which had nuclear weapons to destroy them, nor did it prohibit any further development or manufacture of such weapons. The Treaty was therefore plainly inadequate and avoided tackling the main issue, because those against whom NPT was directed had, at least at the time, no capacity to manufacture nuclear weapons. In fact, such a treaty did more harm than good to the world's disarmament efforts. It might be thought that Member States who held that view were in the minority. However, during the 1975 conference to review the implementation of the Treaty, a great deal of dissatisfaction was expressed by most non-nuclear-weapon Member States, who stated that the undertaking of the nuclear-weapon Member States to proceed with effective nuclear disarmament negotiations had so far not yielded any tangible results. And four years after that review conference, hardly any progress had been made by the nuclear-weapon Member States in reducing the nuclear arms race. Indeed, many parties to the Treaty, including Tanzania, felt frustrated and concerned that some nuclear-weapon States Members of the Agency who were parties to the Treaty were continuing to supply nuclear weapons technology to States such as South Africa and Israel. Tanzania strongly condemned such collaboration. The Agency should, therefore, think seriously about reviewing the Treaty so as to make it more equitable and more likely to benefit all mankind. Otherwise, Tanzania would continue to adhere to its current stand on the Treaty. That did not mean, however, that Tanzania did not appreciate the Agency's safeguards methods or its technical assistance programme as a whole. That programme was particularly welcome in the areas of training and planning for nuclear power stations in developing countries. Tanzania fully supported the concept of establishing regional nuclear fuel cycle centres, not for non-proliferation reasons but for the assistance they would provide to those non-nuclear-weapon Member States which were ready to embark on nuclear power programmes. It was, however, to be hoped that the use of regional nuclear fuel cycle centres would not be subject to Member States being a signatory to NPT, as that would considerably reduce the effectiveness of the Agency's technical assistance to developing Member States.

Finally he emphasized that Tanzania was grateful to those countries which had contributed generously to the General Fund. Tanzania intended to contribute to the Fund an equivalent of US \$850 for 1979.

109. Mr. KATORI (Japan) said that since the Agency's foundation twenty-one years earlier its activities had broadened and diversified, and it now faced today new challenges, the solution of which required joint efforts.

110. The Agency's basic task was concerned with the utilization of atomic energy for the welfare and progress of mankind. The world had been compelled to recognize in the face of the so-called "oil crisis" that atomic energy was a necessity and that it could replace fossil fuel in the shorter and the longer term. That fact was also mentioned in the Agency's Annual Report for 1977 (document GC(XXII)/597), and it was appreciated in particular by many countries such as Japan which were not endowed with large quantities of natural energy resources such as oil, coal or natural gas. For those countries, research on and the development of the peaceful uses of atomic energy were a matter of the greatest urgency in order for them to be able to sustain their national existence in the future. That should be understood both by the nuclear-weapon States and by States rich in natural resources.

111. It was imperative for Japan to establish a nuclear fuel cycle to utilize its limited resources better. His Government was fully aware, however, that, in order to preserve world peace and security, atomic energy should be used solely for peaceful purposes and should not be diverted for military purposes.

112. Concern to prevent proliferation of nuclear weapons while promoting the peaceful uses of atomic energy was not new but had been one of the most important reasons for the establishment of the Agency. The Agency had so far fulfilled the hopes placed in it and should continue to play a central role in preventing the proliferation of nuclear weapons.

113. Apart from the efforts made by the Agency, it was also necessary to endeavour to make the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) universal. Those States which were not yet party to NPT should join it as soon as possible.

114. However, in order to prevent the proliferation of nuclear weapons on a long-term basis, it was not sufficient simply to take measures to prevent non-nuclear-weapon States from possessing weapons. Steps should also be taken to try to eliminate the various factors which might encourage the possession of weapons. One of those steps would be the realization of nuclear disarmament. NPT would be

rendered more effective if the inequality between nuclear-weapon States and non-nuclear-weapon States were eradicated by the abolition of nuclear weapons. In that connection, he very much welcomed the fact that the United States, the United Kingdom and France had volunteered to submit to Agency safeguards. Those States which had not yet made the same offer should follow suit.

115. Another step to be taken was the creation of an international environment in which every State, regardless of size, behaved in strict compliance with the principles set forth in the United Nations Charter, so as to make it impossible for new nuclear-weapon States to emerge. Through the combined efforts of the non-nuclear-weapon and the nuclear-weapon States, on the basis of self-restraint and international co-operation, it would be possible to prevent the proliferation of nuclear weapons.

116. However, while the prevention of proliferation was undoubtedly one of the Agency's most important tasks, it should not be its only function. Peaceful uses of atomic energy were not only a source of power, but contributed to the welfare of mankind in other ways.

117. The results of research and development work in fields such as the use of isotopes must, therefore, be shared by all nations. Technical assistance by the Agency to developing countries was very important, and measures should be taken to make such assistance more effective. In that connection, it would be a very constructive move to resolve outstanding issues such as that of unobligated balances.

118. In the past, Japan had paid 100% of its share of voluntary contributions and in 1977 it had also made additional funds available to the Agency. As for 1979, his Government was in the process of taking the internal measures necessary for making the voluntary contribution corresponding to its base rate of assessment.

119. Japan had recently joined the Regional Co-operative Agreement for Research, Development and Training Related to Nuclear Science and Technology (RCA) and intended to make a positive contribution to nuclear technology research and development and to technical co-operation through its participation in the RCA projects which were needed in Asia. Japan believed that it was desirable to establish a mechanism within the framework of RCA, such as a regional co-operation centre or institute, to promote co-operation in atomic energy research and development.

120. The promotion of the peaceful uses of atomic energy in Japan had always been linked inseparably with the Agency. Japan had fifteen commercial nuclear power plants with a total capacity of 8800 MW in operation, producing 8% of the total electric power of the country. The fraction of the country's total electric power produced by means of nuclear reactors was expected to increase to 15-18% by 1985.

121. As a basic policy for energy security, Japan had been striving to establish a national fuel cycle and to develop advanced reactor types. Because of those efforts, the 165 MW(e) FUGEN advanced thermal reactor had gone critical in March 1978 and had begun to produce electricity in August. As to fast breeder reactors, the JOYO experimental reactor had attained an output of 50 MW in May and was continuing to operate successfully.

122. The Tokai reprocessing plant had started its hot test run in September 1977, and it was expected that it would finish the final test run during 1978 and be ready for normal operation in 1979. In addition, another reprocessing plant was in preparation.

123. In the meantime, considerable progress had been made towards achieving national consensus in favour of the peaceful uses of atomic energy. It was to be hoped that, with the establishment of the Nuclear Safety Commission in October 1978, better conditions would be created for public acceptance. Also, the nuclear ship "Mutsu" was expected to go into operation again in the near future.

124. In the area of fusion, Japan's experimental critical plasma facility, JT-60, was under construction. His Government had initiated talks concerning co-operation in research and development with the United States in an effort to achieve controlled nuclear fusion, and it was prepared to co-operate with other countries with an interest in fusion.

125. In promoting the peaceful uses of nuclear energy, Japan had followed a consistent course which proved the compatibility of peaceful uses of atomic energy with the non-proliferation of nuclear weapons. When it began to utilize atomic energy its basic policy had already been determined, namely that research on and the development and utilization of atomic energy should be limited to peaceful purposes as stipulated by Japan's Basic Atomic Energy Law.

That policy was also reflected in Japan's "Three Non-Nuclear Principles". In that context, his Government had readily accepted Agency safeguards.

126. The conclusion of subsidiary arrangements under Japan's NPT safeguards agreement, which were being negotiated by the Government of Japan and the Agency, was near at hand and it was to be hoped that final agreement would be reached in the very near future. Along with the development of peaceful uses of atomic energy, the safeguards system needed to be improved. In that connection, Japan was undertaking, through a programme called "TASTEX", joint research with the United States and France and in conjunction with the Agency for the development of more effective safeguards techniques to be applied at reprocessing facilities. The Japanese Government was prepared to co-operate fully with the Agency in that endeavour.

127. The Agency had never before been faced by so many complicated tasks, and those had to be undertaken with limited human and financial resources. The ability of Member States to share the burden was also limited, and the Secretariat should be asked to make further efforts to ensure balanced distribution and efficient implementation of its limited budget in line with the Agency's objectives as laid down in the Statute. Likewise, Member States had the responsibility of co-operating closely with each other in order to consolidate the Agency's central role in the uses of atomic energy for peaceful purposes. The future of the peaceful uses of atomic energy depended primarily on maintaining the Agency's credibility.

128. Mr. ALER (Sweden) said that in many countries the past year had seen a lively and sometimes heated debate concerning nuclear power as a source of energy. Safety and economy were aspects that had received special attention. In particular, questions were being raised regarding the risks of proliferation of nuclear weapons and of the handling and long-term storage of spent fuel and radioactive waste.

129. The Agency had an important role to play within the field of safeguards and in the international effort to develop codes and standards aimed at ensuring the safety of nuclear power plants.

130. The basis of the Swedish Government's policy of preventing any spread of nuclear weapons was NPT, with full-scope safeguards covering all nuclear facilities. The safeguards system administered by the Agency was a vital element in the non-proliferation effort. It was of great importance that the Agency should be given adequate resources to carry out that important function and also that the effectiveness of the system should be continuously improved.

131. In Sweden the Safeguards Implementation Report for 1977 had been studied with great interest. His Government hoped that the Director General would continue to prepare and circulate safeguards implementation reports and that the Agency would take steps to improve accounting systems where those had been found not fully to meet the high standards required.

132. Sweden welcomed the coming into force of the NPT safeguards agreement between the Agency, EURATOM and the seven non-nuclear-weapon States Members of the Community. The agreement concluded with Japan meant that the NPT safeguards system was coming closer to being universal.

133. It was with close attention that his delegation had studied the Agency's programme in the nuclear safety and environmental protection sector. In its view the issuing of safety codes and guides was a most appropriate and valuable activity on the part of the Agency.

134. The back-end of the fuel cycle was considered more and more crucial to any increased use of nuclear power, and adequate solutions to the problems in that context had to be found. The Agency's activities in the waste management field were arousing great interest in Sweden, which expected to participate actively in them.

135. His country was participating in the work to prepare an international convention on the physical protection of nuclear material and it was its hope that a convention could be drafted in the not too distant future.

136. The present debate regarding nuclear power should be seen as a stimulant to the Agency, which should respond by deepening its work on safety, in the widest sense of the word, covering all stages of the fuel cycle.

137. In Sweden it was a requirement of law that new nuclear power plants could not be brought into operation unless the operator had demonstrated how and where completely safe terminal storage could be achieved either of spent fuel or of

highly radioactive waste after reprocessing. Government analysis of applications to fuel two nuclear reactors was in its final stage. The utilities concerned had made considerable technical efforts to meet the legal requirements. An analysis of the suggested solutions for safe terminal storage of highly radioactive waste had been made by both Swedish and foreign institutions and scientists. The Agency had also provided valuable assistance by convening a panel to scrutinize the waste management report prepared by Swedish nuclear power plant operators.

138. He wished to confirm that, for 1979 also, Sweden was in a position to pledge a voluntary contribution to the General Fund equal to the amount calculated from its base rate of assessment.

139. In conclusion he stressed the high priority which the Swedish Government attached to Agency safeguards and to the Agency's work for nuclear safety. Nuclear safety in Sweden meant not only operational safety but also the protection of future generations against the hazards accruing from the waste generated in the nuclear fuel cycle.

140. Mr. AL-ESKANGI (Libyan Arab Jamahiriya) said he wished to comment first on a matter of utmost importance as far as the basic functions of the Agency were concerned, namely, the question of what benefit the developing countries actually derived from the organization. The question that was raised every year and still remained unanswered was whether any serious effort had been made by the Agency and its big-Power Members to reduce the gap between developed and developing countries in the applications of nuclear technology. Despite the concern that had been voiced in the various sessions of the General Conference almost no progress had been made.

141. The United Nations had been aware of the problem and had adopted General Assembly Resolution 32/50 concerning the peaceful uses of nuclear energy as applied to economic and social development and the right of all States, including the developing countries, to acquire the nuclear technology necessary for those applications. The resolution also called on the more advanced countries to assume their responsibility in helping the developing countries in that endeavour.

142. His country's delegation was confident that the Agency would pay increasing attention to its technical assistance programmes, which at present were not providing adequate help. Not only were the available funds inadequate but the system for implementing programmes was not efficient enough. Sometimes it took

more than two years before a technical assistance request was approved. Obviously, such delays affected the planning of the country submitting the request. He realized the difficulties which existed in that respect, but he was confident that the Agency could do something about it.

143. His country's delegation wished to express its gratification at the activities of the Group of 77, which it believed would not only be of great help to the Agency but also serve as an instrument through which the developing countries could improve their contribution to the Agency's activities.

144. As regards the proposal to amend Article VI of the Statute, his delegation found it difficult to understand the negative attitude of some delegations towards the justified demands of the sponsors.

145. His country was going ahead with its programme for introducing the peaceful nuclear technology relevant to its economic development plans. Construction and civil engineering work at the Libyan Nuclear Research Centre was progressing according to schedule; about 60% of the construction work on different buildings, laboratories and other facilities had been completed. The training of technical and scientific personnel was going forward at the same time. By the beginning of 1979 the installation of equipment would be started, so that testing and commissioning could be carried out in 1980. In the meantime, Libyan specialists would be returning home from their study missions abroad and would join the country's experts in operating the centre.

146. Libyan plans for uranium prospecting were also going forward: the objective was to locate areas with uranium deposits of commercial interest. Some success had been achieved and it was hoped that the country's capabilities in that respect could be increased.

147. Mr. GAHURANYI TANGANIKI (Zaire) said that his country had been among the first to sign and ratify the Treaty on the Non-Proliferation of Nuclear Weapons and had since then negotiated and signed safeguards agreements with the Agency. His Government had thus signified its unswerving advocacy of the use of atomic energy solely for peaceful purposes. It continued to attach great importance to the Agency's programme and would like to see the safeguards programme strengthened not only in strictly budgetary terms but also with regard to operative clauses, which should be made more restrictive so as to make any diversion of nuclear material for military purposes as difficult as possible.

148. Among the Agency's welcome initiatives in that connection was the study of the possible establishment of regional fuel cycle centres, which would include reprocessing plants and could also have storage facilities added. That study, complemented by the one relating to the exercise by the Agency of the powers, conferred on it by its Statute, to require deposit with it of any excess of plutonium or other special fissionable materials, could lead to international plutonium management, which would have clear advantages.

149. The plutonium management plan at present being studied within the Agency should be extended to the problem of irradiated fuel storage. In order to avoid storage of extracted plutonium, a non-discriminatory system should be established, capable of universal application, to control the putting of plutonium into circulation, both for export and for domestic use.

150. His delegation welcomed the Secretariat's report on the implementation of safeguards in 1977 and shared the satisfaction that in 1977 there had been no significant diversion of Agency-safeguarded nuclear material. With regard to the Secretariat's efforts to develop further the notion of "safeguards effectiveness", including the establishment of a system to ensure the early discovery of "illicit movements of fissionable materials", a permanent and independent verification procedure was necessary in order to reduce the "detection time". The last condition was vital; it was highly desirable that the Agency should accept no compromise on that point in its negotiations with certain highly industrialized Member States.

151. Technical assistance was no less important than safeguards, although much progress still needed to be made with regard to the former. Despite the Secretariat's praiseworthy effort to draw up a body of guidelines and overall rules for the provision of technical assistance, his delegation could not agree with all of them. In particular, the provision of technical assistance should be based on the principle of non-discrimination. There should be much more emphasis on the provision of equipment and fellowships than on the sending of experts. On strictly budgetary matters, his delegation had insisted in the past that technical assistance should be financed 100% from the Regular Budget instead of relying on voluntary contributions, which were always uncertain. At all events it was necessary, in order to avoid the growing distortion in the Agency's budget as between technical assistance programmes and safeguards, to establish

a link between the Agency's Regular Budget and the funds earmarked for technical assistance, so that any increase in one was matched by an increase in the other.

152. With regard to the proposed amendment of Article VI.A.2 of the Statute, his country had been a co-signatory of the original proposal to provide three additional seats on the Board of Governors for the area of Africa and two for the area of Middle East and South Asia. Subsequent discussions in the Board during the past year had in many ways been discouraging; in that matter, as in many others, Africa was still suffering from discrimination, which reflected no credit on the organization. It was to be hoped that, during the current session, a solution would be found which would give the area of Africa equitable representation on the Board of Governors.

153. It should be noted that Africa was likewise poorly represented in the Secretariat. Serious efforts should be made to recruit more Africans for high-level posts.

The meeting rose at 12.45 p.m.

