



International Atomic Energy Agency

# GENERAL CONFERENCE

GC(XVIII)/OR. 173

5 March 1975\*

GENERAL Distr.

ENGLISH

## EIGHTEENTH REGULAR SESSION: 16—20 SEPTEMBER 1974

RECORD OF THE ONE HUNDRED AND SEVENTY-THIRD PLENARY MEETING

Held at the Neue Hofburg, Vienna, on Thursday, 19 September 1974, at 10.55 a. m.

President: Mr. MEDINA (Philippines)

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\* A provisional version of this document was issued on 23 September 1974.

\*\* GC(XVIII)/534.

## THE RECORD

GENERAL DEBATE AND REPORT FOR 1973-74  
(GC(XVIII)/525, 532) (continued)

1. Mr. ANINOIU (Romania), continuing the general debate, said he wished once more to congratulate and welcome the Democratic People's Republic of Korea on its admission to membership of the Agency.

2. At its current session the General Conference would have to discuss and take decisions on matters of major importance to the present and future work of the Agency and of direct concern to all the States represented at it. It was obvious that the Agency's main activities could not develop effectively and satisfactorily unless the international atmosphere favoured them.

3. Despite certain events that had occurred in various parts of the world, the period since the last General Conference had been marked by important international developments, amongst which might first of all be mentioned the increasingly vigorous affirmation of the will of peoples to regain control of their national wealth and to make sure of independent economic and social development and free access to modern science and technology, the efforts relating to security and co-operation in Europe, and the new trend towards détente and co-operation between all States.

4. The Romanian Government considered that everything should be done to encourage the development of that positive trend, so that it would become general and irreversible and so that, during the current period of history, decisive steps would be taken along the path of complete equality in relations between all nations, towards achievement of a new international economic and political order, towards the building of a better and juster world, in which all the peoples could fully enjoy the benefits of peace, of progress and of modern civilization.

5. That policy was reflected in the stirring appeal made a few weeks previously by the President of Romania, Nicolae Ceausescu, at the World Population Conference:

"We appeal to heads of State, Governments and to peoples to do their utmost to create a world of collaboration and of peace, in which each nation can develop freely and benefit fully from the conquests made by world civilization."

6. After the Second World War, his country had had to make considerable efforts to put an end to the backwardness caused by centuries of foreign domination. By its efforts, compared with the pre-war years, its industrial production had increased almost thirtyfold, agricultural production had doubled and the national income was eleven times as high, which had enabled the per capita income to be increased from \$80 to \$800.

7. Significant results had also been obtained in the many-sided uses of peaceful applications of the atom in fundamental and applied research, in the protection of nuclear equipment and installations and in the solution of different technological problems. Particular mention should be made of the results concerning the structure of the nucleus, high energy physics, plasma and semiconductor physics, the properties of nuclear materials in the field of radiation, lasers. Likewise, special attention was given to nuclear power, to the extension and diversification of the applications of radioactive and stable isotopes and nuclear techniques in the chemical, metallurgical and extractive industries, in building, hydrology, agriculture, medicine and biology, and in environmental protection. Those achievements showed in a practical way the creative force of a people that had become craftsmen and masters of their own destiny and gave proof of their ability to build, during a short span of history, an economy in full development, within which the use of peaceful applications of the atom constituted an important element of rapid progress towards well-being.

8. Bilateral and multilateral co-operation had without doubt played a positive role in achieving the objectives set by Romania in its programme of developing the applications of nuclear energy for peaceful purposes. In that connection, co-operation within the framework of the Agency and the United Nations Development Programme (UNDP) had been of special importance, and his delegation wanted once more to express its gratitude to those organizations for the support they had given to the creation of the Institute of Nuclear Technology in Romania. The progress made both in economic development and in the application of nuclear energy was opening up increasingly wide possibilities for intensive participation in international co-operation in that field.

9. At a time when the peaceful use of nuclear energy had become an indispensable component in the solution of development problems, the right of every State, large or small, developed or at different levels of development, nuclear Power or non-nuclear-weapon State, to make use of that component of development under conditions of full equality and with no discrimination, was an indivisible and inalienable attribute of sovereignty. As a reflection of that requirement, the final document of the Conference of Non-Nuclear-Weapon States and, in particular, the provisions of Articles IV and V of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT)[1] enshrined the right and duty to co-operate in the peaceful uses of nuclear energy and stressed the special responsibilities of the nuclear Powers in that field.

10. International co-operation in the peaceful uses of nuclear energy had reached a stage at which it should be put on a permanent footing by establishing a legal framework of standards and basic principles. Being convinced of that, the Romanian

[1] Reproduced in document INFCIRC/140.

Government had proposed at the sixteenth session of the General Conference that an international legal instrument laying down the principles of international co-operation in the peaceful use of nuclear energy and the basic rights and duties of States in that field should be drawn up and adopted. [2] It noted with satisfaction that in response to increasingly felt needs, the idea of preparing such an international instrument was gaining wider acceptance. His delegation thought that the time had come for the question to be studied closely so as to find out the views of States on the subject and for concrete efforts aimed at the negotiation of such an agreement to be made. The Secretariat could help put that proposal in concrete form.

11. It seemed all the more necessary to take action without delay in view of the forthcoming Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons (the Review Conference), which would have to make a serious analysis of the way in which the parties had fulfilled the obligations they had assumed and of the practical results of the operation of NPT during the last five years. In view of its special responsibilities, the Agency could and should make an important contribution to ensuring that there was a suitable basis for making an accurate evaluation of the existing situation and for identifying what measures had to be taken in the future.

12. His country was particularly interested in the enormous prospects the use of nuclear energy was opening up in the field of nuclear power generation and technology, to which sectors the Agency was rightly giving priority. The country's development programme foresaw that in 1990 more than 20% of the total installed power would come from nuclear power stations. For that reason his delegation was pleased that the Agency intended to continue intensifying its efforts to help increase the contribution of nuclear power generation to solving the world's energy problems, which were of the greatest concern to the large majority of peoples.

13. His delegation considered that the Agency, which already had extensive experience, should, as a matter of priority, concentrate on the special needs of the developing countries, which had hardly begun to take steps towards installing nuclear power plants on their soil, so that they could be provided with multilateral and effective help.

14. Under present circumstances, when a good proportion of the planet's population was faced with dramatic problems of under-development and disease, the Agency's efforts to extend the application of isotopes and irradiation in industry, agriculture, hydrology, medicine, biology and in other related sectors of economic and social life were particularly useful, satisfying immediate practical needs.

15. He also wanted to mention the achievements of the Agency in the preparation of radiation

protection standards, in some aspects of safety in nuclear installations and the protection of the environment, a field to which his delegation considered the Agency should give special attention.

16. Since the economic and social progress of each country required the training of qualified national personnel, his Government had always attached great importance to the Agency's programme for training staff. In Romania, teaching, research and production in the field of physics had been practically integrated, which tended to contribute to the considerable increase of scientific and economic efficiency, as a result of a better use of staff and plant. It had also contributed to raising the level of research and to reducing substantially the duration of the research/development/application cycle.

17. His delegation was in favour of the more specific orientation of the Agency's revised programme for 1975-80 towards nuclear power and technology, the extension of the use of isotopes, irradiation and nuclear techniques in the most varied economic and social sectors, and towards an increase in the emphasis to be put on applied research.

18. Under the provisions of NPT, an important place in matters of concern to the Agency should, in the coming period, be given to nuclear explosions for peaceful purposes (PNE), a sector in which it seemed desirable to go more thoroughly into concrete economic and scientific aspects and to proceed to practical work.

19. The transformation of the objectives of that programme into facts would require ensuring that there was an equitable relationship between the Agency's safeguards activities and those devoted to fulfilling its primary function, namely the introduction and development of applications of nuclear energy for peaceful purposes, the encouragement of international co-operation in that field and the increase of technical assistance to the developing countries.

20. So that all people could fully benefit from the peaceful uses of the atom, it was, above all, necessary that atomic energy should no longer be used for destructive purposes and for the production and improvement of nuclear arsenals. The Romanian Government was categorically in favour of putting an end to the armaments race, of the reduction of military expenditure, of achieving nuclear disarmament. It was absolutely essential to obtain a ban on nuclear weapons and to achieve their destruction. The resources thus saved could then be used for the purposes of peaceful development and for economic and social progress.

21. Mr. FEDOROV (Byelorussian Soviet Socialist Republic) welcomed the Democratic People's Republic of Korea and Mauritius to membership of the Agency. The General Conference's decision was in accordance with the principle of universality, a fundamental principle of the United Nations and its specialized agencies for which the Byelorussian Soviet Socialist Republic had always stood up. His

[2] See documents GC(XVI)/OR. 155, para. 41 and GC(XVII)/OR. 164, para. 21.

delegation was sure that the new Members would make a useful contribution to the Agency's work. His delegation also shared the views of the Democratic People's Republic of Korea concerning the peaceful unification of Korea and a single representation of the Korean people in the United Nations.

22. The eighteenth regular session of the Agency's General Conference was taking place at a time when the "cold war" atmosphere was giving way to normal, reasonable forms of international contact based on peaceful coexistence, when the need to strengthen and expand collaboration between countries in all fields - including science and technology - was becoming generally recognized and when the ideas of collaboration were beginning to assume concrete forms.

23. The consistent implementation of the peace programme adopted by the 24th Congress of the Communist Party of the Soviet Union and the major foreign-policy actions taken by the Soviet Union in recent years - including the signing of important agreements with the Federal Republic of Germany, France, the United States of America, and a number of other countries - had had a beneficial influence on the entire international climate. The agreements between the Soviet Union and the United States of America on the prevention of nuclear war and the limitation of strategic arms were of great importance for the further improvement of the world situation, as was the Treaty on the Limitation of Underground Nuclear Weapons Tests, [3] which had a bearing on the Agency's work. Mr. Brezhnev, the General Secretary of the Central Committee of the Communist Party of the Soviet Union, had recently said that the Soviet Union regarded the Treaty as a step towards a complete ban on the testing of nuclear weapons and was ready to conclude an agreement to that end. It was to be hoped that the day was not far away when such an agreement would become a reality.

24. The steady improvement in the world situation was having a positive effect on the work of international organizations, including the Agency, whose authority was growing with the expanding utilization of nuclear energy for peaceful purposes. The Agency was on the whole coping well with the tasks entrusted to it and was exerting a great influence on the development of nuclear science and technology, especially in the developing countries. Its activities in connection with safeguards, nuclear safety, environmental protection, nuclear power generation, reactors and the International Nuclear Information System (INIS) were, in his delegation's opinion, being conducted quite efficiently and deserved wide support. Moreover, his delegation had no objections to the programme for 1975-80[4], which took into account present needs and the wishes of Member States.

25. Noting the useful and important work being done by the Agency in connection with NPT, he

emphasized that much remained to be done. A further increase in the number of States party to NPT, and hence in the number of States concluding safeguards agreements with the Agency, would contribute to peace and international security and to the development of international collaboration in the peaceful utilization of nuclear energy. Accordingly, still greater efforts by the Agency were called for in achieving the adherence of the vast majority of countries to NPT. In the opinion of his delegation, the Agency would be assisted in those efforts by the initiative taken by the Governments of the Soviet Union, the United Kingdom and the United States of America concerning the provision to the Agency of information about the export and import of nuclear materials destined for use in any non-nuclear-weapon State[5].

26. Nuclear energy was being used in the Byelorussian Soviet Socialist Republic in a variety of fields, including science and medicine. Theoretical and experimental work was continuing on power reactors with a dissociating coolant, and the prospects of gas-cooled fast reactors with a dissociating coolant had again been confirmed. Specialists from Member States of the Council for Mutual Economic Assistance (CMEA) were taking part in the programme in question.

27. The Institute of Nuclear Power Generation of the Academy of Sciences of the Byelorussian Soviet Socialist Republic was also doing a great deal of work relating to the evaluation of nuclear constants, the uptake of uranium by the organism and the fissile material concentration in the fuel elements of critical assemblies. Considerable success in developing a theory of radiation damage in solids and seeking practical ways of reducing the harmful influence of radiation on the properties of solids had been achieved by scientists at the Institute of Solid State Physics of the Academy of Sciences of the Byelorussian Soviet Socialist Republic, who were working with a research reactor, a gamma facility and electron accelerators. Work was also being done at the Institute on the physics of the atomic nucleus, with extensive use of nuclear spectroscopy, and on the theory of nuclear particles.

28. Radioisotope techniques were being used in process control, science and many other fields virtually throughout the economy of the Republic. Significant success had been achieved in the use of radiation for sterilizing and modifying various materials.

29. The Byelorussian Soviet Socialist Republic had considerable understanding for the problems of the developing countries and their desire to liquidate the legacy of colonialism. It was rendering assistance to such countries both on a bilateral basis and through international bodies such as UNDP, to which it was making available 135 000 roubles each year. In response to the appeal of the General Conference, it was also going to make available to the Agency's General Fund

[3] Reproduced in document INFCIRC/208.

[4] See documents GC(XVIII)/526 and Mod. 1.

[5] See document INFCIRC/207.

20 000 roubles in national currency, to be used in supplying equipment, instruments and other items to developing countries (primarily to those which had adhered to NPT) under the Agency's technical assistance programme.

30. Mr. OSZTROVSZKI (Hungary) said that the past year had seen further advances in mutual understanding and co-operation in international political life. He was convinced that all countries, even those with different social structures, were interested in strengthening peace and international security, settling international conflicts peaceably and reducing the tension existing in various parts of the world. The Hungarian Government was striving sincerely to help reduce that tension and to make the process irreversible. Hungary had participated actively in the second phase of the Conference on Security and Co-operation in Europe and hoped that the third phase of that conference would take place at the highest level in the near future.

31. CMEA had recently celebrated its 25th anniversary. Hungary continued to attach great importance to the multilateral collaboration organized within the framework of CMEA and considered it important for close ties to be established between the Agency and CMEA.

32. His Government firmly believed that the peaceful utilization of nuclear energy, the maintenance of peace in the world and the objectives of the Agency were inextricably bound together. The Agency, under the excellent leadership of Mr. Eklund, should take advantage of the positive developments occurring on the international scene. One result of those developments was that the principle of universality was being more fully applied within the Agency, and his delegation was pleased to welcome the Democratic People's Republic of Korea and Mauritius as new Members of the Agency.

33. The Hungarian delegation noted with regret that there were still countries which had not signed or not ratified NPT and were not doing anything to increase the effectiveness of safeguards.

34. He had been gratified to note the Treaty between the Union of Soviet Socialist Republics and the United States of America, signed in July 1974, on the Limitation of Underground Nuclear Weapons Tests. That was the spirit in which the Agency should operate and it should do everything in its power to bring a complete end to the application of nuclear technology for military purposes and to promote the peaceful applications of nuclear energy. He also wished to express satisfaction at the action being taken by certain suppliers of nuclear materials to ensure that countries which had not signed and ratified NPT but which were receiving fissionable materials and nuclear equipment would be obliged to submit those materials and equipment to Agency control. [6]

35. Expressing his delegation's approval of the Agency's annual report for 1973-1974[7] and its programme for 1975-80 and budget for 1975, he said that his delegation attached great importance to activities in the field of nuclear safety and environmental protection, nuclear power and economics and nuclear safety codes. The distribution of funds between the various programmes seemed to be correct and an increase in the budget was justified to cover a rational and expanding programme. Bearing in mind the Agency's financial difficulties, it was pleasing to note that other United Nations organizations were making contributions to programmes of common interest. In that connection he was pleased to announce that Hungary's voluntary contribution to the General Fund was being increased by 50%.

36. In the past year considerable progress had been achieved in the peaceful utilization of nuclear energy in Hungary. Work was proceeding on the design and construction of Hungary's first nuclear power station. Research organizations in Hungary, notably the Central Physical Research Institute of the Hungarian Academy of Sciences had contributed greatly to solving various problems concerning the operation of nuclear power stations with water-cooled, water-moderated reactors. An international team working in that Institute was carrying out reactor physics research on a critical assembly of the water-cooled, water-moderated type and important results had already been obtained.

37. Radioisotope techniques were being applied on an ever increasing scale in agriculture, industry and medicine and work would commence soon on the construction of a plant for the radiation sterilization of medical products under a programme sponsored by UNDP and the Agency. Research workers in the food industry were participating in an international programme for the irradiation of food products which was being co-ordinated by the Agency. In addition many Hungarian institutes had research contract agreements with the Agency.

38. Mr. BOSWELL (Australia) said that the events of the past year had given Members cause to reflect upon the Agency's objective, as expressed in its Statute, which was "to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world".

39. As the Director General had pointed out in his statement to the Conference[8], nuclear energy could be expected to make an increasing contribution to the growth of the world economy. Nuclear power was becoming attractive on economic grounds for reactor sizes as low as 100 to 200 MW, and its rapid expansion could be anticipated in developing as well as developed countries. One of the Agency's tasks would be to help ensure that such expansion took place, as the Director General had said, under comprehensive, internationally accepted safety and reliability criteria, and under safeguards which

[6] See document INFCIRC/209 and Addenda 1 and 2.

[7] GC(XVIII)/525.

[8] GC(XVIII)/OR. 168, paras 45-79.

prevented the misuse of fissionable material for purposes which could endanger peace and security.

40. The development of proper standards for reactor safety, siting, and quality control was already receiving greater attention. The procedures by which such standards were arrived at would themselves have educational value, and for that reason his delegation hoped that the deliberations of the expert committees concerned in preparing the necessary codes and guidelines would be accessible to all interested parties. It was of great importance for the future development of nuclear power that all concerned, experts and general public alike, should know and have confidence in the safety arrangements of the nuclear industry in their country.

41. Australia believed that the Agency had done well in adapting its programme to the new demands for the wider development of nuclear power. Nevertheless, the limited resources available to the Agency had always to be borne in mind, as had the need for a continuous process of reappraisal of priorities, coupled with vigilance to ensure that the Agency's programmes did not duplicate others.

42. Apart from problems of safety and waste disposal, nuclear energy involved the further danger that fuel could be diverted to make nuclear explosive devices. The spread of nuclear technology implied dissemination of the ability to fabricate such devices, and that ability could of course be used for military no less than for peaceful purposes. Australia had always believed that the benefits of nuclear energy could be widely disseminated without unacceptable dangers only if the spread of nuclear technology were accompanied by corresponding safeguards. The two had to go together, and an effective Agency safeguards system was in the interests of all countries.

43. In that connection both suppliers and recipients of nuclear materials and equipment bore serious responsibilities. Recognition of those responsibilities, and of its obligations under Article III. 2 of NPT, had just led Australia, in common with a number of other actual or potential nuclear exporting countries, to notify the Director General that it would not provide nuclear materials or equipment except under appropriate safeguards.

44. He approved of the start that had been made, by the decisions adopted at the Board meetings immediately preceding the present session, on tackling the problem of PNEs. That problem now appeared to call for greater international attention, with a view to creating an international framework which would provide the necessary guarantees that PNEs would not be misused. His delegation believed that NPT played a key role there also. Article V of NPT provided an assurance that States which had contributed to world peace and security by undertaking not to engage in the manufacture of nuclear explosives for any purpose would be able to obtain the benefits of PNEs under the most favourable terms.

45. In the light of the request by the General Assembly of the United Nations that the Agency

work towards the establishment of an international service for PNEs[9] as envisaged under NPT, he believed that the decisions just adopted by the Board would enable the Agency to progress towards the establishment of a credible international service for PNEs.

46. His delegation shared the Director General's disappointment that only two more States had become parties to NPT during the past year. NPT was a vital safeguard against proliferation and in that respect he wished to emphasize that Australia regarded as proliferation the further extension of any nuclear explosive capability. A lead was needed to give new life to NPT, and he earnestly hoped that all those States which had not yet become parties thereto would now do so.

47. Finally, he wished to express his delegation's continued support for the Agency's technical assistance programme. Australia accepted the need for an increase in the target level of voluntary contributions to the General Fund, and had indeed already pledged an amount representing its full assessment at the new level of US \$4.5 million recommended by the Board of Governors.

48. Mr. TUNALIGIL (Turkey) remarked that the idea of an energy crisis, which had already engaged the attention of some delegates to the preceding session of the General Conference, had now become grim reality. A shortage of conventional energy was now menacing developing countries striving for industrialization, and was likewise threatening the accustomed way of life in already industrialized States. Against that bleak and depressing background the tasks of the Agency had become more arduous and more important than ever.

49. Indeed, his delegation believed that the Agency would have to tackle still more complex problems in the years ahead, and the degree of success achieved in solving them would largely govern the organization's future reputation and credibility. Success on the Agency's part would help to justify the faith of those countries which were putting their trust in nuclear energy. Turkey hoped and expected that the Agency would overcome those newly-emerging difficulties and live up to the expectations of all its Members, particularly those drawn from the ranks of the developing countries.

50. That being so, he wished to stress the importance of the prospecting work for uranium ores that was going on in many parts of the world, including Turkey. Turkey had also been one of the 14 countries covered by the 1972 market survey of the potential demand for nuclear power in developing countries. [10] His Government believed - as had been mentioned by the Turkish delegate at the preceding session - that a periodic revision of the results of the market survey would be extremely valuable. [11]

[9] See General Assembly Resolution GA. 2829 (XXVI).

[10] See document GC(XVII)/506.

[11] GC(XVII)/OR. 164, paras 101 and 102.

51. Since uranium appeared for the time being to be the only alternative to fossil fuel sources, further uranium prospecting was of crucial importance. It was common knowledge that the world's proven uranium reserves would not suffice to meet the demand expected by the end of the century, and enrichment facilities would also be inadequate in another two or three decades' time. On the other hand, it was virtually certain that fresh reserves of uranium ore would be discovered, especially thanks to the development of new prospecting methods and techniques.

52. The Agency had indeed launched jointly with UNDP a large-scale uranium exploration project in south-west Anatolia, scheduled for a duration of three years. While thanking both the Agency and UNDP for making their funds and expertise available, Turkey considered that the Agency should prosecute the search for uranium and thorium raw materials even more energetically. Larger financial appropriations would, of course, be required for that purpose.

53. It was obvious that uranium prospecting was only a preliminary: in order to meet their energy needs, the developing countries would also require advice, specialized personnel training and the provision of nuclear power station equipment. In that connection he wished to thank the Government of the United States of America for the cost-free transfer of title to a certain amount of nuclear material.

54. Problems of safety, environmental protection and safeguards were inevitable accompaniments of the possession of nuclear reactors, and were part of the multifaceted challenge - hence the hard work - which lay before the Agency. Turkey was, however, convinced that with goodwill, understanding, determination and an enhanced co-operative spirit the Agency would be able successfully to take up that challenge, and the Turkish Government would not fail to assist the Agency in achieving its objectives.

55. Mr. OGUNLANA (Nigeria) said it was now universally realized that the shortage of energy was a problem with which every country would have to come to grips. The industrialized countries needed energy to maintain and improve upon their present standard of living while the developing countries needed energy to raise their peoples from subsistence levels. Ironically, it was the developing countries which needed energy the most but were the least equipped to provide it. The equipment he had in mind had less to do with physical gadgetry than with mental attitudes and the discipline needed to achieve goals.

56. The only known solution to the energy crisis was nuclear energy, the development of which entailed a firm grasp of what was still one of the most difficult areas of human knowledge. The problem for developing countries was one of channelling their efforts in nuclear work towards activities that would lead to self-reliance in the harnessing of nuclear energy.

57. The importance of nuclear energy was further underlined by the fact that electricity generated from nuclear power stations would in most cases now be cheaper than that generated from stations using coal or oil. Until recently, it had been thought that nuclear power was not competitive with power from fossil-fuelled plants when output was below 500 MW. That threshold had been steadily lowered and was now between 100 and 200 MW. The result had been a spate of orders for nuclear power plants in the industrialized countries. In fact, one such country was reportedly planning to decommission some of its fossil-fuelled plants. It was to be hoped that developing countries, too, would be able to avail themselves of the opportunity of solving the energy problem through nuclear technology.

58. It was well known that a crucially important factor in the cost of a nuclear generating plant was the radiation shield facility. To help bring down those costs intensive research should be carried out on interactions between radiation and matter. One approach would be to consider such interactions as field-particle phenomena. The notion of fields was one which was permeating all aspects of the physical sciences.

59. Once the fact was accepted that nuclear energy would play an ever-increasing role in economic development, the exchange of ideas and opinions on the subject needed to be encouraged. Co-operation between the Agency and Nigeria would be made easier as a result of the recent establishment of a Nigerian Embassy in Vienna. The Nigerian delegation looked forward to closer joint efforts between the Agency and Nigeria.

60. Mr. DANSO (Ghana) said his delegation warmly welcomed the Democratic People's Republic of Korea and Mauritius as Members of the Agency.

61. It wished to commend the concise but comprehensive report of the Director General on the main problems facing the Agency. Of particular interest to Ghana, as a developing nation, were the question of technical assistance and the problem of safeguards. In that connection it welcomed the decision by the Board to recommend to the General Conference an increase in the target for voluntary contributions to \$4 500 000. It strongly hoped that further contributions in kind would be forthcoming from the developed countries to make up the expected \$6 million in technical assistance for the year 1975. His delegation appreciated the efforts of the Agency to meet technical assistance requirements to the extent permitted by the resources available. Ghana would continue to support the Agency in those efforts.

62. The delegation of Ghana regretted to learn of the impending retirement of Mr. Goswami, the Deputy Director General for Technical Assistance and Publications. It wished him every success.

63. As regards the programme of the Ghana Atomic Energy Commission, early in 1974 the Government of Ghana had decided to reactivate the reactor project, which had been suspended for

some time. The Commission was therefore working actively towards completion of the reactor. Ghana hoped that the Agency would be able to offer generous assistance in the development of its reactor programme. The Commission was also expanding and diversifying its programme in relation to other peaceful applications of nuclear energy with a view to contributing to the solution of some of the country's economic, agricultural, technological and health problems.

64. His delegation considered the International Centre for Theoretical Physics at Trieste an important and necessary institution of the Agency. Its ample facilities for research and consultation among theoretical physicists had been very useful to scientists from Ghana.

65. Ghana considered training to be a vital aspect of any country's scientific and technological programme and was therefore happy that UNDP had, for the second time, provided funds enabling it to hold a regional training course for radioisotope laboratory technicians in collaboration with the Agency. Plans for training at higher levels were also being prepared. In conjunction with the expansion of its nuclear applications programme, Ghana would very shortly build new laboratories which would include adequate facilities for the training not only of technicians but also of scientists, medical officers and engineers. All those training facilities would be at the disposal of the Agency for holding future courses. It was also hoped that scientists from other parts of the world, particularly from Africa, would find it useful to come to those laboratories to carry out special research assignments.

66. In all those endeavours, Ghana was guided by the conviction that co-operation among nations in the peaceful applications of nuclear science and technology was one of the concrete ways by which mankind could justifiably be led to believe that nuclear science and technology would not be used for destructive purposes.

67. Mr. NEUMANN (Czechoslovakia) said that, in view of the favourable international atmosphere, the Agency had an important part to play in fostering international co-operation in the peaceful uses of nuclear energy and that Czechoslovakia considered it an important task to take an active part in assisting the Agency in carrying out the tasks entrusted to it in that respect, particularly in connection with the implementation of NPT and related safeguards agreements.

68. It had to be stated, however, that the present situation with regard to safeguards was not entirely satisfactory. Despite the fact that more than four years had passed since NPT had come into force, a number of States active in the nuclear field had not signed safeguards agreements, or had not taken the requisite steps to ensure that the agreements were put into effect. It was to be hoped that all States Members of the United Nations would become parties to NPT or conclude safeguards agreements by the time of the Review Conference in Geneva in 1975.

69. The Czechoslovak Government was constantly seeking to improve its system for national control of nuclear materials, and had requested the Agency's assistance in carrying out effective and economical inspections in Czechoslovakia; in addition, it was planning further collaboration with the Agency in improving safeguards techniques and analysing samples taken during Agency inspections.

70. Czechoslovakia attributed considerable importance to the Agency's long-term programme of activities for the years 1975-80. The trend in the long-term programme largely coincided with Czechoslovakia's own development plans and therefore earned its full support. Apart from the safeguards activities, his delegation welcomed the developments in nuclear power production, which was the only energy source that could meet the needs of mankind, both at the present time and in the future. A further matter of considerable interest to Czechoslovakia at the present juncture was the combined use of nuclear energy sources, first and foremost for purposes of heating.

71. It was clear, however, that the development of nuclear power was closely associated with the problem of nuclear safety, and the Agency's initiative in that field was therefore greatly welcomed. Although nuclear energy was in a sense one of the safest and cleanest sources of power in terms of environmental effect, it was equally important to give due attention to the management of nuclear waste. His country was consequently following the Agency's programme in that field with interest.

72. The subject of information acquired ever greater importance as the peaceful uses of nuclear energy progressed, hence the Agency's establishment of INIS was highly commendable. The Czechoslovak Socialist Republic was taking full advantage of the system in order to set up a national information service of a similar kind.

73. The admission of the Democratic People's Republic of Korea was of great importance and would have a positive effect on the Agency's activities; along with the admission of Mauritius, it duly reflected the Agency's principle of universality.

74. Among the salient events in the implementation of Czechoslovakia's nuclear energy programme over the past year, the development of nuclear power had been paramount; with the collaboration of the Soviet Union and other members of CMEA, a programme for the development of water-moderated, water-cooled and fast reactors had been got under way and work was also in progress for the construction of the technological equipment required for nuclear power production. The focus of attention was district heating based on nuclear power generation, and problems relating to the physics and safety of power plants.

75. In the field of nuclear safety, experts were working on the establishment of operational, technological and legal standards. Their main aim was to ensure that the principles of nuclear safety

were observed in the operation of the A-1 nuclear power station, and in the pre-operational documentation for the power stations B-1 and B-2. Efforts were also being concentrated on drafting the framework of the atomic energy act, with particular stress on safety techniques and protection of the environment.

76. With regard to the use of radionuclides, renewed attention had been given to the development, within the framework of CMEA, of equipment for sterilizing biomedical preparations, as well as to broadening the range of labelled compounds.

77. In view of the higher standards required in personnel dosimetry, following the development and application of nuclear techniques for peaceful purposes, Czechoslovakia was devoting considerable attention to new personnel dosimetry methods by which the number of monitored workers could be increased. The gradual introduction of thermoluminescence dosimetry was under way and it was eventually expected to replace the film dosimetry technique.

78. With regard to the provision of technical assistance by the Agency, the Czechoslovak Socialist Republic fully supported the Agency's programme in that field, and had increased its voluntary contribution to the General Fund by 25%; at the same time, the Agency would do well to consider the provision of technical assistance primarily to those countries which had signed NPT and concluded safeguards agreements.

79. In conclusion, the Government of the Czechoslovak Socialist Republic would like to propose that two Agency meetings should be held in Czechoslovakia in 1975, and that organizational work for a symposium in 1976 should be begun; it also wished to offer States Members of the Agency, under the Agency's fellowship programme, five long-term fellowships for study in Czechoslovak higher educational establishments, four one-year fellowships for work in the nuclear field at research institutes, as well as the provision of additional funds for three one-year fellowships financed under UNDP.

80. Mr. MERINO (Uruguay) said he wanted to thank the Agency and the scientists and administra-

tors in its employ for the work which had been carried out in the past. Although it was closely watching the nuclear programmes which other States were developing in the face of the world energy shortage, Uruguay would have to proceed in stages before embarking on nuclear power projects, familiarizing itself first with such nuclear applications as irradiation, radioisotopes in nuclear medicine, etc.

81. Since Uruguay was both a producer and an exporter of foodstuffs, it was keenly interested in the techniques of food preservation. Steps had been taken to install an industrial plant for food preservation and, in an investigation carried out in collaboration with the Republic of Argentina regarding the public demand for irradiated potatoes, use had been made of the recommendations and publications of the Agency.

82. Progress was also being made in prospecting for uranium, in nuclear medicine, the agricultural applications of radioisotopes, and the preparation of radiopharmaceuticals. His delegation believed that the Agency, in pursuing its essential objective of disseminating nuclear technology, should pay increased attention to areas of economic and social significance. Countries like Uruguay, where nuclear programmes were not far advanced, had to budget very carefully and they should be helped to determine the most useful areas of nuclear applications and given the necessary assistance to enable them to achieve significant results.

#### CLOSING DATE OF THE SESSION

83. The PRESIDENT recalled that, under Rule 8 of the Rules of Procedure, the Conference had to fix the closing date of the session, on the recommendation of the General Committee.

84. In the light of that Committee's consideration of the matter, he wished to recommend on its behalf that 20 September be fixed as the closing date.

● 85. The Committee's recommendation was accepted.

● The meeting rose at 12.45 p. m.

