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RECORD OF THE ONE HUNDRED AND FIFTY-SECOND PLENARY MEETING

Held in the conference centre of the Secretariat of External Relations,
Mexico City, on Wednesday, 27 September 1972, at 10.50 a.m.

President: Mr. FLORES DE LA PEÑA (Mexico)
later: Mr. ANDRZEJEWSKI (Poland)

Item of the agenda**	Subject	Paragraphs
8	Adoption of the agenda and allocation of items for initial discussion	1 - 2
7	Statement by the Director General	3 - 40
9	General debate and report for 1971-72	41 - 124
	Statements by the delegates of:	
	United States of America	42 - 63
	South Africa	64 - 78
	Indonesia	79 - 92
	Netherlands	93 - 107
	Brazil	108 - 124

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** GC(XVI)/490.

THE RECORD

ADOPTION OF THE AGENDA AND ALLOCATION OF ITEMS FOR INITIAL DISCUSSION
(GC(XVI)/489)

1. The PRESIDENT drew attention to the report by the General Committee contained in document GC(XVI)/489 on its consideration of the provisional agenda for the session [1]. He proposed that the Conference approve the agenda for the session as set forth in that document and also accept the General Committee's recommendations regarding the allocation of items for initial discussion.

● 2. It was so decided.

STATEMENT BY THE DIRECTOR GENERAL

3. The DIRECTOR GENERAL said that, in view of the role that Mexico had played in arms control and disarmament in Geneva, New York and at Tlatelolco, it was most appropriate for the Agency to hold its second General Conference away from Headquarters in Mexico City. The Conference would be asked to approve the co-operation agreement between the Agency and the Organization for the Prohibition of Nuclear Weapons in Latin America (OPANAL) [2], set up under the Treaty for the Prohibition of Nuclear Weapons in Latin America (the Tlatelolco Treaty) [3] which itself was largely due to Mexican initiatives. He wished to thank the President of the Republic and the Government and people of Mexico for their warm welcome and hospitality, and for the excellent help and facilities they had accorded the Agency in overcoming the logistical problems of holding the Conference far away from its usual venue.

4. During the past year, the rapid development of nuclear power as a means of meeting growing energy needs, coupled with the concern for the preservation of public health and environmental quality, had led the Agency to focus attention on its task of promoting nuclear safety and environmental protection.

5. In March 1972, the Board of Governors had decided that one of the Agency's most important and urgent tasks, in which it should take the leading role in close collaboration with competent organs of the United Nations, specialized agencies and other international organizations concerned, was the elaboration of recommended standards of safety concerning the dispersion into the environment of radioactive waste resulting from the peaceful use of nuclear energy.

[1] GC(XVI)/478.

[2] GC(XVI)/481, Annex.

[3] Reproduced in the United Nations Treaty Series, Vol. 634, No. 9068.

6. The United Nations Conference on the Human Environment held in Stockholm in June 1972 had been the first large-scale international meeting at which attempts had been made to identify the environmental problems of the planet. The Board's decision had been reported to the Stockholm Conference and echoed in two of the Conference's recommendations relating to nuclear waste management. [4]

7. The recommendations of the Stockholm Conference would be discussed at the current session of the General Assembly of the United Nations. It was therefore too early to foresee all the implications for the Agency of the decisions which the Assembly might take.

8. The Agency had a statutory obligation to contribute to a proper understanding of the environmental consequences of large-scale use of nuclear power. The Agency had access to the advice of the world's leading experts in that field, as had so clearly been demonstrated at the symposium organized jointly with the United States Atomic Energy Commission in 1970 on the environmental aspects of nuclear power stations. The Agency had considerable experience in dealing with regulatory questions, as demonstrated by numerous publications in the Safety Series. The Agency was actively supporting the International Commission on Radiological Protection and collaborating with the United Nations Scientific Committee on the Effects of Atomic Radiation.

9. All this being said, it should be understood that the Agency itself could only recommend standards and codes of practice; the responsibility for their implementation lay with Member States, although Agency projects required adherence to the Agency's basic health and safety standards. The Agency intended to take a more active role in advising Member States on health and safety conditions in existing facilities, and one advisory mission was already in the field.

10. The nuclear industry had, throughout its existence, been extremely successful in achieving a safety record which was probably unique in the history of industrial development. However, with the anticipated enormous expansion of installed nuclear capacity from 27 000 MW in 1972 to some 190 000 MW in 1978, it would certainly be wise to start facing the problems which that increase would involve. That would be the only way to ensure solution of the much greater problems associated with the further gigantic increase in nuclear capacity to some 3 000 000 MW at the end of the century.

11. Bearing in mind those problems and provided that the necessary funds would be made available, some additional and expanded activities could be considered for 1973 and 1974, which might include:

- (a) Methods of establishing the capability of various sectors of the environment to accept radioactivity;

[4] See United Nations document A/CONF.48/14, Part one, II, B., Recommendation 75 (a) and (b).

- (b) Study of critical radionuclides and their environmental transfer mechanisms;
- (c) Establishment of working limits for releases of radionuclides from a nuclear facility;
- (d) Assessment of the environmental impact of nuclear power programmes;
- (e) Study of appropriate environmental surveillance around nuclear installations;
- (f) Research on the fate and behaviour of radioactive materials released to the environment, and other data necessary for establishing limits for such releases;
- (g) Research on cost-benefit analyses of environmental controls; and
- (h) Estimation of population dose from radioactive contaminants present in the environment.

12. That additional programme had recently been worked out by the Agency's Secretariat and he would welcome comments from the General Conference on it. He had also convened a panel of experts from outside the Secretariat early in November 1972, and its report would be submitted as a special item to the Board's Scientific Advisory Committee when it met in Vienna at the beginning of December. The extra costs for the expanded programme were estimated at \$100 000 for each of the years 1973 and 1974, which would also permit a certain expansion of the work on marine pollution of the International Laboratory of Marine Radioactivity at Monaco.

13. New initiatives of the kind he had described might also be supported by the Environmental Fund if the latter were established by the General Assembly. The Agency's environmental programme should also give the Agency a sound basis for intensified public information activity regarding nuclear energy. He was convinced that the general public, if presented in an unbiased manner with the alternatives available to cope with a future power shortage, would understand the advantages offered by nuclear power in terms of minimal detrimental effects on the environment.

14. He wished to remind the Conference that the theme of the human environment would be dealt with by the panel to be held at the Salazar Nuclear Centre on 2 October, and he hoped that as many delegates as possible would attend.

15. Nuclear desalting had been on the Agency's programme for some time, although specific activities during the last few years had been running at rather a low level. Still, the report of the joint United States/Mexican Working Group under the chairmanship of a consultant, the former Deputy Director General of the Agency, Mr. Balligand, had been issued and the recommendations made were now being studied by the two Governments concerned. The results of the Oak Ridge study on the application of large water-

producing energy centres in the Middle East, in which the Agency had participated with expert services, had recently been issued in draft form and the Secretariat had been asked to give its comments thereon by the end of the year.

16. The Shevchenko fast-breeder reactor in the Soviet Union to generate 250 MW(e) and to furnish 125 000 m³ of desalted water per day was now near completion. It was expected that the reactor would be loaded at the end of 1972 and power runs started. He had had the opportunity of visiting the reactor site about two months earlier and it had been an unforgettable experience, in that arid area near the Caspian Sea, to see how modern technology could defeat unfriendly natural conditions and create in a desert acceptable conditions for the construction of a modern city with a population of over 80 000 people enjoying cost-free water supplies - on the average, half a cubic metre per person per day. That experience represented a vision of what could be achieved for the benefit of the peoples of the Middle East if the results of the Oak Ridge study on large agro-industrial complexes could be turned to practical use.

17. The quest for additional power continued, the steady increase in demand slowing down to some extent only in certain countries where temporary economic recessions had occurred. The change-over from thermal reactors to commercial fast breeders obviously could not be expected to take place until well into the 1980s.

18. As regards nuclear power for developing countries, the market survey initiated in 1971 by the Agency had now covered six countries out of the 14 to be included, and the information derived therefrom would be placed before the Conference at its seventeenth session. Such studies might have to be continued in the future, since they were beneficial to Member States, to the nuclear industry and to the financing organizations which would have to be called upon for help when a good case could be made for implementing the recommendations of a survey. Towards the cost of the survey, now estimated at about \$250 000, the Agency had received cash contributions from the International Bank for Reconstruction and Development and other financial institutions and Member States, apart from the services of experts free of cost. Booklets outlining the results of the survey would be published in 1973.

19. The implementation of the Agency's commitments arising out of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) [5] was proceeding, though at a somewhat reduced pace. Hitherto, 98 States had signed NPT and 74 had ratified or acceded to it. Negotiations on agreements between States party to the Treaty and the Agency had been completed in 30 cases, which was not a very impressive number, considering that a large part of the world's nuclear activity remained outside the scope of NPT. For example,

[5] Reproduced in document INFCIRC/140.

out of the 44 nuclear power reactors with a total generating capacity of some 10 500 MW operating in 13 non-nuclear-weapon States, only seven, accounting for about 2000 MW, were covered by the agreements in connection with NPT already in force. However, half of the remaining reactors were subject to Agency safeguards under non-NPT arrangements, the other half being in non-nuclear-weapon States Members of the European Atomic Energy Community (EURATOM).

20. NPT would receive a fresh impetus from the agreement reached between the Agency, the non-nuclear-weapon States Members of EURATOM and EURATOM itself which had been approved by the Council of Ministers of the European Communities and by the Board of Governors. The precondition for ratification of NPT by the five non-nuclear-weapon States Members of EURATOM had now been met, and it was to be hoped that the ratification procedures would be completed as rapidly as possible.

21. In 1973 the world would celebrate the tenth anniversary of the Moscow Partial Test Ban Treaty banning nuclear weapons tests in the atmosphere, in outer space and under water, and it was surely not too early to consider completing the work with an agreement on a total test ban. That would be a positive step towards the fulfilment of Article VI of NPT, under which each of the parties undertook to pursue negotiations on effective measures relating to the cessation of the nuclear arms race at an early date.

22. A total test ban treaty would undoubtedly make some provision for the use of nuclear explosive devices for peaceful purposes. Observers from the Agency could be present at such detonations and report to the international community on their findings. Indeed, the Board had already prepared guidelines for the international observation, by the Agency, of nuclear explosions for peaceful purposes. Those guidelines had been transmitted to the General Assembly of the United Nations, which, recognizing the Agency's role in that field, had in the past year requested it, inter alia, to study ways and means of establishing a service for nuclear explosions for peaceful purposes under appropriate international control. [6]

23. The Agency had continued to develop its safeguards system during the past year so that the existing staff could be utilized more efficiently and manpower requirements (a source of alarm for some) reduced. The full utilization of the material in the "Blue Book"[7] would depend, to a great extent, on the national systems of accounting for and control of nuclear material established in States with which the Agency had concluded, or was to conclude, agreements. The Agency was willing to assist them by providing advice on the establishment and operation of such systems, as it had offered to do previously.

[6] See General Assembly Resolution 2829 (XXVI).

[7] INFCIRC/153.

24. Preparations for an increase in the Agency's verification activities were closely related to arrangements for obtaining the services of national laboratories to carry out analyses on samples of nuclear materials taken during safeguards inspections. The Agency would have its own laboratory to make periodic assessments of the limits of error in the results of analyses performed by a network of national laboratories. The Austrian authorities had been most helpful in offering to rent to the Agency premises for the laboratory at Seibersdorf, near Vienna, and in agreeing to build facilities at Seibersdorf for the laboratories now located at Headquarters.

25. On 1 January 1973 the International Nuclear Information System (INIS) would complete its expansion to full subject scope. As a result of that expansion (carried out on a voluntary basis) the number of items of input had almost doubled, the monthly issues of ATOMINDEX now covering more than 2000 items on an average. A service providing up-to-date information on topics of interest to the INIS customer had been initiated on an experimental basis. A report on the progress of INIS during 1972-1974 would be submitted to the Board, as it had requested, in 1975. The new IBM 370/145 computer installed in mid-July would provide the additional capacity required for the expansion of INIS and other Agency programmes, apart from meeting the requirements of UNIDO.

26. All the proceedings of the Fourth International Conference on the Peaceful Uses of Atomic Energy held in 1971 in Geneva (the Fourth Geneva Conference) had now been published.

27. The increasing number of large-scale United Nations Development Programme (UNDP) projects executed by the Agency reflected the growing contribution of nuclear energy to industrial development and economic growth in developing countries. The trend towards larger projects in the nuclear field was particularly evident in the Latin-American region, which accounted for three such projects ranging from the development of uranium resources through the establishment of a nuclear research centre to the organization of a centre for non-destructive testing techniques.

28. It was to be regretted that the Agency's technical assistance programme still suffered from a lack of adequate financing. The technically sound requests which could not be met for lack of funds, along with the decreasing real value of the material assistance given, represented lost opportunities for the developing countries. The current target of \$3 million for voluntary contributions, if met, would finance a regular technical assistance programme with a purchasing power approximately equal to \$2 million in 1962, the target set for that year. Accordingly, he wished to urge Member States to increase their voluntary contributions, since it was through those untied cash contributions that the most flexible and effective technical assistance programme could be implemented.

29. The six-year programme [8] which the General Conference had before it had been prepared with a view to adapting the Agency to the new circumstances brought about by the changing requirements of Member States. The purpose of the new format of the programme document was to assist Member States in evaluating the Agency's planned activities. The programmes had been broken down into about a hundred components and an attempt had been made to relate the various activities, such as technical assistance, research contracts and laboratory work, in order to give a picture of the overall effort involved in each activity. Although it was realized that the number of components should be reduced by phasing out some, the selection of those would be easier in the coming year when the cost of at least the most important programme components would be known. The Agency would appreciate the views of Member States as to how the present diversification of the programme could be limited and the Agency's efforts concentrated for the greater benefit of all.

30. As regards the budgetary situation, the proposed budget for 1973 unfortunately represented, for the first time in the Agency's history, a small overall programme decrease in comparison with the previous year: the increase of 8.8% over 1972 was more than balanced by a 9.9% price increase, so that a programme decrease of 1.1% was the result. That trend must be broken, especially if the Agency was to maintain a dynamic programme which took account of the needs of Member States. It had been a sense of realism, not a dearth of ideas for new initiatives, that had compelled the Agency to present a reduced programme in circumstances which, one could only hope, would prove exceptional. The point had now been reached where automatic cost increases resulting from inflation or currency fluctuations could no longer be absorbed without detriment to the programme.

31. The Agency was doing its utmost to effect savings and keep expenses down. What many Member States might not realize was that serious and not entirely unsuccessful efforts were being made to increase revenues, and in fact revenues in 1972 were likely to be about 20% greater than in 1971.

32. Earlier in the year a raising of the level of the Working Capital Fund from \$1.7 to \$2.5 million in order to alleviate the strains on the Agency's cash liquidity caused mainly by currency fluctuations had been recommended to the Board. Instead, some Members had offered to pay their assessed contributions more promptly. If all commitments were met according to the schedule that had been drawn up, a Working Capital Fund of \$2 million would, it was hoped, be adequate for 1973. [9] Although in 1957, when the Working Capital Fund had been established, it had been adequate to cover the Agency's expenditures for six months, at its present level

the Fund would cover expenditures for only one and a half months and should therefore be increased in 1974.

33. The developments taking place within the United Nations system, especially as regards the salary system, now under review by the General Assembly, would affect the Agency as well. The fact that the Assembly's Special Committee for the Review of the United Nations Salary System had been unable to reach a unanimous agreement demonstrated the complexity of the problem of revising the United Nations salary structure. Nevertheless, the Committee's majority had been able to make constructive suggestions for a revised salary structure and should be congratulated for its efforts.

34. The progress made by the United Nations in achieving universality of membership would undoubtedly be reflected in the Agency too.

35. With regard to the co-ordination of programmes within the United Nations family, the environment problem, especially the practical implementation of the recommendations of the Stockholm Conference on institutional arrangements, would require attention in the coming few years. Existing resources must be fully utilized to avoid duplication of effort, however; co-ordination must not become an end in itself.

36. More and more attention was being paid by leading scientists and statesmen to the overall problem of finding adequate energy sources for future generations. Nuclear power should be considered as one possible solution, in combination with other, more conventional energy sources. Thermal reactors would give the world a breathing space until fusion and perhaps other energy sources were developed to relieve the strain on the earth's non-renewable natural resources.

37. The Stockholm Conference had recommended that a study be carried out in collaboration with the Agency and other appropriate organizations on "available energy sources, new technology, and consumption trends, in order to assist in providing a basis for the most effective development of the world's energy resources, with due regard to the environmental effects of energy production and use". [10] The Pugwash Conference on Science and World Affairs, discussing the same problem some weeks earlier, had also suggested the establishment of an international energy institute. The Agency should take an active role in that area, in collaboration with other international organizations, especially as the national authorities in many countries might find it advantageous, for public information purposes, to refer to the findings of an international body.

38. The composition of the Board's Scientific Advisory Committee had been enlarged by a decision taken in June. He wished to put on record

[8] GC(XVI)/485.

[9] Ibid., Annex V, draft resolution C.

[10] United Nations document A/CONF.48/14, Part one, II. B., Recommendation 59.

his gratitude to former members who had now left the Committee. Warm thanks were due especially to Professor Rabi, who had served on the Committee since its establishment.

39. He took pleasure in welcoming a new Member to the Agency, Bangladesh, whose instrument of acceptance of the Statute had been received by the Depositary Government.

40. In conclusion, he wished to thank the Austrian Government and authorities for their co-operation during the year. That co-operation had, as usual, been marked by a readiness to assist the Agency in every possible way. An additional word of thanks, as all would agree, was due to the Government of Mexico, the generous hosts of the Conference at its sixteenth regular session.

GENERAL DEBATE AND REPORT FOR 1971-72
(GC(XVI)/480, 480/Corr.1 and 3, 488)

41. The PRESIDENT, recalling that the annual report for 1971-72 had been circulated as document GC(XVI)/480, pointed out that Annex E to that document, dealing with the financial status of the Agency as at 30 June 1972, had been superseded by document GC(XVI)/488 which contained financial statements brought up to date as at 22 September. He then invited delegates to participate in the general debate.

42. Mr. SCHLESINGER (United States of America) extended his warmest congratulations to Mr. Flores de la Peña upon his election as President, and expressed his delegation's gratitude to the Government of Mexico for serving as host to the Conference in such a beautiful setting and for providing other courtesies.

43. He then read the following message from the President of the United States:

(1) "It is a pleasure to send my warmest greetings through Dr. Schlesinger to those who attend the Sixteenth General Conference of the International Atomic Energy Agency, and to express appreciation on behalf of the United States delegation to our southern neighbour, Mexico, for hosting this important meeting.

(2) "All those who value the development and application of the enormous potential of the atom for improving the well-being of all mankind recognize the significance of this annual meeting and applaud the important position of leadership which your organization has taken to facilitate international co-operation in the safe and peaceful uses of nuclear energy.

(3) "The International Atomic Energy Agency has undertaken the critical responsibility of carrying out the safeguards provisions of the Treaty on the Non-Proliferation of Nuclear Weapons, and we look forward to the

early conclusion of appropriate safeguards agreements. It has given positive direction to environmental protection programmes, and especially to the question of management of radioactive wastes.

(4) "In these and many other endeavours, this highly important world body has contributed knowledge, guidance and skill and provided the necessary impetus to closer collaboration among the nations of the world. I wish you another successful and productive session."

44. As President Nixon's message indicated, the Agency had made important contributions to the peaceful uses of nuclear energy. In reviewing its proposed programme for 1973-78 and budget for 1973, he (Mr. Schlesinger) had been impressed by the range and depth of its activities, and the relatively modest budget and staff with which those were being carried out. Among the functions that he had particularly noted was that relating to assistance rendered to developing Member States in the introduction of nuclear power. The Agency intended to place more emphasis on that activity, and he believed it to be a significant area of activity for the Agency, with a number of very important features. The United States was deeply impressed by the Director General's statement regarding plans for increased environmental protection programmes.

45. One of the principal issues currently being approached in the United States was the broad one of energy and public policy. It was necessary to predict, to the extent possible, anticipated energy requirements over the next 30 or so years and to specify alternative means of meeting them. That involved careful analysis of the availability and costs of various energy sources, such as uranium, coal, oil, natural gas and water on the one hand, and possible energy demands on the other. Other factors, such as the economic impact of alternative energy policies, and the biomedical and environmental effects associated with the recovery, conversion, transport and utilization of various energy sources, must also be given careful consideration. On the basis of such studies, many of which were already being undertaken by various organizations, it was hoped to make increasingly rational energy choices in the future.

46. It had become quite clear that nuclear energy must be one of the major energy sources in the United States in future years in view of the availability of nuclear fuel materials and the economy of scale in nuclear plants. While there were clear environmental advantages to nuclear power, there were also potential environmental problems associated with its large-scale development, as in the case of new energy resources of any form. The United States believed nuclear electric power could be produced with less insult to the environment.

47. On the other hand, it would be short-sighted not to recognize that some problems in the environmental field were unavoidably linked to the

use of nuclear fission as an energy source. Close international co-operation would be required in working towards the necessary solutions.

48. The problem of future energy needs and the desirability of dealing with them systematically and constructively was not, of course, confined to the United States. It was an issue that all nations, both developed and developing, faced in varying degrees. Those who responded to the problem at an early stage and developed a coherent energy policy would benefit over those who waited until a crisis was upon them.

49. Whatever help the Agency could supply to Member States in considering the nuclear power alternative in national or regional energy studies would be a major service. In fact, the Agency might wish to consider ways in which it could make the most effective contribution towards such studies.

50. In that connection it should be noted that the Stockholm Conference had adopted a recommendation calling on the Secretary-General - working with international bodies such as the Agency and the Organisation for Economic Co-operation and Development - to undertake a comprehensive study of available energy sources, new technology, and consumption trends. The purpose of the study would be to assist in providing a basis for the effective development of the world's energy resources, with due regard to the environmental effects of energy production and use. The first report was due by 1975. The results of the Agency's present market survey of nuclear power needs in developing countries should provide a timely input to the more broadly based study called for by the Stockholm recommendation.

51. When a country had made a decision to move ahead seriously with the nuclear power alternative, there were some specific services the Agency should be in a position to provide readily. Such services could include in-depth reactor siting evaluations, as well as assistance in the development of appropriate regulatory-type licensing procedures and of adequate health and safety standards and procedures. The Agency already provided services in those areas to some extent. However, with the growing number of nuclear power plants being installed or on order around the world, the Agency would face a real challenge in meeting the predictable needs for those services that would arise, and were already arising.

52. As all were aware, increasing international attention was being given to environmental protection and to the related areas of health and safety. The Agency had already made a good start in programmes in those vital fields by issuing its basic health and safety standards, safe transport regulations, and numerous codes of practice covering safe operating procedures, as well as management of radioactive wastes. Additionally, the Agency had made important contributions to the safe use of nuclear energy by sending missions to assist Member States in

dealing with safety and environmental problems, including nuclear power plant siting as well as research and training programmes.

53. The United States fully supported the emphasis the Agency was placing on research on health, safety, waste management and environmental protection. In that connection, a recent independent re-examination of the Agency's programmes and objectives, carried out by a group of distinguished American scientists and educators at the request of the Secretary of State, had concluded that the Agency's work was of continuing importance in the interest of international scientific advancement.

54. There was a distinct need for clear advance planning to develop the most effective means of tackling problems in those areas. The Agency's basic health and safety standards document [11] should be kept under continuous review and updated whenever necessary. In addition, the Agency could well undertake studies and analyses that would enable it to forecast major problems that would require attention in the broad areas of health and safety.

55. One of the important areas to which the Agency was now addressing itself was the long-term management of high-level radioactive wastes. The volume of such wastes would grow as nuclear energy became a more important source of electrical power in both developed and developing nations. The Agency now had an unusual opportunity to help define the international scope of the waste-management task and to develop and recommend standards and criteria for waste management, handling, storage and monitoring. The Agency's panel of experts was to meet in November to assess that problem. The panel's work should provide a basis for identifying criteria to be applied in the search for possible storage sites and in the provision of assistance to nations in regard to the effective management of high-level wastes. Such action was consistent with the recommendation adopted at the Stockholm Conference, which called on Governments to support and expand co-operation on radioactive waste problems with the guidance of the Agency and other appropriate organizations.

56. With respect to safeguards, many States had negotiated or were in the process of negotiating appropriate safeguards agreements with the Agency pursuant to NPT. It was particularly noteworthy that EURATOM and the Agency had been able to negotiate a complex and important agreement involving the nuclear programmes of the European Community and its Members. It was hoped that the Board's action in approving that agreement would bring about the early ratification of NPT by the participating Governments, and the active implementation of safeguards. Possibly other signatories which had not done so would now both ratify NPT and undertake the negotiation of safeguards agreements with the Agency pursuant to it.

[11] INFCIRC/18.

57. His Government wished to reiterate its strong commitment to the objectives of NPT. The United States which, for obvious reasons, was not required by NPT to accept non-proliferation safeguards, had commenced talks with the Agency on an agreement pursuant to its offer to place its nuclear activities, other than those of direct national security significance, under Agency safeguards at an appropriate time. That offer had been made to demonstrate that the United States sought no commercial advantage from NPT and that it was confident that the application of safeguards in connection with it would not entail an onerous burden.

58. The responsibility which agreements under NPT placed on the Agency raised the question as to what was foreseen in the future development of the Agency's safeguarding capabilities. Both records-accountability and inspection activities would need to be continually reviewed and modified, and expanded when necessary, to enable the Agency to fulfil its increasing responsibilities as the use of nuclear power became more widespread. In addition, it appeared to be essential for the Agency to have a strong in-house capability to use and evaluate technical developments resulting from safeguards research all over the world. Inspection procedures must be kept up to date, and the cost effectiveness of the Agency's safeguards must be maintained. Both the experimental research on safeguards techniques at the Seibersdorf Laboratory and the systems analysis research at Agency Headquarters constituted important elements of the safeguards activity.

59. The proposed programme for the Agency for 1973-78 and the budget for 1973 appeared to have been developed with care and with cost restraints in mind. They would have the support of the United States delegation.

60. The operational, or technical assistance, programme and budget, which were of direct importance to the majority of the Agency's Members, deserved special mention. The United States fully supported the technical assistance activities and believed they must remain in balance with other parts of the Agency's programme. To do so, they would require adequate financial support. His Government had clearly demonstrated its support by contributing to the target at a percentage equal to its base rate of assessment and by additional in-kind contributions. A number of other Governments had contributed in a similar way. Participation by all Members at their percentage base rates of assessment would afford equitable and satisfactory sharing of the responsibilities for a healthy and effective operational programme.

61. He was pleased to note that the amendment to Article VI, A-D of the Statute which the Conference had approved in 1970 [12] had been accepted by 46 Member States, including the United States. The Agency was two thirds of the

way towards bringing the amendment into force, making possible an expanded representation of many areas of the world on the Board of Governors, and he wished to urge those Members that had not as yet done so to accept the amendment.

62. As part of the in-kind contributions mentioned earlier, the United States Government was pleased to renew its pledge, for the fourteenth consecutive year, to donate up to \$50 000 worth of special nuclear material for use in Agency projects in research and for medical therapy. The United States would also continue to make available, on a cost-free basis, the services of experts, training opportunities, and items of equipment, to the extent possible.

63. It was his hope that those contributions would serve to underscore the continuing support that the United States extended to the Agency and to its programmes.

64. Mr. ROUX (South Africa) likewise extended his delegation's congratulations to the President on his election and wished to convey its sincere thanks to the Mexican Government and people for their generosity and hospitality in acting as host to the Conference.

65. The Conference, he was sure, was deeply aware of the void caused by the passing away of Dr. V. A. Sarabhai, the Indian delegate to the General Conference during the previous six years. In particular, he would be remembered for the competence and dignity with which he presided over the fourteenth regular session of the Conference. There was one aspect of Dr. Sarabhai's ideals to which he wished to draw particular attention, namely his confidence in the future of nuclear power. Dr. Sarabhai had been imbued with the conviction that nuclear energy was essential not only for maintaining the standards of economically advanced nations but also for enabling the developing nations to achieve greater economic prosperity.

66. He (Mr. Roux) considered it only fitting himself to elaborate on that theme and to point out the responsibilities that the Agency would have to shoulder in the immediate future.

67. Accompanying an exploding world population were the spectres of poverty, depletion of natural resources, inadequate food supplies and pollution of the environment. The enormity of the situation became apparent when one stopped to consider that in the year 2000 the planet would have to house, feed and clothe an estimated 6500 million people.

68. One could not but agree with the late Dr. Sarabhai that in nuclear energy lay the key to the solution of many of the world's problems, but there was very little time for preparing to face the future. The world's nuclear generating capacity was expected to reach a figure of 330 000 MW(e) by 1980 and a more than tenfold increase could be expected in the following

[12] By Resolution GC(XIV)/RES/272, para. 1.

20 years, reaching 3.8 million MW by the year 2000. Proved reserves of low-cost uranium, amounting to approximately 1 million tonnes, were sufficient to satisfy uranium requirements only until the end of the 1970s, assuming an eight-year forward reserve. In addition, it was estimated that requirements of low-cost uranium up to the year 2000 could only be met if the present reserves were increased by some 1.5 million tonnes. Clearly, one should not underestimate the formidable task not only of much more than doubling present reserves, but also of providing the necessary production capacity in a relatively short space of time.

69. It was therefore essential that very serious note should be taken of the warnings sounded at the Fourth Geneva Conference and of the stress that had been placed on the need for increased uranium prospecting, improved methods of ore-processing (especially low-grade ores), the development and improvement of enrichment technology and a solution to the problem of pollution. South Africa was fully aware of its responsibilities in those fields, and vigorous programmes for meeting them were making very satisfactory progress.

70. While the construction of the small-scale enrichment plant was still proceeding according to plan, recent advances in improving the efficiency of the process and the degree of its economic competitiveness had far exceeded expectations. The stage had been reached, therefore, where serious consideration was to be given to the exploitation of the process on a broader front within the general framework of the South African Prime Minister's announcement a little over two years previously.

71. Turning to the Agency's activities, he felt that the past year had been a period that could best be characterized as one of consolidation in preparation for the many new and challenging tasks which lay ahead. That applied to matters as divergent as the negotiation of safeguards agreements required in connection with NPT, where much experience had been gained, and the Agency's internal housekeeping operations.

72. His delegation wished to offer its congratulations to all concerned on the successful conclusion of the Agency-EURATOM negotiations, which had culminated in the safeguards agreement between Belgium, the Federal Republic of Germany, Italy, Luxembourg, the Netherlands, EURATOM and the Agency in connection with NPT.

73. It was also gratifying to note the efforts which had been made by the Director General and the Secretariat to economize wherever possible - no easy matter in a period where the ravages of inflation were eroding every effort to effect savings. Savings and economies had been effected, for instance, in the form of no increase in the numbers of Professional staff for 1973 - indeed, there was a reduction in the overall number of posts. His delegation further welcomed the conscious effort being made to phase out projects

which had served their purpose and to allocate priorities corresponding to the needs of the day. South Africa hoped that that welcome trend would continue.

74. With regard to the problem of environmental pollution, his delegation welcomed the emphasis which the Agency's programme placed on action to protect the environment in relation to the peaceful uses of nuclear energy generally, and the disposal of radioactive waste in particular. That was a field of growing activity for the Agency - and he said "Agency" advisedly, for it was the organization which, in his delegation's view, should bear the responsibility for co-ordinating international efforts relating to the effects on the environment of the peaceful uses of nuclear energy. It was most important that the Agency should play the paramount role in a field for which it was so admirably suited. In that context the expansion of the Agency's public information activities concerning protection of the environment was to be welcomed.

75. On the subject of co-operation with other international organizations, he was somewhat concerned at the extent to which certain research projects were conducted by the Agency primarily on behalf of other international bodies, but were financed largely from the Agency's own resources. He had particularly in mind the research activities in the agricultural and medical fields which the Agency continued to undertake on behalf of the Food and Agriculture Organization of the United Nations (FAO) and the World Health Organization. If, as he had every reason to believe, those research programmes remained of importance to the two organizations concerned, then it was only right that the costs involved should be borne at least on a fifty-fifty basis.

76. Having expressed the satisfaction of his delegation at the Agency's thorough review of its affairs in preparation for the new tasks ahead, he felt obliged to turn to a matter which gave somewhat less cause for satisfaction. Technical assistance was one of the most important components of the Agency's programme - indeed, in the eyes of many Member States, the most important. It was therefore disappointing that perhaps no more than 75% of the \$3 million target for voluntary contributions would be reached in 1972. South Africa had always contributed to the General Fund on the basis of its assessed percentage, in the hope and expectation that other States would do likewise. That expectation remained unrealized, and it was only natural that States which had made it a moral obligation to match their assessed contributions and fulfil their pledges should consider it unacceptable when others did not give the Agency whole-hearted support. Not surprisingly, two major contributors to the General Fund had recently found it necessary to warn that they might be unable to maintain the present level of their voluntary contributions if a more satisfactory response from certain Member States were not forthcoming.

77. He wished, therefore, to appeal to all Member States which were in a financial position

to do so, to make their full contributions to the General Fund, in order to avoid a situation which none would welcome and which could have serious consequences for the future of the technical assistance programme. It was also to be hoped that a greater number of Member States might consider providing assistance on a bilateral basis in respect of projects which the technical assistance programme was unable to finance. In 1972 South Africa had once again been able to assist a fellow Member State in the Africa and the Middle East region in that manner, and it would continue to consider requests for bilateral assistance in the future.

78. The Agency existed to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world. It was, however, the developing countries that needed the lion's share of that contribution if they were to satisfy their rightful hunger for the benefits of modern technology as a means of promoting education, medical care and economic advancement. It was the task of all Member States - developing as well as advanced - to tackle the difficult tasks which lay ahead with diligence, enthusiasm, perseverance and, above all, good neighbourliness.

79. Mr. DARUSMAN (Indonesia) said that he wished to associate himself with the previous speakers in congratulating the President on his election to his high office. He was confident that under the President's able leadership and wise guidance the General Conference would achieve, at its sixteenth session, the important objectives reflected in its agenda.

80. His delegation had been pleased to read the annual report for 1971-72 and to note the many achievements which the Agency had to its credit during that period, in spite of the numerous difficulties of financing. The positive results obtained in the field of nuclear power deserved special mention. Moreover, scarcely a year after the draft resolution on the financing of nuclear power in developing countries had been adopted by the Conference [13], the first surveys were already being conducted in more than ten countries. That testified to swift and efficient action, and all concerned should be congratulated.

81. Indonesia favoured the Board's action in adopting guidelines for the observation by the Agency of nuclear explosions for peaceful purposes (PNE), in order to ensure that obligations undertaken under NPT or other international agreements were not violated. The opportunity to observe such explosions would also help the Agency to gain experience and collect comprehensive information on the applications and technology of PNE, information which, it was to be hoped, would be passed on to Member States without delay. As PNE could in certain cases speed up development, they would be very important to Member States in the execution of their development programmes. Member States wishing to use PNE should be able to profit by the services of

the Agency, not only as an observer but also as a purveyor of information about the safety aspects of such projects; neighbouring countries could then rest assured that they would be exposed to no danger.

82. In spite of the existing partial test ban treaty, atomic weapons tests were still being conducted in certain areas of the world, even in the face of strong objections by countries directly affected through atmospheric pollution and otherwise. His Government could only express its regret in that regard and request that the tests be discontinued.

83. With regard to the programme for 1973-78 and budget for 1973, his delegation wished to congratulate the Director General and the Secretariat on their excellent work. Indonesia well realized that with its limited resources the Agency by no means had an entirely free hand in planning and implementing its programmes, and considered the programme now being proposed as optimal. However, the technical assistance programme was in a serious plight, for even if the present target of \$3 million was reached, that money would have a purchasing power, in 1972, equal to only \$2 million in 1962 (the target set for that year); and since in fact only 75% to 80% of the target had been reached, those resources were in real terms roughly equal to what had been available in 1959. Many were tempted to take a drastic approach in endeavouring to solve the Agency's financial problems, and favoured a sizable increase in the target for the General Fund. That would mean larger individual contributions. The target had in fact been raised from \$2.5 to \$3 million the previous year, [14] an increase which the Board had agreed to recommend to the Conference on the condition that there would be no further increase for at least three or four years.

84. His delegation was convinced that the programme for 1973-78 and the budget for 1973 had been prepared very carefully, but wondered whether a dead point had not in fact been reached if further shifts in the budget were no longer possible so that the Working Capital Fund could be increased without a rise in individual contributions. Because of budgetary limitations and reliance on voluntary contributions, it seemed that the Agency could not satisfactorily achieve its statutory aims. Yet the safeguards budget for 1973 stood at \$2 868 000 and was certain to mount very rapidly in the years ahead. His delegation, although fully aware of the advantages of having a laboratory for safeguards work, was nevertheless concerned, in view of the difficult financial position, about the pace at which the project was being carried forward. Every decision in that matter should be taken only after very careful consideration.

85. At the same time, serious consideration should be given to the possibility of making the technical assistance budget part of the Regular

[13] GC(XV)/RES/285.

[14] Resolution GC(XV)/RES/281, para. 1.

Budget. The technical assistance programme should be a "regular programme" not only in name but also in fact. Although that would imply an amendment to the financial provisions of the Statute, it was a proposal which should, nevertheless, receive serious consideration by Member States. A reasonable balance should be struck between the safeguards budget and the technical assistance budget; in fact a standard correlation between the two might even be considered.

86. Expansion of the programme on radiation safety and environmental protection was very important and his delegation could also appreciate why increased funds had been allocated for research contracts, in view of the valuable results they had yielded. However, the financing of the activities of the Joint FAO/IAEA Division of Atomic Energy in Food and Agriculture and of the related work done in Seibersdorf was a point which should be examined more closely. The Division's programme was of great value to developing countries, and yet FAO did not appear to attach much importance to its work. Whereas the Agency had spent well over \$1 million on those activities during the previous year, FAO - a much larger organization - had spent only about 30% of that amount. Could FAO not be persuaded to increase its share and allow the Agency to use the money thus released for other programmes, such as research contracts?

87. In many instances the assistance extended by the Agency to Indonesia had been beneficial. Nine of the most important isotopes needed in medicine, agriculture and hydrology were now being produced routinely in the Bandung Reactor Centre, and 16 others were available on request. The TRIGA Mark II reactor in Bandung, after having been upgraded, was now operating at 1 MW and the nuclear medicine clinic in Bandung had been working satisfactorily since February 1970. The applications of isotopes in hydrology were now very popular among hydrologists in governmental departments and there was a steadily increasing demand for isotopes among sedimentologists as well. Isotopes were also finding their way into industry and mining, especially in the search for oil. The uses of radiation in mutation breeding, the application of the sterile-male technique and food preservation by radiation were receiving the full attention of Indonesia's scientists. In October 1972 the Agency was to hold a panel meeting on tracer techniques in tropical animal production studies, in Jakarta. In an attempt to improve personnel dosimetry, intercalibrations with the Agency and the Bhabha Atomic Research Centre in India had been established, and to facilitate control of the use of radiation and radioactive isotopes the Government was now considering the promulgation of regulations on the protection of radiation workers and on the transport of radioactive materials.

88. During the past two years, 39 licences had been granted to Government authorities, institutions and hospitals.

89. The survey for uranium ores which was at present being conducted in collaboration with the French Government on Kalimantan, one of the major islands of Indonesia, looked promising and the relevant bilateral agreement had just been extended for another two years.

90. The Indonesian Atomic Energy Agency had now finally conceived a master plan, which in due course would be endorsed by the Government, to give sound direction to its basic aims. Under that plan it was anticipated that the first nuclear power plant in Indonesia would not be feasible before 1985. A second point was that one research centre was considered to be more convenient than three or four separate ones; it would prevent duplication of work and instrumentation and keep total operational costs at a minimum. Therefore, the existing centres, whose location made them suitable for integration with universities, would eventually be handed over to those universities. Construction of the proposed single centre, to be located in the vicinity of Jakarta, was expected to start in 1975.

91. His delegation wished to express its thanks to the Agency and to the Government of the United States of America for their willingness to deliver fuel for the reactor in Bandung for a period of five years beginning in 1972.

92. Finally, he wished to express, on behalf of the whole delegation of Indonesia, heartfelt thanks to the Government of Mexico for the generous hospitality which the Conference was enjoying.

93. Baron van BOETZELAER (Netherlands) recalled that during the fifteenth session of the Conference he had announced that the Commission of the European Communities, of which the Netherlands was a Member, had been given a mandate to start negotiations with the Agency aiming at the conclusion of an agreement which would enable Member States of the Communities that had signed NPT to meet their obligations under Article III thereof. [15] His Government was among those which had made ratification of NPT conditional on the reaching of such an agreement.

94. The negotiations between a delegation of high officials of the Agency's Secretariat and another delegation, led by officials of the European Commission and including representatives of the Member States concerned, were concluded in July 1972. The negotiations were the first that had been held in respect of such an agreement with a group of States, as distinct from a single State. As a consequence, new ground had to be broken and legal, technical and administrative problems of great complexity had to be solved.

95. EURATOM had already developed a safeguards system that operated independently of the Governments of its Member States, and attuning that system to the Agency's system

[15] See document GC(XV)/OR.146, para. 67.

involved problems that were extremely delicate, both technically and politically.

96. His delegation wished to pay tribute to the negotiators on both sides, whose inventiveness and perseverance had led to the conclusion of the agreement. Special thanks were due to the Agency negotiators, led by Mr. Fischer of the Secretariat. However the agreement, which had been reached in July 1972, had still needed approval by the Agency's Board of Governors and, on the EURATOM side, by the Council of Ministers of the European Communities and the national parliaments of the States concerned.

97. He now had great pleasure in confirming (as stated by the Director General [16]) that the agreement had been approved the week before, both by the Council of Ministers of the European Communities and by the Board of Governors of the Agency. Ratification by the States concerned was still required. He could assure the Conference of the intention of his own Government to seek parliamentary approval of the agreement at the earliest possible date.

98. His delegation hoped that many States which had signed NPT would proceed to negotiate and conclude the safeguards agreements required by NPT and would avail themselves of the facilities for information and guidance offered by the Director General at the current session of the Conference.

99. The Agency's safeguarding activities should not compromise its important promotional tasks. The annual report for 1971-72 rightly stressed the importance of the Agency's functions of providing assistance to developing countries and in relation to environmental problems. His Government had again decided to seek parliamentary approval for a voluntary contribution to the General Fund in excess of the assessed rate proportion.

100. The Board had decided to recommend to the Conference that the level of the Working Capital Fund be raised and his Government supported that recommendation; cash availability difficulties had been eased by various offers to pay assessed contributions earlier. It would greatly help the Director General if in coming years offers of that kind were made at an early date.

101. The effect of nuclear energy on the environment had rightly received an increasing amount of attention from the Director General. His Government thought the idea of registering the disposal of nuclear waste should not be abandoned and also wanted to draw attention to the problems created when nuclear installations had to be closed and to the safety of radiological - including repair - workers. A comparative study of existing national regulations on those subjects might prove useful.

102. His delegation found the new format of the Agency's programme for 1973-78 most satisfactory and welcomed the Director General's intention to provide information on cost estimates of individual programme components in future programme and budget presentations. The document directed itself to world-wide problems such as food and water supply, health, environmental problems and energy supply.

103. His delegation welcomed the Agency's contacts and co-operation with other members of the United Nations family, and with regional organizations such as EURATOM. Many useful contacts already existed with EURATOM and they should be further stimulated by a formal co-operation agreement between the Agency and EURATOM.

104. Both in the annual report and in the Agency's programme for 1973-78, attention was also given to the problem of satisfying the increasing demands for fissionable material for nuclear power plants. In that respect he wanted to draw attention to two international industrial projects in which the Netherlands was participating. The first project was related to fast-breeder development and aimed at the operation of a 300-MW prototype reactor in the course of 1979. The latter type of advanced reactor would be self-supporting as far as feed material was concerned. The second international project would increase the possibilities for obtaining enriched uranium; it was a gas ultra-centrifuge project, carried out by the United Kingdom, the Federal Republic of Germany and the Netherlands. To implement that project two joint industrial enterprises had been created, one for the development and construction of centrifuge plants and one for their operation. Pilot plants were being built in the Netherlands and in the United Kingdom. The results of the joint development work indicated that the centrifuge method was an economic way to produce enriched uranium.

105. His Government had supported the action taken by the Board of Governors in December 1971 regarding the representation of China in the Agency. It was to be hoped that the People's Republic of China would soon take a decision as to its participation in the work of the Agency.

106. During the past year the amendment of Article VI, A-D of the Statute had been accepted by a number of Governments. His Government hoped a sufficient number of Members would accept the amendment to bring it into force.

107. In conclusion, he thought the Agency could look back upon a successful year and his delegation considered that the Director General was to be highly commended for his endeavours to meet problems and make clear and comprehensive plans for the future.

● Mr. Andrzejewski (Poland) took the Chair.

108. Mr. de CARVALHO (Brazil), congratulating the President on his election, said that it was a

[16] Para. 20 above.

recognition of Mexico's role in the peaceful applications of atomic energy. Mexico was not only one of the technologically most advanced countries in Latin America, but also - as demonstrated by the Tlatelolco Treaty - a country dedicated to the search for peace. He was grateful to the Government of Mexico for having invited the General Conference to meet in a Latin American country for the first time since the establishment of the Agency.

109. During 1972 two important decisions concerning the development of nuclear energy in Brazil had been taken. The first related to the establishment of a joint enterprise - the Brazilian Company for Nuclear Technology - in which both the Government and private industry would participate. As a subsidiary of the National Nuclear Energy Commission of Brazil, the new enterprise would have as its main objective the creation of favourable conditions for the development of a national nuclear industry based on a potential market of at least 1000 MW per year from 1980 onwards. The Brazilian Government would guarantee an annual subsidy, starting at \$10 million, to be used, together with private funds, in promoting the manufacture of reactor components and solving fuel technology problems.

110. The second decision concerned the allocation of increasing funds for uranium prospecting, the sum allocated in 1972 amounting to \$11 million. The funds would be employed by a similar joint enterprise, possessing the necessary capacity for large-scale mineral prospecting. Thanks to the joint enterprise's experience the National Nuclear Energy Commission of Brazil had reached a high level of efficiency in uranium prospecting and several areas with geological characteristics suggesting the existence of substantial uranium deposits had been discovered.

111. Construction work on the 626-MW (net) nuclear power plant at Angra dos Reis was well under way, all preparatory work at the site having been completed. The financing agreement between the electrical utility company and the Eximbank, involving an amount of \$138 million, had been signed in January, while the commercial agreement with Westinghouse for the purchase of equipment and fuel elements had been signed recently.

112. During the previous week, the Brazilian Congress had ratified both a new Agreement for Co-operation in the Civil Uses of Nuclear Energy between Brazil and the United States of America and a related agreement amending a Safeguards Transfer Agreement between the Agency, Brazil and the United States [17], thereby demonstrating once again Brazil's readiness to act in accordance with the Agency's safeguards system and its appreciation of the Agency's work in the field of safeguards, despite the fact that it did not

agree with the philosophy underlying NPT. To help the Agency fulfil its safeguards obligations in connection with NPT, the Brazilian Government had decided to contribute to the costs of meeting those obligations although Brazil had not signed NPT.

113. The Brazilian Government had ratified the Tlatelolco Treaty and would comply with its provisions - and consequently become an effective member of OPANAL - when all extra-continental and continental Powers which had, de jure or de facto, international responsibilities in respect of territories located within the area of application of the Treaty or which possessed nuclear weapons signed the respective additional protocols.

114. The conflict between the Agency's promotional and control functions was becoming increasingly acute and giving rise in Brazil to deep concern regarding the future of the Agency. The major Powers appeared to be attaching more importance to safeguards and the maintenance of the political status quo than to the Agency's task of making available the benefits of nuclear energy to the developing countries. Due to inflation and the international monetary crisis, the level of the technical assistance programme for 1973 was the same in real terms as that of the programme for 1959. Moreover, if the budget for 1973 was approved there would be a decrease in real terms - something which had not happened before in the history of the Agency.

115. It should be clearly stated that for the developing countries the technical assistance programme was of paramount importance among Agency functions, including its control functions. Despite that fact, only about 40% of the requests for experts and equipment would be met in 1973. It should be understood that developing countries could not take a very great interest in the prohibition of nuclear weapons, which they were in any case not in a position to fabricate, but they were extremely interested in the development of their potential with respect to the peaceful applications of nuclear energy.

116. The only bright spot was the constant dedication of the Director General and his associates in their endeavours to improve conditions in that sector. His delegation particularly commended their efforts to attract the attention of private organizations in Member States to the plight of the Agency in its technical assistance programme. It was gratifying to see that some resources were being provided by private institutions.

117. He wished, on behalf of the Brazilian Government, to compliment UNDP on the structural changes in its technical assistance policy and on the significant increase in the funds it allocated to technical co-operation in the nuclear field. Brazil was now implementing, partly with financial resources from UNDP and with Agency assistance, a large-scale five-year project for the development of agriculture using nuclear technology. As a result of the joint efforts being

[17] The latter two agreements are reproduced in documents INFCIRC/110/Mod.1 and INFCIRC/110 respectively.

made the Centre for Nuclear Applications in Agriculture would become the most important institution in that field in Latin America and probably one of the most outstanding in the developing world.

118. A point of major relevance to the Agency was the amendment of Article VI, A-D of the Statute. Two years had elapsed since the Conference had adopted Resolution GC(XIV)/RES/272 approving the amendment. However, little more than one third of Member States had so far accepted it. He wished to urge those Members that had not yet accepted the text of the Article to do so in the very near future, and thereby provide for more equitable representation on the Board.

119. A coming matter of great importance, that would be considered by the Board and by the Conference, was the appointment of the Director General. In view of the outstanding work done during past mandates, his delegation felt that a continuation of the same administrative leadership would be of advantage to the Agency.

120. Turning to the relationship between development and environment, he stressed that for the majority of the world's population an improvement of conditions would take the form of relief from poverty, better nutrition, education, clothing, housing, medical care and employment, rather than a reduction of atmospheric pollution. At the Stockholm Conference the head of the Brazilian delegation had pointed out that economic development would have to be seen from now on as a compromise between the need to raise man's productivity in order to ensure his well-being and dignity and the need to minimize the predatory aspects that progress had had in the past. Only through economic growth could mankind stem environmental deterioration, i. e. soil erosion

and agricultural and forestry malpractices that went far beyond industrial pollution.

121. Brazil's position at the Stockholm Conference had been identical with that of Mexico. President Echeverria in his Second Report to Congress had summed up the situation by saying that in poor countries the improvement of ecology lay primarily in economic advances and that no preventive or corrective environmental measure should be allowed to impair their development or foreign trade.

122. Liability for pollution control should be shared proportionally by the countries responsible for the pollution. Further, Brazil agreed with the position taken by the Board in its report to ECOSOC in regard to the impact of nuclear energy on the environment (GC(XVI)/480, paragraph 20); it seemed evident that no new international agency was required.

123. Pollution hysteria, psychological pollution, was sometimes more dangerous to mankind than environmental pollution itself. It was also an instrument for maintaining the division of the world between developed and developing countries. Corrective measures based on insufficient knowledge were certain to fail. Efforts should be concentrated on seeking a solution in time to avoid dangers anticipated in the very distant future.

124. He had faith in the future of the Agency and hoped that present difficulties would be surmounted in time, with the co-operation of all Member States, both developed and developing countries. He trusted that the "Spirit of Tlatelolco" would inspire the General Conference, as the "Spirit of Vienna" had done in the past.

● The meeting rose at 1 p. m.