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TWENTIETH REGULAR SESSION: 21–28 SEPTEMBER 1976

RECORD OF THE ONE HUNDRED AND EIGHTY-FOURTH PLENARY MEETING

Held at the Conference Centre, Hotel Nacional-Rio, Rio de Janeiro, on Tuesday, 21 September 1976, at 3.30 p.m.

Temporary President: Mr. FELICKI (Poland)
President: Mr. de CARVALHO (Brazil)

* A provisional version of this document was issued on 28 October 1976.

** GC(XX)/562 and Add.1.

The composition of delegations attending the session is given in document GC(XX)/INF/163/Rev.3.

THE RECORD

OPENING OF THE SESSION

1. The TEMPORARY PRESIDENT declared the twentieth regular session of the General Conference open.

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

● All present rose and stood in silence for one minute.

3. The TEMPORARY PRESIDENT, after welcoming those present, warmly thanked the Government of Brazil for so generously inviting the General Conference to hold its twentieth regular session in Rio de Janeiro and for making such excellent facilities available to the Agency. The year since the previous regular session had been marked by a continuation of detente, by progress in the field of disarmament and by further advances in science and technology. As regards the Agency's activities, the treaty of 28 May 1976 between the United States of America and the Soviet Union on underground explosions for peaceful purposes deserved special mention. The past year had also been marked by a strengthening of the Agency's safeguards system. There was every reason to be satisfied with the efforts of the countries exporting nuclear materials to ensure that those materials were subject to safeguards. Moreover, progress had been made in the developing countries. Lastly, there had been two important achievements in nuclear science: elements with atomic numbers 124 and 126 had been produced and major advances had been made in accelerator technology. That might have a considerable influence on the future utilization of nuclear energy for peaceful purposes.

ELECTION OF OFFICERS AND APPOINTMENT OF THE GENERAL COMMITTEE

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

5. Mr. CASTRO MADERO (Argentina) said that the group consisting of the delegates of the Latin American countries had the honour of including among its members Mr. de Carvalho, the delegate of Brazil, who would be particularly well qualified to exercise the functions of President of the Conference at its twentieth regular session. Mr. de Carvalho, a doctor of chemistry and nuclear sciences, was a member of several Brazilian and other scientific bodies and had been honoured by a number of countries. Since 1969 he had been Chairman of Brazil's National Atomic Energy Commission and the Governor from Brazil on the Agency's Board. In addition, he was a member of the Agency's Scientific Advisory Committee and had published many articles in specialist journals. Mr. de Carvalho would therefore be especially suited for presiding over the session.

6. Mr. HAUNSCHILD (Federal Republic of Germany) said he had great pleasure in supporting the nomination.

7. Mr. KATORI (Japan) also supported the nomination.

● 8. Mr. de Carvalho (Brazil) was elected President of the General Conference for its twentieth regular session by acclamation.

● Mr. de Carvalho (Brazil) took the Chair.

9. The PRESIDENT thanked the delegates for the great honour which they had accorded him. He regarded his election as a tribute to Brazil, which was engaged in promoting the peaceful utilization of atomic energy. He appealed to all delegates to help him to carry out his task successfully and paid tribute to the Director General and the Secretariat for the professional skill which they had once more demonstrated in expediting the Agency's work.

10. There were a number of points which he wished to draw to the Conference's attention. Since the Second World War, the world had been divided into two distinct categories: rich countries and poor countries. The gap between rich and poor countries was bound to increase unless an effort was made to revise the principles governing international co-operation and assistance. For the majority of the Agency's Member States, the provision of technical assistance was by far the most important function of the Agency. From the outset, however, it had been felt that the financial resources available to the Agency for that purpose were insufficient, and that was now truer than ever.

11. The fact was that the Agency's Member States did not agree on what should be regarded as the primary task of the Agency. The developing countries were demanding more technical assistance so as to become independent in the field of nuclear technology, while the advanced countries were interested mainly in establishing an increasingly rigid, world-wide safeguards system, for they considered that safeguards were an essential element of world peace; paradoxically, however, they assigned few resources for technical assistance, even though technical assistance was the starting point of safeguards. He did not wish to question the validity of safeguards, but it was important to establish a proper balance between technical assistance activities on one hand and safeguards activities on the other. Nevertheless, the Director General was to be congratulated on the way he distributed the meagre resources at the Agency's disposal for the provision of technical assistance.

12. The general debate was very important, for it yielded information of value for the planning of the Agency's future activities.

13. Once more nuclear power was at the cross-roads; on the present occasion, the crucial question was that of public acceptance, the main stumbling-block being the ultimate disposal of waste. The opponents of atomic energy were finding it easy to put forward arguments because of the lack of decision on certain important questions. For example, there was a lack of decision regarding uranium reserves. A decisive factor in the adoption of nuclear power programmes was the certainty that there would be sufficient uranium reserves for implementing them. To assure the necessary reserves it was necessary to intensify uranium prospecting throughout the world. Unfortunately, the situation was a vicious circle: public acceptance could not be relied on and hence not enough drilling was being done; consequently, the proven reserves of uranium were insufficient, and that in turn was hindering governmental decision and public acceptance.

14. Another aspect of the public acceptance of nuclear energy was the assurance that fissile material would not be diverted and used by terrorists. Actually, the most likely threat was the diversion of one of the 80 000 nuclear weapons located at various points around the world or the diversion of weapon-grade material from a military enrichment plant. However, the safeguards system currently in operation was satisfactory, as demonstrated by the present situation.

15. The amount of concentrated fissionable material produced and processed as a by-product of civil nuclear power generation would take 15-20 years to approach the amount already produced for military purposes; with recycling in light-water reactors or breeders, in fact, it would remain less. All the same, it was necessary to intensify physical protection for all types of nuclear facility.

16. Public reluctance stemmed largely from the fear of a nuclear arms race, and public opinion - if ill-informed - might constitute an obstacle to the development of nuclear power. That fear was unfounded, however, for two reasons: a good nuclear programme was undoubtedly an essential element in progress and in improving the living conditions of mankind; and the Agency's safeguards system had undoubtedly functioned effectively since the outset. The Agency should try in particular to impress on the public that its safeguards system was perfectly capable of preventing the diversion for military purposes of nuclear materials and information transferred from one State to another.

17. The Agency had been in existence for 20 years. During that time it had done much to help ensure world peace and to promote the peaceful utilization of atomic energy. He earnestly hoped that it would continue rendering such important services to mankind. The fact that the twentieth regular session was taking place in a Latin American country whose people and Government were firmly convinced that atomic energy should be used exclusively for peaceful purposes augured well for the success of the session.

18. Turning to the election of officers, the PRESIDENT said that his understanding was that the developing countries felt they should have one additional seat in the General Committee, a view with which he, as a representative of a developing country, was in sympathy. He referred to the long and extensive consultations that had taken place with many Governments in Vienna about the composition of the General Committee. The question arose as to whether it was now possible to proceed with the elections or whether more time was required for consultations.

19. Mr. ADENIJI (Nigeria) and Mr. SIRRY (Egypt) requested clarification as to what procedure the President had in mind.

20. The PRESIDENT said that instead of proceeding with the election of officers it would be possible, if the Conference so wished, to begin with the general debate so that further informal consultations could take place on the question of the composition of the General Committee.

21. Mr. SATTAR (Pakistan) requested, on behalf of a large number of countries from the Asian region, that the appointment of the General Committee be postponed until such consultations had been completed.

22. Mr. SIRRY (Egypt) said that any implication that agreement on the composition of the General Committee had been reached in Vienna was incorrect. He pointed out that, as head of the African group, he had not been consulted. He therefore strongly associated himslef with the proposal of the delegate of Pakistan.

23. The PRESIDENT stated that, in view of what had been said, informal consultations would continue and he would proceed with item 4 - Statement by the Director General.

STATEMENT BY THE DIRECTOR GENERAL

24. The DIRECTOR GENERAL said that the fact that the Agency's General Conference was meeting in a developing country would contribute to a better understanding both of the problems with which such countries were faced when deciding to introduce nuclear technology on a large scale and of the reasons why they considered it essential to do so.

25. It was now almost exactly 20 years since the Agency had been established. Since then, the number of Member States had increased from 60 to 109; the executive organ, the Board of Governors, now had 34 Members, compared with 23 in 1957; the Regular Budget had increased - as a result of growing activities, inflation and exchange rate fluctuations - from a little over $4 million in 1958 to $37 million in 1976; the staff of the Agency had increased from 400 in 1958 to 1200 now. However, despite the con-

siderable increase in the scale of its operations, the Agency's main objectives were still governed by the unchanged provisions of Article II of the Statute. Moreover, the constructive spirit which now prevailed in the deliberations of the policy-making organs was quite remarkable.

26. The Agency was a scientific and technical organization, and both the General Conference and the Board of Governors had endeavoured over the years to concentrate on the technical aspects of the Agency's work. He hoped that tradition would continue. It was inevitable, however, that during the past 20 years the Agency should have felt the effects of economic, political and social factors and of the developments in disarmament talks.

27. On the technical side, very great progress had been made by Member States in the field of research and development relating to certain power reactor types and nuclear fuel technologies. That progress reflected the growing importance which most industrialized countries attached to nuclear power generation; by the end of 1975, the installed and operational nuclear power capacity in the world was some 70 000 MW. The role of the Agency with regard to nuclear energy and the different phases of the fuel cycle had increased and its safeguards system had grown in importance. Those were some of the factors which had influenced the work of the Agency during the past 20 years. In that connection it should not be forgotten that several developing countries had embarked on major nuclear power programmes in order to solve their energy problems, which had been aggravated by the fossil fuel situation.

28. The present, twentieth regular session of the General Conference presented an excellent opportunity for consulting the crystal ball about the future while keeping in mind the lessons of the past. The annual report for 1975 contained in document GC(XX)/565 and the programme in document GC(XX)/567 gave details of what had been achieved during the past year and what was intended to be done the following year and the five subsequent years, due regard being had to the various constraints, above all of a financial nature, within which the Agency had to operate. He would therefore confine himself to commenting on nuclear power, safeguards and technical assistance as constituting major sectors of the Agency's work.

Nuclear power

29. Since the beginning of the present decade the question of energy had been arousing rapidly increasing interest. The views put forward on the subject varied widely. On the one hand the need was being stressed for the availability of cheap energy, an increasing proportion of which should be electricity, in order to maintain the industrialized society in its present state or to ensure its further development, and to enable the developing countries to improve their standard of living. On the other hand, there were those who maintained that the continuous increase in energy consumption should be halted as soon as possible and that even a reduction should be aimed at. In each country it was for the politicians to determine what options were to be taken up. At the present juncture the Agency's role should consist of putting forward nuclear energy as the only alternative to other sources immediately available, and of contributing, as efficiently as it could, to the installation and the safe and economic operation of nuclear power reactors and associated facilities.

30. A comparative analysis of the costs of nuclear and conventional power showed that, in most cases, the economic advantages of nuclear power stations emerged clearly only when the prices of fossil fuel exceeded a certain level, and the paradox of only limited expansion of nuclear programmes in spite of the cost advantage had to a large extent to be sought beyond the field of economics. That stemmed particularly from the compounding of uncertainties. The future of commercial reprocessing was fraught with doubt, and power companies had difficulties in deciding whether they should reprocess spent fuel or store it. Public acceptance was likewise the cause of substantial delays and cost increases as a result of safety and environmental considerations involving the development of additional safety features, greater engineering design costs, longer construction periods and increased investment costs. As more and more reactors came into service and proved to be safe, public opposition seemed to be shifting towards the various environmental aspects of nuclear power. However, as recently pointed out by the International Labour Organisation (ILO), no industry had proved to be so environmentally conscious as the nuclear power industry.

31. The Agency had launched the International Nuclear Information System (INIS), which was already recognized as the main channel for the exchange of nuclear information and had served as a model for similar undertakings by other organizations. The Agency had also decided to set up a computerized data bank which would collect the relevant data on nuclear energy and other forms of primary energy and would also act as a bank for data on cost and other economic parameters.

32. In order to be able to provide sound and well based advice to its Member States, especially developing countries, the Agency needed to have a thorough knowledge of conventional and emerging alternative power sources having genuine prospects of utilization. The expansion of activity in that field, which would be based on temporary assistance by competent specialists, would scarcely divert attention from the Agency's primary tasks, which already included the question of nuclear fusion. On the contrary, it would enable the Agency better to serve its Member States, above all the developing countries. Furthermore, it would thus be possible to avoid the establishment of further international organizations in related fields,

with the accompanying inevitable overlapping of functions.

33. In the public debate on the acceptance of nuclear power the Agency had hitherto confined itself to presenting the conclusions reached by experts recruited to analyse specific questions. Nevertheless, the time appeared to have come when more effort should be devoted to following and understanding activities of that type. Valuable contributions in that respect could be expected from the International Institute for Applied Systems Analysis (IIASA) study on the environment, in which the Agency and also the United Nations Environment Programme (UNEP) and the World Health Organization (WHO) were co-operating, and from the risk comparison project referred to in the Agency's programme.

34. A year before there had been grave concern about the adequacy of the world uranium resources, enrichment capacity and reprocessing capacity. Recent large discoveries and the rapid rise in the price of uranium - six- or sevenfold increases in certain cases - had greatly changed the basic features of the problem and would improve prospects for the early phases of the fuel cycle, particularly when those new resources came on the market. Uranium prospection, therefore, continued to be one of the main features of the Agency's technical assistance programme.

35. It should not be forgotten, moreover, that the uranium reserves used in present thermal reactors only corresponded to an amount of energy equal to that contained in present known oil reserves. Only by the transition from thermal to breeder reactors would the content of energy in uranium become roughly of the same order as the energy contained in total fossil fuel reserves (coal, oil and natural gas). Some regional co-operation existed for sharing the enormous cost of developing the breeder reactor concept from the pilot stage to the full-scale industrial reactor. He wished to appeal to Member States to use the good offices of the Agency in achieving more effective international co-operation in that sphere.

36. Earlier anxiety concerning enrichment capacity seemed to have been largely dissipated due in part to the establishment of a common diffusion enrichment undertaking, Eurodif, and the development of the centrifuge process by Eurenco. Unfortunately, the same could not be said about the reprocessing of irradiated fuel. The appeal he had made in favour of joint regional undertakings in the field of reprocessing had led to generous support for the Agency's continuing study of regional nuclear fuel cycle centres, the results of which would be presented at Salzburg in May 1977. The Secretariat's study tended to indicate that such projects would be advantageous from an economic, safety, physical security and safeguards point of view. It should however be recognized that thus far it had not been possible to define with certainty the economic advantage of reprocessing plant fuel rather than simply storing it.

37. During the following 10-20 years, the possible accumulation of plutonium in the world would constitute an ever more serious problem. However, Article XII.A.5 of the Statute foresaw the possibility of additional measures such as the deposit of surplus plutonium with the Agency in Agency-operated storage facilities. Hitherto there had been little need to make use of those provisions of the Statute, but the need to do so was now becoming apparent. The Secretariat had therefore begun an internal study on international plutonium management.

38. In the field of thermal reactors, safety questions would remain a focal point for some time to come. The consolidated effort which had been undertaken in the Agency to develop safety codes and guides would be vigorously pursued.

39. The end of the fuel cycle, namely the safe disposal and management of radioactive waste, still raised a number of problems, the solutions of which - already found at experimental level - would have to be extended to industrial conditions during the next decade or so.

Nuclear liability

40. It was his wish that Member States should consider signing or ratifying the 1963 Vienna Convention on Civil Liability for Nuclear Damage[1]; it was regrettable that only slight progress had been registered in that direction. Furthermore, in the light of the leakage recently detected in the oceans at points where wastes had been dumped decades before, it was important to take specific action in connection with the Agency's liabilities arising under the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (the London Convention)[2].

Safeguards

41. The recent expansion in the use of nuclear power had greatly increased the Agency's responsibilities with regard to safeguards. Consequently, activities in that domain had developed faster than in any other. Supported by experts from Member States the Agency had taken the lead in the development of safeguards, and the newly established Standing Advisory Group on Safeguards Implementation (SAGSI) should have an important role to play in that respect.

42. The shift in emphasis from plant to material had led to the establishment of a trigger list covering both equipment and material, and also to the start of discussions on the possibility of the Agency assuming responsibility for the storage of plutonium in all its forms. The initial

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[1] The text of the Convention is reproduced in Legal Series No. 4 (STI/PUB/430).

[2] The text of the Convention is reproduced in document INFCIRC/205.

safeguards system, which dealt only with research reactors, had gradually been elaborated to cover all sizes and types of nuclear installation and material. For the first time in history, an international safeguarding system had been established and recognized. It might not be ideal but it could and would be improved if the supporters of the Agency and of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT)[3] were prepared to give their assistance and wholehearted support to the Secretariat's endeavours. He would appeal to States which had accepted the Agency's safeguards system to extend that acceptance to include the Agency's inspectors, irrespective of their nationality.

43. An important task for the Agency was to keep abreast of developments in new instrumentation designed for safeguards purposes and to promote work on apparatus and equipment which could be used to facilitate, and eventually automate, some elements of inspection work.

44. In 1976, Japan had become the one-hundredth country to ratify NPT. Those 100 States included three nuclear-weapon States and more than 70 developing States in the sense used by the United Nations Development Programme (UNDP). It would be seen from those figures that NPT was neither a pressure group of the industrial countries nor a developing country group. Nevertheless, a small group of countries possessing significant nuclear programmes still remained outside the scope of NPT. That group included nuclear- and non-nuclear-weapon States, developed and developing. The time might be ripe now for those countries to re-examine the grounds that five or six years before had militated against their participation in the NPT system. The fact that some of them were located in areas of political tension made formal renunciation of the "nuclear option" difficult, but that was precisely why their ratification of NPT would constitute an important contribution to regional and international security.

45. There were now cases among developing countries in the United Nations sense which had progressed so far in the nuclear field as to be able to manufacture sophisticated equipment and material. It was to be hoped that deliveries from such a country of material or technological knowledge would take place only under the express condition that appropriate safeguards were applied. In making that suggestion to certain non-nuclear-weapon countries, he felt bound once again to remind the nuclear-weapon States of the crucial importance of a complete cessation of all nuclear-weapon tests. He announced that the European Atomic Energy Community (EURATOM), which in 1972 had approved the NPT Agreement between the Agency, EURATOM and the countries concerned, had now informed him that further progress in the matter was expected in the months ahead.

46. In June 1976, the Board had approved, and he himself had recently signed, an agreement with the United Kingdom and EURATOM to implement the offer made by the United Kingdom to accept Agency safeguards, subject to exclusions for national security reasons only, on its nuclear fuel cycle. A similar agreement with the United States had just been placed before the Board.

47. In Article III.2 of NPT the importance of nuclear supply policy was recognized. According to reports, the progress made in the London talks was heartening. The Agency itself was not directly involved in the current extensive discussions on nuclear export policy matters. Obviously, however, it would be helpful if the Agency were kept informed of decisions emanating from those discussions and affecting Agency safeguards to some extent, as had been done in the case of the "Zangger Committee".

48. SAGSI was beginning to play a very valuable role. In view of the growing interest in the effectiveness of Agency safeguards, fuller reporting was essential to ensure a high degree of confidence in the operation. Accordingly, SAGSI was now focusing its attention on developing a more effective system for reporting the results of safeguards operations to the Board and to Member States. It was his intention to introduce the new reporting system in 1977.

49. Questions had been raised about the ability of current Agency safeguards to deal with large reprocessing plants. Although any such question was at present academic, he had full confidence in the capacity of the Agency's safeguards procedures to apply effective safeguards to any nuclear plant with which the Agency was now dealing or was likely to be dealing within the coming few years. In that regard, it was important to avoid any misunderstanding of the Agency's role. The Agency could and should be in a position to detect diversion, and to do so promptly, but it was unable physically to prevent diversion either by individuals or by any Government bent on such action.

50. As nuclear fuel cycles under safeguards became larger and more complete, the Agency would have to examine other questions going beyond those concerning the individual plant or materials balance area, and would have to devise techniques and approaches for evaluating the totality of the safeguarded fuel cycle, as also the activities coming close to nuclear explosive production.

51. It was noteworthy that, in accordance with General Conference Resolution GC(XIX)/RES/328 whereby Member States and the Director General of the Agency were called upon to consider ways and means of promoting the physical protection of nuclear facilities and materials, the Secretariat had entered into consultations with a number of Member States with the object of designing a realistic programme for the Agency. The Agency would continue with the formulation of recommendations on physical protection and would be

[3] Reproduced in document INFCIRC/140.

prepared, at their request, to assist Member States in developing co-operation in various forms to solve problems of common interest.

52. As for the present situation in regard to safeguards and how safeguards might develop over the coming ten years, those countries which had accepted NPT would have all their nuclear activity under Agency safeguards, whereas those which had not accepted it or had not placed all their activity under Agency safeguards would be in a position to develop a nuclear technique of their own, directed, if they so wished, toward the manufacture of nuclear explosives or weapons. That prospect was scarcely a satisfactory one.

53. It should be recognized that NPT might be nearing the end of the line. If realization of the prospect in question was to be averted, the only alternative would be for the manufacturing States to stipulate, as an irrevocable condition for the delivery of nuclear material or equipment, that the receiving State accept the placing of Agency safeguards on its entire nuclear programme.

54. In practice, Agency safeguards were already being applied to all nuclear plants in many countries that had not formally accepted full-scope safeguards. Such countries had much to gain by formalizing that situation. At the Board's request, the Secretariat was preparing the draft text of an agreement that could serve as a starting point for negotiations with any country now ready to accept full fuel cycle safeguards, and he would be interested to know how the Governments concerned regarded the matter.

55. It was encouraging to find that many Member States had supported the Secretariat in its endeavours to maintain a proper balance between the promotional and the safeguarding activities of the Agency. At times, however, that dual role of the Agency had been called into question. All the activities involved were of interest and importance to the Member States as a whole, whether developed or developing, but their nature was such that within the Agency, no line could be drawn between their promotional and their regulatory aspects.

Nuclear explosions for peaceful purposes

56. The possibility of using nuclear explosives for peaceful purposes had attracted much attention. The Ad Hoc Advisory Group on Nuclear Explosions for Peaceful Purposes, set up by the Board in 1975, had already held two series of meetings and a third was to be convened later in the year. In that way, the Agency was discharging its obligations under the Statute as well as under Article V of NPT. The Agency's activity in that complex field was being closely followed by the General Assembly of the United Nations and would no doubt be thoroughly examined at the next NPT Review Conference in 1980.

Technical assistance

57. The Agency's activities in the field of technical assistance were directly affected by Member States' voluntary contributions to the General Fund, the target of which had increased from $1.5 million in 1959 to $5.5 million in 1976. In terms of purchasing power, however, the increase could not be regarded as large, and moreover the sum had to be spread over a wide field of activities and a large number of developing countries.

58. The lack of funds had been hampering the technical assistance programme throughout its existence, but it was gratifying to note that in the past few years an increasing amount had been received from UNDP, due solely to Member States including more nuclear projects in their country programmes.

59. In order to maintain and, if possible, expand the Agency's technical assistance programme, he would appeal to all Member States, including developing countries, to contribute in both cash and kind to that programme, since the end result should be a narrowing of the gap between the developed and the developing countries in the nuclear field.

60. For developing countries, the problem lay in how to find the money for new plant and how to build up a nucleus of trained managers, engineers and safety personnel. With the generous help of a number of Member States, the Agency had initiated a major training effort. Four large training courses, especially designed to help Member States just embarking on nuclear power programmes, had been held since the beginning of 1975.

Concluding ramarks

61. If the Agency had been efficient, the credit was partly due to its ability to respond promptly to emerging new situations which required specific action. The existing organizational structure and comprehensive programme of the Agency, combined with the competence of its technical and scientific staff, had made it possible to bring together in so-called "project teams" staff members from a variety of Secretariat units, in order to deal with a specific problem. Cases in point included the market survey study, the regional nuclear fuel cycle centre study and the nuclear safety standards project. That "project approach" could be more widely used in the future.

62. Lastly, the question that had to be asked was whether the trends in the Agency's activities, as outlined in the programme for 1977-82 now before the General Conference, were properly responsive to the role which the Agency was expected to play. Only the General Conference could furnish the answer.

ADDRESS OF WELCOME BY THE VICEPRESIDENT OF THE FEDERATIVE REPUBLIC OF BRAZIL

63. Mr. PEREIRA DOS SANTOS (Vice-President of the Federative Republic of Brazil) said that it was a great pleasure for Brazil to welcome the President of the General Conference and the delegates attending the twentieth regular session, on what was the third occasion on which the General Conference had met outside Vienna.

64. The Agency had enjoyed the support of Brazil from the moment of its inception, and from the very beginning his country had been a Member. Indeed, it was to a Brazilian, Mr. João Carlos Muniz, that the honour had fallen of presiding over the Conference convened in 1956 to draw up the Agency's Statute. In more specific terms, Brazil was helping the Agency in its work through the efforts made by its representatives and through its financial contributions to various programmes.

65. It was Brazil's firm conviction that the international organizations were best placed to speed the process of development, by mobilizing resources and ensuring their equitable distribution. The Agency, in particular, had made great efforts toward fulfilling the hopes placed in it by the developing countries and already positive results were being obtained by its technical assistance programme. Given the present world shortage of conventional types of energy and the fact that an ever-increasing number of countries were turning to nuclear energy as a source of power, at any rate while awaiting the discovery of new sources of energy, the Agency's role was taking on added importance.

66. As to his own country, Brazil had only recently taken up its nuclear option but already had some success to record. In the research field, several research reactors were available and had been used for the training of Brazil's first teams of nuclear physicists and engineers, while other centres were engaged in work involving the medical and agricultural applications of nuclear energy. The Brazilian Government had now decided that nuclear power would best meet the country's growing energy requirements and the first power reactor in Brazil was due to be commissioned in 1978.

67. An industrial infrastructure was needed if the nuclear programme was to be carried through to success, and Brazil was bending its efforts to providing that infrastructure, with the object, on the one hand, of speeding up implementation of the programme and, on the other, of intensifying national participation therein. In that connection Brazil was benefiting from co-operation with the Federal Republic of Germany, under an agreement signed in 1975 and supplemented very recently by commercial and financial contracts between undertakings in the two countries. The conclusion of a trilateral safeguards agreement between Brazil, the Federal Republic of Germany and the Agency had followed.

68. As would be seen, Brazil's programme was broad in scope and, for its successful completion, would require a maximum of manpower and material of national origin since that, alone, would lead to autonomy in that high priority sector of the national development process. Thus, Brazil had chosen an arduous path but, counting on its human reserves, it could look forward to the future with confidence. Happily, the harvest of the efforts expended was already being reaped, and he hoped that Brazil's example would prove an encouragement to other countries.

69. In conclusion, he conveyed to the Conference the Brazilian President's sincere hopes for its success and his good wishes to all the participants for a pleasant stay in Brazil.

STATEMENT BY THE REPRESENTATIVE OF THE SECRETARY-GENERAL OF THE UNITED NATIONS

70. Mr. HYVÄRINEN (Representative of the Secretary-General of the United Nations) recalled to the General Conference the great interest taken by the United Nations in the Agency and the ever-growing co-operation existing between the two organizations.

71. At its twentieth session the Conference would undoubtedly focus its attention on the Agency's main objectives in the light of the present state of world affairs. As a result of the scientific and technological advances that had been made, the world had entered the nuclear era and nuclear power had become a reality. In that situation, there was need to maintain a balance between the development of research, production and utilization of nuclear energy as against a proper concern for safety and environmental protection. Moreover, the destructive potentialities of nuclear energy in the form of armaments or of ill-understood or ill-utilized techniques constituted a factor which could not be ignored. The Agency was therefore rightly devoting special attention to the question of nuclear explosions for peaceful purposes.

72. The Review Conference of the Parties to NPT had endorsed application of effective and standardized safeguards by the Agency, regulation of exports, improvement of methods, techniques and instrumentation, and measures for the physical protection of nuclear material. The Agency's work in safeguards to be applied under agreements concluded inside or outside NPT and in ensuring the physical security of the ever-growing amounts of fissile material in the world could not be valued too highly.

73. At the end of the second decade of its existence the Agency had an impressive record of achievement, as had been noted with appreciation in many General Assembly resolutions. He would like at that juncture to pay a tribute to Mr. Sigvard Eklund for his praiseworthy endeavours in guiding the work of the Agency. In conclusion, he proffered his warm wishes for the success of the General Conference.

● The meeting rose at 5.45 p.m.