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President: Mr. SANDOVAL VALLARTA (Mexico)

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* GC(XII)/390.

GENERAL DEBATE AND REPORT OF THE
BOARD OF GOVERNORS FOR 1967-68
(GC(XII)/380, 389) (continued)

1. Mr. MOJSOV (Yugoslavia) noted that the importance and usefulness of the Agency to its Member States and to the international community at large had increased year by year, as had the scope of its activities.

2. Since the last session of the General Conference, new dangers had been added to those created by the threat of nuclear weapons and the arms race, since it had been demonstrated that the use of violence, pressure and military intervention had become common practice in international relations. Such developments resulted in increased international tension and greater discrimination on the part of the large nations against the small ones, and had an adverse effect upon the policy of peaceful co-existence among States with different social systems. His own country would continue to be guided in its foreign policy by the principle of developing international co-operation on the basis of full respect for sovereign equality, territorial integrity and the right of every nation to decide its own destiny.

3. The adoption by the General Assembly of the United Nations of a resolution commending the Treaty on the Non-Proliferation of Nuclear Weapons¹⁾ represented an important step towards preventing the spreading of nuclear weapons. In signing the NPT, his country was convinced that it was only the first stage in the process of nuclear disarmament. At the Conference of Non-Nuclear-Weapon States²⁾ countries which did not possess nuclear weapons had considered important issues, the solution of which would guarantee world security.

4. The NPT would place heavy responsibilities on the Agency, especially with regard to the provision of an effective safeguards system. The Agency had also given assurances to the General Assembly of its participation and involvement in the creation of an international mechanism to facilitate the effective use of nuclear energy for peaceful purposes.

5. The assumption by the Agency of new responsibilities in connection with the NPT and its increasing activities in the administration of safeguards were proof both of its competence and of the confidence placed in it by its Member States. The Yugoslav Government welcomed the decision of the Mexican Government to entrust to the Agency

the safeguarding of all its nuclear activities³⁾ and hoped that action would serve as an example to other Member States.

6. The Agency's activities during the past years had been comprehensive, diverse and successful. The six-year programme presented to the Conference⁴⁾ was particularly useful and it was to be hoped that other major problems would be considered in a similar manner.

7. The Agency would need the widest possible support from Member States in fulfilling the new obligations and tasks which it was likely to assume in connection with the NPT. The successful execution of those activities would have a favourable effect upon the development of the peaceful application of nuclear energy and would strengthen confidence among States, thereby facilitating further measures towards general, and in particular nuclear, disarmament.

8. It was to be expected, in the light of Article VI of the NPT, that the great nuclear Powers would undertake to stop carrying out research of a military nature or, at least, gradually reduce the amount of such research. If the research now being carried out for military purposes were devoted to peaceful purposes instead, it would give an enormous impetus to the development and extension of the use of nuclear energy to promote the prosperity of mankind.

As an immediate result of the implementation of the Treaty, a freer exchange of information and knowledge, the declassification of hitherto classified data and results and the implementation of new projects relating to the peaceful uses of nuclear explosions were to be expected. The expenditure necessitated by those activities would be considerable, but every effort was worth while if it helped to avert a nuclear catastrophe.

9. Yugoslavia was prepared to assist the Agency fully in meeting the ever-growing costs of inspection and control by making available its research laboratories and facilities for the training of inspectors, the carrying out of analyses, and the development and promotion of control methods, instrumentation, specific dosimetry and, in general, the techniques of control and inspection.

10. The Agency's efforts in providing technical assistance to developing countries had in the past been constructive and successful, but the increasing number of requests for aid, taken in conjunction with the Agency's limited resources, was seriously hampering the solution of the problems

1) This Treaty, which is the subject of Resolution 2373 (XXII) adopted by the General Assembly of the United Nations on 12 June 1968, is subsequently referred to in this record as "the Treaty" or "the NPT".

2) Held at Geneva from 29 August to 28 September 1968.

3) See document INFCIRC/118.

4) GC(XII)/385, paras 11-15 and 32-623.

involved. His delegation believed that the appeal by the Director General for voluntary contributions from Member States at the same percentage rate as their assessed contribution to the Regular Budget should be answered in a positive manner.

11. Few countries had the necessary facilities for a dynamic development of reactor technology and the mass construction of large nuclear power stations. On the other hand, many more countries were interested in plants of a more modest size or in the diversification of reactor types. The Agency should give more attention to the problems associated with such concepts and possibilities. It should also explore means of using as much of its resources as possible to carry out its technical assistance programme without increasing administrative expenses. It was desirable that the Agency should use its available resources with the maximum degree of efficiency and economy.

12. Mr. MOROKHOV (Union of Soviet Socialist Republics) read a message to the Conference from the Chairman of the Council of Ministers of the USSR⁵).

13. He then stated that a new and important stage had been reached in the life of the Agency as a result of the adoption by the General Assembly of the NPT and its opening for signature. The NPT would undoubtedly contribute to easing international tension and reducing the threat of nuclear war, and would give a fresh impulse to the implementation of further measures in the field of disarmament, particularly nuclear disarmament. It had been signed by 81 States; that bore witness to the wide international recognition of the importance of the Treaty for the peace and security of the peoples of the world.

14. The Soviet Government attached great importance to the NPT, and had sent to all Governments a memorandum concerning a number of measures which should be taken urgently with regard to the cessation of the arms race and disarmament. Among those measures were the prohibition of the use of nuclear weapons, the cessation of their manufacture, the reduction and liquidation of their existing stockpiles, and the limitation and subsequent elimination of the means of their delivery. That memorandum had been submitted by the Soviet Government to the General Assembly as an important and urgent item for its current session. The Soviet Union considered that the proposals contained in the memorandum were of exceptional importance. Their implementation would represent a substantial contribution towards putting an end to the armaments race and solving the vital problem of disarmament.

15. The conclusion of the NPT directly affected the Agency's work in all its aspects. Under the NPT, non-nuclear-weapon States which were parties thereto were called upon to accept safeguards, concluding special agreements with the Agency for that purpose. Altogether, during the two-year period following the entry into force of the NPT, the Agency would have not only to complete negotiations with the non-nuclear-weapon States concerned and conclude safeguards agreements with them, but also to be ready to exercise forthwith effective control over their peaceful nuclear activities.

16. The main responsibility for timely action to equip the Agency for carrying out its control functions under the NPT lay with the Board of Governors. Without waiting for the entry into force of the NPT the Board and the Agency's Secretariat should start negotiating agreements with the non-nuclear-weapon States which were parties to the Treaty and solving other important problems connected with the Agency's safeguards activities.

17. The Agency possessed all the facilities for coping with the tasks it would have to perform in ensuring observance of the NPT. As a result of painstaking and protracted work in line with the Agency's Statute, a system of safeguards and inspection had been established, on the basis of which it would be possible to discharge the control functions laid down by the NPT. That system now covered practically the whole nuclear fuel cycle with the exception of plants for the isotopic enrichment of uranium. The Agency had at its disposal a staff of highly qualified scientists and technicians familiar with the specific problems of safeguards. With the help of those experts the Agency could, within a relatively short space of time, establish the necessary control and inspection machinery and carry out control operations in accordance with the provisions of the NPT. In the future also the Soviet Union would be prepared to participate actively in that aspect of the Agency's work.

18. In the light of the tasks awaiting the Agency in connection with the NPT, it was extremely important that the principle of universality, the participation in the Agency's work of all the countries of the world, should be rigorously observed. In that connection the Soviet delegation considered it necessary to state that membership of the Agency should be open to a country such as the German Democratic Republic, the great achievements of which, particularly in the peaceful uses of atomic energy, were widely recognized.

19. As was well known, the German Democratic Republic had been among the first to sign the Treaty and to state its readiness to place its activities relating to the peaceful uses of atomic energy under

5) The text is reproduced in document GC(XII)/INF/104.

the Agency's safeguards⁶⁾. Its participation in the work of the Agency would have a beneficial effect on the entire work of the organization.

20. On the subject of the conclusion of the NPT, the Soviet delegation wished to emphasize that the Agency's control functions should not supersede and supplant its other activities in connection with the peaceful uses of atomic energy or its efforts to promote international co-operation in that sphere. The Soviet delegation was firmly convinced that the NPT would create favourable conditions for the utilization of atomic energy for peaceful ends. The Treaty established conditions under which the non-nuclear-weapon countries could derive extensive advantages from the peaceful applications of atomic energy, including the benefits of nuclear explosions for peaceful purposes. It confirmed the right of the parties to engage, free from discrimination, in nuclear research, production and applications for peaceful purposes. It extended the possibilities of participation in a broad international exchange of equipment, materials and scientific and technical information on the peaceful uses of atomic energy. Moreover, in accordance with the wishes of non-nuclear-weapon countries, the Treaty included provisions under which States which had achieved a high level of development in peaceful applications would co-operate in promoting the development of such uses by non-nuclear-weapon States, making due allowance for the needs of the developing countries.

21. It was obvious that the non-nuclear-weapon States which were parties to the NPT would enjoy extremely favourable opportunities in connection with the peaceful uses of atomic energy. It would enable them not only to avoid involvement in a hopeless and wasteful nuclear weapons race but also to conserve a considerable part of their resources to meet urgent requirements bound up with their economic development, raise the living standard of their people and devote greater efforts and more funds to the solution of their economic and social problems.

22. It was absolutely essential that the Agency should play a leading part in the development of the peaceful uses of atomic energy following the conclusion of the NPT.

23. The development of nuclear power in the Soviet Union would be carried out in the years immediately ahead on the basis of familiar types of facilities — water-water reactors and uranium-graphite reactors of the channel type, followed by a gradual transition to fast-neutron breeder reactors.

24. Plans had been made in the Soviet Union, and were already being carried out, for the expansion of the existing nuclear power stations at Novovoronezh and Beloyarsk (installation of a BN-600 fast reactor), and also for the construction of the Kola, Armenian and Bilibinsk nuclear power stations, as well as a dual-purpose nuclear power station at Shevchenko.

25. In addition, four twin-reactor nuclear power stations (unit capacity up to 1000 MW(e)) were scheduled for construction. Erection of the first of those stations was already under way near Leningrad, and the second would be built near Kursk. The cost of generating electricity at those stations would be considerably lower than at the organic-fuel power plants in the same regions.

26. It was well known that the Soviet Union was co-operating extensively on an international scale in the field of nuclear power, concluding agreements with a number of countries for the erection of nuclear power stations. It was intended to continue such co-operation in the future, making use of the wide experience that had been gained in the construction and operation of such stations.

27. As part of the effort to promote still further the development of the peaceful uses of atomic energy in the developing countries, especially the generation of nuclear power for the purpose of improving the economic welfare and prosperity of the peoples of those countries, the Soviet delegation was authorized to state that the Soviet Union was prepared to enrich natural uranium for interested non-nuclear countries up to 2.5-5% in uranium-235, i.e. to the level of enrichment required for nuclear power stations. It went without saying that such uranium would have to be used in those countries solely for peaceful purposes.

28. At the present time, Soviet industry was producing on a mass-production basis over 50 different types of radioisotope devices for industrial process control; a total of nearly 3000 familiar and widely used items were being produced by the isotope industry.

29. One of the most important radioisotope applications in the Soviet Union was the control and automation of technological processes in various branches of industry.

30. In 1967 an industrial-scale radiation chemistry installation had come into operation for the purpose of producing monosulpho-chloride, which was used in the manufacture of effective synthetic detergents and emulsifiers. There was a steady growth in the use of radioisotopes for the manufacture of power sources for various types of automatic electronic equipment.

6) See documents GC(X)/INF/91 and GC(XII)/INF/105, part V.

31. In the past year significant scientific and technical achievements had also been made in a fundamental field, that of nuclear physics. During the same period, the world's largest (70-GeV) proton accelerator had started operation in the Soviet Union.

32. In the course of 1968, a number of essential beam parameters had been established and experimental work started. The first scientific results in an experiment on proton-proton scattering had been obtained, yielding valuable information about the nature of the interaction of elementary particles in that energy region. Co-operation with scientists from France and the European Organization for Nuclear Research (CERN) under agreements concluded for work on accelerators was going forward successfully.

33. In 1967 an annular electron accelerator (with an energy of 6 GeV) had gone into operation. The unit was the largest of its kind in the Soviet Union and one of the largest in the world. The accelerator had reached the planned energy level.

34. In the past year the Soviet Union had made definite progress in the study of plasma physics and controlled thermonuclear reactions. Thermonuclear plasma parameters — temperatures up to 100 million degrees, densities up to 10^{20} particles per cm^3 and confinement times up to one second — had been obtained separately in various experimental facilities. The main task of scientific research in that field was to obtain a plasma which would combine, in one facility, all the parameters required for bringing about a thermonuclear fusion reaction. One of the basic problems was to develop ways of countering micro-instability and maintaining a high-temperature plasma.

35. It was gratifying to note that during the past year the Agency had become an even more efficient organization. It had brought greater benefits to both developing and developed countries. Altogether, his delegation was favourably impressed by the accomplishments of the Secretariat during the past year and was glad to see that a great deal of work had gone into the preparation of the draft programme — work, moreover, of high scientific and technical calibre. Particularly well-prepared were the programmes of the Division of Nuclear Power and Reactors, Health, Safety and Waste Management, Life Sciences, and Scientific and Technical Information — in the latter connection the International Nuclear Information System (INIS) deserved special mention.

36. Whilst approving the programme as a whole and being aware of its undoubted merits, he felt obliged to point out that in some areas there seemed to be no proper relationship between the different scientific and technical activities. That applied to

hydrology (Division of Research and Laboratories), and to the programme of the Joint FAO/IAEA Division of Atomic Energy in Food and Agriculture. The programmes in question were far too wide and ambitious and had been drawn up without proper consideration of the Agency's true possibilities.

37. The work of the Agency's laboratories and scientific centres had been put on a more rational basis during the past year. However, a lot had still to be done. That applied in particular to the work of the Agency's laboratories at Seibersdorf and at Headquarters. At the present time an analysis was being carried out of the work scheduled for those laboratories. The results of that analysis should permit the Agency to review its attitude to the laboratories and to organize their work in such a way that it would be better integrated with the Secretariat's other activities from both the technical and financial points of view.

38. In his delegation's view, special attention should be paid to that section of the Agency's programme concerned with the establishment of an international information system in the field of the peaceful uses of atomic energy. The Soviet delegation was glad to note that in conformity with Article VIII.A of the Agency's Statute, the Secretariat had in 1965 started to take practical steps to establish an international nuclear information system based on multilateral co-operation between the Agency's Member States in the collection, processing and distribution of information on atomic science and technology. That activity was nearing successful completion.

39. The work of setting up INIS took on special significance in the light of the NPT. The system could, and must, ensure in particular that all States that were parties to the Treaty had access to the benefits of the peaceful applications of nuclear technology — that was one of the main principles of the Treaty.

40. The Soviet Union attached great importance to INIS and regarded it as an instrument with which the Agency could accelerate world-wide scientific and technical progress; he therefore fully supported the Agency's activities in that connection and his country would do its share to see that INIS operated successfully.

41. His Government, as was well known, had always attached great importance to international collaboration and the provision of scientific and technical assistance to developing countries. It was part of his country's national policy to give maximum part of his country's national policy to give maximum support along those lines.

42. His country was at the present time a party to many bilateral agreements concerning the peaceful use of atomic energy with other socialist countries, and with developing and developed capitalist countries. Most of the agreements concluded provided not only for the exchange of scientific and technical information and for visits of scientists, but also for the provision of technical assistance.

43. In its programme of international co-operation in the peaceful uses of atomic energy his country did not confine itself to bilateral agreements; it was also fostering broad international co-operation in that field under the auspices of a number of international organizations, primarily the Agency.

44. He welcomed the collaboration which had been established between the Agency and the Council for Mutual Economic Assistance (COMECON) by the exchange of information and scientific and technical documentation and by reciprocal participation in each other's activities.

45. His country had always attached importance to the Agency's work in granting technical assistance to developing countries. Since the Agency had only limited funds available for that purpose, the question arose as to how they could be used to best effect.

46. The Secretariat had started to take account of the desires of the developing countries for increased assistance in the form of equipment, as could be seen from the programme for 1968. It should, however, be pointed out that the increase compared with the programmes for 1966 and 1967 amounted to only 1-1.5%, which in his view was totally inadequate.

47. His country regularly made voluntary contributions to the Agency's General Fund, and placed at the Agency's disposal both financial resources and fellowships. His delegation was glad to note that the Agency had used almost the entire sum of 100 000 roubles offered by his Government as a voluntary contribution at the last regular session of the General Conference. It was also pleased that the arrangements which the Soviet Union had made during the past summer regarding activities under the technical assistance programme had been favourably received.

48. Desirous of contributing further to the Agency's work in providing technical assistance, the Soviet Union was pledging an increased voluntary contribution to the General Fund for 1969, amounting to 150 000 roubles in national currency for the purchase of equipment, apparatus and materials in the Soviet Union.

49. At the present session of the General Conference, as was customary, the Agency's budget estimates for the coming year were up for consideration. It must be recognized that the Agency's Secretariat and the Director General had made a definite attempt to limit the rate of increase of the budget and that that attempt had met with some success.

50. There were no inherent obstacles to the Secretariat in following a rational policy in staffing and financial matters, and his delegation hoped that such a policy would be applied.

51. In conclusion he again stressed that the Soviet Union had always attached great importance to the Agency's aims and activities. In its view, the Agency had provided, and would continue to provide, valuable scientific and technical assistance both to the developing and to the developed countries in the use of atomic energy for the benefit of mankind. The Agency was also under an obligation to take active steps to thwart attempts to use atomic energy for purposes contrary to the interests of mankind. That objective made the Agency's existence not only desirable but indispensable and enhanced its role and influence in international relations. The Soviet delegation was convinced that the Secretariat fully understood the importance of the new tasks with which the Agency was faced.

52. Mr. McCORDICK (Canada) said that the peaceful uses of atomic energy were developing rapidly and continuously in Canada. Among recent developments in the Canadian nuclear power programme, he would refer only to the construction at Pickering, Ontario, of what would, in the early 1970's, be the world's largest nuclear power plant using heavy water moderated, natural uranium type reactors, and — another significant development — to the construction at Gentilly in the Province of Quebec of the first Canadian nuclear power station employing boiling light water as coolant. The use of boiling light water instead of pressurized heavy water as the heat transfer medium offered the prospect of significant savings in both capital cost and the cost of the power produced.

53. Among the areas of common interest to Canada and the Agency mention should be made of reactor development, the economics of nuclear power, the use of isotopes in medicine, agriculture and other fields, the establishment of health and safety standards, and the provision and exchange of technical and scientific information, together with the very important sector of safeguards.

54. If he were asked to what extent the Agency had been able to fulfil the functions assigned to it, and whether it had been and was still capable of

adapting itself satisfactorily to meet the ever-changing demands being placed upon it and to the ever-changing circumstances within which it had to conduct its work, his reply would be that the Canadian delegation was satisfied with the Agency's achievements. He considered that he was reflecting the general view in saying that the Agency had already amply demonstrated its capacity to serve the international community and that its usefulness and authority were growing steadily.

55. Without going into details with regard to the Agency's activities, he nevertheless wished to mention certain functions to which Canada attached great importance. One of those functions was the Agency's role in the field of nuclear power. It was foreseen that that role would acquire ever greater significance, particularly as regards assisting Member States in preparing their nuclear power programmes. The Agency occupied an almost unique position among international organizations in being directly and intimately concerned with that major industrial field, which was of fundamental interest to all its Members. The Canadian delegation was convinced that the Agency had successfully recognized both the importance and the sensitive nature of its role in that respect.

56. As to the dissemination of scientific information, the ever-increasing volume of scientific literature had created highly complex problems, which only recourse to new methods, such as those provided by the computer sciences, would make it possible to solve. The large technically advanced countries were already communicating both to smaller industrial countries and to developing nations the results yielded by their conventional information systems. In that connection the Agency could play a key role by providing a channel for exchanges and thus avoiding duplication of effort. On the other hand, care should be taken in determining the precise function of the Agency with regard to nuclear data and in deciding what resources it could reasonably devote thereto. Canada intended to continue to make an active contribution to the development of the Agency's work in that domain.

57. When the Agency's technical assistance programme was viewed in the very general context of the strategy which the United Nations and specialized agencies intended to pursue during the Second Development Decade, it was clear that the Agency would certainly play an active role in development, particularly in nuclear energy and its applications in agriculture, medicine and the generation of electricity.

58. The Canadian delegation also considered that the Agency should take an active part in the prepara-

tions for and the deliberations of the fourth international conference on the peaceful uses of atomic energy which, according to a recommendation of the General Assembly of the United Nations, would be held in 1970 or 1971⁷⁾.

59. Turning to the subject of safeguards, he was gratified at the vigour with which the Agency had expanded its safeguards system, which now included most of the facilities in the nuclear field and should soon cover the complete fuel cycle. The Agency's unremitting efforts to refine safeguards techniques and develop new methods proved that it was keeping abreast of developments in that sphere.

60. Following the conclusion of the NPT, the Agency would need to review its safeguards system and perhaps expand its activities. It would thereby secure an outstanding opportunity to advance the cause of international safeguards and to elaborate agreements and procedures which would become the accepted international standard, thus fulfilling two of its main purposes: that of ensuring that special fissionable materials, equipment and facilities were not used for military purposes, and that of facilitating the international exchange of nuclear materials and equipment for peaceful purposes.

61. In that connection it would first be necessary to develop a model agreement permitting the fulfilment of the obligations assumed by the parties to the NPT in respect of safeguards. Such an agreement should place broadly similar obligations on parties which would negotiate individually with the Agency and on groups of States which would negotiate collective agreements.

62. The Agency would also have to assess its requirements for additional staff not only for elaborating the model agreement and carrying out the related technical studies at Headquarters but also for work elsewhere, and it would similarly be necessary to make provision for the recruitment and training of inspectors.

63. To complete the negotiations relating to safeguards agreements, the Agency had a period of two years as from the date of entry into force of the NPT; in view of the large number of States with which agreements would have to be negotiated, that two-year period did not seem unduly long.

64. Regarding the additional expenditure brought about by the expansion of operations and of staff, the Canadian delegation considered that such expenditure should be charged to the Regular Budget and shared by Member States proportionately to their assessed contributions thereto.

7) General Assembly Resolution 2309 (XXII).

65. In his view, the Agency was uniquely qualified by virtue of its Statute, especially Articles III.A and XI, to assist in implementing Article V of the NPT, which concerned the provision of services relating to the peaceful applications of nuclear explosions to non-nuclear-weapon States. He would suggest that the Secretariat study the role which the Agency might play in that direction, where substantial progress was in prospect, and submit a report on the subject to the following session of the General Conference.

66. Before concluding, he desired to commend the Secretariat on the excellent manner in which the programme and budget had been prepared, as a result of which it was possible not only to analyse the Agency's detailed programme for the following two years but also to discern the general trend of the programme for the next six years. The Agency would thus be able to make the best possible long-term use of its limited resources. While congratulating the Secretariat on its efforts to avoid wasteful expenditure and to keep the expansion of the budget under firm control, his delegation believed that one should not allow oneself to become so preoccupied by budgetary considerations that one shrank from considering new areas in which it would be to the advantage of Member States to expand the Agency's programme. He reaffirmed that, satisfied as it was at the progress which the Agency had made in the past, the Canadian delegation looked forward with hope and confidence to the role which the Agency would be able to play in the future.

67. Mr. HIRSCH (France) said that, after twelve years of existence and in spite of the difficulties it had encountered, the Agency had gained its place among the international organizations. The developments which would be witnessed in the years immediately ahead (especially as regards the use of nuclear explosions for peaceful purposes) could only intensify the co-ordinating role played by the Agency in the dissemination of techniques connected with the peaceful uses of nuclear energy.

68. The development of nuclear energy, which had gone on at a rapid rate since the last session of the General Conference, continued to raise a large number of problems, both scientific and economic. One could not fail to be struck by the scope of the task that had to be undertaken in order to cope with the extraordinary growth in power consumption, and it was more necessary than ever to seek ways of achieving maximum efficiency as rapidly as possible. The exchange of information between countries which had acquired skill and experience and countries which were less advanced was the best means of avoiding waste and error, which for the richer countries were something to be regretted but for the developing countries were actual disasters.

69. The international meetings — symposia, seminars and panels — organized by the Agency had yielded very good results and deserved every encouragement, provided efforts were made in certain cases to obtain the collaboration of other international organizations so as to avoid any likelihood of duplication and also to achieve savings.

70. France appreciated the Agency's efforts to achieve rationalization in drawing up its long-term programme. The difficulty in the years ahead would lie in choosing the priorities to be assigned to the various projects.

71. He welcomed the Agency's increased support for the Laboratory of Marine Radioactivity at Monaco, which would henceforth be able to co-ordinate research done by national institutions and to standardize the results. The French Government had decided to make the Agency a gift of electronic equipment for the Monaco Laboratory; the items in question would form the components of a gamma spectrometry unit worth F.Fr. 100 000.

72. He was very much in favour of the objectives which the Agency had laid down for INIS. He took it that the team responsible for considering the best systems would report to the Board on solutions that were feasible, giving detailed information on their financial implications.

73. The French delegation approved the Agency's budget for 1969, although it had some reservations regarding the expansion of the Department of Safeguards and Inspection. If the Agency was to be called on to assume wider control functions in the near future, it should certainly make preparations to that end, but the number of inspectors employed by the Department should not increase at a rate higher than that of the number of installations to be inspected.

74. As regards the general question of the financing of inspections, he wished to reiterate the position of the French Government, which had agreed that such financing should be covered by the Agency's Regular Budget as long as research reactors, certain power reactors of different types and certain reprocessing installations were involved. However, the time was not far off when, owing to the transfer of control functions to the Agency under bilateral agreements, a considerable number of power reactors would be subjected to the Agency's safeguards, and the costs involved would tend to account for a considerable proportion of the total budget as it now stood. The French delegation considered it out of the question that such expenditures should in every case be charged to the Agency's Budget. The time would come when special measures would have to be taken. Those expenditures would then, to some extent

like conventional insurance against accidents, have to be charged to the sellers and users concerned, which meant, in the last analysis, that they would be included in the cost per kilowatt-hour.

75. Another problem, which had been raised by a number of countries, was the expansion of the Board of Governors. Since it was very rare for an item in the general debate to be the subject of a decision by vote, the French delegation had no objection a priori to the consideration of that problem; it had, moreover, adopted the same attitude in 1961 when two seats had been established for the benefit of the area of Africa and the Middle East. However, negotiations on the subject should not give rise to disputes nor raise questions concerning the Agency's Statute, and the new composition of the Board should not result in the discussions becoming more cumbersome.

76. As far as the development of the French nuclear programme was concerned, he merely wished to point out that, following the sudden breakthrough in the industrial development of nuclear energy in the world, the past year had been the occasion for a period of reflection on the part of the French authorities. While orders for nuclear power plants had continued to grow, most of the reactor types that were gradually coming to be considered as tried and tested had met with operational and structural incidents which raised important technological problems and made it necessary to carry out thorough-going studies. Independently of the use of nuclear power to generate electricity, a number of other uses of atomic energy had been considered, especially desalting and nuclear ship propulsion, to say nothing of French efforts to develop the peaceful use of nuclear explosions.

77. He welcomed the fact that consideration was being given to the holding, in 1971, of a fourth international conference on the peaceful uses of atomic energy. He was convinced the experience gained at the previous conferences and the active assistance of the Agency's Secretariat would permit such a meeting to be organized with a maximum of efficiency.

78. Mr. ERRERA (Belgium) said that among the achievements of the past year pride of place should be accorded to the NPT. As its representatives had stated both at the United Nations in New York and at the Conference of Non-Nuclear-Weapon States, Belgium considered the NPT not as the final stage in an effort aiming at the ultimate achievement of disarmament, but as the starting point of a policy designed to bring about the adoption of measures likely to ensure a genuine, controlled disarmament. In his delegation's view, the decision taken by the non-nuclear-weapon States to sign the NPT ought

to be followed by positive action on the part of the nuclear-weapon States, whose duties and responsibilities had been increased by the very fact of the NPT being accepted.

79. In signing the NPT, Belgium had understood that it was becoming a party to an important treaty which represented a first real step on the road to disarmament. It would object, however, if the NPT were to impair already existing achievements or impede the future progress of European co-operation, to which it attached great importance.

80. It certainly saw no incompatibility between the aims pursued by the NPT and the European Atomic Energy Community (EURATOM), but since the NPT contained, on the subject of safeguards, only a reference to agreements to be concluded with the Agency, it was not prepared to ratify it until the negotiations which, under Article III of the Treaty, would be carried out between the Agency and the Commission of the European Community had led to an agreement which respected the terms of the treaty under which EURATOM had been established.

81. He proposed to make some critical comments on the Agency's activities, which, he hoped, would prove beneficial to its work.

82. In the first place, he wished to recall certain remarks he had made at the last regular session of the Conference⁸⁾, which still remained topical.

83. It appeared more than ever advisable that a budget should be established for carrying out safeguards activities, which would be distinct from that covering all the other financial commitments of the Agency. The Belgian delegation had no desire to change the unique institutional character of the Agency, but rather to ensure the maintenance of its essential activities, for it feared that, in the face of the large additional expenses which would inevitably result from the expansion in the control functions, once the NPT had entered into force, the real cost of the Department of Safeguards and Inspection might be artificially reduced by including a part of its expenses in other administrative charges borne by the Agency. Such, indeed, was already the case. The safeguards budget should cover all payments for hours of service and all sums spent for safeguards purposes by officials of other Departments of the Agency. It was important that a clear and accurate picture be presented of the extent of the expenses incurred in respect of each of the Agency's activities and that nothing be done which might gradually restrict some of its activities under the pretext of a lack of funds, while a proportion of the latter, originally earmarked for those activities, was expended on safeguards.

8) See document GC(XI)/OR.113, paras 104-115.

84. The Belgian delegation had on many occasions recommended the establishment of a committee, composed of administrators and technical experts, which would be responsible for examining from an industrial, budgetary and general policy angle the proposals relating to the work of the Agency's Laboratory. It noted with satisfaction that the suggestion had been favourably received, since a fresh and detailed study of the work of the Laboratory was to be undertaken by a group of scientists and administrators in October 1968⁹⁾. He felt certain that the conclusions of that study, which were to be transmitted to the Board of Governors, would enable the latter to determine more easily and with greater efficiency the nature and scope of the activities of the Laboratory.

85. With regard to the more general problem of the financing of the laboratories and centres, his delegation could not approve of the trend towards charging to the Regular Budget the cost of an ever increasing proportion of the work undertaken, nor could it accept as relevant the reason given for doing so¹⁰⁾. As the Belgian delegation had declared in 1965, the Laboratory ought not to undertake with its own resources, which would of necessity always remain limited, activities which could easily and more cheaply be carried out at its request by laboratories in Member States¹¹⁾. The Agency should beware of being drawn into too much fundamental research, to the detriment of work on the practical uses of nuclear energy.

86. As far as the INIS project was concerned, the uneasiness voiced by the Belgian delegation at the eleventh regular session of the Conference¹²⁾ had not been allayed; on the contrary, a careful examination of the programme for 1969-74 had merely strengthened its fears. Although the matters which it had raised the previous year still appeared to be unresolved, and no decision had been taken at the governmental level, the Agency seemed to regard INIS as an established fact. Indeed, as the Belgian delegation would state at greater length during the debate on the 1969 budget¹³⁾, it had the feeling of being confronted with a series of accomplished facts which in no way solved the fundamental problems.

87. It was still wondering whether the conditions whose fulfilment it regarded as essential before the Agency should be authorized to establish the INIS project had in fact been met. Had steps been taken to ascertain whether a sufficient number of countries

capable of making a useful contribution to the system in the form of information were prepared to join in it? Such did not appear to be the case, for no approach had been made to Belgium in that connection. Had steps been taken to ensure that the project would not overlap, either in the field of documentation or that of information, with other similar schemes? That also seemed unlikely. Finally, had *agreement* been reached on the standardization of indexing *before* the implementation of the project? It appeared likely that that question also would receive a negative reply.

88. Nevertheless, a large infrastructure had already been set up in 1968, and the establishment of posts was planned for 1969. Had market research been carried out to assess the economic value of the project? Not until the latter was known could it be decided whether INIS was of interest to future users.

89. The interest it presented to users must be taken into account. Whether the system when established proved worth while or not would depend on the number of those calling upon the proposed services. The Belgian delegation felt that sufficient information was not yet available. The only fact that was known was that by 1970 the salaries of staff already in service or due to be attached to INIS, together with the operating costs of the computers, would amount to approximately \$500 000. Belgium did not regard that as a sufficient reason for approving that part of the Agency's programme at the present stage.

90. Its critical attitude should not, however, be interpreted as an expression of hostility towards the work done by the Agency.

91. Belgium valued highly the meetings organized by the Agency or with its support and readily recognized the usefulness of the assistance it offered to developing countries to further their progress in nuclear technology. It was in line with that attitude that Belgium placed at the disposal of the Agency each year six Type II fellowships, to a value of approximately \$20 000, in addition to making its annual voluntary contribution to the General Fund.

92. For the same reason the Belgian representatives at the Conference of Non-Nuclear-Weapon States at Geneva, in stressing the effectiveness of the technical assistance currently being provided by the Agency, had proposed the imposition of a financial penalty upon the States possessing nuclear weapons in the form of a substantial increase in the amount of their voluntary contributions to the Agency's General Fund, to be devoted entirely to providing technical assistance to developing countries. From

9) See document GC(XII)/385, para. 241.

10) *Ibid.*, para. 239, last sentence.

11) GC(IX)/OR.93, para. 46.

12) GC(XII)/OR.113, paras 107-109.

13) See document GC(XII)/COM.1/OR.80, paras 14-22.

a perusal of the remarks made by various delegations at Geneva, he noted that many of them had, like Belgium, expressed the wish that the States possessing nuclear weapons should increase their voluntary contributions to the Agency. The Belgian delegation had, however, been the only one to express that desire in quantitative terms; it had suggested that such States redeem their "nuclear sin" by paying as their annual voluntary contribution an amount equivalent to four times their voluntary contribution based on their assessment ratio under the Regular Budget, but not exceeding three times the highest current contribution.

93. In conclusion, he wished to thank the Director General for the excellent step he had taken in inviting Member States to communicate to him, before the Conference, written statements on the progress made in peaceful applications of atomic energy during the preceding year¹⁴), thereby relieving them of the task of presenting such statements in a plenary meeting. Belgium had taken advantage of that invitation and submitted a written statement on the progress made in its nuclear energy activities during 1967-68.

94. Mr. FAROLAN (Philippines) said he wished, on behalf of his delegation, to congratulate and welcome the Agency's new Member States. The continuing growth in the membership of the Agency bore witness to the universal recognition and acceptance of the indispensable character of its work in promoting the peaceful uses of atomic energy for the benefit of all peoples throughout the world.

95. It was auspicious that the present session of the General Conference had convened at a time when the General Assembly of the United Nations had decided to commend the NPT. That action, in the words of the Director General, represented a step of profound importance towards international peace and security. The Treaty presented a new and demanding challenge to the Agency, particularly as regards its role in implementing the safeguards provisions. The smooth functioning of the Agency's safeguards system, which had now been extended to plants for converting or fabricating nuclear material, was of great significance for the proper discharge of the Agency's safeguards functions under the Treaty. The Philippines had manifested its unconditional support for the Treaty by being among the first signatories.

96. His delegation believed that substantial progress had been achieved by the Agency in several fields during the past year. The Director General and the Secretariat should be congratulated on the work they had accomplished, and if much still remained to be done, particularly in meeting the needs

of developing countries for technical assistance, it was only because the Agency was handicapped by insufficiency of funds.

97. The Philippine delegation indeed shared the growing concern of the Board of Governors and of many Member States at the inadequacy of the resources available for the Agency's technical assistance activities. Voluntary contributions had never reached more than 75% of the yearly target of \$2 million and the shortfall appeared to be getting more substantial as time went by.

98. To developing countries like the Philippines, technical assistance was one of the Agency's most important activities, and failure to obtain it often compelled such countries to postpone worth-while projects in nuclear research and development. He therefore desired to reiterate the appeal made by the Philippine delegations at previous sessions of the Conference that the more advanced and wealthy nations should respond sympathetically to the request for increased voluntary contributions to the General Fund by pledging funds at least corresponding to their assessments under the Regular Budget, and more if possible. Despite its financial difficulties the Philippines would make a voluntary contribution to the Agency's General Fund for 1969 corresponding to its assessment under the Regular Budget.

99. The Philippines was keenly interested in the work being done, with the Agency's support, in research on the use of radiation in food preservation and grain disinfection, and on agricultural studies leading to increased food production. The demonstration-type projects sponsored by the Agency were most welcome to scientists from the developing countries, who were usually interested above all in practical solutions to pressing problems relating to economic and social development. Limited research work was being done in that connection in the Philippines, which however hoped that the results of the Agency's projects would enable it to make greater progress.

100. His Government viewed with keen interest the Agency's efforts to promote co-operation between the countries of Asia and the Far East. There was no doubt that the use of the limited resources of the nuclear energy establishments of the individual countries in that region to solve common problems would be conducive to realistic regional co-operation. He was particularly gratified at the establishment of the Agency's Regional Office for Asia and the Far East in Bangkok, under the direction of Mr. F. Medina.

101. He now wished to summarize the salient features of his country's activities in the peaceful

14) See document GC(XII)/INF/101/Rev.1.

application of nuclear energy during the year 1967/68; a full statement on those activities had been communicated to the Director General and distributed by the Agency as information material for the Conference.

102. As regards nuclear power development, although the Manila Electric Company (MERALCO), the largest electric utility company in the country, had postponed until 1975 the operation of its first nuclear power plant, the Philippine Government had paved the way for the eventual introduction of nuclear power by enacting the Atomic Energy Regulatory and Liability Act, concluding a revised agreement for co-operation with the United States of America concerning the civil uses of atomic energy and making arrangements for the conduct of a local training programme in reactor operation, maintenance and instrumentation for the engineering staffs of both government and private bodies concerned with electric power generation.

103. The India-Philippines-Agency (IPA) neutron crystal spectrometry programme¹⁵⁾ was now in its fourth year of operation, and had stimulated great interest in solid-state physics in the region. The Philippines supported the recommendation of the Joint Committee for the IPA programme on the need to expand the project to include the participation of Australia, the Republic of Korea, Thailand and Japan.

104. As he had just stated, the Governments of the Philippines and of the United States of America had in June 1968 signed a new Agreement for Co-operation concerning the Civil Uses of Atomic Energy, superseding the agreement of July 1955. The two Governments had agreed, inter alia, that the Agency would continue to administer the safeguards stipulated in the new Agreement for Co-operation as had been done under the superseded agreement. Accordingly, a new trilateral agreement on the transfer of safeguards between the Agency, the United States of America and the Philippines had been signed on 15 July 1968¹⁶⁾.

105. The Philippine delegation was happy to note the increased importance attached to research contract projects by the Agency. The soundness of the research contract arrangements had resulted in Member States concluding contracts with the Agency on an ever-increasing scale. His own Government acknowledged the stimulating effect on its nuclear research activities which such contracts had had, and it trusted that the Agency would continue its research contract activities with even greater vigour.

106. The Philippines was also grateful to the Agency and to the United States of America for the assistance extended in the form of grants of special uranium materials for the fabrication of replacement fuel elements for the Philippine Research Reactor PRR-1. The first 20 replacement fuel elements were now ready for use and negotiations had started for the fabrication of the further 10 elements which would complete the replacement of the reactor's fuel.

107. He desired to put on record his Government's sincere appreciation of the sympathetic support accorded to it by the Director General and his staff during the past year. That support had been given in the spirit of true co-operation, despite the limitations within which the Agency had to operate. For its part, the Philippines had exerted - and would continue to exert - greater efforts to make itself deserving of increased aid, and to become a still more effective force in contributing to the advancement of the lofty aims of the Agency. Those aims would be brought still nearer to realization by the implementation of various measures of a practical nature, particularly those proposed by six Members for enlarging the composition of the Board of Governors¹⁷⁾.

108. In conclusion, he said his delegation welcomed the recommendations made by the Director General¹⁸⁾ and by the Board in its report to the General Conference (GC(XII)/380 and 389).

109. Mr. PEIRIS (Ceylon) welcomed the agreement between Mexico and the Agency by virtue of which all Mexico's nuclear activities would be placed under the Agency's safeguards. In his view, there was a clear connection between the present session of the General Conference, which was continuing the efforts made to harness the energy of the atom for the benefit of mankind and to promote economic and social progress, and the deliberations now under way at the Conference of Non-Nuclear-Weapon States at Geneva, which was striving to eliminate the threat of a nuclear holocaust. Some of the views and suggestions put forward at the Geneva meeting might be of value to the General Conference, and it was fitting that it should send the delegates at Geneva a message expressing its best wishes for the success of their work.

110. Approval of the NPT was not an end in itself; it would have to be followed by other actions if any real sense of security was to be warranted. One such further step was complete disarmament, in

15) See document INFCIRC/56 and Add.1.

16) Reproduced in document INFCIRC/120.

17) See the draft resolution in document GC(XII)/397.

18) See document GC(XII)/OR.119, paras 29-53.

regard to both conventional and nuclear weapons. As further progress was made in that direction, the Agency would gradually be called upon to assume further responsibilities, and it should prepare itself in every way to do so.

111. Although the Agency would have important obligations to discharge in connection with the NPT, it was essential that it should not lose sight of its basic objectives and priorities. Its most important task was to make information and know-how relating to the peaceful uses of nuclear energy available to the developing countries. It would be unfortunate and regrettable if the impression were created that the Agency was losing sight of, or abandoning, that priority objective.

112. It was idle to expect that general and complete disarmament could be achieved without a complete transformation of the general political situation in the world. That was a discouraging prospect, but efforts should nevertheless be made to move forward, even by short steps. The main obstacles to a relaxation of world tensions and to general and complete disarmament were injustice, fear and mistrust. A greater degree of trust and confidence, not only among the great Powers but among all the nations of the world, appeared to be a sine qua non for a general improvement of the world political situation. Was it too much to hope that a greater degree of international co-operation in the peaceful uses of nuclear energy would make some small contribution to that end?

113. Most of the developing countries could report some advances in the peaceful applications of nuclear energy. Ceylon had, unfortunately, not yet been able to develop any nuclear capacity, and its financial position was unlikely to enable it to do so in the foreseeable future. It was, however, encouraged to learn that the previous year's forecasts of the rate of development of the world's nuclear capacity had not only proved to be realistic but were even likely to be surpassed. A statement summarizing what Ceylon was doing in fields which were of interest to the Agency had been communicated to the Director General.

114. He wished, however, to make a few general remarks on the work of the Agency.

115. A very tight budget seemed to be a perennial problem. However, it was doubtful whether the developing countries would be able to increase their present contributions and it was therefore to be hoped that the more fortunate countries would find it possible to make bigger contributions, thereby enabling the Agency to intensify what should be

its main activity — the granting of all types of technical assistance to developing countries. Meanwhile, the Ceylonese delegation endorsed the suggestion that technically advanced countries should help support, on a bilateral basis, projects which the Agency could not at present finance owing to lack of funds.

116. What the developing countries needed most were experts, equipment and technical training. He welcomed the recommendation made at the previous session that equipment should be provided independently of the services of experts in respect of several projects¹⁹⁾. He hoped that policy would be continued.

117. It was also desirable that the greatest possible number of seminars and training courses should be organized for the benefit of developing countries.

118. The establishment of the Ceylonese Radioisotopes Centre had made it possible to hold courses for undergraduates in certain specialized subjects. He wished to reiterate the suggestions which Ceylon had made concerning the desirability of the Agency's holding more courses, of an international or regional nature, at that Centre. Radiological protection and nuclear medicine were two fields in which such courses could be held. It had also been suggested that the Ceylonese Radioisotopes Centre could be developed into a regional centre for training and research.

119. In conclusion, he wished to express the gratitude of his Government to the Director General and the Secretariat for the valuable assistance and co-operation which Ceylon had always received from the Agency.

120. Mr. GANEV (Bulgaria) said that the Agency was continuing its efforts to provide a larger number of States with the opportunity to benefit from the achievements of nuclear science and technology. The NPT, which had been signed by more than eighty States, including Bulgaria, created a favourable atmosphere for the Agency's work. The Treaty, the purpose of which was to close all doors to the proliferation of nuclear weapons, could bring about conditions in which more vigorous steps could be taken to achieve nuclear disarmament, and thus general and complete disarmament. Implementation of the Treaty would make it possible to use exclusively for peaceful purposes the scientific, technical and material resources devoted to nuclear energy activities and pave the way for a collaborative effort in which the Agency had a leading role to play. Under Article III of the Treaty, the Agency was called upon to act, through its safeguards system, as the organ primarily responsible for supervising

19) See General Conference Resolution GC(XI)/RES/230.

implementation of the Treaty. That was yet another recognition of the Agency's authority in international relations, and one which made heavy demands on it. The Bulgarian delegation was convinced that the Agency had the necessary means to carry out that highly responsible task successfully. As a member of the Agency's Board of Governors and also of the Eighteen-Nation Disarmament Committee, Bulgaria was prepared to play its part in a business-like and constructive manner. He would like to draw attention to the fact that the German Democratic Republic had also made more than one contribution towards that end. It had been one of the first signatories of the NPT; on 19 September 1968 its Government had submitted to the Conference of Non-Nuclear-Weapon States a memorandum in which it had again emphasized its resolve to support the Treaty, and at the tenth regular session of the General Conference, the same Government had specifically expressed its support for the safeguards system. It was essential that the principle of universality in the Agency should be respected and it was most regrettable that, over a period of years and despite the attitude adopted by many States, that question had not yet been solved in a correct and equitable manner. The German Democratic Republic was a highly industrialized State, with notable achievements in the peaceful uses of atomic energy, which could make a positive contribution to the achievement of the lofty aims of the Agency. The fact that it was not a Member of the Agency was an abnormal situation, particularly in the light of the NPT, and he felt that the Agency should favourably consider any application for membership which that country might present.

121. The documents dealing with the Agency's future activity in the period 1969-74 gave an idea of the systematic efforts it was making to extract greater benefits from the development of nuclear science and technology. The formulation of long-term programmes would cast the Agency's activity in a new light, as well as making it possible for individual States to bring their national programmes into harmony with the main trends of the Agency's activities. He welcomed the Agency's efforts to devote close attention to nuclear power, technical assistance and the use of radioisotopes.

122. Bulgaria was keenly interested in the Agency's work on radioisotope applications in agriculture, industry, hydrology, foodstuffs preservation and

health. A considerable amount of useful work was also being done by Bulgaria and other socialist countries under the auspices of COMECON. COMECON's Standing Committee on the Peaceful Use of Atomic Energy was primarily concerned with the construction of nuclear power stations, the manufacture of nuclear equipment, the use of radioisotopes and labelled compounds, radiation safety and shielding techniques.

123. In regard to technical assistance the Agency should comply with the terms of the resolution adopted at the previous session. Appreciable quantities of equipment had been supplied in 1968. Besides safeguards and INIS, which were regarded as major elements in the Agency's future activities, it was still one of the Agency's tasks to help the developing countries by providing fellowships, supplying equipment, sending experts on missions, holding scientific meetings and courses, etc. By convening conferences and symposia on the use of atomic energy in science and the national economy, the Agency performed a service of value not only to the participating countries but to all Member States; the topics discussed at such meetings should be those of interest primarily to the developing countries. The annual training courses on various subjects were of considerable importance for training young scientists, particularly in applied science. The regional meetings of experts, such as that held in Sofia from 10 to 14 June 1968 on foodstuffs irradiation, were also useful. Other international organizations should provide financial support for the symposia, meetings, courses and seminars organized by the Agency.

124. As far as the Agency's budget was concerned, the Bulgarian delegation considered that the Secretariat had taken into account the Administrative and Budgetary Committee's recommendation concerning a certain reduction in expenditure. Another matter that should be carefully considered was the proposed programme for the Seibersdorf Laboratory, in order to determine that the work proposed for it was urgent and that no other work had higher priority.

125. He again emphasized the need to continue to strive towards the establishment of a more favourable climate for international co-operation in the Agency, in the spirit of its Statute and the United Nations Charter.

The meeting rose at 5.50 p.m.