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President: Mr. PERERA (Ceylon)

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^{*} GC(VII)/247.

The composition of delegations attending the session is given in document GC(VII)/INF/66/Rev.2.

GINERAL DEBATE AND REPORT OF THE BOARD OF GOVERNORS FOR 1962-63 (GC.(VII)/228, 243) (continued)

- 1. Mr. GUDENUS (Austria) said that the discussions on future tasks and aims at the last two sessions of the General Conference had been most valuable and the Agency had now reached the stage where its work could continue in accordance with generally accepted principles.
- 2. The joint memorandum by the Board of Governors and the Director General on long-term planning was a very constructive guide for the future activities of the Agency and a striking example of how to tackle and overcome difficult problems.
- 3. Austria hoped that the Agency would devote increasing efforts to the practical uses of nuclear energy in science and industry. The Agency's studies on nuclear power costs and the use of nuclear power plants would undoubtedly be of great assistance to many Member States. The publications on reactor facilities and the results of the Symposium on Criteria for Guidance in the Selection of Sites for the Construction of Reactors and Nuclear Research Centres²/ had been particularly appreciated in Austria.
- 4. A country's decision on the use of nuclear power depended to a large extent, however, on the general power situation and, in giving advice to Member States, the Agency should be able to call on the highly qualified power experts available in other international organizations. It was, therefore, desirable to continue the efforts to secure closer co-operation between the Agency and other international organizations, including the World Power Conference, though it was logical that the Agency should have the primary responsibility for questions of investment in nuclear power.
- 5. He noted with great satisfaction the Board's recent decision to extend safeguards to large reactor facilities. It would, however, be necessary to review the procedure for the application of safeguards, and he hoped that

^{1/} GC(VII)/227.

^{2/} Held in Bombay from 11 to 15 March 1963.

^{3/} See document GC(VII)/235.

the study to be carried out in 1964 would result in a workable and universally accepted system. At a later stage, consideration would also have to be given to another important question, namely the extension of safeguards to facilities other than reactors. Austria intended to enter into negotiations with a view to transferring to the Agency the responsibility for applying the safeugards provided for in the bilateral agreement between Austria and the United States.

- 6. The training programme was another of the Agency's most important activities. At the last session of the General Conference, his country had announced that it would place certain facilities at the Agency's disposal for that programme and arrangements had now been made for the first training course to begin at the Seibersdorf Reactor Centre on 1 October 1963. It was hoped that the training programme would be useful to young scientists, particularly those from the developing countries. Austria was also considering the possibility of establishing a training centre for the applications of radioisotopes in medicine.
- 7. Now that atomic energy was coming to be used in so many different ways, it was natural that the different specialized agencies should be interested in particular branches of the subject. It was most important that all their activities should be effectively co-ordinated and the Agency, which should have primary responsibility in all fields closely related to nuclear energy, was undoubtedly the most appropriate body for that task.
- 8. He stressed the importance of the legal work done by the Agency during the past year, mentioning in particular the International Conference on Civil Liability for Nuclear Damage held in Vienna and the Nordic Mutual Emergency Assistance Agreement in connection with Radiation Accidents 4. It seemed desirable that other countries should follow the example of Scandinavia.
- 9. In conclusion, he expressed the hope that the treaty imposing a partial ban on nuclear weapons tests would represent a first significant step towards a better understanding among nations.

^{4/} The text of the agreement is reproduced in document INFCIRC/49.

- 10. Mr. DARUSMAN (Indonesia) said that his delegation warmly supported the statement made by the delegate of Ghana and strongly urged that the Conference should inform the United Nations of the importance attached by the new African and Asian countries to the political factor as an essential condition of the Agency's success.
- 11. Indonesia had made further progress in atomic energy with the acquisition of a well-equipped radioisotopes laboratory, a reactor simulator and a library. The Triga Mark II reactor being built at Bandung had almost been completed; a site had been selected and the necessary preliminary survey and preparations made for the construction of a 2-MW research reactor.
- 12. During the past two years his Government had been exploring the possibility of establishing a regional isotope training centre for South East Asia and the Pacific in Indonesia and, in spite of certain delays and difficulties, was continuing its preparations, which were at present confined to the operation of such a centre on a national basis. A four-week course in radiation protection and two four-week courses in radioisotope applications would be held in November 1963 and January and July 1964 respectively, and applications were invited from trainees from other Member States.
- 13. His Government considered that the Agency's procedure of awarding fellow-ships should be reviewed. Owing to the long waiting period before receipt of their grants, the original applicants were in most cases no longer able to accept them; it would be helpful if they could be replaced by other available candidates with the same qualifications. Closer co-operation was also required between the Agency, the host Government and the nominating Government.
- 14. With regard to the technical assistance programme, he pointed out that many young scientists returning from training abroad could not make satisfactory use of their newly acquired knowledge because of lack of equipment. It was therefore highly desirable to stress the provision of equipment, rather than experts. The Agency should also improve its arrangements for sending out missions, which should visit a Member State only if its consent had been obtained.

^{5/} GC(VII)/OR.76, paras. 8 to 14.

- 15. In principle, his delegation was opposed to safeguards and believed that a rigid control would serve no purpose, especially as developing nations were unlikely to use their limited resources for military purposes.
- 16. As to research contracts, his delegation fully recognized their importance, but thought that too many had been awarded to technically advanced countries; the funds, distributed on a regional basis, could be better spent on partially financing research facilities in developing countries. His Government was particularly interested in a research grant in agriculture, for which it already possessed the necessary facilities; Member States were welcome to send research fellows to its laboratories.
- 17. The Agency could promote scientific documentation and the dissemination of scientific information by establishing depository libraries in the developing countries, with the help of the United Nations Resident Representatives.
- 18. His Government appreciated the Agency's policy of organizing as many seminars, symposia and conferences as possible in developing countries and would be glad to act as host for a symposium; the necessary facilities would be available by the end of 1964.
- 19. Mr. N'DIAYE (Mali) said that at a time when the three great nuclear Powers had just concluded an agreement on the discontinuance of nuclear tests on the ground and in the atmosphere, the Republic of Mali placed great hopes in the Agency. Everyone knew that Mali had always taken a firm stand against such tests, wherever they might take place and in whatever form. That position had been clearly defined on many occasions, both in the General Conference and in all other international assemblies. It had never changed. By signing the Moscow treaty, Mali had accordingly expressed, through the voice of its President, its satisfaction at being able to associate itself actively with a victory in the struggle for general and complete disarmament.
- 20. The developing countries were aware of the immense possibilities for economic and social development offered by atomic energy, and they warmly welcomed the substantial efforts already made by the Agency. Of course, a great deal remained to be done, but the Agency's programme was likely to make a large contribution to the improvement of living conditions throughout the

world, and particularly in the less-developed countries. In that sphere, the application of radioisotopes in medicine and agriculture opened up wide possibilities, particularly in the fight against noxious insects, the preservation of foodstuffs such as meat and fish, and the prophylaxis of endemic diseases such as malaria and trypanosomiosis. The use of iodine-131 in the diagnosis and treatment of thyroid affections, and of cobalt-60 in teletherapy, were already available to the developing countries.

- 21. The 1964 programme should therefore pursue and develop those peaceful uses of atomic energy. But there was another use in which Mali was greatly interested, namely electric power production. It had been found that for the time being, to be economic, power reactors must be of a certain size. Poor countries were not able to finance reactors of that size, and the Agency should therefore promote the study and development of small atomic power plants of less than 50 000 kW capacity, which would be within their limited financial means. The delegation of Mali considered that that would be one of the best ways of extending to the developing countries the advantages offered by atomic energy for the generation of electricity.
- 22. Leaving on one side questions of equipment and technique, subjects that had already been eloquently dealt with by more competent speakers, he would like to make some comments of a political character despite the wish expressed by an eminent delegate. At the opening meeting of the present session the delegate of South Africa had carnestly requested Member States to leave aside the political problems that divided them and to confine themselves to the technical questions that fell within the Agency's competence. He had been disappointed at that conciliatory proposal, coming as it did from the representative of so intransigent a country as South Africa; in view of the total contempt for the black race shown by the South African Government, he had expected its representative to say that the South African delegation could not logically sit side by side with black delegations and consequently felt bound to withdraw. He would then have understood its position, and even have appreciated its attitude, since such a gesture would have been in conformity with the policy of racial segregation openly practised by its Government.

- 23. Unfortunately, it would appear that the views of the South African authorities on the racial question varied according as the problems in question were internal or external. The South Africans would certainly not expect that the coloured people would insult them by demanding their expulsion from the Agency: their pride at belonging to the chosen race would no doubt urge them to go of their own accord. They could not in any case complain of any inconsistency in policy, since the coloured peoples had never ceased to press for, and even demand, the expulsion of South Africa from all international bodies, in accordance with the provisions of the United Nations Charter, and in conformity with those of the Addis Ababa Charter.
- 24. The same observations obviously applied equally to Portugal, whose policy was closely akin to that of South Africa. The delegates of both countries would therefore not be surprised if the coloured peoples continued to pursue a logical policy and demanded that which they had never ceased to demand in other circumstances and places, namely the exclusion of South Africa and Portugal from the Board and from the General Conference. It was intolerable that the Agency should continue to give its moral support to States that continually and deliberately trampled underfoot the elementary principles of human dignity; the maintenance of an odious system of social segregation and the domination by a foreign minority of a native majority were an insult to the whole human race.
- 25. If the co-operation the Agency wanted was to be candid and effective, those who rejected all idea of equality between races, who degraded men, or continued to encourage the shameful exploitation of man by man, must go in other words, all those whose presence could be nothing but a source of discord and disagreement. It was not logically possible to speak of universal disarmament and of the peaceful uses of atomic energy in developing countries when it was perfectly well known that in some of those countries the moral principles that should govern the relations between peoples and races were deliberately ignored. Hence, before considering any other matter, it was necessary to have the courage to stamp out an evil that weighed on the conscience of mankind by taking up the challenge that Portugal and South Africa had dared to cast in the face of the entire world. The independent African States had unanimously taken up the glove at Addis Ababa. It remained to be seen whether countries that claimed to be partisans of peace and social justice would follow suit, follow what no one could deny was the right road.

- 26. Moreover, South Africa's right to be on the Board appeared debatable, not only because of its odious <u>aparthoid</u> policy but also because the right of a South African Government put into power by a white minority to be considered representative was open to question. South Africa and Portugal should fall into line with the rest of the world and respect the fundamental principles to which they had subscribed in accepting the United Nations Charter, failing which the rest of the world should have the courage to reject them so long as they maintained their racialist and colonialist policy. The respect due to the dignity of man, regardless of colour or of the social condition in which he might temporarily find himself, was at issue. No solution aiming at universal disarmament and the establishment of lasting peace in the world could be effective until respect for human dignity was entirely restored everywhere and freedom was the lot of all. Until those ends were accomplished arms would not be abandoned, and all measures to promote world peace would prove ineffective.
- 27. Mr. AMOS DJORO (Ivory Coast) expressed the gratitude of his country to the Board for recommending its admission in the first place, and to the delegates of the Member States who had unanimously approved its application for membership of the Agency.
- 28. The Ivory Coast was naturally glad to be admitted to full membership. It was an honour to belong to an organization whose main object was to develop the use of atomic energy for peaceful purposes in medicine, agriculture and industry applications that were of special interest to the developing countries. Nationally and internationally, there was a complete identity of aim between his country and the Agency, and joining the Agency was in itself an expression of that identity of view. It was in that same spirit of working for peace that his Government, by its signature, expressed its approval of the Moscow test ban treaty.
- 29. Under those circumstances the potential radioactive ore resources of the Ivory Coast could be placed at the disposal of mankind for its good rather than used for its destruction.
- 30. Hence he wished to draw the attention of the General Conference to the presence in the Agency of countries which, like South Africa, defied world opinion by casting doubt on the potentialities of man, by trampling on his

dignity, and by making his race and colour a badge of shame. That was not only an insult to democracy, it was a grave affront to the very spirit of the Agency.

- 31. Pending the taking of measures to expel South Africa, he wished to stress his delegation's entire support for the views of all delegations which considered the presence of representatives of a unique and iniquitous regime undesirable in the Board and at the General Conference.
- 32. The greatness of the Agency lay in its determination to utilize science and technology for the happiness and for the freedom of mankind.
- Mr. BILLIG (Poland) expressed his satisfaction at the admission of three new African States to membership of the Agency. His delegation sympathized with and fully supported the struggle of the African peoples against the racialist policy of the South African Government.
- 34. The present session of the General Conference was taking place in a favourable international atmosphere, thanks to the signature of the Moscow treaty banning nuclear weapons tests in the atmosphere, in outer space and under water. In his view that was an extraordinarily important event and the first step towards realizing humanity's aspirations of lasting peace and the fullest possible use of nuclear energy to meet human needs.
- 35. He recalled that the United Nations Economic and Social Council (ECOSOC) had unanimously adopted at its thirty-sixth session a resolution referring to the Agency's responsibilities regarding the peaceful uses of atomic energy 6.
- 36. His delegation attached great importance to the Agency's fellowships programme. It was a great achievement for the Agency to improve the qualifications of close on 400 scientific workers and engineers annually. Agency fellowships were important not only because they improved the qualifications of the fellows concerned, but also because they enabled close links to be established between the institutes in which the fellows worked, links which were often transformed into lasting scientific co-operation.

^{6/} ECOSOC Resolution 986 (XXXVI), reproduced in document INFCIRC/48.

- 37. The Polish delegation wished also to express its satisfaction at the assistance furnished by the Board and the Secretariat in connection with the agreement reached between Yugoslavia, Norway and Poland concerning co-operation in the field of reactor physics. Although the agreement had been concluded quite recently, he thought it could already be said that the type of co-operation involved was most useful and appropriate. Such co-operation, within the framework of the Agency, should be widened to include other fields of research.
- 38. Referring to the long-term programme drawn up by the Agency, he remarked that the document before the General Conference was the starting-point for elaboration of a more detailed plan.
- 39. Outstanding amongst the problems facing the Agency, in that connection, was the development of reactor technology and nuclear power.
- 40. The example of India, where a large-scale nuclear plant was being built, showed that the question was becoming increasingly important for the developing countries as well. They were now acquiring reactors and establishing new nuclear centres. The main issue for them, therefore, was the training of qualified staff, able to carry through an appropriate research programme and to undertake reactor construction, which was a necessary stage in the development of nuclear power. The Agency could do much in that direction, both in training personnel and in providing advice on the utilization of nuclear equipment.
- 41. He thought consideration should be given to the possibility of turning one or more national institutes into international centres to which the Agency could send scientists and engineers for training and to carry out specific research programmes. The Agency could also play an important part in research on radioactive waste disposal.
- 42. His delegation was convinced that the third Geneva conference, to be held in 1964, would help the Agency to draw up a specific programme with regard to nuclear power problems.
- 43. Everyone agreed that safeguards should be attached to reactors with a capacity exceeding 100 MW. Nevertheless, his delegation had always considered that safeguards should be applied in such a way as to avoid infringing national sovereignty. That meant that they should be applied only where really necessary, their sole purpose being to prevent the spread of nuclear weapons.

- 44. His delegation approved of the Agency's research contracts programme.
- 45. He also noted with satisfaction that some positive results had recently emerged from the work of the Seibersdorf Laboratory: preparation and distribution of isotope standards, measures for the comparison and unification of methods of analysis, etc. Nevertheless his delegation thought that the Agency could play a greater part in scientific research, without any increase in financial expenditure, if it requested individual countries to submit to the Agency the results of research coming within the scope of its programme. Poland would play its part in that respect, as far as its modest resources permitted.
- 46. The Agency's work on standardization and unification in the nuclear energy field, and on the establishment of standard regulations for the transport of radioactive materials, was also useful. It would be possible, he thought, to draft a uniform code on the subject for adoption by all countries. A start had been made in that direction by co-operation between the Agency and the countries of the Council for Mutual Economic Aid (COMECON).
- 47. The Agency's work during the past year had, however, been marred by several defects. He was thinking of the attempt to introduce new principles for the award of fellowships, by which Type I fellowships would go only to countries in receipt of aid under the Expanded Programme of Technical Assistance (EPTA); and also of the efforts to amend Article XIV of the Statute, which dealt with the method of financing the Agency's activity.
- 48. To alter the principles by which fellowships were awarded, with the idea of discriminating against certain countries, was contrary to the very basis of the Agency's work. And the proposal had failed to find any enthusiastic support within the Board. His delegation was in favour of awarding fellowships in such a way as to take greater account of the needs of applicants from developing countries without depriving any Member State of its legitimate rights. The Agency, he recalled, had not been making full use of Type II fellowships for a number of years.
- 49. The second question of serious concern to his delegation was the attempt to amend Article XIV of the Statute, dealing with the methods of financing the Agency's work. The proposed amendment would introduce a kind of compulsory

taxation, imposed on sovereign States. To abandon the voluntary principle governing technical assistance operations would bring about not only a change in the Statute, but also in the character of the Agency itself.

- 50. Furthermore, though the purpose of the proposed amendment was ostensibly to ensure sufficient funds for the programme of technical assistance to developing countries, in actual fact it might lead to a reduction in the funds available to the Agency for technical assistance purposes, since a number of countries which had so far been making voluntary contributions for technical assistance might refuse to take part if any element of compulsion were introduced, as United Nations experience showed.
- 51. His delegation wished to declare solemnly that Poland would continue to grant assistance to the developing countries on as large a scale as possible.
- 52. He recalled in that connection that Poland, together with the other socialist countries, had, at the sixth regular session of the General Conference, put forward a specific plan of assistance to developing countries, providing inter alia for the establishment of physics and medical centres. His Government had been prepared to supply equipment and fellowships to the value of approximately \$75 000, a sum which exceeded its annual contributions to the Agency and was considerably higher than the contributions which would be requested of Poland if the proposed amendment to Article XIV of the Statute were adopted. The Agency had not, however, made any use of that offer.
- 53. His delegation remained of the opinion that the programme concerned was not only practicable but could even be considerably extended. Poland, like the other socialist countries offering assistance, did not want to see any delay in implementing the programme.
- 54. In conclusion, he stated that the Polish Government and people fully supported the Moscow treaty and expressed the hope that the great Powers would continue the efforts begun at Moscow.

^{7/} GC(VI)/COM.1/67/Rev.1.

- 55. Poland's support for any initiative directed towards consolidating international peace was inspired not only by a general desire for peace but also by its particular geographic situation. His country was following with great anxiety the policy of the Federal Republic of Germany, whose signature had been placed with such reluctance beneath the Moscow treaty, and its attempts to acquire nuclear weapons at any price. At the same time, the Polish people had welcomed with great satisfaction the fact that the Government of the German Democratic Republic had been prepared to sign the Moscow treaty immediately.
- 56. The Polish delegation expressed its profound conviction that the initial step taken in Moscow would inspire all Governments to redouble their efforts to ensure peace throughout the world.
- 57. Mr. HIRSCH (France) welcomed the Agency's new Member States, particularly Gabon and the Ivory Coast.
- 58. After the euphoria of the years 1955-58 and the readjustment of 1959-62, it could be stated that the promise of 1962 had been fulfilled. Electric power production by atomic plants was already starting to assume industrial proportions in several large countries and becoming so nearly economically competitive that signs of concern could be detected in producers of conventional power resources. However, such concern was unfounded because longterm forecasts showed that a steadily developing world would definitely have to supplement its reserves of conventional fuels by nuclear ones.
- 59. The United States Atomic Energy Commission had issued an interesting report on future prospects in which it dealt with the problem of world uranium resources in relation to the need to develop fast reactors. The French delegation agreed with the general long-term conclusions of that report: fast reactors constituted the only means of utilizing the immense uranium supplies available in the world's rocks. On the other hand, it had to be remembered that the development of electric power production by fast reactors was inevitably dependent on very large-scale production of plutonium in thermal reactors using natural or slightly enriched uranium. The economic viability of thermal reactors had already been demonstrated, and the main nuclear task of the coming 25 years would be to construct them in large numbers.

- 60. It therefore was a suitable moment to seek a definition of the Agency's long-term tasks. The French delegation approved the main lines of the long-term programme submitted to the General Conference. It was not a revolutionary plan, but simply a reassessment of the priorities to be assigned to the activities which clearly came within the Agency's terms of reference. It was to be hoped, in a field where changes were occurring so rapidly, that the programme would not become stagnant, and France had already proposed to the Board the setting up of a committee which could help the Secretariat adapt the programme to the needs of Member States at regular intervals.
- 61. The long-term programme covered five major spheres of activity: power production, radioisotope applications, waste management, radiation protection and scientific research.
- 62. Nuclear power production was naturally one of the Agency's main concerns, as it formed the basis of national nuclear energy programmes. Many new nuclear power station projects would have been launched by the end of 1963. In France, after the Marcoule reactors, the first nuclear power station of Electricité de France had started supplying power to the grid. The next two power stations were under construction and a fourth had been decided on: it, too, would have a natural uranium, graphite-moderated reactor, cooled by pressurized gas. At the same time, a similar type of reactor, using heavy water as moderator, was being developed. The first prototype fast reactor was under construction at Cadarache as a joint project with the European Atomic Energy Community (EURATOM). France was also participating in joint undertakings concerned with the design and construction of other types of reactors.
- 63. It should be reiterated that the nuclear power stations already constructed or under study had net outputs of several hundreds of megawatts and were located in countries where industrial development justified setting up power stations of such large size. It should also be pointed out that the Agency had not yet had any opportunity to participate in international negotiations relating to power reactors.
- 64. It was not certain whether medium-power reactors would be constructed in the near future with Agency assistance, even if such reactors were economically justifiable in certain locations. Similarly, the era of reactors for

the production of industrial heat - say, for use in saline water conversion, a problem at present under study by an Agency panel - appeared remote, because such applications required considerable power capacities if they were to be economically sound.

- of. The Agency could nevertheless be of service in advising Member States which planned to set up nuclear installations. Economic surveys relating to both nuclear and conventional installations (provided that they were conducted in close liaison with the United Nations and its specialized agencies), the collection and dissemination of data and the training of key scientific and technical personnel would be of great value. The large-scale project due to begin in the Philippines in October with the assistance of the United Nations Special Fund seemed to be precisely the type of survey in which the Agency's qualifications and impartiality were irreplaceable. It was to be hoped that other projects of a similar nature would be organized.
- 66. Radioisotope applications were the second major activity covered by the programme. The main thing to be avoided on that score was a dissipation of effort, because the application of radioisotopes was a matter particularly suited to regional projects, whether relating to agriculture, hydrology, pest control or medical problems. The hydrological studies carried out in the Mekong Basin as part of a United Nations project in that region were a perfect example of the type of work that should be encouraged. In the case of countries standing on the threshold of atomic development, it would be wrong to consider radioisotope applications merely as a secondary matter because in addition to the direct benefits of those activities, the training of personnel in the handling of radioactive materials, in the measurement of radiation and in radiation protection would be of valuable assistance when those countries were ready to embark upon the construction and operation of research reactors.
- 67. The third main chapter of the long-term programme was devoted to radioactive waste. For the operator of a nuclear power station, wastes constituted an economic problem for which no really satisfactory technical solution had been found. At the national level, the technical and economic problems were complicated by psychological ones, as the public was nervous about radioactivity and still not very familiar with the many and various new

units in use. At the international level, the problem was made even more complex by political considerations. The Agency should therefore contribute to the technical study of radioactive waste problems and to the formulation of practical regulations. The rather limited studies which could be carried out at the Seibersdorf Laboratory could not serve for very much more than training purposes. The Monace Laboratory would continue to provide technical data on changes in radioactivity in the sea and help clarify the relationship between well-defined basic standards and the multiple aspects of the diffusion of, and changes in, environmental radioactivity, on which more knowledge was required. Concerning regulations, France was studying the report of a panel on the legal implications of radioactive waste disposal, on which it had been represented, and thought that in spite of certain conflicting views the final version might provide some simple and universally applicable rules.

- 68. He had little comment to make on health problems, which formed the fourth chapter of the programme. It would be sufficient to continue the work already in hand, which had always been amongst the Agency's most successful activities.
- 69. Regarding scientific research, the Agency's activities should no doubt be restricted, as its limited funds would not allow it to play an important role. Moreover, research topics of immediate interest to all Member States were difficult to find. For those reasons, France had not favoured the creation of the International Centre for Theoretical Physics, which it feared might cause a drain on the Agency's limited resources. Above all, the interests of the developing countries would perhaps be better served, at least initially, by the organization of summer courses in various areas of the world. In that connection, the Agency's efforts should be concentrated mainly on problems associated with the use of research reactors, because they required such a heavy investment that failure to make proper use of them would be intolerable. Three regional meetings had been organized in 1963 to co-ordinate the use of research reactors. France was participating in that work and was always prepared to help in the training of technicians at its centres.
- 70. The cost of the long-term programme, according to the Director General's estimates, appeared reasonable. Between 1963 and 1970, the budget would rise from \$10 million to \$13 million, a rate of increase lower than that of many national programmes.

- 71. It was in the light of that long-term programme and the comments he had just made that France approved the draft programme and budget for 1964. The French delegation appreciated the Director General's efforts to stabilize staff requirements and limit the growth of the budget.
- 72. Technical assistance, whether in the form of training, expert missions or the supply of equipment, would continue to be the Agency's main activity. Between 1958 and 1962, fifteen Member States had received assistance representing about \$6 million, equivalent to two thirds of the total amount devoted to that aspect of the Agency's work. There was a certain anomaly in that situation and it could not be explained in terms of any criterion connected with the stage of development of the receiving countries or with their efforts in atomic matters. The Secretariat and the Technical Assistance Committee of the Board should endeavour to give greater publicity to the technical assistance available from the Agency and ensure the widest possible distribution of the resources concerned. France had been host to about 40 Agency fellows during the year and had provided 14 experts to meet various requests for technical assistance.
- 73. The conference programme would be restricted in 1964, as the Third United Nations International Conference on the Peaceful Uses of Atomic Energy was to be held in Geneva. France urged, and would continue to urge, that the Agency should play a leading role in the organization of that Conference under the auspices of the United Nations. The availability in the Agency of several outstanding scientists, its experience in the successful organization of scientific meetings and its direct contacts with the national atomic energy organizations should ensure the best possible technical success with the least possible outlay.
- 74. Regarding the delicate question of safeguards, France had voted, in the Board, for extension of the Agency's system to reactors of more than 100 MW. The general review to take place in 1964 would permit simplification of the existing safeguards document and make it acceptable enough to Member States so that they could be induced to use the Agency's services. In that connection,

^{8/} INFCIRC/26.

France had always recommended a flexible application of any rules formulated, which meant, in practice, application on a case-by-case basis. The first two large nuclear power stations in Asia, at Tokai-Mura and Tarapur, were to be placed under Agency control. It would be advisable to establishing a working group in due course to study, as they arose, the problems involved in the control of those two installations of different types.

- 75. He was pleased with his first contact with the International Atomic Energy Agency. He had already had occasion to appreciate the qualities of the Director General and knew of the ability and loyalty of the scientific and administrative staff assisting him. The Secretariat's efficiency would certainly be increased by the reorganization under way. He hoped that continuation of the Secretariat's work in accordance with its new programme and the present easing of the political situation would enable the Agency, after the major conference in Geneva and the review of national programmes that would be made there, to participate ever more actively in the development of atomic energy throughout the world.
- 76. Mr. BHABHA (India) said that the treaty limiting the testing of atomic weapons had created a more propitious atmosphere for the Agency's work. India had been one of the first States to adhere to that treaty and he wished to congratulate the three States primarily concerned. India believed that atomic energy, and indeed all scientific discoveries, should be used only for peaceful purposes, an attitude which was reflected in the title of its new Atomic Energy Act: "A Bill to provide for the development, control and use of atomic energy for the welfare of the people of India and for other peaceful purposes and for matters connected therewith."
- 77. Another fortunate circumstance was that advances in technology had made nuclear power economically more competitive than many had thought possible a short while ago. Even in the less-developed countries nuclear power could be economically generated, as was clear from his own country's experience. To illustrate that point he gave details of the cost of building two nuclear power stations in India and the cost of the electricity generated, which in one case was 10%-15% lower than that of electricity from a conventional power station. A third nuclear power station was now planned and a special

committee had been set up to draft a 15-year programme for power development in India. It seemed probable that it would be necessary to start building a new nuclear power station every year from 1966 onwards. What had turned out to be economical for India might well prove to be economical for other developing countries, which should study their own power problems as objectively as possible. The Agency could give valuable assistance in that matter and India would be glad to help in any way it could.

The atomic power station at Tarapur was being built by a United States' firm and the two countries had entered into a bilateral agreement which covered provision of enriched uranium fuel for the entire life of the reactor. That was an excellent illustration of the desire for co-operation shown by two countries which held different views on certain aspects of the question of safeguards. India had always held the view that enriched uranium and plutonium should only be supplied under adequate safeguards and, on that score, was entirely in agreement with the majority of other countries. His delegation was, however, against the attachment of safeguards to equipment and devices, in particular because it would widen the gap between the developed and the less-developed countries and thus increase tension. He was glad to note that the Indian viewpoint had been supported by the group of experts convened by the Board of Governors to advise it on extension of the Agency's safeguards system. Four of the eight members of the group had recommended that the principle of the attachment of safeguards to equipment and devices should be re-examined. He had no wish to delay extension of the Agency's safeguards system, but he did not think that a short delay would be of any consequence and it seemed irrational to extend a system when its very basis was to be reviewed within a few months. His delegation could not accept the extension of the system in the form in which it had been recommended and would, at the appropriate time, prepare amendments to the resolution adopted by the Board .

79. India had always supported international organizations and believed that international safeguards should be welcomed if they satisfied certain basic requirements. It had agreed with the United States, in principle, to request

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the Agency at a suitable time to enter into a trilateral agreement for implementation of the safeguards provisions of the agreement between the United States and India. But the principle of safeguards should apply to all countries equally. India would like the Agency to recognize EURATOM, so that projects in which the latter organization was a participant could be brought under the international safeguards of the Agency by mutual agreement.

80. At the conference on the Statute of the Agency in 1956, the Indian delegation had suggested that if all gaseous diffusion plants for the production of enriched uranium and all separation plants for the production of plutonium were placed under international control, no safeguards on source material, equipment or reactors would be necessary. At that time India had not possessed any such plants, but one was to be completed during 1963 and his Government was willing to place it under safeguards, provided that all other countries did likewise. He believed that if progress was made with disarmament, the type of safeguards system proposed by the Agency would be largely irrelevant. No peacefully-minded State could object to international safeguards if they applied to all alike, but unfortunately the system proposed did not satisfy that criterion. It was most effective with respect to those least capable of dangerous activities, while leaving completely free countries which were self-reliant and therefore most capable of using atomic energy for military purposes.

81. The long-term programme for the Agency's activities was a well conceived document which should be given favourable consideration. The increasing activities of the Agency would require more funds and he hoped that they would be made available under the existing financial system. A proposal to amalgamate the Regular Budget and the Operational Budget of the Agency was before the Conference. On that was a very far-reaching proposal, involving a change in the Statute, and he could not see any pressing need for such a radical change. Not all the money contributed at present on a voluntary basis was being spent and, while his Government would be glad to support an increase in the Agency's Operational Budget and to make its own contribution thereto, he could not agree that there were strong reasons for changing the system by which funds

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were raised. States had joined the Agency with certain promises; to change the provisions of the Statute relating to financial contributions might well lead to serious disharmony among the Members of the Agency. There were many programmes initiated by the United Nations and the specialized agencies which were wholly or partly financed by voluntary contributions, such as those of the United Nations Children's Fund, the United Nations Relief and Works Agency, EPTA and the United Nations High Commissioner for Refugees. Adoption of the proposal in question would mean a departure from United Nations practice and would render States liable to give financial support to projects which they did not consider sound. His delegation, like many others, could not support such a radical proposal and regretted that it had been put forward.

- India was facing an acute shortage of foreign exchange, but it had made a voluntary contribution in Indian currency equivalent to \$25 000 during the last three years. Not all of that sum had been used. In addition, it had offered the Agency five fellowships every year involving a further commitment of some \$12 000 a year. India was willing to increase the number of fellowships, provided only that the necessary space was available. In order to enable the Agency to plan its operational activities on a more secure basis, he wished to repeat the proposal made by his delegation the previous year that Governments should announce each year their minimum contributions for a specific period ahead, e.g. three or even five years. His Government was willing to give the equivalent of \$25 000 payable in Indian rupees as its contribution to the General Fund of the Agency for 1964, and to guarantee that at least that much would be made available in each of the two following years. The training school operated by the Indian Department of Atomic Energy was at present housed in temporary premises, but its permanent buildings should be ready in about two years and he hoped that the facilities would then be made available to scientists from other countries, especially the developing countries in Asia and Africa.
- 83. Another suggestion his delegation had made was that the Agency might take the initiative in organizing collaborative activities among States on a regional basis. There were many countries in Asia, Africa and Latin America in which reactors and other scientific facilities were not being fully utilized, so that regional co-operation would benefit all concerned.

- 84. In conclusion, he emphasized that, as he had said at the beginning of his statement, recent developments were creating an atmosphere that was propitious for the growth of the Agency's activities; he was confident that it would seize its new opportunities and go from strength to strength.
- 85. Mr. KIM (Korea) said that his delegation wished to express its deep appreciation of the excellent work done by the Director General, the Secretariat and the Board.
- 86. Atomic energy activity in Korea was at present confined to maximum utilization of the Triga Mark II reactor which had come into operation in March 1962 and was now producing 18 different radioisotopes. The immediate aim was to ensure the effective use of radioisotopes in agriculture and medicine. The Korean Atomic Energy Research Institute had set up a Division of Nuclear Medicine, and a radioisotope clinic for the treatment of cancer and thyroid diseases was due to go into operation in October 1963 with a cobalt-60 teletherapy unit. Strenuous efforts were also being made to recruit and train technicians for the agricultural research establishment to be opened in the near future.
- 87. The Korean Office of Atomic Energy had decided that the most important objective of its atomic energy programme should be wide and effective use of radioisotopes in agriculture. It was hoped that the Agency would be able to provide the technical advice and assistance that were so badly needed. the past year Korea had benefited from the services of three experts - two under EPTA and one under the Agency's exchange programme - whose work had been greatly appreciated. The expert on the utilization of radioisotopes in agriculture had extended his stay for four months to study a grain disease called akiochi. On the other hand, Korea had been unable to obtain the timely services of experts on the medical uses of radioisotopes and electronics, and there was frequently a considerable gap between the arrival of experts and that of the necessary equipment. The success of technical assistance, particularly in countries building up their research establishments, depended upon its being provided where and when needed; it was important that experts! services and equipment should be provided separately and only in response to specific requests. He suggested that more funds should be appropriated for training programmes in the coming year, to meet the needs of the developing countries for well-trained scientists and atomic energy technicians.

- 88. His delegation had consistently stressed the need for regional training centres and more research contracts for the developing countries, and he hoped that the Agency would co-operate fully in the establishment of a training centre in the Far East. The establishment of a radioisotope training centre and reactor centre in the Far East and South-East Asia regions had been discussed at length during meetings held at Bangkok in December 1962 and Tokyo in March 1963, and was to be considered again by the Study Group on Operational Problems of Research Reactors and their Use for Isotope Production and Activation Analysis, which was due to meet at Manila in December 1963.
- 89. Research contracts had always been a great stimulus to research workers in the developing countries, and the Republic of Korea had applied for five contracts in 1962. It had so far been awarded one contract by the Agency on field experimental studies of the time and rate of fertilizer application in rice production. He hoped that the Agency would give favourable consideration to his country's application for seven research contracts in 1963. It could also help developing countries by encouraging the supply and exchange of upto-date scientific and technical information.
- 90. His delegation greatly appreciated the dispatch of a nuclear power survey mission to Korea by the Agency and felt sure its recommendations would prove extremely useful.
- 91. Finally, he suggested that sincere and realistic consideration should be given to the amendment of Article XIV of the Statute in order to improve the Agency's financial position in regard to the implementation of various longterm programmes.
- 92. <u>Mr. BORISEVICH</u> (Byelorussian Soviet Socialist Republic) said that his delegation supported the stand taken by the delegates of Chana, Mali and the Ivory Coast regarding the inadmissibility of racial discrimination.
- 93. The present session of the General Conference was taking place just over a month after the representatives of the three nuclear Powers the Soviet Union, the United States of America and the United Kingdom had signed in Moscow a treaty banning nuclear tests in the atmosphere, in outer space and under water. However, the treaty's immense importance to all mankind lay not only in its specific provisions. It was the first hopeful step towards limiting the nuclear arms race and reducing international tension, and had for that reason been enthusiastically welcomed by all men of goodwill.

- 94. The Moscow treaty was the first step on the long road mankind must follow until complete and general disarmament, the only lasting and dependable guarantee of world peace, was achieved. He expressed the hope that that first step would be followed by further, more substantial progress towards freeing mankind from the nightmare of thermonuclear war.
- 95. The Agency could and should make every effort within its power to contribute to the current easing in the international situation and to promote early agreement on complete and general disarmament. It should continue its useful co-operation with the United Nations in studying the effects of disarmament on the development of the peaceful uses of atomic energy. That was important work which should be carried out more energetically and purposefully than had so far been done. He welcomed in that connection the appearance of the first Sceretariat report on the possible consequences of an agreement on complete and general disarmament for the development of atomic energy, despite its sketchiness and the approximate nature of the estimates that figured in it.
- 96. Turning to the progress made in the peaceful uses of atomic energy in the Byelorussian Soviet Socialist Republic, he pointed out that a research reactor, used for various types of research and for the production of radioisotopes, had been operating there since 1962. At the present time new laboratories were being constructed on the reactor site. Great attention was being paid to the use of isctopes in automation and control of industrial processes, the use of radiation for medical purposes, the use of tracer atoms and radiation in agriculture, the use of neutronography for studying the structure of new materials, and so on.
- 97. His delegation had made a statement at the sixth regular session of the Conference concerning the various ways in which the Byelorussian Republic could render effective assistance to other countries in the peaceful uses of atomic energy. He was unfortunately obliged to note that the joint proposal of eight socialist countries, including the Byelorussian Republic, had not so far been implemented, though it had been approved in principle at the sixth regular session.
- 98. Once more his delegation was repeating the offer it had already made. The Byelorussian Republic was prepared, within the framework of the proposed programme, to accept a number of fellows from developing countries for

training in nuclear physics, to make available to the Agency free of charge the services of its experts in a number of specialized subjects and to accept specialists from developing countries for training in its scientific research institutes.

- 99. In addition, desiring to make its own contribution towards extending the Agency's technical assistance, the Byelorussian Republic was prepared to make available to the Agency, without delay, for possible application in developing countries, the results of certain scientific research work which had already been carried out on the peaceful uses of atomic energy. He called upon other countries which had completed such work to make their results available to the Agency, too.
- 100. The Agency's activities over the past year had been attended by a measure of success. Useful work had been done on long-term planning. The elaboration of a long-term programme for the Agency would enable it to draw up programmes which were better thought out and more rational, and which met the requirements of the majority of Member States. Basically, the programme was a welcome document, even though it had a number of weaknesses.
- 101. One welcome feature of the Agency's activity over the past year was the fact that more attention had begun to be paid to the scientific and technical rather than the administrative side of affairs. In his view, however, the Agency's work thus far revealed a number of essential weaknesses; it still did not measure up fully to the aims and tasks devolving on the Agency under the Statute.
- 102. One of the Agency's basic statutory functions was to grant technical assistance and it could do much in that connection, bearing in mind that existing possibilities were not at present used to the full. It appeared from the data provided by the Secretariat for the three years 1959-61 that the Agency had had at its disposal a total unused amount of \$283 000 out of the funds specifically allocated for technical assistance purposes; no obligations at all had been undertaken in respect of \$155 000. Far from showing any improvement, 1962 had revealed a deteriorating situation with regard to the use of such funds. The total of non-liquidated obligations at 31 December 1962 had amounted to \$561 000 and unobligated appropriations to \$258 000.

103. Furthermore, technical assistance was being distributed unevenly among the various countries. Since the Agency's establishment, for instance, the pupper Governments of Formosa and South Korea had received three times more assistance than nine countries in Africa.

104. Discrimination, however, extended wider than that. A decision had recently been taken by the Board, dictated by political considerations, which deprived certain countries of the possibility of receiving any fellowships. In his view, that was a violation of the principle of equal rights for all Members of the Agency, and he therefore protested strongly against the decision referred to. The Byelorussian Republic had never taken up any Agency fellowships. On the contrary, it was even prepared to grant the Agency fellowships free of charge under the technical assistance programme proposed by the eight socialist countries, but could not agree that it and other countries should be deprived altogether of the right to receive Agency fellowships, should they be needed.

105. For some reason such actions were generally explained by a concern to improve the work of the Agency. A similar "concern" had ostensibly motivated the proposal to alter the Statute and the Agency's Financial Regulations. His delegation wished to make it quite clear that the proposal in question was completely unacceptable to it, since - like the United Kingdom amendment to Article XIV of the Statute 11, which had been rejected by the General Conference in the preceding year - it ran counter to the generally accepted principle of the voluntary character of technical assistance, and was designed to undermine the established and proven procedure for financing administrative expenditure by means of assessed contributions from Member States and operational expenditure by means of voluntary contributions. The proposal was a gross attempt to put countries whose national currency was inconvertible and which had so far been able to make their contributions to the Operational Budget in their own national currency in a position of inequality as regards the payment of budgetary contributions. It tended to increase the financial burden on Member States. His delegation was fully convinced that, should the proposal come into effect, those countries which were pinning on it their hopes

¹¹/ GC(VI)/205, Annex I.

of receiving more Agency assistance would lose more than they gained. The Byelorussian delegation reserved the right to go into such an important matter in greater detail when it came up for discussion. He would, however, take the present opportunity of calling on delegates to oppose the adoption of any such decision. It was inadmissible that, for the benefit of a small group of countries, yet another discriminatory political measure should be adopted, seriously impeding real co-operation within the Agency. On the authority of his Government, he was able to state that if the proposal were nevertheless adopted, the Byelorussian Republic would not pay a single extra cent towards the increased budget.

106. To justify discriminatory measures of that sort the Western Powers alleged that the Agency lacked sufficient funds to finance its normal operational activities. Yet, as had been shown, the Agency was not making full use of the funds made available to it for technical assistance. Over a number of years much of the Agency's resources had been unwarrantably spent on such activities as the application of safeguards, studies on radioactive waste disposal into the sea, the determination of environmental radioactivity and the award of contracts.

107. In addition, the Agency was spending a great deal of money on its Laboratory at Seibersdorf. His delegation had objected to the Laboratory being set up, on the ground that it would be a useless and expensive burden to the Agency. Yet it had been set up, and was now costing the Agency several hundred thousand dellars a year. Appropriations for the upkeep of the Laboratory were increasing from year to year and had already reached over half a million dellars, the major part of which, in violation of the Agency's Statute, was being paid out of the Regular Budget. The work done by the Laboratory was extremely extensive in scope and included things which often had nothing to do with the peaceful uses of atomic energy.

108. In his delegation's view, the establishment of an international centre for theoretical physics would also involve the Agency in additional and largely wasted financial expenditure, and the Agency should not therefore take over responsibility for such a centre.

- 109. In addition to reducing its expenditure on work which brought no real return to Member States, the Agency could, in his view, find new ways of expanding technical assistance. In particular it could appeal to Member States, especially the industrially developed countries, to make available to the Agency free of charge, for the use of the developing countries, the results of the research carried out by them in the peaceful uses of atomic energy. Countries advanced in nuclear science could also be asked to carry out, free of charge, in their own research establishments, certain research work on the Agency's behalf. The funds released as a result could be used to increase the scale of technical assistance supplied.
- 110. Implementation of the proposals put forward in the preceding year by the eight socialist countries would also provide a considerable reserve, enabling technical assistance to be expanded within the framework of existing statutory provisions. Assistance of the kind he had proposed was the most effective and efficacious kind, while not infringing the fundamental principle of technical assistance, namely its voluntary character. And that was the direction in which the Agency should orient its technical assistance activities.
- 111. Mr. de ERICE (Spain) referred to two international events that had taken place since the sixth regular session which were bound to have favourable repercussions on the Agency's work: the nuclear test ban treaty, signed in Moscow on 5 August 1963, to which Spain, like many other countries, had quickly subscribed; and the Convention on Civil Liability for Nuclear Damage, signed on 21 May 1963. Both would affect the Agency's activities. The Moscow treaty would enable it to concentrate on the peaceful uses of atomic energy; the Vienna Convention, by establishing responsibilities, would involve an extension of safeguards.
- 112. The Spanish delegation felt optimistic: after successfully overcoming its attack of growing pains the previous year, the Agency was now entering the stage of full development. Spain had continued to produce uranium concentrates at the rate of some 50 tons annually, had raised the national production of radioisotopes by 80% and greatly increased their application, mainly in agriculture, through the intermediary of the Institute for Agronomic Research, and in medicine through the Ramon y Cajal Institute.

The study and development of the heavy-water moderated, organic-liquid cooled reactor had continued, and an exponential experiment employing uranium carbide fuel elements was underway. A small experimental reactor in Moncloa produced the radioisotopes he had previously referred to. With regard to the benefits of the peaceful uses of atomic energy which were more accessible to the general public, Spain was undertaking a series of nuclear power projects. It was hoped to put into effect soon three projects which were at present in preparation, involving three 300-MW power stations, to be operated by the private companies Hidroclóctrica Española, Empresa Sevillana de Electricidad and Empresa Iberduero, all of which were interested in the production of nuclear power.

113. In view of the Agency's need for funds for development, his delegation was not in favour of the proposed amendment of Article XIV of the Statute. It did, however, view with sympathy the Pakistan suggestion to modify some of the Rules of Procedure and hold the General Conference every two years. That would help to reduce administrative costs and prevent the long-term programme from being subject to annual modifications.

114. The Agency should intensify its technical assistance to countries such as Spain which were not as yet sufficiently advanced in research and needed fellowships and exchanges of students and teachers. The Agency should also stimulate the production of nuclear power.

The meeting rose at 6.5 p.m.