

General Conference

GC(VI)/OR.69 12 December 1962 GENERAL Distr.

ENGLISH

SIXTH REGULAR SESSION

OFFICIAL RECORD OF THE SIXTY-NINTH PLENARY MEETING

Held at the Neue Hofburg, Vienna, on Friday, 21 September 1962, at 3.20 p.m.

President: Mr. BAFFOUR (Ghana)

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^{*} GC(VI)/207.

The composition of delegations attending the session is given in document GC(VI)/INF/56/Rev.2.

GENERAL DEBATE AND REPORT OF THE BOARD OF GOVERNORS FOR 1961-62 (GC(VI)/195, 204)(continued)

- 1. Mr. NADJAKOV (Bulgaria) said that the Agency, enjoying as it did almost universal support, should have been able to give proof of its worth even in so short a period as the five years of its existence. In his delegation's opinion, no such proof was yet forthcoming.
- 2. Like some previous speakers, he granted that certain positive results, more or less favourable to the development of the peaceful uses of atomic energy in States receiving assistance from the Agency, had been recorded. He had in mind in particular the training of key scientific staff for the developing countries, through the fellowship programme. That programme was also of benefit to countries like his own with a long-standing scientific tradition. The procedures for the award of fellowships were on the right lines and a considerable impetus would undoubtedly be given to further development in the peaceful applications of atomic energy if the means could be found to expand the programme further. It was undeniable that every country, even the most advanced, needed large numbers of scientific and technical staff to tackle its own particular problems. But the task of meeting such a vast need was obviously beyond the Agency's capacity with the modest means at present at Other useful aspects of the Agency's work included the organizing its disposal. of symposia, the formulating of regulations and standards for utilization and transport of radioisotopes, the work on waste disposal, and the publication of Activities of that kind, however, were also being undertaken scientific data. by other international bodies and could not be regarded as fulfilling the Agency's main purpose. And if account were taken of other sectors where nothing positive had been achieved, the reasons for the Agency's failure so far to justify the hopes reposed in it were easily understandable.
- 3. It was essential to analyse the factors that prevented the Agency from developing normally. A primary factor was that not enough assistance in the training of scientific staff was being provided. The Agency could play a most important role by helping to train key staff and by providing the material aid that would enable countries to set up scientific centres of the kind that were largely responsible for the advanced stage of science, in particular nuclear science, at the present day. Such centres provided a better means of spreading scientific knowledge than regional courses.

- 4. He had a number of recommendations to make. First, the standard required of candidates selected for training, both by the requesting countries and by the Agency, must be raised to a higher level. Secondly, the duration of fellowships should be extended by one or two years for those trainees who showed special aptitudes. Thirdly, the Regular Budget, instead of increasing from year to year, should be reduced and the resultant savings transferred to the budget sections covering the Agency's real purposes particularly technical assistance, which should be extended to as many needy countries as possible. Funds for technical assistance could be increased further by transferring allocations for research contracts to the Operational Budget. Action to that end should not be blocked on purely formal grounds; good-will would be enough to remove any obstacles.
- 5. He did not wish to deny that the research contract programme might prove useful in solving certain problems of decisive importance for the Agency's work; but no detailed analysis was available on which to assess the relative value of the results obtained as compared with work done on the same problems by other national and international institutes. It would be better to replace the present system by a system of compétitions with prizes, which would have the great advantage of engaging the efforts of more institutes and research workers while producing results often better results at less cost.
- 6. A further possibility for extending and increasing technical assistance within the framework of the long-term plan lay in the proposals put forward by the Soviet delegation on behalf of the socialist countries. He was gratified that there had been further support for that initiative, and Bulgaria would do its utmost to further the proposed programme. Every man of sense would agree that that was the right way of expanding the Agency's activities, rather than to amend Article XIV of the Statute as the United Kingdom delegation proposed. His delegation would strongly oppose the amendment in question.
- 7. A further source of funds for technical assistance could be found in savings on the \$350 000 appropriation for safeguards, if the Western States, headed by the United States, would change their attitude. Expenditure on such activities was pointless and useless. Moreover, the safeguards system was one of the basic obstacles hampering the Agency's work, since it discouraged Member States from

 $[\]underline{1}$ / GC(VI)/COM.1/67/Rev.1.

^{2/} GC(VI)/205.

asking for aid. Unless the matter were reviewed, there was a danger that the Agency would become isolated and its importance as a United Nations body diminished.

- 8. The Agency's usefulness was also directly affected by the fact that the Chinese People's Republic was still not a Member, its rightful place being usurped by the Chiang Kai-shek clique. Such a situation could no longer be tolerated. If the principles of universality and international collaboration were to be respected, the Chinese People's Republic must be enabled to join in the Agency's work.
- 9. On purely formal grounds, the Conference was also avoiding any action to reduce the threat of nuclear war and to relieve mankind of the greatest menace that had ever threatened the world. The tenth Pugwash Conference, recently held in London, had issued a unanimous statement declaring that its participants more than 200 of the world's most eminent scientists would do their utmost to ensure that science should be a source of good rather than harm to mankind. The General Conference could and should add the weight of its international authority to that statement and take effective steps to ensure that atomic energy was used in that way. His delegation therefore warmly supported the joint Soviet-Polish proposal for a study of the consequences of general and complete disarmament for the Agency's work. Every formal obstacle to general disarmament and the complete destruction of nuclear weapons stocks should be overcome before it was too late.
- Mr. LEITE PINTO (Portugal), referring to the production of radioactive materials in Portugal since the first discovery of radioactive ores in the country in 1908, said that, between that year and 1926, a total of about 10 grams of radium had been produced; between 1931 and 1944, 20 grams. Uranium had at first been regarded as a useless by-product, and by 1944 some 500 tons of it had gone to waste; later, a rational, low-cost method of chemical treatment of the ores had been adopted.
- 11. In 1949 a Commission for the study of nuclear energy had been set up, and since then more than 200 scientists and medical men had received fellowships to study in Germany, Denmark, France, Italy, Spain, Sweden, Switzerland, the United States and the United Kingdom. The Commission, working in collaboration

^{3/} See GC(VI)/OR.65, paras. 50 and 81.

with the universities, had prepared the way for the establishment of the Portuguese Atomic Energy Authority in 1954. Both the Authority and the Commission had promoted scientific research on radioactive materials.

- 12. Since 1950 the Commission had set up 13 laboratories. The Atomic Energy Authority had set up the Sacavem Centre for Physics and Nuclear Energy and provided various radioisotope services at the Cancer Institute, the faculties of medicine, the teaching hospitals, the Higher Institute of Tropical Medicine, and the Overseas Hospital. It had also drawn up prospecting and training programmes and had received valuable assistance from France, the United Kingdom and Spain.
- 13. Since 1955 large areas had been prospected, first by airborne scintillometer and then systematically, on foot, at the selected sites. Between October 1955 and June 1962 more than 100 deposits had been investigated by means of over 2000 borings. Between 1951 and 1962, 1325 tons of uranium oxide had been exported in the form of concentrates of 10% 25%. To December 1961, metropolitan reserves had been estimated at 6500 tons of uranium oxide, but subsequent investigation had shown that the true figures would turn out to be much higher.
- 14. Prospecting in overseas territories, where the reserves of certain minerals having applications to nuclear energy were fairly high, had led to Portugal's taking second place among world producers of beryllium and a high position among producers of tantalum ore.
- 15. The purpose of the Sacavem Centre, opened in 1961, was to train working groups in the main branches of nuclear technology. Special attention was being given to power reactor problems, to exploiting Portugal's mineral wealth for the production of nuclear materials, and to radioisotope applications in medicine, agriculture and industry. The Agency had awarded two research contracts, to the Portuguese National Centre for Agronomic Research and to the National Civil Engineering Laboratory.
- 16. A great deal of other work was being undertaken: various forms of research; applications of radioactive materials in physics, chemistry and metallurgy; checks on the radioactivity of water and atmospheric dust in Portugal.
- 17. Working groups were being organized to study the technical and economic problems of power reactors, and one private organization had been set up to consider the first Portuguese nuclear reactors. In spite of all efforts,

however, progress had not been as fast as was desired, because of difficulties in recruiting qualified personnel and in procuring equipment. Portugal had collaborated on nuclear matters with several countries and received help from the Agency and some Member States for which it was very grateful. Its experience, its technicians and its laboratories were at the disposal of all interested States.

- 18. Mr. MARTINO (Italy) said that Mr. Emilio Colombo, the leader of the Italian delegation, regretted his inability to participate in the present session of the General Conference.
- 19. The Agency had overcome numerous difficulties in its first five years and had made steady progress. In the past year, some excellent results had been achieved thanks to the enthusiasm and competence of the Director General. The way in which the recommendations made by the Conference at its fifth session had been followed up was worthy of particular praise.
- 20. Much remained to be done, however, and it was a matter of satisfaction that long-term planning was an item on the Conference agenda. The Agency should define its programme of activities and the related expenditure as precisely as possible. In that connection it was important that political issues should be excluded if the Agency was to function efficiently as a scientific organization.
- 21. It was encouraging to note that the Agency was devoting its limited resources more and more to carrying out its statutory functions and assisting new countries. It was essential to keep administrative expenses to a minimum. The fact that the Director General had been able to reduce the total number of administrative staff was most gratifying.
- 22. In the formulation of a long-term plan, every effort should be made to avoid duplication with the national programmes of Member States. In Italy great progress had been made during the past few years under the auspices of the Comitato Nazionale per l'Energia Nucleare (CNEN), the body responsible for basic and applied nuclear research and technological development. Under the programme of applied research, encouragement was being given to the construction of advanced power prototypes, and the construction of a 30 megawatt (thermal) organic moderated reactor was planned. A long-term research project aimed at improving the various techniques for using organic fluids in nuclear reactors. Another ambitious project was an investigation of the technical and economic

possibilities of using the uranium-thorium cycle in reactors — a system which seemed economically promising. It was hoped soon to have a pilot plant for the chemical treatment and reprocessing of irradiated fuels. Research was also being done by CNEN on fast and epithermal reactors, using two different models: a fast dilute type based on the uranium—thorium cycle, and a fast reactor fuelled with ceramic plutonium. A new plant for the extraction of enriched uranium was in an advanced stage of planning. Two large power reactors were due to come into operation in Italy during 1963, and a third was under construction.

- 23. Reverting to the Agency's activities, he considered that great attention should be paid to long-term planning, and to projects in keeping with the Agency's statutory aims.
- 24. On the scientific and technical side, it was interesting to note that work on research contracts had reached a satisfactory stage of development. The Scibersdorf Laboratory was making good progress and providing useful training for young scientists from countries less developed scientifically. The Monaco Laboratory was now also in full operation.
- 25. The Agency's scientific meetings had been of a high standard, but care should be taken to avoid duplication with meetings sponsored by other bodies.
- 26. It was to be hoped that a great deal more would be done in the future in the way of technical assistance to developing countries. It should be brought home to the young students in those countries that real scientific development was only possible in a spirit of collaboration, on a basis of reciprocal assistance and mutual exchange.
- 27. In that spirit, CMEN had signed agreements with a number of organizations in other countries which were beginning to develop their atomic energy programmes. The agreements provided for an exchange of fellows, experts and documentation and the establishment of joint working groups for the study of scientific problems. By participating in such groups, experts from the developing countries could make a valuable contribution to the success of the projects.
- 28. In support of the Agency's activities, Italy would again make 20 fellowships available for foreign students in the coming year. No financial aid would be expected from the Agency in the case of contracts with CNEN, and Italy would continue to make large voluntary contributions to the Agency as it had done in the past year.

- 29. The plan to establish an international centre for theoretical physics was of great interest. Its value would be considerable, especially to new nations, and if Trieste were chosen as the location the Italian Government would be ready to make specific proposals in order to minimize the financial contribution required from the Agency.
- 30. Mr. ORTIZ TIRADO (Mexico) said that the Board's annual report showed that the Agency had met with considerable success during its fifth year of operation and that a period of consolidation had now been reached.
- 31. He wished to express gratitude to the Director General for attending the fourth meeting of the Inter-American Nuclear Energy Commission, held in Mexico. His delegation greatly appreciated the work so successfully carried out by the Director General and the other members of the Agency's staff, and hoped that future efforts would be equally successful. The progress of the Agency depended, however, on co-operation between its Member States, whether at an advanced stage of development or morely entering the initial stage.
- 32. In November and December 1961, at the Conference on the Use of Radioisotopes in Animal Biology and the Medical Sciences held in Mexico City, it had been most gratifying to hear so much praise for the papers presented by the Latin American representatives, and to learn that scientists would continue their battle against disease. The Conference had complemented the work of the Copenhagen Conference on the Use of Radioisotopes in the Physical Sciences and Industry, held in September 1960. Both had been highly successful.
- 33. Among the various activities the Agency had carried out since its inception, the technical assistance programme had been of outstanding importance. The allocations the Board had made in that connection for the services of experts and equipment in different countries had been in accordance with the aims set out in the Statute.
- 34. Further study of the use of radioisctopes in agriculture was of vital importance in view of the urgent need to increase agricultural production. In paragraph 62 of its report, the Board indicated that the relevant technical assistance and research programmes had been extended. The effectiveness of fertilizers in the rice-growing regions of the world had been one of the subjects studied. Other subjects of interest to developing countries such as Mexico were the relationships between various types of soil, plant genetics, pest control and other aspects of food production.

- 35. Further information about the effects of irradiation was also urgently needed. Mexico had made investigations of atmospheric contamination, the presence of strontium-90 and caesium-137 in food, and might have to ask the Agency's advice about the most convenient and economical methods of radioactive waste treatment and disposál. The results of the various research contracts would eventually constitute a valuable source of scientific information. It went without saying that Mexico was greatly interested in the Agency's work on nuclear power and the possible uses of research reactors and, in short, would do everything in its power to enable the Agency to fulfil the lofty purposes for which it had been established.
- Mr. KARATAY (Turkey) stated that his delegation deeply appreciated the untiring efforts of the Agency, under its able Director General, to promote the peaceful uses of atomic energy throughout the world. It was an easy matter to criticize the Agency for its shortcomings, but a young body, beset by problems so new in nature and of such magnitude, was bound to commit errors. In all fairness, therefore, attention should rather be turned to its achievements, which were in fact impressive.
- 37. He wished to give a brief summary of nuclear activities in his own country during the preceding year. Turkey's first research reactor, located in Istanbul, had reached criticality in the spring of the year, and was being fully used by a team of Turkish scientists and research workers in the various branches of nuclear science. It was hoped that, in the not far distant future, it would be possible to open the nuclear centre's facilities for purposes of international co-operation.
- 38. The successful summer course on theoretical physics which had been held in Istanbul earlier in the year was an example of the kind of international co-operation he had in mind. The outstanding ability of the participants and the high level of the discussions that had taken place clearly illustrated the point made by the Pakistan collegate in the general debate: in international scientific co-operation brains could compensate for an inferiority in terms of equipment and material resources.
- 39. The international radioisotope course, spensored by the Agency and the Turkish Atomic Inergy Commission (TAEC), which was to open in Ankara in less than a week's time would be a further example. He took the opportunity to express his Government's gratitude to the Agency and to friendly countries which were contributing to that programme.

- 40. During the year various laboratories and research institutions had really got down to work on nuclear physics, electronics, radiochemistry, radioisotope applications in agriculture and medicine, and so on. Turkey greatly valued the expert advice received from the Agency in connection with those programmes.
- 41. With the help of the Agency and generous support from the United States and the United Kingdom, the TAEC had drawn up a long-term plan within the framework of Turkey's first five-year plan (at present under discussion) of applications of immediate importance for science and the national economy.
- 42. Turkey followed the Agency's various activities with the greatest interest and hoped to see more of its energy and resources devoted to its true aim, namely the raising of standards of living for mankind as a whole and the furtherance of peace and prosperity; achievement would depend to a great extent upon confining the Agency's activities to scientific and social objectives. Embittered political discussions were out of place in the Agency and were storile, harmful and a source of danger for its future.
- 43. Mr. CHON (Cambodia) said that Cambodia was particularly interested in sceing that the Agency should not be used as an instrument of the cold war. It had noble peaceful aims, but its prestige would be appreciably increased by proclaiming that all stocks of nuclear weapons should be destroyed and all nuclear tests discontinued.
- 44. Cambodia was following with interest the progress being made in the application of nuclear energy, and had requested assistance from the Agency for studie on various agricultural subjects.
- 45. The Agency had praiseworthy achievements to its credit, but must make a great effort to fulfil all its obligations in the future. The proposed amendment to Article XIV of the Statute did not seem very realistic if it meant ultimately that the developing countries would have to pay more in terms of convertible currency. The comments of the Indian delegation on that subject were worthy of particular attention.
- 46. The practical measures proposed by the Soviet Union and the other socialist countries for a long-term programme of assistance to the developing countries was most welcome. It was particularly gratifying to note the unity of views expressed by the Soviet Union and the United States with regard to technical assistance; that was a very good sign.

- 47. The Agency's mission would never be entirely fulfilled until the rightful representatives of all the countries of the world had taken their places in the organization; it was to be hoped that one day all nations which so desired would be represented.
- Mr. PERERA (Ceylon), commenting on the draft resolution concerning 48. the amendment of Article XIV of the Statute 4, said that it dealt with two interconnected issues which had a significant bearing on the Agency's future activities, namely the amount of funds available for carrying on its work and the amount of technical assistance that could be provided, particularly to Unless the Agency had the requisite funds, Member States developing countries. would be unable to obtain the technical aid in nuclear energy matters so vital to their industrial growth. He wanted it to be clear that his comments should not be interpreted as opposition to a further increase in the Agency's technical assistance funds: in fact he was of the contrary opinion and believed that its work was being hampered for lack of resources. He therefore welcomed the Director General's assurance that he proposed to study the staff position 2, and felt sure that Dr. Eklund would seek to determine whether any retrenchment was possible and whether the existing staff was being used to the best advantage. Any savings which resulted should be used for technical assistance. the Director General was able to resist unjustified staff increases, the technical assistance programme was likely to suffer.
- 49. The United Kingdom proposal for a far-reaching amendment to Article XIV of the Statute affected a vital principle on which great stress had been laid by the authors of the Statute, namely that Member States, while required to pay regular contributions assessed according to a predetermined scale for the financing of administrative and similar expenditure, should be left full discretion in making voluntary contributions to the Operational Budget. The proposed amendment, the purpose of which was that all the Agency's activities should be financed from a single assessed budget, violated the principle of separate contributions, one fixed and the other voluntary, and would transform the latter into a compulsory levy. That would be contrary to the spirit of the Statute.

^{4/} GC(VI)/208 and Add.1 and 2.

^{5/} See document GC(VI)/OR.63, para. 51.

- 50. He did not know whether it was also the intention to require that assessed contributions be paid in hard currencies or whether Member States would still be left the option of paying a proportion in local currency, as had been the practice in respect of their voluntary contributions. In the first eventuality, he believed that most of the developing countries would find the burden too heavy, since the majority of them, in Asia, Africa and Latin America, were elaborating long- and short-term development plans that were already straining their meagre resources and causing serious foreign exchange difficulties.
- 51. With more and more countries applying for membership of the Agency every year, another consideration that must weigh was that such countries might be deterred if the voluntary principle embodied in the Statute were so gravely undermined.
- 52. He had been pleased to observe that during the past year the problem of using all offers of technical assistance had been more realistically tackled. In the past some voluntary contributions, made in local currencies and in kind, had not been taken up, so that developing countries were deprived of equipment and other forms of help.
- 53. He expressed his Government's appreciation of the technical assistance which Ceylon had already received. It was confident that future requests would elicit an equally sympathetic response.
- 54. What he had said on the subject of the proposed amondment to Article XIV in no way meant that his delegation failed to appreciate how great was the Agency's need of funds for its programme. He therefore suggested that the General Conference should make another earnest appeal to all States for a serious effort to increase their voluntary contributions, but that it should do so without disturbing the existing system and inviting all the consequences of such a change.
- 55. Undoubtedly the advanced countries, which had always shown themselves ready to help the developing ones in every possible way, would respond, and he was confident that one, the inadequacy of the operational budget had been brought more forcibly to the notice of developing countries, they too would not fail to respond. He knew that the results of such an appeal in the past had been disappointing, but was sure that another would not fall on deaf ears. In any case it was worth making such an attempt rather than amend the Statute at present.

56. The 13-Power draft resolution stated categorically that the financial provisions of the Statute needed revision to remedy the situation, and that the proposed amendment had the broad support of the Conference; it also suggested that the question be referred back to the Board for study. To some extent, it seemed to prejudge the issue unnecessarily. The Governors should be left fully free to examine the question objectively, and they would no doubt take the views expressed at the General Conference fully into account before reaching their considered verdict. He therefore suggested that the Board be invited to examine the vexed question of finance fully and to submit a report on the matter to the Conference at its seventh regular session.

APPLICATIONS FOR MEMBERSHIP OF THE AGENCY (GC(VI)/211)

- 57. The <u>PRESIDENT</u> invited the General Conference to consider the application by Saudi Arabia for membership of the Agency. The Board had met that morning to consider the application and had submitted its recommendation in document GC(VI)/211. As would be seen from paragraph 2 of the recommendation, the Board had determined that the Government of Saudi Arabia was able and willing to act in accordance with the purposes and principles of the United Nations Charter, and had accordingly submitted a draft resolution for consideration by the General Conference, recommending that the application be approved.
- 58. The draft resolution was adopted unanimously.
- 59. The <u>PRESIDENT</u> said that Saudi Arabia would be admitted to membership of the Agency as soon as its instrument of acceptance had been deposited with the United States Government in accordance with Article XXI.C of the Statute.
- 60. Mr. TAYIM (Saudi Arabia) thanked the delegations for approving his Government's application for membership. He was grateful to the Director General and his staff for their advice and assistance, which had helped to expedite matters.
- 61. As the first representative of his country to attend a General Conference, he had been impressed by the efforts being made by Member States to enable the Agency to discharge its obligations and ensure that atomic energy would be used to the best advantage throughout the world. Some people had expressed surprise

 $[\]underline{6}$ / GC(VI)/208 and Add.1 and 2.

that Saudi Arabia, with its extensive reserves of petroleum, should be interested in an expensive new source of energy; but after all, some of the countries most advanced in the use of atomic energy were oil exporters. It was natural to try to move with the times and vitally important to use atomic energy for other purposes besides generating power.

- 62. His country was interested in the applications of radicisotopes in agriculture and medicine and was already making use of them in the petroleum industry. Without burdening the Agency, it hoped to obtain help and advice; the sooner they were given the sooner Saudi Arabia would be able to help others in its turn. That had been the case with the oil industry, for most of Saudi Arabian production was used in other countries where it helped to raise the general level of prosperity. Indeed, the revenue obtained by West European Governments from taxes on Middle East oil was as great as the income Middle East Governments derived from their petroleum deposits. A similar development of nuclear science and nuclear power resources in Saudi Arabia would no doubt also be similarly rewarding.
- 63. If his Government's instrument of acceptance were deposited before the end of the Conference, he hoped to be given an opportunity of expressing its views on some of the points raised during the discussions.

The meeting rose at 5.15 p.m.