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President: Mr. RAFFOUR (Ghana)

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* GC(VI)/207.

The composition of delegations attending the session is given in document
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GENERAL DEBATE AND REPORT OF THE BOARD OF GOVERNORS FOR 1961-62
(GC(VI)/195, 204) (continued)

1. Mr. SPANIDES (Greece) said he was gratified by the Agency's steady progress since its inception and considered that, among other things, the increasing number of applications for membership, particularly from the developing countries, was tangible proof of its usefulness.
2. It was regrettable that lack of funds was hampering technical assistance, and particularly training - of such great importance to the long-term needs of the developing countries. Training should be on a high level and given at academic institutes rather than in the form of one-year courses at research centres in the more advanced countries. Many developing countries, having had the benefit of the second type, had made some progress in atomic energy but now needed scientists with sound theoretical knowledge to initiate their own research.
3. Despite financial difficulties, Greece would comply with the resolution adopted at the fifth regular session^{1/} and increase its voluntary contribution by 50%. It supported the United Kingdom amendment to the Statute^{2/}, being satisfied that a unified budget and a programme financed from regular contributions would make planning easier.
4. He was glad to see the Agency encouraging the practical applications of radioisotopes through the fellowship programme, radioisotope training courses, visits of experts and scientific meetings, and expressed appreciation for the valuable assistance Greece had received in past years.
5. His delegation believed long-term planning was desirable and hoped that in the programme - which might take some years to develop - full account would be taken of the needs of all, and particularly the developing countries which, with the Agency's help, should soon benefit from the technological progress made in the more advanced countries.
6. He would comment later on the question of establishing a centre for theoretical physics.
7. He wholeheartedly approved the Agency's efforts to make nuclear power competitive: the discussions in the panel on nuclear power the previous day gave grounds for hoping that nuclear power would soon be competitive with

^{1/} GC(V)/RES/100.

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

conventional power in most parts of the world. Greece did not need nuclear power immediately but very much hoped that what was being done by the Agency in that regard, particularly in Yugoslavia and Pakistan, would enable developing countries to start producing nuclear power as soon as they were ready for it.

8. The 1-megawatt swimming-pool research reactor at the Democritus nuclear research centre had gone critical in July 1961; the centre was now producing some short-lived radioisotopes for use in hospitals and industry.

9. Greece was particularly interested in the agricultural applications of atomic energy. As an olive-producing country, it was working in co-operation with United States and Agency experts on the problem of the Dacus fly which caused damage evaluated at \$15 million every year in Greece. The male flies were sterilized by irradiation - the method successfully used some years previously against the screw-worm fly in Curaçao. Results obtained were encouraging.

10. The Greek atomic energy commission was also exploring underground water resources in the Argos-Tripolis plain in the Peloponnesus in co-operation with the Agency, the United Nations Special Fund and the Greek Institute of Geology and Subsurface Research, tritium being used as the tracer. In another experiment, non-radioactive tracers had been used, the qualitative and quantitative analysis being done by neutron activation; a paper on the experiment would shortly be appearing.

11. The Greek authorities fully realized that the development of atomic energy in a country depended largely on the availability of scientists, technicians and research workers. Hence the many courses it had organized, particularly on radioisotope techniques. The most important would be a four-year course at the Centre for Advanced Studies in Physics and the Philosophy of Science, which would give graduates specialized training comparable to that given in European and American universities. The teaching staff would consist of Greek and foreign doctors of science; the facilities of the Democritus centre would be at the disposal of the Centre. Twenty students had enrolled for 1962-63 and students from other countries would soon be accepted also.

12. An Agency-sponsored training course in the medical applications of radioisotopes for Mediterranean countries had recently been held at the

Democritus centre and the Alexandra Hospital in Athens, both well equipped for such courses. Attended by 20 trainees from 8 countries, it had been a great success.

13. About a hundred participants from all over the world were expected at an international symposium on radioactive dating that was to be held in Athens in November 1962. The question of holding another conference (on entomology) in Athens was also being discussed.

14. Mr. VEJYANT-RANGSRISHT (Thailand) said he had been gratified by the Agency's progress during the past few years; he was aware of its difficulties and hoped the friendly atmosphere which had prevailed in the Board during the preceding year would be maintained. The technical aspects of the peaceful uses of atomic energy were the Agency's chief concern and it would perhaps obtain better results if politics were entirely eliminated.

15. Thailand had always been a strong supporter of the Agency's safeguards and hoped that the administration of safeguards applicable to the nuclear materials used in its research reactor would be transferred to the Agency. The reactor was expected to reach criticality in October 1962 and, with its associated laboratories, would provide a centre for atomic activities in Thailand; his country was very grateful to the atomic energy commissions of the United States and Australia for their much-appreciated co-operation.

16. Thanks were also due to the Agency for sending a group of experts to make a hazards evaluation of the research reactor. The Agency team that was to study the prospects for nuclear power in Thailand, and the study group on research reactor utilization that was to meet in Bangkok toward the end of the year, would be very welcome.

17. His delegation favoured long-term programming in the Agency; the amendment to Article XIV of the Statute should also greatly facilitate its work.

18. The procedure for providing technical assistance to the developing countries must be made more flexible. In view of the real difficulty of recruiting suitable experts, he suggested that the supplying of equipment should not be too rigidly bound up with the provision of experts.

19. Mr. BALKE (Federal Republic of Germany) said that the most urgent task of the Agency at the moment was to extend knowledge and ensure its dissemination. There was, in addition, its regulatory work - the drawing up and unification of legislation - which had already given such good results in matters of health, safety and safeguards.
20. The Agency could effectively contribute to international understanding; its Members should avoid political controversy and co-operate in true partnership.
21. Turning to the Board's annual report^{3/} and the Programme and Budget^{4/}, he stressed the necessity of establishing priorities and adopting the best methods of work and the best possible administrative organization.
22. First priority should go to training, which should above all serve the needs of the developing countries. The allocations for training in 1961-62 had been lower than in the preceding year, and the number of fellowships had dropped accordingly. That regrettable development was not due to bad administration but to the insufficiency of funds.
23. The scientific meetings arranged in 1961-62 had been of great interest and those planned for 1963 had been selected with care. The Federal Republic hoped to gain from them information of value for its prototype reactor programme. Agency publications, incidentally, maintained their high reputation.
24. Nuclear research sorely needed the Agency's encouragement but, until the financial situation drastically improved, it could hardly do more than co-ordinate - a role, however, which also offered great opportunities that so far had not been fully used. As the research contract system was costly and could give only meagre results unless more money was made available, perhaps existing research installations could be made available for joint programmes without cost to the Agency.
25. The Agency would then suggest subjects for research which would simultaneously be of general interest and satisfy individual national needs. The major research projects would be split up by ad hoc panels and distributed among the national institutes best qualified to handle them. When a research subject was of particular interest to a given State, it might be prepared to

3/ GC(VI)/195.

4/ GC(VI)/200.

contribute to the cost of a joint project; the research institutes concerned would have to keep in close touch, and that would naturally strengthen the links between Member States.

26. The Laboratory at Seibersdorf had done useful work for several Member States in research on environmental radioactivity. It was in a position to make exact and impartial radioactivity analyses and, providing of course that sufficient funds were allocated, would be particularly suitable as a training centre.

27. The Agency had very important practical tasks in regard to radiation protection. As several international organizations were working on the subject also, guiding principles for collaboration should be laid down in order to prevent overlapping.

28. Radiation protection should figure largely in the Agency's educational programme which must extend to those who had to handle radioactive materials in the course of their biological or medical work and be both theoretical and practical. Centres gave such training in several Member States; if so requested the Federal Republic could organize courses for about 100 foreign participants every year at the radiation protection research and training centre at Neuherberg, near Munich. The major problem in ensuring radiation protection was radioactive waste disposal. No entirely satisfactory method yet existed but salt deposits and other geological formations offered the particular advantage that radioactive materials could not permeate them and so contaminate underground water. The storing of wastes of medium specific activity in salt deposits was being investigated in the Federal Republic. If the means were available, the subject might profitably be more extensively investigated by the Agency, whose valuable regulatory work in connection with radiation protection should be further developed.

29. The treatment of radiation diseases must be considered a first priority among the radiobiological problems. The Agency should intensify its work on it by encouraging close co-operation between the various treatment centres with a view to speeding up the discovery of effective methods of treatment.

30. The deliberations of the Conference and the proposals made during its sessions would come to nothing so long as the Agency continued to lack the

indispensable funds. During the preceding year its activities had had to be curtailed because voluntary contributions by Member States had been less than what was budgeted. There was no point in drawing up a long-term programme without knowing approximately what financial means would be available for putting it into practice.

31. His delegation would support any proposal that aimed at improving the existing system of financing. The Member States must either voluntarily agree on a standard of contributions to the General Fund or drop the principle of voluntary contributions and amend the Statute accordingly. In accordance with the resolution adopted by the General Conference at its fifth regular session, his Government had decided to contribute to the General Fund in the proportion of its assessed contribution to the Regular Budget, and accordingly increase the amount in 1963 from \$65 000 to \$100 000.

32. The Director General's proposed reorganization of the Secretariat must obviously depend to a large extent on what was done about long-term programming; some changes in its structure would probably allow a reduction in the administrative machinery, and consequently in the amount of the Regular Budget.

33. To raise standards of living in the developing countries, the Agency must do more than place a promising source of energy at their disposal: the prerequisites for utilizing it must also be supplied. Its current activities were providing detailed knowledge about their economic trends and civil engineering needs; it would be lamentable if that wide experience were not used within the framework of the United Nations Development Decade.

34. Under the leadership of its new Director General the Secretariat had continued its tradition of devoted service. His Government had faith in the Agency's future and would continue to give it every support.

35. Mr. de CASTRO (Philippines) said that, reviewing the Agency's operations, his delegation noted the generally larger contribution of the peaceful uses of atomic energy to world health and prosperity.

36. The Agency could really help the less-developed countries through experts, fellowships, equipment and research contracts. His own country was grateful for the excellent help it had received; three Agency experts in

health physics, the agricultural uses of radioisotopes and the industrial applications of atomic energy were at present working in close collaboration with Philippine colleagues, and fellowships and equipment had also been made available.

37. The national atomic energy programme was now at a stage where more Agency assistance would pay dividends, and he accordingly hoped that its requests would continue to be met.

38. His delegation was fully aware of the complicated problems the programme involved and particularly the recruitment difficulty mentioned by the Director General in his opening statement^{5/} - one that could be overcome only by more co-operation from the scientifically advanced countries which could provide at least a part solution by making their experts more readily available to countries in need of technical assistance.

39. The proposal to appoint regional experts should be supported. The Agency could now determine the type of service for which a common need existed in the countries of a particular region; by appointing the corresponding regional experts, it would be able to provide expert services at short notice wherever they were most needed. The regional experts would serve to keep the Agency in touch with the atomic energy programmes of Member States, a factor which would not fail to improve the efficiency of the Agency's work.

40. Attention should be paid to proper timing in the provision of technical assistance and the delivery of equipment connected with it. It often happened that equipment arrived weeks or even months after the expert who was to use it. Apart from messing up his programme, valuable time was lost. The Agency should be more adaptable and hence more efficient.

41. With regard to scientific and technical activities, he congratulated the Agency on the regional research programme on fertilizer utilization in rice-growing. The Philippines and other countries where rice was the staple food considered that no project could better serve international efforts to increase rice production and stave off hunger in many areas of the world. The Government was happy to participate in the project with six other countries, and had offered to serve as host country for the Agency's regional expert.

^{5/} GC(VI)/OR.63, para. 39.

It hoped the Agency would accept the invitation and take advantage of the facilities of the new International Rice Research Institute in the Philippines.

42. Tropical and subtropical diseases constituted another research group of great interest to many less-developed countries. His country was very anxious to participate more actively, and looked forward to the regional training course on the medical uses of radioisotopes to be held in Manila in 1963; the Government had offered facilities and support.

43. In 1960, the Philippine delegation had suggested that the Agency should consider measures for the tropicalization of nuclear equipment. It was gratified to know that a consultants' meeting on tropicalization of instruments had been held the previous year and that a document on the specifications of nuclear electronic instruments for use in tropical countries had been discussed. The document should be published as soon as possible. It was interesting to note that due attention was now being given to documentation services, and that the Agency had started providing fellowships for training in that subject. As his delegation had pointed out at the fifth regular session^{6/}, it was a matter of urgency to improve the library and documentation services in many Member States by providing direct technical assistance.

44. For countries such as the Philippines, the Agency provided a most important link with the world of science and technology. It was the only world atomic energy organization representing all shades of political opinion. It had nevertheless done useful work and, even though its very nature limited its scope of action and dynamism, it would continue to receive the full support of the Philippine delegation which believed firmly in multilateral co-operation and assistance.

45. Mr. TÉTÉNYI (Hungary) said there had recently been cause, in national administrations and bodies concerned with atomic energy, more and more frequently to ask what the Agency was for and what were its prospects for the future. The question was still more urgent in the Agency itself, in view of the proposed long-term plan.

46. His delegation's views were based on Hungarian experience following the establishment of its own atomic facilities and an analysis of the Agency's activities as observed during a year's participation in the work of the Board.

^{6/} GC(V)/OR.52, para. 95.

47. When the Agency was founded, international circles had generally believed mankind to be on the threshold of large-scale nuclear power production. That opinion had since proved mistaken. The development of atomic energy was impeded by considerable obstacles, since complete and universal disarmament was still an unsolved problem and fissionable materials were mostly used not as nuclear fuel but in weapons tests. As long as that problem remained unresolved, the large-scale use of fissionable materials for power production was out of the question. His delegation therefore agreed with those delegates who had requested the Agency to do its utmost to remove the obstacles impeding the achievement of complete and universal disarmament.

48. Apart from that fundamental problem, the development of atomic energy also involved difficulties of a technical nature. Nuclear power stations were still not economic, and were still only at the experimental stage. Experimental plant required investment on a scale which only the Great Powers could afford. Major technical problems such as the disposal of radioactive waste also remained to be solved.

49. The Agency's main task was to disseminate the new information obtained as a result of the great advances in various countries in science and technology, using the means at its disposal first and foremost to organize co-operation between countries in that respect. As only the larger countries could afford research in all branches of atomic energy, it must ensure that the results were made available to developing countries in Africa, Asia and Latin America; it could help in spreading knowledge about radioisotope techniques, further the use of radioisotopes in medicine, agriculture and industry, and encourage the training of scientific and technical staff.

50. The fellowship programmes, the exchange of scientific information and the organization of scientific meetings were worth-while activities of the Agency.

51. The Hungarian delegation attached great importance to providing technical assistance to developing countries, believing it should be regarded as one of the most important of the Agency's activities and broadly interpreted to include the distribution of information about technical advances, assistance in obtaining equipment and instruments, on-the-job training for scientists, and the sending of experts.

52. Agency technical assistance was not free from blemish. It lacked clear guiding lines and was often given on the basis of requests that were unacceptable or technically unjustifiable (such as the request submitted by Portugal in February 1962). Hence funds were wasted.
53. In the 1962 programme, an entirely disproportionate share of the available funds had been allocated to States that were members of aggressive military blocs, to the detriment of the developing countries.
54. The programme of its Laboratory was much too extensive and would really need several hundred scientists and a large amount of equipment. Given its scope and nature, it could not hope to compete with the great national centres. It should limit itself strictly to the Agency's main objectives and have a scientific board to supervise the programme and its execution.
55. There was another regrettable tendency to attempt, much too often, to transfer General Conference responsibilities to the Board and Board responsibilities to the Secretariat. Thus the question of financing Laboratory expenditure had been settled - without reference to the General Conference - by debiting it to the Regular Budget. Again, an attempt had been made to authorize the Director General to dispose of small quantities of fissionable materials - a matter which was the prerogative of the Board. The alleged justification in all cases was the need for a more "flexible" procedure. The purpose of the United Kingdom proposal to amend Article XIV of the Statute was similar in character. His Government could not accept that proposal because it believed that the difficulties encountered by the Agency in performing its work should, and could, be removed by other means, since they could not be attributed to a lack of financial resources.
56. Nuclear research undertaken by the Hungarian People's Republic included micro studies, work on the dual nature of light and the theory of relativity, and the elaboration of principles deriving from measurements. Accelerators designed and constructed by Hungarian scientists had been used in important research in certain branches of nuclear physics.
57. Nuclear chemistry had considerably developed during the last few years and Hungary was now able to manufacture many radioisotopes, labelled compounds and sealed sources - details were available in the recently-published Agency

directory^{7/}. Radioisotopes produced in Hungary had been used in the Agency's Laboratory.

58. Radioisotopic methods were being more and more used. During the previous two or three years, the number of radioisotope users had doubled. The number of radioisotopes supplied in 1961 was four times the 1960 figure, and over 200 different institutions were now using them. All Hungarian establishments for higher and technical education now had radioisotope laboratories. Most research institutes also used radioisotopic methods. One of the Hungarian scientific research institutes was working in close collaboration with the Agency's Laboratory on certain questions relating to rice-growing.

59. The use of radioisotopes in industry was also extending. There was a wide use of gamma-radiation to reveal defects, and of radioisotopes to check quality and measure levels, thickness and density. With the growth in isotope techniques went a corresponding growth in the construction of equipment for their application.

60. He unreservedly supported the Soviet proposals regarding the programme of technical assistance for the developing countries^{8/}. His Government was ready to play its part in that programme.

61. More specifically, Hungary was prepared to place at the Agency's disposal long-term and short-term fellowships, medical equipment such as cobalt bombs (1300 curies activity), a Scintikart diagnostic apparatus and various items of laboratory equipment. His Government attached the greatest importance to measures that would facilitate the use of atomic energy and increase the well-being of all peoples, particularly those of the developing countries.

62. Mr. DARUSMAN (Indonesia) said that, in reviewing the Agency's activities during the previous five years, he would like to call attention to various difficulties Indonesia had faced in the development of nuclear energy, difficulties which other developing countries were probably encountering as well.

63. Thanks to hard work by local experts, and with the assistance of the Agency and friendly countries, Indonesia was now able to provide training courses in radioisotope applications in agriculture and medicine.

⁷ STI/PUB/45.

⁸ GC(VI)/OR.65, para. 39.

64. A sub-critical assembly operating at the Gadjah Mada University in Djakjakarta had an entirely Indonesian staff. The university had its own radiochemistry laboratory. The cobalt-60 unit at Djakarta was being extensively used for medical therapy and agricultural purposes. An IRT 2000-kilowatt reactor for research and training was also to be set up under the supervision of the Indonesian Institute for Atomic Energy; provided the necessary instruments arrived on time, the TRIGA MARK II training reactor would go critical in 1963 at the Technological Institute in Bandung.

65. During the fifth regular session, the Indonesian delegation had proposed the establishment of a regional isotope centre in Indonesia^{9/} and a formal request had been made to the Director General. The Government had set aside \$400 000, together with land and buildings, for the project, which would be of great benefit to the countries of South-East Asia and the Pacific. It was therefore to be hoped that the Member States concerned would support it.

66. Referring to the difficulties he had mentioned earlier, he said that the Indonesian Government, with advice from an Agency mission, had three years previously requested the services of eight experts in nuclear raw materials prospecting, radiochemistry, radiobiology, theoretical physics and health physics. The request had been approved by the Board the same year, but only three of the eight experts requested had arrived and the national atomic energy development programme had been seriously held up in consequence. It was to be hoped that in the future the services of experts and equipment would be forthcoming as arranged.

67. His delegation considered that more fellowships should be awarded for the study of the following subjects, which were of particular importance to the developing countries: nuclear raw material processing, electronic equipment, radioisotope applications in industry, reactor technology, and nuclear power reactors. Part of the funds appropriated for safeguards could be used for that purpose, and for the dissemination of information.

68. In the latter connection, the Indonesian delegation had repeatedly requested that the Agency, through the schools and in conjunction with the United Nations Educational, Scientific and Cultural Organization, implement a Board decision regarding a world campaign of information about the peaceful uses of atomic energy, so that in the minds of men atomic energy might become synonymous with progress and reason.

^{9/} GC(V)/OR.53, para. 30.

69. Safeguards should not be too rigid. The countries that requested Agency assistance were developing countries and it was extremely improbable that they would use nuclear energy for military purposes. If safeguards had to be applied as a matter of principle, that should only be done to the extent to which they were applicable to the project in question, as laid down in Article XII of the Statute.

70. Mr. ZHMUDSKY (Ukrainian Soviet Socialist Republic) said that humanity was going through a great scientific and technical revolution which offered immense possibilities for increasing production capacity and harnessing the forces of nature for numerous purposes.

71. A daring and systematic penetration of outer space by man had been undertaken. The grouped flight, unparalleled in its complexity and duration, of the space vessels "Vostok 3" and "Vostok 4", piloted by the Soviet astronauts Nikolaev and Popovich, provided new evidence of the unlimited possibilities of human genius. The Ukrainian people was rightly proud that its celebrated son, the astronaut Pavel Popovich, had joined the valiant family of the conquerors of space.

72. The year which had elapsed since the fifth regular session of the General Conference had been an outstanding one for the Ukraine, which had continued to extend its activities in connection with the peaceful uses of atomic energy.

73. Scientific research institutes in the Ukraine were very actively occupied with nuclear physics and other branches of nuclear science, with the effect of radiations on solid bodies, the chemistry of radioactive substances and the applications of atomic energy in geology, biology and medicine.

74. The research reactor of the Ukrainian Academy of Sciences, which had come into operation in 1960, was being used to study the structure of nuclei, physical phenomena in solid bodies under the effect of radiation and the interaction of slow neutrons with nuclei. The maximum sensitivity of cadmium sulphide to gamma radiation under neutron bombardment had been determined, and the effect of radiation on biological substances was being studied. Reports on the various experiments made had been presented at a conference in Romania and at the Symposium on Inelastic Scattering of Neutrons in Solids and Liquids held recently at Chalk River, Canada.

75. Particular importance had been attached to discovering the primary mechanism of sub-cellular lesions in the tissue of various organs. Interesting data had been obtained by subjecting animals to bombardment by fast neutrons with an energy of 4 mega-electron-volts.

76. During 1961 alone, Ukrainian industry had been equipped with over 200 instruments and 8 installations for the application of radioisotopes and radiation, which would permit annual savings of the order of 450 000 roubles.

77. In the Ukraine the radioisotopes of gold and sodium were widely used in treating breast cancer, and thyroid cancer was commonly treated by means of radioactive iodine. Twenty-one cobalt teletherapy units were in use in hospitals.

78. The universities of Kiev, Kharkov and Uzhgorod and various other teaching institutes trained specialists highly qualified in the peaceful uses of atomic energy.

79. In all higher educational institutions throughout the Republic, the faculties of science and technical colleges gave a course on "the peaceful uses of atomic energy", which included laboratory work.

80. Turning next to the strengthening of the international links between Ukrainian scientists and those of other countries, he pointed out that the Ukrainian scientists concerned with the peaceful uses of atomic energy shared their experience with their colleagues abroad. In 1961, a group of young foreign specialists had visited the Ukraine for training in methods of research with linear accelerators. For over a year, two Ukrainian specialists, Inopin and Sorokin, had been providing assistance in carrying out scientific research in the first nuclear laboratory of the United Arab Republic, near Cairo, which had been organized with the help of the Soviet Union.

81. In many higher educational institutions in the Ukraine there were students from Ghana, the United Arab Republic, Indonesia, India, China, Cuba and many other countries. The number of foreign students and fellows in the Ukraine was already several thousand. Some of them would be specializing in the peaceful uses of atomic energy, and many were taking advanced medical and technical courses with that end in view.

82. The report of the Board mentioned certain achievements of the Agency in the training of specialists, the provision of equipment and experts, the organization of scientific meetings and the dissemination of scientific and technical information. What it had done was insufficient to meet existing needs, however. The Agency was still far from having attained the objectives laid down in its Statute; its activities had not reached the desired volume, especially in view of the successes obtained by various countries without any assistance. There was no justification for curtailing the Agency's work in 1961 in so important a matter as specialist training.

83. The programme was encumbered with secondary questions which often had no direct connection with the Agency's work (environmental contamination, disposal of radioactive wastes into the sea, etc.). Excessive importance was attached to safeguards and supervision, although there was hardly anything to supervise at the moment. Quite unjustified sums were swallowed up by the Agency's Laboratory, the financing of which from the Regular Budget was a violation of Article XIV of the Statute. Instead of working to improve international collaboration and increase assistance to the developing countries, the Secretariat increased its establishment and raised staff salaries; most of the funds available were spent in that way, which was inexcusable whatever point of view was adopted. The Secretariat should take account of the criticisms made by Member States.

84. The delegates of the United States, the United Kingdom and certain other countries often said that the Agency should not concern itself with political questions; yet in many cases they themselves pursued political ends, while claiming that such action had nothing to do with politics. What was the political significance of the United Kingdom amendment to Article XIV of the Statute, merging the Regular Budget with the Operational Budget? The Operational Budget was financed by voluntary contributions from States, i.e. it was made up of the assistance which certain States furnished to other States through the Agency. The amendment was directed against national currencies and merely amounted to converting all currencies into dollars. Thus if somebody wished to make a present to another person, it would only be accepted if it was paid for in dollars; it would be refused if it was paid for in roubles, rupees, forints etc. It was pointless for the United Kingdom

delegate and those who supported him to claim that the amendment was of a purely financial nature; they would not convince anyone, for they were really trying to create unequal conditions, whereas all the Members of the Agency had equal rights.

85. Again, the delegates of the Western countries considered that any statement or action in favour of peace was political. Progressive people in all countries well knew what enormous benefits would result for humanity if all the achievements of science now applied to military ends were used for peaceful purposes. The most important of such achievements were those relating to the use of atomic energy.

86. As the Soviet Union delegate had already pointed out, the joint draft resolution submitted by the socialist countries and proposing a programme of technical assistance to the developing countries^{10/} was an important and timely measure calculated to re-activate the Agency. The adoption of that resolution would greatly facilitate the drafting and execution of a long-term programme, since it provided for assistance to developing countries over a period of two or three years.

87. The Ukraine could receive trainees at its scientific research centres for training in experimental physics, nuclear physics, the applications of radioisotopes in agriculture, the production of radioisotopes by means of the cyclotron, and the production of radioisotopes for medical diagnosis and treatment; it could also send developing countries highly qualified instructors who would help to train specialists in nuclear physics and the applications of radioisotopes. The Ukraine could also take part in the programme for equipping laboratories in the developing countries.

88. The Agency - whose noble purpose was the preservation of peace and the use of atomic energy for the benefit of mankind - could not stand aside from the solution of the most urgent problem of the day, namely general and complete disarmament.

89. Disarmament and the establishment of world peace would open up wonderful prospects for the peoples of the world; for armaments swallowed up in one hour resources which would be enough to enable the Agency to award 25 times as many fellowships every year as it did at present.

^{10/} GC(VI)/COM.1/67/Rev.1.

90. But peace could not come of itself. It was necessary to fight against the forces that sought to use atomic energy against humanity in order to enrich themselves through the sufferings and extermination of millions of people. The Government of the Ukraine would support any measure proposed by any country with a view to beating swords into ploughshares.

91. The Ukrainian delegation therefore unreservedly supported the draft resolution referred to by Poland on the consequences of general and complete disarmament for the peaceful uses of atomic energy^{11/}.

92. Aggressive circles in the West, especially the United States, were continuing the arms race, creating centres of tension in different parts of the world, spreading war psychosis and intensifying preparations for war. The most flagrant example was the shameful measures directed against the Republic of Cuba and its heroic people.

93. The world knew the consequences of the thermonuclear explosion which the United States had carried out in space. The radiation belt it had created had proved to be more intense than the scientists had expected and might subsist for several years.

94. However, the greatest danger lay in the accumulation and continual improvement of nuclear weapons. The armaments race not only swallowed up enormous resources, but also constantly threatened international disaster.

95. The formidable power resulting from scientific discoveries now had an enormous influence in speeding up social progress and the creation of living conditions worthy of human beings. That was the noblest objective which any international organization had ever set itself. Every effort must be made to attain it.

96. Mr. TORKI (Tunisia) said that the Agency's work during the period covered by the Board's report had been satisfactory on the whole. The Agency was now drawing up a long-term programme. His delegation supported that effort and hoped that the programme would stress the study of nuclear reactors and their use, particularly in the developing countries. It was glad that the Director General had decided to send with the preliminary assistance mission to Africa an expert on conventional power as well as an expert on nuclear power, which could already be competitive in certain regions, particularly in developing countries.

^{11/} See document GC(VI)/OR.65, para. 81.

97. The training of senior technical staff was one of the major problems those countries had to solve, and setting up national training centres was the only real solution. The Agency should give more assistance to such centres. The Tunisian Government was happy to confirm its full support of the regional centre recently set up in Cairo, to which it would contribute \$2000 a year. He hoped that the Agency would consider the possibility of setting up other regional centres in Indonesia and Japan. The Director General's proposal for using the Agency's Laboratory to train senior technical staff^{12/} should also be supported.

98. The Agency had successfully organized courses, conferences and symposia, among which particular mention must be made of the seminar on theoretical physics held in Trieste. The brilliant success of that seminar, the inadequate number of places in other national or regional institutions, and the obvious success of the regional institutions set up a few years previously in the technically developed countries were all reasons why the Tunisian delegation supported the establishment of the international centre for theoretical physics in Trieste.

99. Turning to the Tunisian atomic energy programme, he said that with the help of the Agency Tunisia had first set up three laboratories concerned with the use of radioisotopes in agriculture, industry and medicine. Then an atomic physics centre had been set up in the University of Tunis under a bilateral aid scheme. Two courses in atomic energy were being given, one at the Faculty of Science, the other at the Atomic Energy Commission. The Commission was studying the possibility of using atomic energy for desalinating water and producing electric power; for fresh water and power were the two factors on which the Tunisian economy mainly depended. Tunisia needed fresh water not only for irrigation but also for developing new industries, e.g. paper pulp, textiles, iron smelting. No water in Tunisia contained less than 1.5 grams of salt per liter; the cost of producing a cubic meter of drinkable water in the south of Tunisia was about 65 cents, and not enough was produced. The cost of electricity per kilowatt-hour at a thermal plant was about 2 cents.

100. To remedy that alarming situation, the Atomic Energy Commission was considering the possibility of installing a power reactor for desalinating salt water and producing electricity, and that project might be the subject

^{12/} GC(VI)/OR.63, para. 47.

of a special study by the Agency; the Government of Tunisia was, of course, willing to accept the collaboration of any country interested in that problem.

101. It was difficult to exclude political considerations when speaking of international technical collaboration, but in applying a policy one must show reasonableness and sincerity, seeking to attain objectives that were useful both to the interested parties and to all mankind.

102. Two problems relating to the use of atomic energy had not yet been solved: the discontinuance of nuclear tests and general and complete disarmament. The Tunisian delegation wondered whether the Agency could not at least stimulate and encourage attempts to solve those two vital problems; international co-operation would be strengthened thereby and the Agency would thus contribute to scientific progress and to human happiness.

103. Mr. LEE (China) said that his country was grateful to the Agency for the help given it in recent years in the form of fellowship awards, experts' services and nuclear equipment. The Agency had also awarded Chinese scientists three research contracts and sent two missions to the country to study its needs in the development of nuclear science and technology.

104. However, the Agency had so far failed to fulfil one obligation to his country. The Republic of China was not represented in the Secretariat to the extent required by the principle of geographical distribution. Recently, however, his Government had received several communications from the Director General asking it to nominate candidates for various posts which would soon be vacant. It had complied with those requests and was now waiting to see what decisions would be taken.

105. Commenting briefly on the Agency's programme, he said that during the last few years the Republic of China had received many invitations to send representatives to scientific meetings organized for all Member States, but in view of the very heavy travelling expenses involved it had often had to decline.

106. For the same reason, it was easier for his country to take part in regional meetings. A case in point was the study group on research reactor utilization to be held in Bangkok in December 1962 with the participation of Japan, the Philippines and the Republic of China. It might be thought that regional meetings were of more interest to the scientists of Member States and accordingly gave better results.

107. With regard to contact between the Agency and the Member States, he thought that the latter would be better informed about the Agency's activities if the records of the Board's meetings were communicated to them. As to the Board's annual report to the General Conference, Member States did not receive it until a late date, and he himself had only been able to obtain a copy at the beginning of the session.

108. Up to the present, the Republic of China had never had the privilege of serving on any of the commissions or committees of the Agency or of the General Conference. If the reason had been that the Republic of China, which was not represented on the Board, had no permanent representative in Vienna, that reason was no longer valid, for his Government had just designated as its permanent representative to the Agency His Excellency Ambassador Cheng Paonan, a distinguished diplomat who had been a member of the Chinese delegation to the United Nations for several years.

109. He also pointed out that the Republic of China had offered to act as host to a scientific meeting, but had received a negative reply without any explanation.

110. As to the Programme and Budget for 1963, he approved the increase in the budget. However, he supported the Pakistan suggestion for biennial programmes and budgets, which would certainly result in savings.

111. Referring to the work of the Republic of China on the peaceful uses of atomic energy, he said that the research reactor of the National University had produced some radioisotopes for use in medicine and agriculture, and scientists planned to study the neutron flux distribution of the reactor and related questions. The Republic of China was now setting up a radiation protection service and the Government had for the first time awarded two fellowships to foreign students at the National University's Institute of Nuclear Science.

The meeting rose at 1.10 p.m.

