

## General Conference

GC(V)/OR.54 4 December 1961 GENERAL Distr. ENGLISH

FIFTH REGULAR SESSION

## OFFICIAL RECORD OF THE FIFTY-FOURTH PLENARY MEETING

Held at the Noue Hofburg, Vienna, on Friday, 29 September 1961, at 3.15 p.m.

President: Mr. QUIHILLALT (Argentina)

## CONTENTS

Item of the agenda*		Paragraphs
	Tribute to the memory of Mr. Dag Hammarskjöld	1 - 9
11	General debate and report of the Board of Governors for 1960-61 (continued from the 53rd meeting)  Statements by the delegates of:	10 - 89
	Tunisia Ukrainian Soviet Socialist Republic United Arab Republic Senegal Morocco Belgium Chana Bulgaria	10 - 16 17 - 47 48 - 59 60 - 65 66 - 72 73 - 77 78 - 82 83 - 89

<sup>\*</sup> GC(V)/171.

The composition of delegations attending the session is given in document GC(V)/INF/42/Rev.3.

## TRIBUTE TO THE MEMORY OF MR. DAG HAMMARSKJOLD

- 1. The <u>PRESIDENT</u> recalled that, simultaneously with the present meeting, the funeral of Mr. Dag Hammarskjöld was taking place at Uppsala in Sweden, where the Director General was representing the Agency at a ceremony which was also being attended by the heads of the Secretariats of other organizations of the United Nations family.
- 2. As the Temporary President had said at the opening of the current session, Fr. Hammarskjöld's death would have important consequences for the United Nations. Many were the delgates who during the past few days had paid a tribute to his memory and emphasized the grief which the news of his death had caused in all circles connected in any way with the United Nations.
- 3. He laid stress on one aspect of the work accomplished by Mr. Hammarskjöld, namely the important role he had played in encouraging international cooperation in the utilization of atomic energy for peaceful purposes.
- 4. The Secretary-General had not been a man of science, but he had been fully conscious of the mission of science and technology in present-day society. He had understood in particular the hopes which they aroused among the less-developed peoples and their importance in bringing together great and small nations. It was under his direction that the United Nations had begun to study actively the various scientific problems of the day and to attempt to solve them for the benefit of all peoples of the world.
- 5. Ar. Hammarskjöld had given great attention to the nuclear sciences and their possibilities, and since 1953 he had tried to promote co-operation in that sphere. It was enough to recall the work done by the most important scientific conference since the end of the Second World War perhaps of the present generation which had taken place at Geneva in 1955. That conference had given a fresh impulse to science and technology, and had done much to break down the walls which had hitherto surrounded the secret of the peaceful uses of nuclear energy. The interest which Mr. Hammarskjöld had taken in that problem had been confirmed on the occasion of the second Geneva Conference in 1958. His unccasing efforts had also contributed greatly to the establishment of the Agency.

<sup>1/</sup> GC(V)/OR.48, paragraph 2.

Since the idea of an organization had first been brought up in 1953, he had done all in his power to ensure the success of the Agency and to make it into an efficient working instrument, closely associated with the United Nations. It had not been a mere accident that the Conference on the Statute in 1956 had taken place at the United Nations Headquarters and that Mr. Hammarskjöld had consented to act as its Secretary-General. All those who, like the President, had taken part in the work of the Preparatory Commission in 1956-57 knew the extent of the assistance provided by the United Nations and Mr. Hammarskjöld's personal efforts to ensure that the Agency should be solidly based. Until his death he had continued to take an interest in the Agency's progress, as was evidenced by the fact that he had appointed a personal representative to the Agency — an action unprecedented in the United Nations family.

- 6. Several of the scientists who were attending the present session had acted as technical advisers to Mr. Hammarskjöld on atomic energy questions and had collaborated with him in the activities already referred to, and particularly in the establishment of relations between the Agency and the United Many delegates had had other opportunities of coming into contact with him, and several members of the Secretariat had worked under his orders. He was sure that he was expressing the feelings of all in sending to His Majesty the King of Sweden the following message of condolence: "On behalf of the General Conference of the International Atomic Energy Agency I have the honor to convey to Your Majesty, the Government and Poople of Sweden, our deep sympathy and condolences on the tragic death of Dag Hammarskjöld. Sweden has lost a great man and the United Nations, under whose aegis this Agency was created, will not forget his name and his work. With his bereaved family and country, the General Conference is to-day paying tribute to his memory.
- 7. At the opening meeting of the Conference on the Statute in 1956, 2/Mr. Hammarskjöld had asked whether it was too much to hope that that Conference, like the Conference which had taken place a year before at Geneva, would help to reduce tensions in international life through a reassertion of the spirit of enlightened co-operation.

The following is the text of His Majesty's reply to the President dated 16 October 1961: "I beg to extend to you and to the General Conference of the International Atomic Energy Agency my most sincere thanks for your kind expression of sympathy on the occasion of the passing of United Nations Secretary-General, Dag Hammarskjöld."

<sup>2/</sup> IAEA Conference on the Statute, OR.1, page 6.

- 8. The President invited the members of all delegations and the staff of the Secretariat to pay a tribute to Mr. Dag Hammarskjöld's memory by observing one minute of silence.
- 9. All present rose and stood in silence for one minute.

GENERAL DEBATE AND REPORT OF THE BOARD OF GOVERNORS FOR 1960/61 (GC(V)/154, 168) (continued from the 53rd meeting)

- 10. Mr. EL ANNABI (Tunisia) congratulated the President on his election. He shared the feelings of those who had paid a tribute to the memory of Mr. Hammarskjöld, whose efforts had been of such great service to the cause of international co-operation. He welcomed the new Members of the Agency.
- 11. The Agency's record of work for the past year appeared quite a good one. Important progress had been made thanks to the devotion of the Director General and his colleagues. Among the positive achievements were the organization of many scientific meetings, the development of technical assistance, the granting of research contracts and the setting-up of a laboratory.
- 12. He regretted that there had been a reduction in the number of fellowships and that the administrative services had been slow in the investigation of requests and the establishment of programs. Moreover staff was being recruited on a rather arbitrary basis and there were inexplicable differences of category between persons with the same qualifications. In that connection differences in the standard of living in the countries of origin should not be considered as a valid criterion in an international organization. It was also regrettable that authority should be concentrated in the hands of a representative of the Great Powers and that the small Powers should find themselves with little or no share in the directorial posts.
- 13. In order to solve all those difficulties it was necessary to speed up administrative procedures, to send out follow-up missions composed of traveling inspectors with a view to drawing up programs, and to establish objective rules of recruitment. The post of Director General should be allocated in accordance with the principle of rotation between geographic regions.
- 14. One of the most important problems was the financing of long-term projects. Greater use should be made of the Special Fund and the Expanded Program of Technical Assistance (EPTA). While the interest on all funds from those sources

could be spent, the capital should be used as security for loans, with which the Agency could finance profitable undertakings on the basis of projects proposed by the Agency or by Member States, like the laboratory - which could become an international research center - and the international center for theoretical physics which had been advocated.

- As far as nuclear power was concerned, projects could pay their way only if there was a fall in the price of uranium, which presupposed that the Powers would give up using that metal for military purposes and that they would agree to the cessation of nuclear tests and to complete and controlled disarmament. Moreover, in the opinion of experts, grave risks to the health of mankind were involved in the testing of nuclear weapons. The use of atomic energy for peaceful purposes itself presupposed the solution of certain problems: the disposal of radioactive waste in deep geological strata, the preparation of legislation and appropriate security measures, not to mention the study of the possibilities of protection by biological means, Some control by the United Nations Scientific Advisory Committee appeared necessary in order to determine the usefulness of any tests it was proposed to make to increase existing knowledge. should as far as possible take place underground in order not to be too dangerous and should be held in the presence of scientists from all countries. Nuclear energy could be used for excavations, for merchant ship propulsion and for large-scale radioisotope manufacture. The smaller countries were already able to use it themselves for the production of industrial heat, urban heating and salt-water distillation for example, electricity production being still too Clearly the price of uranium would have to come down and technological knowledge would have to be extended more widely. Nothing could be done without peaceful collaboration between the two blocs and their co-operation with the non-aligned States, which should be given a share in the administration of activities and the diffusion of knowledge. At the fourth session of the Conference Tunisia had accordingly requested two more seats for Africa, and supported the views of those who wished for a reform in the Agency's structure.
- 16. In conclusion, he expressed his pleasure at the progress accomplished by Tunisia as a result of assistance from the Agency and of bilateral assistance. Bilateral assistance had allowed Tunisia to set up a nuclear physics laboratory equipped with material to the value of \$60 000 and to acquire a cobalt-60 bomb which was soon to be installed. With the Agency's assistance two projects had been carried out: an agricultural radiochemistry laboratory and a metal-testing laboratory. Tunisia had also set up a radiodiagnosis laboratory on its own

account. A 100 kW reactor was under construction and other projets were being studied. Lastly Tunisia had just given its support to the plan for setting up an international center for theoretical physics at Dubrovnik, wishing in that way to demonstrate that the problems arising were not all insuperable for the smaller countries, and that the latter could make a modest contribution to the welfare of humanity. It was to be hoped that co-operation within the Agency would be strengthened, though that would not be possible unless certain shortcomings were rectified.

- Mr. ZHMUDSKY (Ukrainian Soviet Socialist Republic) said that after a long period of evolution, during which steady development had alternated with sharp advances, periods of calm with revolutionary upheavals, joy with disappointment, mankind had now entered upon an era of scientific expansion and triumph. The rate of scientific and technological advance was now such that mankind had in a few decades made progress as great as during the whole of its previous history. Science's true vocation lay in discovering the laws of nature and in using them to alleviate human suffering and to improve the human condition. Were science and its achievements used in a rational manner, all mankind could be released from its exhausting labor, hunger, poverty and sickness.
- 18. If, on the other hand, such achievements were used not wisely but wildly, there was a danger that untold disasters would befall humanity. Fortunately the present stage of mankind's historical development was characterized by the fact that a growing number of scientists, politicians and statesmen, with millions of men of goodwill, were beginning to understand that it was essential to place the achievements of science, and all the wealth which was the fruit of man's effort, at the service of peaceful and not of military ends. The Soviet Union was in the forefront of the forces which were revolutionizing contemporary science.
- 19. Together with the other peoples of the Soviet Union, the Ukrainian people had undertaken the task of building communism, which would be inconceivable without considerable scientific and technical development notably in nuclear science.
- 20. Among the scientific problems which Ukrainian scientists were trying to solve, the most important were those raised by the industrial use of nuclear

energy, the direct transformation of nuclear power into electrical power and the control of thermonuclear fusion. Much effort was being devoted in the Ukrainian Soviet Socialist Republic to nuclear physics research, that being the basis of nuclear power engineering and of the economic application of nuclear energy.

- 21. A gigantic linear electron accelerator with a capacity of 2 BeV had been built at the Kharkov Institute of Nuclear Science. It was to be hoped that it would allow Ukrainian scientists to make a valuable contribution to world science. Important work had also been done in installing Van de Graaff accelerators. Thermonuclear fusion and other important fields of nuclear science were being studied there.
- 22. The Ukraine possessed another nuclear research center, the Kiev Institute of Physics, which comprised several large nuclear laboratories and had at its disposal an abundance of up-to-date equipment a cyclotron, electrostatic generators, neutron generators, etc. That institute was undertaking the most varied research work into neutron physics, radiation, physics, thermonuclear fusion, etc.
- 23. The value of the work done by Kiev doctors had been recognized by the choice of that city in 1959 for the so-called Rochester Conference. Reports on the work done at Kiev had also been sent to several international conferences in Switzerland, Canada, France, the United States and other countries.
- 24. Another nuclear center was at present on the way to completion at Kiev, namely the Nuclear Physics Laboratory of the State University, which would begin operating at the beginning of next year. It would be devoted not only to scientific research but also to the training of highly qualified specialists in nuclear energy.
- 25. Kiev University had recently acquired a Faculty of Propaedeutics, the courses of which had already been attended by 300 students from 23 developing countries, including the United Arab Republic, Cuba, Ghana, Guinea, Cambodia, etc. During the current year the number of students was being doubled and everything possible had been done to ensure the success of their studies. In addition, a number of young specialists from the United Arab Republic, Nepal and other countries had been taken as trainees in physics and biology, which would represent an appreciable contribution to the development of science in those countries.

- 26. The Ukrainian Soviet Socialist Republic would be very glad if the Agency could arrange for a number of the fellows being sent to the Soviet Union to go to Ukrainian research institutes and higher educational establishments.
- 27. His delegation considered that it would be a good thing if the Agency could examine and make known the results of experience acquired in the various countries as regards the training of key personnel in the field of peaceful uses of atomic energy.
- 28. In the Ukraine, specialists in a number of fields were working on the peace-ful uses of atomic energy. Extremoly important research in that sphere was being carried out in the Ukrainian Academy of Agronomical Sciences. During the current year detailed studies had been carried out on crop improvement by seed irradiation. Most of the experiments had yielded positive results. The Ukrainian SSR would be happy to communicate the data obtained on the subject to countries that were interested.
- 29. The Bogomolets Institute of Physiology was now carrying out research and experiments on the therapy of acute cases of radiation sickness. Preparations had been developed which permitted the effective treatment of radiation sickness and reduced the death rate amongst irradiated animals. The institute was continuing to study the mechanism of organic disturbances under the influence of ionizing radiations. The morphological composition of the peripheral blood and of the bone-marrow of patients suffering from radiation poisoning had been determined, as well as changes in the organs and tissues during the various stages of the disease.
- 30. Work had been carried cut at the Institute of Microbiology of the Ukrainian Academy of Sciences concerning the way in which pathogenic micro-organisms were affected by gamma and neutron radiation emitted by a reactor.
- 31. The Agency should first and foremost promote extensive international collaboration in the peaceful uses of atomic energy, and help developing countries. The Board's report (GC(V)/154) and certain delegates had properly given great prominence to that aspect of its work. During the past year the Agency had to some extent increased its help to less-developed countries, and several countries had received technical assistance, particularly for training specialists. It had also arranged scientific conferences and symposia, disseminated scientific and technical information and helped in the provision of equipment.

- 32. Unfortunately serious gaps in the Agency's work still hindered the development of collaboration in the peaceful uses of atomic energy. In allocating technical assistance there was a marked tendency to favor countries forming part of the military and political blocs directed by the United States. Equally to be condemned was the practice of increasing annually funds for research contracts, the outcome of which so far had not proved of great service to Member States.
- 33. As a result of the existing practice of preferring nationals of Western countries when recruiting for survey missions, and of dispatching missions without regard to the real needs of the recipient countries or proper consultation with their Governments, missions' recommendations were sometimes out of touch with reality.
- 34. The Agency's program for 1962 provided for scientific and technical assistance to less-developed countries, training of specialists and organization of scientific conferences. The Ukrainian Soviet Socialist Republic would do its best to help the Agency to strengthen international co-operation in the peaceful uses of nuclear energy and in helping developing countries.
- 35. Unfortunately the 1962 program took no account of the observations and wishes put forward by certain Member States concerning the subject-matter and the number of scientific meetings. At the fourth session of the Conference a number of delegations, including his own, had opposed the Symposium on Nuclear Ship Propulsion: it was patently obvious that at the moment that subject chiefly concerned the military uses of nuclear energy.
- 36. Delegates from socialist countries were often reproached for undervaluing the Agency's role, criticizing its work and bringing politics into their speeches; but there was clear evidence that the leaders of the Western Powers had no intention of abandoning their policy, which was intensifying the armaments race and exacerbating the international situation. One hundred thousand million dollars were spent in the world every year on military purposes. Economists had estimated that a mere 10% of that sum would build forty Bkhilai factories and ten Aswan dams, and that 1% would pay for more reactors than existed at present in the world.
- 37. His delegation valued the Agency's work at its true worth but would not go so far as to admire it. In numerical terms the Agency's budget was minute compared to military expenditure. At present values it would take over 12 000 years

to equal one year's military expenditure - a shocking fact. The Agency's work could therefore not be admired, and means must be found to turn the Agency into an international organization which would contribute effectively towards diverting nuclear materials from military to pesceful uses. The McKinney report said that their application to exclusively peaceful uses would strengthen peaceful relations between States. Unfortunately many examples showed how far that dictum was removed from reality.

- 38. The first example was that for five years, through the fault of the Western Powers, the Chinese People's Republic had not been able to take its rightful seat in an international body concerned with the peaceful uses of atomic energy. Its place had been usurped by a decaying clique whose arrears of contributions were tolerated by Western Member States to the detriment of the Agency.
- 39. Secondly, the World Federation of Trade Unions (WFTU), which with its member-ship of over one hundred million was doing much to improve working conditions in atomic industrial plants, had not yet been accorded consultative status with the Agency, owing to the discriminatory attitude of the Western Powers.
- 40. Thirdly, anyone could see how at the beginning of the present session the Western Powers had made sure of a majority in the General Committee and the Credentials Committee, and would not on any account agree to equal representation of the three groups of Powers.
- 41. Fourthly, four years ago the delegates of the socialist countries had agreed to the nomination of a United States national to the post of Director General. At the end of his term of office it might seem proper to appoint his successor from the Afro-Asian group; but that the Western bloc consistently opposed. Their attitude infringed the most elementary rules of international collaboration. His delegation was emphatically against the nomination of Mr. Eklund to the post. Lack of flexibility in the settlement of that question would gravely prejudice collaboration among the Members of the Agency.
- 42. Fifthly, the efforts of Western States to use the Agency's resources for studies of doubtfully peaceful character did not show a sincere desire for collaboration. It was scandalous that the Agency should be spending its modest resources on the study of safety in bases from which death and destruction might be spread.

- 43. Those examples, which could be multiplied, showed that the United States and the other Western Powers were leading the Agency off along a perilous path in disregard of the facts. The Ukrainian delegation was ready to collaborate, but the persons responsible for a policy like that could never count on its support.
- 44. All the participants in the Conference knew that the policy of nonintervention had unleashed the horrors of the Second World War. It was
  therefore the duty of all countries and all men to show wisdom and understanding, to profit by the lessons of world history and to take a realistic
  view of the present situation, in order to prevent a new conflagration which
  would bring irreparable suffering to mankind. Only the destruction of
  nuclear arms would put an end to the ever-present fear of imminent disaster
  and enable all peoples to join together in harnessing the hitherto unused
  forces of nature and-all the riches hidden in their own planet and in outer
  space.
- 45. The peoples of the Soviet Union and other countries in the socialist camp had unhappily been forced into a painful decision, but they had been left without choice. The Soviet Union, whose attitude was completely understood and approved by the Ukrainian people, had been obliged to prepare itself fully by all necessary means to overcome any possible aggressor. As part of those means the decision had been taken to carry out experimental explosions with nuclear devices. It had been a difficult decision, for the Government of the Soviet Union had been perfectly aware in taking it that all experiments with nuclear arms caused foar and moral suffering to all peoples.
- 46. The Ukrainian delegation warmly supported the draft resolution by the Soviet Union inviting the Agency to participate in international activities designed to settle the problem of general and complete disarmament. It also welcomed the joint declaration made by the Soviet Union and the United States setting forth the principles which should guide the disarmament negotiations, and expressed the hope that, following the example of the Soviet Union and other socialist countries, the Western Powers would put those principles into practice.

<sup>3</sup>/ Subsequently issued as GC(V)/175.

<sup>4/</sup> United Nations Document A/4879.

- 47. Only if definite measures were taken by all countries to turn to peaceful uses the immense resources at present spent for military purposes could the Agency achieve its noble aims.
- 48. Mr. MAHMOUD (United Arab Republic) said that his delegation was happy to congratulate the President on his election by acclamation; it was convinced that under the direction of Mr. Quihillalt the Conference would fulfill its allotted task in a relaxed and friendly atmosphere.
- 49. The Conference was meeting at a time of mourning for the United Nations family. The tragic end of Mr. Hammerskjöld during a mission which he was fulfilling on behalf of the United Nations had been deeply felt by nations throughout the world.
- 50. The delegation of the United Arab Republic also wished to express its complete satisfaction at the admission to the Agency of the Republic of the Congo (Leopoldville), which would cortainly make a valuable contribution to the Agency's various activities.
- 51. His delegation was greatly pleased that the League of Arah States had sent an observer to the Conference. The League had played an important part in organizing the first regional training course in radioisotope techniques, which had been held in Cairo under the joint auspices of the Agency and the UAR Atomic Energy Establishment. The League was currently assisting the competent authorities to prepare a second regional course, and organizing a conference on ionizing radiations and protection, to be attended by the Arab nations, other African and Asian countries and scientific organizations and specialized agencies. The Agency would of course take part in the conference, and its co-operation with the League of Arab States would continue to develop to the greater benefit of the region.
- 52. The United Arab Republic delegation wished to express to the Director General its deep gratitude for his unremitting efforts throughout his term of office. Amongst the Agency's achievements of the last four years should be mentioned the results obtained in training and exchange, the organization of scientific meetings on fundamental problems of nuclear science, the supply of material, the granting of aid to several countries for the initiation of their atomic energy programs, and the establishment of an information center. Those

results could not fail to contribute to scientific progress and to the development of the peaceful uses of atomic energy in all parts of the world. His delegation was convinced that the Agency's chief aim should be to help developing countries, so as to increase the contribution of atomic energy to peace and prosperity throughout the world in accordance with Article II of the Statute.

- 53. The United Arab Republic was somewhat concerned by the thought that international tension might affect the work of the Conference and the future of the Agency. His delegation would spare no effort to promote international co-operation within the Agency; it hoped that, by adherence to its scientific and technical aims, and in a spirit of conciliation and mutual understanding, it would be possible to find specific solutions for the problems which it encountered in drawing up its programs and in its organization.
- 54. The United Arab Republic had always followed a policy of international co-operation with respect to atomic energy, and the relations which it maintained with the Agency, and with other countries on a regional or bilateral basis, were well known. That co-operation had helped it to carry out its atomic energy program, and recently to evolve a program on the photographic localization of tumors with radioactive tracers. It hoped that its request, submitted to the Agency in 1959 and recently renewed, for a cobalt teletherapy installation could be granted under the 1962 program.
- and the UAR Atomic Energy Establishment, the Board's decision of June 1960 to set up a regional radioisotope center for the Arab countries of the Middle East had been put into effect, and the first of the courses provided for by the Board had been held at the National Radioisotope Center in Cairo from March to May 1961. The Agency had invited Middle Eastern and African countries to send students to the course. Of the 86 candidates applying from eleven countries, 20 had been picked, only 5 of whom were nationals of the United Arab Republic. The large number of applications was clear evidence of the need for a regional center in that part of the world. Moreover, the marked success of the course guaranteed success for a regional center. A second course, on the medical applications of radioisotopes, would be held in

November and December 1961. The Government of the United Arab Republic judged that the conditions necessary for the establishment of a regional center in accordance with the Board's decision would thereby be fulfilled. An agreement could be concluded with the Agency in 1962.

- 56. The progress made by the Atomic Energy Establishment also appeared in the opening of a nuclear physics laboratory with a 2.5 MeV Van de Graaff accelerator. The 2 MW research reactor at Inshas had gone critical in July 1961 and trials at various power levels were being carried out; a program had been established to use it for research in nuclear physics, radiochemistry, radiobiology and isotope production. At the beginning of 1962 the nuclear chemistry laboratory would be able to conduct research and to produce and process a number of radioisotopes. All the work at present being done in the provisional radiobiology, geology, engineering and radiation protection laboratories would in fifteen months be performed in the Inshas Nuclear Research Conter.
- 57. To carry out the nuclear power program and the decision to build an 80-100 MW nuclear power plant under a five-year plan, an administrative and a technical committee had been appointed and had almost completed their study of the main technical and economic features of the program and the question of the site; that preliminary work should enable practical measures to be taken in the near future. The UAR delegation welcomed the Agency's assiduous study of the economics of nuclear power throughout the world , a matter of especial importance to the developing countries.
- 58. The five-year plan of the United Arab Republic covered many other important activities. The main projects included an annual production of 20 tonnes of heavy water as a by-product of the Aswan fertilizer plant, uranium refining and the manufacture of fuel elements.
- 59. The United Arak Republic was convinced that no effort should be spared to enable the Agency to do full justice to its important task. It was therefore important to make the general review of the provisions of the Statute prescribed in Article XVIII.B, so as to bring the Agency's functions into line with the needs of a changing world. First, Articles V and VI should be amended to make the main organs of the Agency more representative. The designations made under Article VI should not make certain States semi-permanent members

<sup>5/</sup> GC(V)/161 and GC(V)/INF/38.

of the Board; and the Conference, as the most representative organ, should play a more positive part in the Agency's work. Secondly, the Board of Governors had studied the resolution adopted at the fourth regular session for an equitable representation on the Board of the "Africa and the Middle East" area , and the draft resolution it had submitted to the Conference could be used as a basis for discussion; the draft resolution, however, did not sufficiently recognize that a growing number of new States in that area were joining the Agency and the situation was changing rapidly. Thirdly, the attitude of the UAR Government towards safeguards was well known and had been clearly explained at the fourth session of the Conference. Article XII should also be thoroughly examined during the general review.

- Mr. DAGUERRE (Senegal) congratulated the President on his election and expressed great satisfaction at the admission of the Republic of the Congo (Leopoldville) to membership. He hoped that soon all independent States would take their place in the Agency.
- 61. He paid tribute to the French teachers in his country who, leaving all political considerations aside, had fulfilled a scientific and cultural task which had always done credit to France. Thanks to France, Dakar now possessed one of the most modern universities in West Africa, which would very shortly have an institute of nuclear science to co-ordinate all the nuclear research now conducted in Senegal on the use of radioisotopes in agriculture and medicine.
- 62. His Government made the following suggestions for the Agency's program. More attention should be paid to the peaceful uses of atomic energy that would help to solve the special problems of developing countries, particularly want and endomic disease. Efforts should be directed particularly to reducing the cost of energy produced by small nuclear power stations, to intensifying medical research against endomic diseases and insect vectors, and to agricultural research for improving crop production and acclimatizing certain crops needed for a balanced diet.
- 63. His Government wholeheartedly approved the Agency's training program, but hoped that the courses could be given in French and the administrative formalities for the award of fellowships simplified. Delay between the

<sup>6/</sup> GC(IV)/RES/85.

 $<sup>\</sup>mathcal{I}/\mathrm{GC}(V)/151$  and Add.1; see also  $\mathrm{GC}(V)/\mathrm{RES}/92$ .

<sup>8/</sup> Cf. GC(IV)/OR.42, paragraph 11.

approval of technical assistance projects and their implementation often imperiled the proper execution of programs for the peaceful uses of atomic energy. He hoped that the Agency would take the necessary steps to remedy that situation by improving co-ordination between the departments concerned.

- 64. In order to carry out its program the Agency would have to induce the nations possessing considerable scientific and technical resources to place a greater number of experts at its disposal. His delegation did not think that the Agency would be able to resolve the particular problems of the developing countries unless it established, side by side with regional training centers, laboratories for specifically regional studies and research. Dakar would be prepared to act as host to one of those centers.
- 65. He was convinced that the standard of living of the underdeveloped people could be improved only if there was peace at present threatened by the resumption of nuclear tests and he thought that its Statute entitled the Agency to recommend that nuclear tests should be stopped immediately and that atomic weapons should be destroyed. The Agency had a grat role to play in nuclear science and the Government of Senegal had every confidence in it.
- 66. Mr. SINACEUR (Morocco) associated himself with the tribute paid to Mr. Hammarskjöld, whose tragic death was a catastrophe for all countries.
- 67. Morocco, which had followed the Agency's activities since its establishment, had in 1957 shared the optimism of the world concerning the peaceful uses of atomic energy. At that time it had been hoped that the Great Powers would use that new form of energy to improve the conditions of mankind, particularly in the less-favored regions, and that they would stop using it for military purposes. Unfortunately, various difficulties had caused the abandonment of that hope. In spite of the obstacles it had encountered, the Agency had been able to do satisfactory work, and Morocco remained convinced that sooner or later, it would accomplish all the tasks originally envisaged, the most important of which was to help the insufficiently developed countries.
- 68. Morocco did not wish to commit itself lightly to extremely costly programs, and for that reason no important practical undertaking in the atomic field had as yet been initiated in his country. Morocco would for many years to come have sufficient energy from conventional sources to cover its needs, and had

enough material and staff for ordinary activities in geology, medicine and agricultural science. Thus it had been able to devote the past few years to the preparation of an optimum program which would fit harmoniously into the framework of its general development. On that basis it had three times invited Agency experts to study on the spot the possibilities of developing nuclear activities.

- 69. A first expert had been sent by the Agency in April 1960 to study the question of extracting uranium from natural phosphates. In May of the same year a preliminary assistance mission had recommended that the Agency should send two experts to Morocco to prepare a step-by-step program for the development of atomic energy and to study the possibilities of using radioisotopes in agriculture and medicine. According to their report, which had just been sent to the Moroccan Government, certain applications of radioisotopes could be introduced without delay. The installation of an experimental reactor seemed desirable but required thorough preparation, which would take at least three years after the initiation of the general program prepared by a commission consisting of two Agency experts and representatives of the Moroccan services concerned, That program, which would be spread over five years, called for the training of 50 specialists and loans estimated at \$4 million for equipment alone. The administrative work would be entrusted to a national nuclear energy commission which would shortly be set up. program would soon receive the approval of the Moroccan Government but its implementation would necessitate substantial Agency assistance.
- 70. It could thus be said that in nuclear energy Morocco was on the point of passing from a period of exploration to a period of practical realization. The same process would have to take place in many countries which had recently become independent and some of which had become Members of the Agency, for example the Congo. So far the Agency had given those countries the aid which they had requested by sending experts and granting fellowships to their students. However, it was to be anticipated that that aid would have to be more substantial in the future, and he wondered whether the Agency would be able to cope with the new situation. To facilitate the necessary adjustment, as many technicians and administrators as possible from those countries should at once be allowed to take high positions in the Agency, and an equitable method of representation of the new Member States on the Board should be

adopted. The Moroccan delegation had already expressed its views on the question of representation at the fourth session of the Conference, It believed that all countries, regardless of their size, had the same rights and obligations, that the present composition of the Board was inequitable and that all members of the Board ought to be elected by the Conference.

- 71. A reform in the structure of the Board would certainly be no easy matter, and Morocco would have favored the full application of the resolution adopted by the Conference at its fourth regular session recommending the Board to submit to the fifth regular session a draft amendment to the Statute and suitable proposals to ensure the equitable representation of the "Africa and the Middle East" area as soon as possible. However, the Board had only put forward a draft amendment, so that it would be some time before the present injustice could be remedied. The Moroccan delegation hoped that all delegates would take note of those observations, because the solution of the problems at issue was of the greatest interest to many countries which were playing an increasingly important role in the international sphere, as the recent conference at Belgrade had shown.
- 72. In conclusion, he paid a tribute to the Director General, who had done everything in his power to ensure the efficient operation of the Agency.
- 73. Mr, ERRERA (Belgium) congratulated the President on his election, paid tribute to the way in which Mr. Nadjakov had presided over the fourth regular session and thanked the Director General for his work during the first four years of the Agency's existence.
- 74. One example of the importance of the Agency's work for the establishment of atomic energy programs of Member States was its co-ordination of the studies on the problems of nuclear merchant-ship propulsion, referred to by the delegate of the Soviet Union at an earlier meeting  $\frac{10}{}$ . He proposed to stress another aspect of that activity, which to him appeared the only real one. The Agency had in fact investigated the risks presented by the entry of nuclear-powered ships into harbors and had assessed their safety. It had

<sup>9/</sup> GC(IV)/OR.41, paragraph 80.

<sup>10/</sup> GC(V)/OR.51, paragraph 1 (31) - (39).

examined the economic, technological and safety aspects of nuclear-powered ships, and had dealt with the problem of water pollution through accident, and the protection of water from contamination. Finally, at the Diplomatic Conference on Maritime Law it had played an important technical part in drawing up a convention concerning the liability of operators of nuclear-powered ships.

75. One of the main points of the program which Belgium was about to execute was to study and construct a nuclear reactor called "Vulcain", one model of which, with an output of 65 MW(t), was intended for ship propulsion. The Vulcain was a pressurized-water reactor using enriched uranium oxide as fuel and mixtures of heavy and light water as moderator and coolant. It combined the advantages of spectral shift with the additional flexibility conferred by ability to vary the moderator temperature. The Belgian Government had been able to undertake that study and might decide on the construction of a prototype and a boat because the problems of entry into port, water contamination and the civil liability of operators would be solved in time through the Agency's activity - which, he emphasized, had a very minor effect on the budget.

76. In the budget, absolute priority should be given to technical assistance. Unfortunately, in 1961, for lack of funds, only 300 fellowships would be granted as compared with 429 in  $1960^{\frac{12}{2}}$ , 554 man-months of experts would be provided as against 620 requested, and only 40% of requests for visiting professors would be satisfied  $\frac{13}{2}$ . In 1962 the program of regional and international courses would suffer, as in 1961, from shortage of funds, which was resulting in an accumulation of requests  $\frac{14}{2}$ . On the other hand, under the scientific programs, 90 research contracts were running at present, most of which were not related to technical assistance, and it was thought that their number would increase to 120 by 1962. He was aware that in the program for 1962 it

<sup>11/</sup> Held at Brussels, 17-29 April 1961.

<sup>12/</sup> GC(V)/154, paragraph 200.

<sup>13/</sup> GC(V)/155, paragraph 528,

<sup>14/</sup> Ibid., paragraph 531.

was said that "The expansion of certain of the Agency's scientific programs proposed for 1962 should not be regarded as minimizing the great importance which, in the opinion of the Board, should continue to be attributed as far as possible to rendering technical assistance ..."

[15]. However, on second thoughts he regretted the use of the conditional "should" and the phrase "as far as possible". The Scientific Advisory Committee (SAC) would therefore be well advised to examine, before approving new research contracts for 1963, whether priority should not rather be given to requests for technical assistance. Moreover, the research contracts were not always part of a coherent long-term program, and were often given to countries which could afford to execute them without the Agency's assistance. He thanked the Italian Government for paying the expenses of the research contracts which it was going to accept from the Agency, 16/2 and also for its offer concorning the establishment of an international center for theoretical physics, and supported the candidature of Trieste as the site of the institute 17/2.

- 77. The Agency's scientific function was to co-ordinate research undortaken by Momber States rather than to grant research contracts, which imposed a heavy burden on its budget. The Agency's co-ordinating activities had proved efficient, and ought to increase in the future without great budgetary implications.
- 78. Mr. BREW (Ghana) congratulated the President on his election, paid tribute to the memory of Mr. Hammarskjöld, whose loss was deeply regretted by all countries, and expressed his gratitude to the Director General, whose name would always remain associated with that of the Agency.
- 79. Several delegates had already stressed the Agency's efforts to initiate the use of atomic energy in their countries for peaceful purposes. It was true that the present world tension was casting a shadow over the deliberations of the Conference, but it was too early to decide that the hope placed in the goodwill of the nations had gone up in smoke. Moreover, nuclear weapons were so destructive that an atomic war would bring the victor nothing but ruin and desolation.

<sup>15/</sup> GC(V)/155, paragraph 21.

<sup>16/</sup> GC(V)/OR.50, paragraph 68.

<sup>17/</sup> Ihid, paragraph 69.

- 80. He welcomed the initiative taken by the Board to enable developing countries to participate in its work. The draft amendment to the Statute clearly showed the Agency's wish to distribute between all people the responsibilities so far borne by the Great Powers, and to encourage young countries to achieve economic independence.
- 81. With regard to the nomination of the Director General, he hoped that, if the decision could not be changed, it would be possible in future to fill the post by rotation. Moreover, several delegates were of the opinion that high posts should not be reserved for nationals of certain regions of the world. He hoped that opinion would be borne in mind. It would be a disaster if the Director General and his chief collaborators could not count on the support of the majority of Member States.
- 82. In conclusion, he said that Ghana would do everything in its power to serve the noble cause of the Agency.
- 83. Mr. NADJAKOV (Bulgaria), on behalf of his delegation and himself, congratulated the President on his election and wished him every success in his task. The Board's annual report presented the positive side of the Agency's work, but also revealed difficulties which the Agency had been unable to surmount. No one, for example, would dispute the usefulness of the work done in training personnel, which made it possible for many Member States to benefit from the experience of other States more advanced in the peaceful uses of atomic energy. The procedure for the award of fellowships should, however, be revised, since the time taken was far too long. Only large research centers possessing a well-established scientific tradition could train highly qualified scientific workers. Young research workers of proved ability ought to be given the benefit of longer courses in such centers, in order that they might acquire the necessary knowledge and experience to train in their turn the scientific personnel of their own countries.
- 84. One of the Agency's essential functions if not its actual <u>raison d'être</u> was to provide fissionable materials. Unfortunately, the Agency had done very little in that direction. Since it had a very large stock of fissionable materials at its disposal, the reason for that omission must be sought in the safeguards system, which was damaging to the prestige of

States applying for aid, and infringed their sovereignty. There seemed to be an implication that the Agency suspected that every State which made an application intended to divert the fissionable materials supplied to it to non-peaceful purposes. Such an assumption was absurd, since practically none of the applicant States possessed either the means or the necessary experience to use for military purposes fissionable materials supplied by the Agency. To remedy that state of affairs, the Agency should carry out a fundamental revision of the safeguards system; otherwise there was a risk that fissionable materials would be supplied on the basis of bilateral agreements rather than through the Agency. Moreover, such a revision would release large funds which could be allocated to other Agency activities.

- 85. Another of the Agency's duties was to bring together all countries and organizations that were able to contribute to the peaceful uses of atomic energy. The position in that respect called for severe criticism. Countries such as the German Democratic Republic, the People's Republic of Korea, the People's Republic of Mongolia and the Democratic Republic of Viet-Nam were being kept out of the Agency as a result of unjustifiable discrimination. And why were the Chinese, that great people, who had achieved remarkable results in the peaceful application of atomic energy, still not properly represented in the Agency? That state of affairs must be brought to an end without delay. There the Agency could set an example which might facilitate the solution of the problem of admitting the countries concerned to the United Nations.
- 86. Similarly, consultative status with the Agency had been accorded to a number of international non-governmental organizations, yet it had been refused to WFTU, whose influence was nevertheless world-wide.
- 87. In the matter of research contracts, the Board's annual report confined itself to listing contracts which had been granted. It was difficult to decide, in the absence of any indication as to the results of the work done, whether the contracts concerned were really useful and whother they contributed to the success of the Agency's work. It was preferable in his view to replace the contracts system, at least in part, by competitions and prizes, which would attract not only a greater number of research workers but the most qualified among them.

- 88. Referring to the appointment of the new Director General, he recalled that his delegation, together with those of Poland and the USSR, had introduced a draft resolution on the subject 18. The choice of Mr. Eklund created a very difficult and embarrassing situation. In the interests of the Agency's future work it would be a good thing to invite Mr. Eklund to attend the discussions under item 22 of the agenda. The Bulgarian delegation was strongly opposed to the appointment imposed upon the Board by the United States and the other Western countries, despite the opposition of the socialist and Afro-Asian countries, which by force of circumstance were in a minority on the Board.
- 89. In conclusion he asserted that the aggressive policy of the imperialist Powers was plunging the whole of mankind into a state of anxiety and insecurity. The armaments race was being speeded up. Intensive rearmament was in progress in Western Germany, where militarists were no longer concealing their desire for revenge, even at the cost of a new war, the consequences of which would be incalculable. Faced with such a prospect, the forces of peace and progress could not remain idle. International tension had compelled the Soviet Union, very much against its will, to resume tests of its new nuclear weapons. The Pugwash Conference, which had just hold its seventh and eighth conferences in the United States, was seeking to promote constructive co-operation in the field of science, because such co-operation could not fail to restore confidence among nations. Unfortunately a spirit of understanding had not yet been established and the negotiations on the cessation of nuclear tests and on disarmament had shown that the Western Powers did not want effective disarmament. Complete and general disarmament, however, was the only way to avert the catastrophe threatening the human race. It was for that reason that he was appealing sincerely to all delegates to show proof of their good will, thereby facilitating the conclusion of an agreement on the disarmament problem.

The meeting rose at 5.50 p.m.

<sup>18/</sup> GC(V)/173.