International Atomic Energy Agency

General Conference

GC(V)/OR.50
27 November 1961
GENERAL Distr.
ENGLISH

FIFTH REGULAR SESSION

OFFICIAL RECORD OF THE FIFTIETH PLENARY MEETING

Held at the Neue Hofburg, Vienna,
on Wednesday, 27 September 1961, at 3.20 p.m.

President: Mr. QUIHILLALT (Argentina)

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* GC(V)/171.

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

GENERAL DEBATE AND REPORT OF THE BOARD OF GOVERNORS FOR 1960-1961 (GC(V)/154, 168) (continued from the 49th meeting)

1. Mr. LAURILA (Finland), after congratulating the President on his election, paid a tribute to the memory of Mr. Dag Hammarskjöld, with whose country Finland was closely linked and whose death had been deeply felt by all his countrymen.

2. In his opinion, the present session of the Conference might be considered as one of the most important of the five so far held, since it had to decide whether a general review of the Statute of the Agency was to be undertaken during the following year and to confirm the appointment of the Director General whom the Board of Governors had elected in June by a large majority.

3. It would no doubt be useful to review certain provisions of the Statute, but something could be done to remedy most of the existing defects by practical administrative measures. For that reason, the Finnish delegation would support a proposal to defer the review. The only urgent measure at the present juncture was the adoption of the amendment to the Statute submitted by the Board pursuant to the resolution adopted unanimously by the Conference at its fourth session with a view to ensuring the equitable representation of the "Africa and the Middle East" area on the Board[1/]. The Finnish Government was prepared to approve that amendment and ratify it as soon as possible. In its opinion, the amendment met the well-founded claims of the new Member States from that area, without affecting the distribution of seats among the other areas.

4. With regard to the Agency's activities, he stressed that the really significant large-scale application of nuclear physics was to be sought in the production of electrical and thermal energy by fission or, in the not too near future, by fusion processes. Technology seemed to be leaving behind the initial period of fumbling, and nuclear energy was entering a phase where it really began to be economically and technically profitable - at least in certain areas of the world, of which Finland was one. For that reason, it was conceivable that the Agency would concentrate its attention

1/ GC(IV)/RES/85.

on activities the aim of which was to solve problems connected with the more extensive use of nuclear energy in power economy. Studies such as the analyses of power systems of the kind made jointly by the Agency and Finnish experts in Finland[2] and by the Agency mission in the Philippines[3] were of exceptional value. The panels of experts dealing with such problems as third party liability and the pollution of air and water, and the conferences dealing with safety measures and protection against radiation, were also extremely important. On the other hand, the well-known and much discussed problem of safeguards had only a secondary importance from the technical point of view. In view of the increasing importance of nuclear power plants, he hoped that the Agency would establish closer relations with the World Power Conference, which had a very wide experience in handling the world-wide problems of energy production in general.

5. The furnishing of nuclear aid to areas where the conventional forms of engineering had not yet been fully developed was a difficult and even a delicate task. If the less-developed areas did not receive evenly balanced aid throughout the whole sector of engineering, a one-sided emphasis on nuclear engineering might lead to a certain distortion of the technological development of the area concerned. The Agency should not lose sight of that aspect of the problem.

6. It was customary for the delegates to the Conference to give a personal opinion on the activities of the Agency. Those opinions were often made in the form of criticisms which were not entirely unjustified. However, it might be that the successful activities of the Agency were not sufficiently stressed. For that reason, he was happy to state, in conclusion, that the relations between the Agency and his country had always been excellent, and had produced concrete results. He thanked the Director General and his collaborators, whose skill and goodwill had made a large contribution to the solution of important problems.

7. Mr. SEABORG (United States of America) first paid a tribute to the memory of Mr. Hammarskjöld, whose death was a grievous loss to humanity.

2/ STI/DOC/10/2.

3/ STI/DOC/10/3.

8. He then made the following statement:*

(1) "I am honored to appear before the General Conference of the International Atomic Energy Agency. Your election as President of the Conference is a tribute to the impressive role you have played in advancing the Agency's objectives, and I congratulate you. I should like to pay tribute to the outgoing Director General, Sterling Cole, for his notable work in leading this organization so successfully through its formative years.

(2) "I am privileged to read the following message to the delegates from the President of the United States:

'The General Conference of the International Atomic Energy Agency is a welcome event to all peoples who value peace. Your meeting accentuates the enormous potential of the atom for improving man's well-being. We already know the atom can help place more food on our tables, provide more light in our homes, fight disease and better our health, and give us new technical and scientific tools. The exploration of this force for human welfare is just beginning. The International Atomic Energy Agency can assume a position of leadership in bringing the peaceful uses of atomic energy to the people of the world.

'Moreover, the intangible benefits of your work are no less than the material rewards. When people from different countries work together in a common cause, they help to maintain a bridge of understanding between nations during times of tension and build firmer foundations for a more stable and peaceful world of the future. I applaud your efforts and assure you that they have the full support of the United States.

'John F. Kennedy
'President, United States of America'

(3) "I am here in the spirit of President Kennedy's message, to advance on behalf of my Government the high principles of the Agency, which in the words of the Statute are 'to accelerate and enlarge the contribution of atomic energy to peace, health, and prosperity throughout the world.' My remarks will be confined to that purpose. I shall not pretend that we can ignore world tensions. It is, of course, difficult to be optimistic that these tensions will vanish at an early date. We can hope, as I earnestly do, that this condition will be limited to the tension phase, however difficult this may be. We can do much more: we can resolve, here, to dedicate ourselves to the pursuit of the objective of the Agency and - through mutual goodwill and the positive accomplishment that is within our power - to strive to build solid international foundations that will diminish tensions in the longer future.

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* This statement is reproduced verbatim, at the speaker's request, under Rule 92(b) of the Rules of Procedure of the General Conference.

(4) "There are good reasons why this organization is especially suited for such accomplishment. Man has many arts which can be applied to the building of a better world order, including diplomacy, law, economics, and others. I believe science stands high among these activities.

(5) "I should like to discuss briefly how I believe this Agency, if Members apply themselves to the expansion of science and technology, can use the potential and the characteristics of these arts to influence constructively the course of events.

(6) "The world of the future will be increasingly affected by science. Already in some nations, science has become the dominant force in shaping the material course of affairs. This trend will continue in countries that have highly developed technologies. Moreover, we hope that science and technology will develop and grow in other countries; indeed, this is one of the major objectives of this organization. I should hope that the development of science will be a matter of high policy in all countries, especially those that are newly independent, and that all Member States use the resources of this Agency for this purpose.

(7) "There are many qualities of science that can be cultivated by bodies such as this with great profit for the world. Science is involved with the pursuit of truth, with the expansion of knowledge. It is not concerned with national differences.

(8) "The characteristics of science encourage in the individual scientist and technologist values that are especially favorable to an international viewpoint. In their search for knowledge, scientists seek to achieve the free, unfettered, unprejudiced mind. The scientist's greatest admiration is for individuals with curiosity, ability and a willingness to exchange ideas. Moreover, a scientist's empathy with mankind in the broad sense is reinforced by his consciousness that the knowledge he gains ultimately becomes a part of the common heritage of men everywhere forever.

(9) "Science gives us the means for the treatment and prevention of disease. The knowledge it creates helps us to increase our productivity in agriculture and in industry. It gives us energy with which we can do more work. Above all, perhaps, it is the means by which man puts behind him superstition and fear, and thereby finds greater personal security through understanding the forces of an environment that has been overwhelming and fearsome to previous generations of people.

(10) "It is painfully clear, of course, that science, misused by man, can create fear and destruction. As more sophisticated world political devices evolve in the years ahead - perhaps with the help of science itself - I believe there will be a progressive lessening of such fears.

(11) "With all these good qualities and more, science and technology are among the most powerful of the arts of peace. To my Government it is clear that the Agency, being charged in its Statute with world-wide peaceful expansion of one of the greatest scientific-technological developments of our time, is in a position to be a powerful catalyst of peace and international co-operation.

(12) "I am a newcomer to these Conferences, and perhaps I bring to this meeting a perspective that is possibly different from that of delegates who have observed the evolution of this body from its beginnings. While it may seem that the program is modest, my view is that the Member States have built soundly and well, and that, considering the youth of the Agency, the achievements and the promise are highly significant.

(13) "The challenge to the Agency and to its Members is very great. As President Kennedy has said in his message, the Agency can help to maintain strong bridges of friendship between nations during times of tension; and in the longer future, can offer a model of operation which can help men to enlarge the foundations for a more secure and peaceful world.

(14) "How can we set about to develop the maximum potential of the Agency as a force for peace? I believe, first of all, we must establish a pattern of conduct here that will permit representatives of Member States to exchange ideas in reasonably free and unencumbered fashion. Second, the larger contributions of the Agency will be achieved through dedication to specific programs.

(15) "We are, I am sure, realistic enough to know that we will work under difficulty for some time. If we can dedicate our efforts to the goals of the Agency, with faith in their power for good, I believe the ultimate impact on world society will be very large.

(16) "Let me describe, briefly, some of the views of my Government relative to the program of the Conference and future work of the Agency.

(17) "With reference to the question of the next Director General of the Agency, it is my pleasure to give the vigorous support of my Government to Mr. Eklund. He is highly qualified for the important office of Director General. Mr Eklund is, as you know, an eminent scientist. We hope that he will receive that wide and generous support which will enable him to render the effective leadership of which he is capable.

(18) "In supporting strongly the candidacy of Mr. Eklund, I wish at the same time to make wholly clear that it is our firm view that, as a matter of principle, the top posts of this organization, including the post of Director General, cannot be considered to be reserved to any group, geographical or otherwise, of the Members of this Agency.

(19) "It is pertinent to point out that the Governor from the United States stated this same principle with regard to the Secretariat when, at the June meeting of the Board, he made it clear that we do not consider that the top posts in the Secretariat should be held exclusively by particular Member States or groups of States. This has been our policy, and we will continue to be guided by it in supporting qualified candidates in the years ahead.

(20) "We believe every effort should be made to minimize the burdens and increase the strength of the new Director General and his staff. We have been particularly impressed with the caliber, strength and dedication of the Secretariat, and are convinced that this organization can fruitfully expand its work in nuclear science.

(21) "We are pleased that the membership of the Agency continues to grow. During the past year, six new Members have joined, all from the developing areas of 'Africa and the Middle East' and 'Latin America'. We hope that this trend will continue.

(22) "We are gratified that the Agency has recognized the implication of expanding membership by timely resort to the process of amendment of its Statute. This has resulted in a draft amendment. The amendment would double the representation of the 'Africa and Middle East' area on the Board, and in addition, would insure the present representation of Latin America, without altering the existing pattern of representation from other areas. We strongly support this amendment. My Government intends to press for early ratification so that a generally recognized inequity in representation of an important area can be quickly corrected. In our view, however, since four years of Agency experience is too little to warrant a general Statute review, we believe consideration of this question should be postponed for a reasonable period. This need not preclude a decision in the meantime to undertake a review of individual statutory provisions in the event circumstances make such action desirable, and, of course, any Member Government is free at any time to propose an amendment to any particular provision of the Statute pursuant to the regular amendment processes provided for in the Statute.

(23) "The United States supports the recommended Program and Budget for 1962. We urge Members to contribute generously to the operational budget, and to increase their contributions wherever possible.

(24) "I should like, also, to make certain suggestions relative to the Agency's program:

"I. Technical assistance

(25) "We believe the program to provide experts, equipment, training opportunities and research grants can and should be expanded, within the fiscal ability of the Agency, to stimulate technical progress in developing countries.

(26) "My Government will continue to supplement, to the extent practicable, the Agency's resources for equipment, experts and research contracts.

"II. Research and research co-ordination

(27) "In line with the thoughts I expressed earlier and with the support of my Government, I should like to urge upon the Agency the study of undertakings in basic and applied research that are within its power. In particular, I believe the Agency is well qualified to organize joint projects. The Agency need not be limited to its own budget, but can organize projects financed by participating Members. We welcome the recommendations of the Scientific Advisory Committee regarding possible joint projects.

(28) "My own experience leads me to suggest, as an example, that important advances could be made in science and technology by the development and construction of reactors with fluxes as high as

10^{16} n/cm^2/sec. The Agency could make an important contribution by identifying the requirements for such facilities and encouraging scientists from Member States to undertake joint conceptual studies of such reactors.

"III. Nuclear power technology

(29) "We have gone through successive stages of over-optimism and pessimism about the prospects of nuclear power. We have emerged now, I believe, into a time of realistic optimism. It is my own belief that nuclear power will provide an important and expanding supplement to conventional sources of power in many areas of the world by the 1970's and 1980's. In my own country, private and public utilities are already undertaking large developmental reactor power projects, and within this decade nuclear power may be competitive with conventional sources in some circumstances.

(30) "Important studies also have been sponsored by this Agency, notably in Finland and the Philippines, and my Government hopes that an increasing number of Member States will avail themselves of this type of Agency assistance.

(31) "As for our own program of assistance in this area, we are prepared to consider Agency nominees from developing countries for on-the-job training in the construction and operation aspects of our small and medium power reactors.

"IV. Radioisotopes and radioisotope technology

(32) "I propose that the Secretariat expand further its activities in the field of isotopes. There are almost unlimited possibilities in this area. A satellite using isotopic power, for example, is now sending navigational signals for the use of ships at sea. Similarly, important weather data from unmanned stations can now be transmitted from remote areas. My Government would like especially to commend to the Agency the study of low-dose radiation as a means of preserving food. The development of this technique could significantly improve the distribution of wholesome and nourishing food to many areas of the world. My own country recently initiated a five-year research program in this area. The Agency, in co-operation with international organizations such as the Food and Agriculture Organization of the United Nations (FAO), might profitably undertake such research, convene meetings, arrange for expert advice and furnish radiation sources. The Agency may be especially effective in establishing research centers in this field, with special consideration for those countries having limited scientific and financial resources and which are most likely to benefit. My own Government is prepared to support the Agency in developing such a program. I note that FAO, the World Health Organization and the Agency are sponsoring a Technical Meeting in Brussels on the Evaluation of the Wholesomeness of Irradiated Foods.

"V. Health, safety and advice on regulatory activities

(33) "It is now widely recognized that the Agency has made important contributions in this field. The adoption of international conventions governing liability for possible nuclear damage from both land-based reactors and nuclear-powered ships is very important, and we hope that conventions acceptable to Member States can soon be opened for signature.

(34) "We support the Agency's co-ordination of technical and legal studies on radioactive waste disposal in the ocean, and we are prepared to consider Agency proposals for jointly financing waste disposal studies.

"VI. Exchange of information

(35) "The very nature of progress in science and technology, to which I referred earlier, requires the continual exchange of information through meetings and publications. By continuation and further improvement of its generally good program of conferences and publications, the Agency can be of maximum influence in the expansion of science and technology. My Government believes that a third International Conference on the Peaceful Uses of Atomic Energy might usefully be held in 1963 under the auspices of this Agency. Although the scope should be more limited than at the previous meetings, we recommend that the Director General study and report on the desirable scope, timing and financial implications of convening such a meeting.

"VII. Materials

(36) "My Government was pleased to have been a party to the project and supply agreements signed during the past year furnishing reactors and fuel to Finland and Norway. We hope an increasing number of States, including those with whom we have bilateral agreements, will avail themselves of the sizable quantities of special materials the Agency has for distribution.

(37) "We are pleased to have been able to reduce our prices for U^{235}, and we are now able to make available to the Agency plutonium and U^{233} for use in research projects. I am also pleased to renew for the third year our offer to donate up to $50 000 worth of U^{235} to the Agency for use in research projects. Lastly, I am gratified to announce to this Conference that President Kennedy has just approved the allocation of an additional sizable quantity of enriched uranium for peaceful uses within the United States and abroad. Under this new allocation, a total of 65 000 kilograms of contained U^{235} has been made available for distribution to other countries. In making this announcement, the President has noted that, as peaceful programs develop in the future, it will undoubtedly be necessary for the United States to make further allocations of this nature. His statement underscores the point that the capacity of the United States for producing enriched uranium is sufficient to meet all foreseeable needs for peaceful uses. As in the past, this material will be distributed over a period of years and it will be subject to prudent safeguards against unauthorized use.

(38) "In this connection, we are gratified that important progress is being made in developing and applying Agency safeguards to such materials to assure their peaceful use. As the atomic energy industry grows throughout the world, experience with this system will help insure that nuclear materials for peaceful application will not be diverted to military use.

(39) "When we consider the progress and the potential of this young organization, we cannot fail to be encouraged. Much has already been accomplished, even though the emphasis of the program has not been identical with some of the original conceptions. The important thing is that we have a basically sound organization, with good purposes and dedicated to the international promotion of a great technological discovery. Each nation which lends the Agency its full support will be rewarded many times over in the years ahead. We can already experience or foresee many of the material benefits: the augmentation of our energy resources, the additions to our agricultural and industrial production, the benefits to our health. But we have barely entered the atomic age. No one can now foresee, as scientists and technologists expand our knowledge, the extent of our ability to control the environment.

(40) "This body has a much larger potential as an instrument of peace than its present program suggests. Each of us knows that, despite the difference between nations, there is in the hearts and minds of thinking men - as individuals - a universal idealism. Each of us, I am sure, yearns for peace, for freedom of the mind and spirit, for liberation from fear, for an understanding of the natural forces of his environment, and for the friendship of his fellows. The world of today and tomorrow provides the International Atomic Energy Agency with an unusual opportunity to help translate this universal idealism of man into reality.

(41) Finally, I should like to extend my personal good wishes to every delegate. I look forward to becoming acquainted with you and exchanging ideas with you in the days ahead."

9. Mr. HOCHSTRASSER (Switzerland) congratulated the President on his election, which the Swiss delegation regarded as an earnest of the success of the Conference's work. He associated himself with those delegations which had thanked the Director General for the great services he had rendered the Agency during the first inevitably difficult years of its activities. The Swiss delegation had appreciated the kind remarks made by the Director General and the representative of the United Nations regarding Mr. Jolles, the former Deputy Director General for Administration, Liaison and Secretariat. It had noted with satisfaction the new presentation of the budget, now divided by activities and no longer by departments. That change, which was not just one of form, would make itself felt in a saving of staff, on the lines advocated by the Director General.

10. As far as the Operational Budget was concerned, it was desirable that the real efforts which had been made to cut administrative expenses so as to devote more to scientific activities should be continued. In order to avoid duplication and waste of effort, the Agency should concentrate particularly on those activities which it was best able to undertake. Among the essential tasks of the Agency were the efforts to standardize, on a world-wide plane, the collection and exchange of scientific information on atomic energy and research which could not - for lack of funds - be undertaken on a regional or national level. In the legal and economic fields, useful work could also be done by the Agency, particularly in the preparation of international regulations and in carrying out economic studies on applications of atomic energy, especially on the cost of nuclear energy. The use of panels had proved the most suitable way of achieving that purpose.

11. Switzerland was aware of the importance and usefulness of the scientific meetings organized by the Agency. It was necessary, however, to co-ordinate activities in that field with those of international scientific institutions, in order both to avoid duplication and to help those institutions to achieve their objectives.

12. The Director General had stated that the fellowships program was about to level off at a certain ceiling.4/ The Agency should therefore now study what were the employment openings for the scientists it had trained so that its fellowships program could be based on the real needs of applicants.

13. The Swiss delegation was convinced that the Agency's laboratory could render important services. It would, however, be necessary to clarify its tasks in order to avoid duplication with national laboratories. He proposed that a report on the laboratory's activities in 1962 should be submitted to the sixth regular session of the Conference.

14. The Operational Budget showed that Member States were increasingly availing themselves of the Agency's technical services. The Swiss delegation suggested that a charge should be made for those services: technical assistance would thus be able to develop without being a burden on that budget. The Swiss Government had decided to allocate again the sum of 50 000 Swiss francs to the General Fund for 1962.

4/ GC(V)/OR.48, paragraph 70.

15. He expressed the hope that no considerations unconnected with the scientific and technical activities of the Agency would be allowed to intervene in the deliberations of the Conference and that every Member State would contribute to the development of the Agency as far as its means allowed.

16. Mr. GOLDSCHMIDT (France) congratulated the President on his election, and expressed the French delegation's gratitude to the Director General, who, in spite of serious difficulties, had carried out his task with great dedication for four years.

17. Up to the present time, the Agency had had a complex and delicate existence by virtue of the dual political and technical character of atomic energy and the slowness with which its use for non-military purposes had developed, as compared with earlier anticipations.

18. It had meanwhile been possible to arrive at a more judicious assessment of the Agency's role. Far from being a clearing-house for nuclear materials and techniques as its founders had hoped, it had become essentially an organization for technical assistance at the disposal of the more advanced countries, to assist less-developed countries in their atomic endeavors. In that field, however, the Agency had to contend with the competition of bilateral assistance, which channeled the great majority of international atomic exchanges, and for that reason its means were limited. A better definition of the trend of its activities was therefore essential.

19. He regretted that in the past the Agency had dispersed its resources over a multitude of projects, and thought that it should concentrate its efforts on a limited number of items likely to be of interest to the greatest possible number of Member States, such as the co-ordination of programs on the use of research reactors, the use of radioisotopes in medicine and agriculture, research connected with the problem of radioactive wastes and international legislation, particularly in regard to radiation protection. Efforts in those fields should be integrated and should simultaneously embrace technical assistance, fellowships, scientific meetings, research contracts and even laboratory work.

20. The main function of the Agency was to help its economically least advanced Members to prepare for the day when nuclear power would become competitive in their respective territories. The Agency should, however, warn some of them of the dangers of drawing up programs which were too ambitious.

21. In one group of States, for which a reactor would represent too great a financial outlay, the Agency should direct its efforts towards activities of more immediate interest, such as the various applications of isotopes, or towards prospecting for uranium and thorium, as it was desirable to know, even in a time of abundance, the utilizable resources. In those countries, the most that could be justified was, in exceptional circumstances, the construction of nuclear stations of low and medium power; in that case the Agency should provide for the training of the necessary staff.

22. In a second group could be placed more advanced States, which had been obliged to confine their efforts to the purchase of one or two research reactors with the aim of training technicians able to operate nuclear stations in the relatively near future. As forecasts had proved to be rather optimistic, it was often difficult for those countries, whose resources in money and staff were limited, to use their installations for original work in the field of nuclear research. No effort should be spared to keep the capable research workers of those countries and their laboratories in touch with leading research work; the Agency could organize links between research centers in those countries and the corresponding centers in more experienced countries.

23. In the third place, the Agency could play a significant part in relation to the large nations, by virtue of the fact that in the atomic field it was the only organization to which all the Great Powers belonged.

24. The Agency's symposia provided the atomic Powers with the opportunity of comparing their views on the future, and the meetings organized by it in the past had been fruitful. France also recognized the usefulness of comparing views on general problems, and hoped that the Agency would take over the principal responsibility for the third International Conference on the Peaceful Uses of Atomic Energy, which might be held in 1963.

25. In technical matters, there was a much disputed question in which the Agency could play its part - the treatment of radioactive waste (for any considerable development in nuclear energy inevitably caused the creation of large amounts of radioactive waste). It was completely untrue to say that that problem concerned only the military atomic Powers, and the French delegation therefore fully endorsed the suggestion by the delegate of the Soviet Union for a meeting of experts from the four or five Powers most concerned with the subject, which was unfortunately too often exploited purely for the purposes of political propaganda.

26. The leading countries had also much to gain if swift decisions were reached on the problems of health and safety standards, for public fear about radioactivity was increasing. The Agency, which had already done excellent work in the matter, should play its part by laying down the operating conditions and the security regulations appropriate to research reactors and power reactors.

27. The French Government approved the Agency's Program and Budget for 1962, which involved only a slight increase in staff and an increase of less than 1.5% in the regular budget. Technical assistance would be the Agency's principal field of activity in 1962. In that connection, France would continue to put at the Director General's disposal some of its most able experts, and hoped that the benefit from the results obtained by the technical assistance missions would not be limited to the Member States which they had visited. France, which would have received more than 30 Agency fellows in 1961, would continue to participate in that training program and hoped that it would develop further.

28. The French Government approved the program of conferences and symposia drawn up for 1962, but warned the Agency against the dangers of increasing the number of those meetings.

29. The program of work of the Seibersdorf Laboratory was also praiseworthy, but it was to be hoped that the research work performed there as well as work performed on external contract would be related as closely as possible to the major activities of the Agency.

30. One of the main statutory functions of the Agency concerned the supply of source and fissionable materials. It seemed that in 1962, as in 1961, the Agency would have no occasion to supply fuel for power reactors, in spite of the revival of optimism observed in some advanced countries, where it was anticipated that nuclear power would become competitive before the end of the next decade. For that reason France would continue to advocate moderation in the application of safeguards, in order not to drive towards bilateral negotiations the few countries which might be tempted to obtain the nuclear materials they needed from the Agency.

31. Because of the complexity of the Agency's activities, his country had always considered that the Director General should be chosen from among those leading men who had for years been closely involved in the development of atomic energy in their own country. Last June, therefore, when voting in the Board, France had not hesitated between a specialist in atomic energy and a man who, however meritorious, had never been concerned with the development of atomic energy. The question of the country of origin could not be completely ignored, but it should be secondary to specialist knowledge and in no case ought it to be the guiding factor in choosing the head of an international organization whose function was essentially technical. His delegation accordingly saw no reason why the Agency should not choose for its second Director General, on the ground that he was fitted for the task, a national of one of the countries - but from another part of the world - which provided most of its credits, its training fellowships, its correspondents and its experts.

32. Unlike those countries that had systematically opposed the candidature of a national of an advanced country, regardless of his worth, France by no means refused to consider the idea of a future head of the Agency being a national of a country receiving technical assistance, provided he was familiar with its complex problems. Only such a person could command the respect of staff members who were of real worth to the Agency, especially in the technical field.

33. The French delegation was thus glad that the Board's choice for Director General had fallen on Mr. Eklund. He was not only one of the pioneers of atomic energy in Sweden but also a person who, it was unanimously agreed, had succeeded on the international plane as Secretary General of the Second United Nations International Conference on the Peaceful Uses of Atomic Energy, held in Geneva in 1958. His presence at the head of the Agency would assist it to play the important role it should in the third conference. As the technical director of an organization which numbered more than a thousand people and which had tackled all the problems of a uranium chain, Mr. Eklund was completely qualified for such a task. The French delegation wholeheartedly supported his candidature and hoped that the political considerations raised in opposition to his appointment would grow dim in the light of his

merits and that he would not be hampered in his direction of the Agency during the four-year period which would bring nearer the time when nuclear power became competitive and the Agency could assume its full functions.

34. Mr. BERGMANN (Israel) congratulated the President on his election, and offered him his best wishes for success in his high office.

35. He asked permission to dwell briefly on the research carried out in Israel in the field of atomic energy. The main objective had been to utilize as fully as possible the swimming-pool research reactor, which had been operating satisfactorily for over a year. Israel was producing a number of radioactive elements, limiting its activities to short-lived radioisotopes among which fluorine-18 had proved to be of some practical value in the location of brain tumors.

36. Like the other developing countries, Israel was particularly interested in the agricultural applications of atomic energy. Apart from the production of useful mutations of practical value, the most urgent problem in that field was the fight against insects - including agricultural pests as well as disease-transmitting insects. The human race was losing ground in its fight against insects, and atomic energy in the form of sterilizing radiation could be an extremely valuable instrument.

37. The Israel Atomic Energy Establishment was also taking an interest in chemical protection against radiation. In studying that method of protection, which seemed to have a promising future, the Agency would supplement usefully its important activities concerning water pollution by radioactive wastes, radiation dosimetry and general aspects of safety.

38. Among the routine activities of the Establishment was, of course, the measurement of radioactive fall-out. There were some areas in the world where, for various reasons, no measurements of that kind had been carried out. His delegation would like to see a survey of those areas included in the Agency's work on radioactive fall-out, both as a matter of scientific interest and because those areas might in future have to serve as sources of food for the ever-increasing population of the world. He felt sure that the Agency's laboratory and the atomic energy establishments of many countries would be willing to carry out the analytical work connected with the study of those areas. His Government, for one, would accede to any request of that kind addressed to it by the Agency.

39. Another important problem of technical interest was the utilization of research reactors for analytical purposes: activation analysis was being increasingly used because of the great advantages it offered. Israel had recently developed a method which consisted in the irradiation of uraniferous ores and measurement of the secondary neutrons emitted by the contained uranium-235. That method had put surveying of the radioactivity of geological structures on a new basis. A technician could now carry out more than one hundred analyses of very high accuracy in a single working day.

40. The Government of Israel was fully aware that the nuclear future of the country depended as much on the training of scientists and technicians as on actual research carried out by them. The Israel Radioisotope Training Center was now taking advantage of the possibilities offered by the research reactor. Moreover, efforts were being made to show visitors from developing countries that the possibilities of atomic energy were by no means limited to power supply: in fact the medical, agricultural and other applications of atomic energy seemed very promising.

41. The international course on radiobiology that was soon to begin in Israel had aroused great interest in many countries, including some that were far more advanced from the nuclear point of view. It was through the good offices of the Agency that Israel had been able to arrange the course, and the Israeli Government wished to express its gratitude for the moral support and practical help it had received from the Agency.

42. It was important to encourage the developing countries to avail themselves without delay of the benefits of atomic energy. The Israeli delegation was therefore happy to see new States becoming Members of the Agency at every session of the Conference: it extended a warm welcome to the Republic of the Congo (Leopoldville) whose application for membership of the Agency had just been approved[5/]. For the same reason the Israeli Government welcomed the proposal to increase the number of Members of the Board.[6/] It firmly believed that that step, apart from its political advantages, would go a long way towards establishing a reasonable policy on the question of regional centers. The time had not yet come for the Agency to devote a considerable part of its budget to the establishment of costly centers. Each country should first

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5/ GC(V)/OR.48, paragraph 51.

6/ GC(V)/151 and Add.1.

have its atomic energy establishment and train its own nationals, gradually attracting students from abroad and calling on experts from more advanced countries through the good offices of the Agency.

43. Referring to the project for an international center for theoretical physics[7], he said that the Israeli Government - while recognizing that the project was admirable in itself - would prefer the Agency to begin by arranging a series of symposia on theoretical physics, to be held in interested Member States, with the participation of scientists from all the advanced countries. That interim measure would have the advantage, among others, of showing many countries how important true international collaboration was in that field; it would also enable them to realize that founding a regional center was not a question of prestige, but a matter of necessity for the host country as well as the other participants.

44. He had deliberately abstained from mentioning political questions because they should not enter into the deliberations and decisions of the Agency. Nevertheless he was bound to say that the Israeli Government had been grieved at the Agency's decision not to allow it to be host, in 1961, to a seminar on the applications of short-lived radioisotopes, although there had been no scientific objection and no other country had offered to act as host to such a seminar.

45. The Israeli delegation sincerely hoped that the Agency would be able to fulfill the hope expressed by the out-going Director General at the 48th plenary meeting. In spite of temporary difficulties, collaboration between scientists was possible: it was, indeed, essential for the survival of humanity.

46. Mr. ESCHAUZIER (Netherlands) warmly congratulated the President on his election.

47. The Agency had now been operating for four years. That period, which was mentioned twice in the Statute - explicitly with regard to the term of office of the Director General and implicitly in the provision for a general review of the Statute -, was not without significance.

48. The Director General's term of office was coming to an end. Delegates had listened with particular interest to the detailed statement in which he

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7/ GC(IV)/RES/76.

had expressed his views on the achievements and shortcomings of the Agency and had noted his suggestions for the future. He (Mr. Eschauzier) commended Mr. Cole for his wholehearted devotion to the Agency.

49. In the introduction to its report (GC(V)/154, paragraph 1), the Board recalled that the Agency had begun normal operations two years previously, and that 1961 has been generally expected to be a year of consolidation. Useful experience had been gained, not only of the Agency's activities, but also of the implications of certain constitutional provisions of the Statute.

50. In accordance with Article XVIII, the question of the general review of the Statute had been placed on the agenda. To undertake that review, the Conference would have to draw up a balance-sheet of the past years and hazard a forecast of the future.

51. The peculiarities of the Agency's structure were explained by the unique character of atomic energy and the need for delicately balanced compromises. That being the case, considerable foresight had been necessary to provide the opportunity for revision. Dissatisfactions undoubtedly existed in certain quarters, but did that make it necessary to undertake a general review? Even if an imperfection was generally recognized it was inevitable that the remedies proposed would differ, and it might therefore be best simply to adapt the existing structure as need arose and avoid changing the very foundations of the edifice. Article XVIII moreover afforded the possibility of pragmatic and partial solutions: in that connection the Netherlands delegation wholeheartedly supported the amendment to Article VI recommended by the Board with a view to increasing the size of the latter and meeting the legitimate wishes of Member States of the "Africa and the Middle East" area, who sought more equitable representation for that region.

52. Once that point had been settled, it seemed to the Netherlands delegation that the most urgent task was to give consideration to the reorientation of the Agency's activities reflected in the program for 1962. A certain balance between the different parts of the program would have to be struck and an order of priority established in the light of new trends and likely developments.

53. He had been happy to note from the Director General's address[8/] that the Secretariat had started formulation of a long-term program on the basis of the changes which had occurred. In its observations on the program for 1962 the Board informed the General Conference that it intended to continue its study of the problems connected with programming of that kind and the Netherlands delegation was looking forward with interest to the specific proposals which the Board would submit to the sixth regular session of the Conference.

54. The Agency's functions had been defined on the basis of assumptions which either had not been confirmed or had materialized more slowly than expected. He considered that the adaptation of the Agency's program had perhaps been too slow, and for that reason it would be necessary to pay great attention to a forward appraisal at the sixth regular session.

55. Turning to some issues of interest more specifically to his own country, he recalled, in the first place, that the Netherlands had benefited from Agency assistance. An advisory panel of experts had studied the safety aspects of a high-flux reactor project, and in the light of their findings it could be said that the Agency was fully capable of giving important assistance to countries requiring expert opinion on the hazards involved in reactor operation. The Institute for the Application of Nuclear Energy to Agriculture, at Wageningen, had received valuable advice on material accounting for radio-isotopes.

56. At that Institute the Agency and FAO had organized two international courses on radioisotope techniques in agricultural and forestry research, for which the Netherlands had provided the necessary facilities. If the Agency wished, his country would be prepared to act as host for symposia on subjects of mutual interest. In view of its present state of development in the field of peaceful uses of atomic energy, the Netherlands had not been able, except in exceptional cases, to comply with requests for experts or fellowships. Nevertheless, a start had been made in the form of three Type II fellowships offered to the Agency.

8/ GC(V)/OR.48, paragraph 86.

57. The Netherlands was very much concerned with the effects of environmental radioactivity, particularly those accruing from the release of radioactive wastes into the sea and fresh water. It had noted with interest the paragraphs in the Annual Report devoted to the subject (GC(V)/154, paragraphs 147-150) and the attention which the Agency was paying to co-ordinating the activities of interested organizations: the Netherlands also welcomed the work of the panel of legal experts (GC(V)/154, paragraph 170) which had considered the measures to be taken at the international level to implement the conclusions of the Panel on Radioactive Waste Disposal into the Sea.

58. The atom would probably become a viable source of power: the Netherlands and the whole world were preparing for that event and the Agency could make a substantial contribution in that field. During its first four years the Agency had become a useful and respected member of the United Nations family. In spite of some disappointments, it had very great potentialities. It was certain that, with growing experience, it would become increasingly effective in carrying out its objectives.

59. Mr. IPPOLITO (Italy) congratulated the President on his election. He then associated himself with the expressions of condolence voiced by earlier speakers at the untimely death of the Secretary-General of the United Nations.

60. He paid tribute to the outgoing Director General, who had given the Agency a vitality and efficiency which unfortunately did not always exist in other international organizations, too often paralyzed by the opposing interests of their members.

61. The Agency itself might on various occasions have become an instrument of political propaganda. The Director General had ensured that the Agency remained faithful to its objectives and had at the same time encouraged its work for the peaceful uses of atomic energy. The Italian delegation fully agreed with the proposals put forward by the Director General in his address with regard to better organization and more efficient working of the Secretariat[9].

9/ GC(V)/OR.48, paragraphs 88-89.

62. The Agency had done a remarkable job with regard to technical assistance in the nuclear field. However, the task was enormous and much remained to be done, particularly when it was considered that atomic energy was of supreme importance as key to the industrial progress of the developing countries. Italian participation in the Agency's technical assistance program had so far been less than was desirable: the reason was not ignorance or blindness on the part of the Italian authorities but a long-standing legislative deficiency which had, however, recently been remedied. The Act of 11 August 1960 and the establishment of the National Committee for Nuclear Energy (CNEN) - which had replaced the National Committee for Nuclear Research - justified hopes for a substantial improvement in the situation.

63. Two of the chief responsibilities of the new Committee, whose activity extended, however, to all spheres of nuclear research, were to supervise the construction and operation of power reactors and to promote the technical training of nuclear experts. It had an appropriation of 75 000 million lire ($120 million) for a period of four years. That sum had made it possible to prepare a much more comprehensive program of work than in the past.

64. Among other activities, the Italian program included the building of two nuclear power stations with a power capacity of over 350 MW. Furthermore, CNEN had studied two extremely interesting projects. The first covered the study, erection and operation of a 30-MW(t) reactor, organic liquid-cooled and -moderated, which would provide technical information and data on the operating costs and final unit cost of nuclear power. That reactor was to go into service at the beginning of 1964, the estimated cost being some $12 million. The aim of the second project was to show the feasibility of setting up a Th-U^{233} fuel cycle for thermal power reactors at comparatively low cost. The plant, which was at present in the planning stage, would begin to operate at the beginning of 1964, the initial cost being about $5,5 million. To those two programs must be added a design study for a 70 000-ton nuclear-propelled tanker.

65. He hoped that those few very general items and projects to which he had referred would lead many foreign countries to ask for more detailed information on Italian nuclear programs. The exchanges of information on activities in the nuclear field undoubtedly provided the best means of extending to all the benefits arising from the peaceful uses of atomic energy.

66. Being well aware of the difficulties in implementing technical assistance programs, and in response to the Agency's appeals for stronger support from its Members, the Italian delegation was happy to announce that the CNEN had decided to work more closely with the Agency in assisting it to achieve the objectives laid down in its Statute. As from the start of the Agency's next fellowship program and up to the end of 1964, appropriations for fellowships for training foreign scientists in Italy would be doubled, i.e. would be increased from 10 to 20 million lire, or more than $32 000. At the request of the Agency, and within the limits of the funds appropriated, changes could be made in the amount and duration of individual fellowships, which at present were to the value of $1 500 and were tenable for eight months. The CNEN, on its part, thanked the Agency for the opportunities for further training which the latter had obtained for Italian technicians, and was, in that connection, studying ways and means of making a partial reimbursement of costs with a view to lightening the financial burden on the Agency.

67. The CNEN intended to expand substantially the number of schemes for the dispatch of Italian scientific and technical missions to the developing countries. Agreements as to the financing of the travel and maintenance expenses of the experts concerned might be concluded with the Agency. It should be understood, however, that for a country like Italy, which had important projects of its own on hand, there were certain difficulties in the way of long-term secondment of highly qualified personnel to assignments abroad.

68. As regards the program of research contracts, he was glad to announce that the Agency could now request the CNEN to carry out research in which it was interested, free of charge to itself. The CNEN was prepared to carry out such research at its own expense, while placing the results at the Agency's entire disposal; it merely reserved the right to make a choice among the subjects for research proposed by the Agency. On the conclusion of the current contracts, the favorable terms to which he had referred would be applied to them, should the Agency wish the work to continue.

69. As in recent years, the CNEN had decided to make a voluntary contribution of $25 000 to the Agency for 1961. In view of the unanimous agreement on the need to strengthen co-operation among theoretical physicists, particularly

those from the developing countries, Italy also intended to assist in the establishment of an international center for theoretical physics. Provided the Agency agreed to the city of Trieste as the location of the center, Italy would be prepared to furnish the site and itself undertake the construction of the center at a cost of about 300 million lire, or $500 000. Italy would, moreover, bear the whole cost of erecting accommodation for the staff and fellows at a cost of a further 300 million lire. It had been decided to make an annual contribution of 20 million lire, or $32 000, for a period of five years, towards the cost of running the center. Italy was, therefore, prepared to offer more than $1 million in all for the international center for theoretical physics.

70. In conclusion, he hoped that Italy's efforts to meet the Agency's needs would be appreciated not only for their monetary value, but also, and above all, for the spirit of collaboration and co-operation which they showed.

71. Mr. SHIN (Korea) associated himself with previous speakers in congratulating Mr. Quihillalt on his election to the presidency of the Conference. On behalf of the Korean Government he paid a tribute to the Director General, who had carried out his duties with ability and devotion. He also congratulated the Agency's staff on their untiring efforts to implement the programs drawn up by the Board, particularly in the fields of technical assistance and the exchange of information to promote scientific progress in developing countries.

72. He was happy to point out that over 1 000 scientists and technicians specializing in atomic energy had been trained in the advanced countries under the Agency's fellowship programs. The arrangements made by the Agency for the exchange of information had contributed much to the development of atomic energy in Korea, which had benefited, in particular, by the presence for several weeks of a mobile radioisotope laboratory.

73. With the assistance of the Agency and of the United States Atomic Energy Commission, Korea had made rapid progress. Mention should be made, in the first place, of the establishment of the Atomic Energy Research Institute, where a Triga Mark II reactor, made in the United States, was being installed. A new five-year plan for the period 1962-66 had been drawn up by the Office of Atomic Energy; among other things, it provided for extension of the uses of atomic energy and expansion of the laboratories and other facilities of the Atomic Energy Research Institute.

74. Korea attached great importance to a plan for the use of radioisotopes in agriculture and medicine. That plan included the installation of a 3-MeV Van de Graaff accelerator, and full utilization of the reactor for research work and applications in the various branches of nuclear science.

75. A follow-up mission had visited Korea from 16 to 23 August 1961 and supplied the competent authorities with valuable information for putting the atomic energy program into effect. Two experts were now on mission in Korea and were actively engaged in advising Korean scientists and technicians. Their advice was greatly appreciated.

76. Fourteen fellowships had been awarded to Korean students under the Agency's fellowship program for 1961, but that number fell far short of the Korean Government's request. It appeared that one of the Agency's most urgent tasks was to train qualified scientists and technicians in the developing countries. Korea hoped it would be possible to meet its request for fellowships under the 1962 program.

77. The importance of establishing regional training centers and of certain research contracts with less-developed countries could not be overestimated. Having promoted the establishment of a training center in Latin America and planned a radioisotope center for the Arab countries, the Agency should now take similar measures in respect of the "Far East" and "South-East Asia and the Pacific" areas. The Agency would also do well to award as many research contracts as possible to less-developed countries, thereby encouraging research.

The meeting rose at 5.20 p.m.