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President: Mr. SUDJARWO (Indonesia)

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^{*} GC(II)/57.

N.B. The list of delegations attending the second regular session of the General Conference was issued as document GC(II)/INF/17/Rev.3.

GENERAL DEBATE AND REPORT OF THE BOARD OF GOVERNORS FOR THE YEAR 1957-58 (GC(II)/39) (continued)

- 1. Mr. WINKLER (Czechoslovakia) stressed the vital importance of thoroughly examining the Agency's work and the results achieved since the first session of the General Conference, in view of the fact that the Agency was called upon to promote the peaceful uses of atomic energy throughout the world.
- 2. Since it had found out how to release the forces concealed in the nucleus of the atom, mankind was confronted with a historic choice: either to use the new form of energy for the further advancement of civilization or to allow it to be turned against man himself. It was imperative to take all possible steps to ensure that atomic energy was used exclusively for peaceful purposes. To that end, it was necessary to avert for ever the danger of atomic destruction, to prevent any misuse of atomic energy for military purposes, and to prohibit all nuclear weapons. In accomplishing those tasks, the Agency could play a decisive part, as it was not only entitled, but in duty bound to do under its Statute.
- 3. It was only natural that in the first year of its operation, the Agency should have had to face the difficulties of any new organization making a start in a new field of international co-operation. The task had been, and continued to be, to find the best means of attaining its statutory objectives and of overcoming the lack of experience in this as yet unexplored field of activity. The initial programme had been extremely valuable in formulating the Agency's tasks. With regard to methods of work, the Agency had greatly benefited from the spirit of conciliation and understanding that had marked its establishment. Since the first session of the General Conference an international secretariat had been set up, which was able to provide the necessary technical and administrative services and to ensure proper administration. The Czechoslovak delegation was hopeful that the shortcomings in the equitability of geographical distribution among the Secretariat staff would be corrected before long.
- 4. Promising initial steps had been taken on some parts of the Agency's operational programme, in particular the training and exchange of scientists and experts, the collection and exchange of scientific and technical documentation, the setting up of the Agency's library and work with radioisotopes.

^{1/} GC.1/1.

Those were only a few of the tasks in the initial programme, however; many of them had remained undone. Unfortunately, despite the express recommendation made by the first special session of the General Conference in a resolution adopted on 22 October 1957², the tasks which had not been undertaken were mainly those whose accomplishment would have resulted in immediate benefit for the underdeveloped countries. The General Conference should therefore give special attention to that matter. In future, the decision of the first session of the General Conference on priorities should be fully respected and the Agency's work should be judged solely on the extent to which it had contributed to the peaceful development of atomic energy and brought effective assistance to Member countries, particularly in the under-developed areas.

- 5. Some parts of the programme and budget for 1959 were not free from tendencies which failed to take those criteria into due account. Under the influence of certain Members represented on the Board of Governors and advanced in the technology of atomic energy, elements had been introduced into the programme which might completely change the character of the Agency and transform it into a centre for fundamental research, which would be alien to the spirit of the Statute. If the Agency were to follow that course, it might be led to undertake ambitious projects which would impose an excessive financial burden on it for many years. Ordinary caution required, therefore, that the Programme, Technical and Budget Committee should examine the proposed budget with care, not only in the light of the figures for 1959, but especially in the light of its implications for the future.
- 6. To be successful, the Agency must avoid becoming the scene of conflicts between political interests. It must become a truly international organization based on the noble principle of world-wide co-operation for the benefit of all nations, on scientific and technical collaboration and on genuinely unselfish effort to assist the less developed areas. It was therefore important that the Agency should maintain a spirit of negotiation and mutual understanding, which had been a feature of its establishment and had characterized the work of the Preparatory Commission, but unfortunately had not always been preserved during the first year of operation.

^{2/} GC.1(s)/RESOLUTIONS: GC.1(s)/RES/5(c)3.

^{3/} GC(II)/36.

- 7. Czechoslovakia had, of course, taken an active part in setting up the Agency from the very beginning and had endeavoured to help make it an effective instrument of international co-operation in the peaceful uses of atomic energy. At the first session of the General Conference, Czechoslovakia, as a country with considerable resources of nuclear material and highly developed industries, had declared itself willing to give the Agency its full support and the benefit of its experience in the peaceful uses of atomic energy 4/; the Czechoslovak Government had accordingly decided during the past year to authorize the Central Technical Library of the Czechoslovak Republic in Prague to supply the Agency, in co-operation with other Czechoslovak libraries, regularly and free of charge, with technical and legal publications, films and microfilms relating to atomic The first consignment had been delivered to the Agency in May 1958. In July, the Czechoslovak Government had decided to place at the disposal of the Agency, for the less developed countries, thirteen fellowships in Prague, at the Charles University (Faculty of technical and nuclear physics), the Secondary Industrial School of Muclear Technology and the Institute of Nuclear Physics of the Czechoslovak Academy of Sciences, starting in the academic year 1958/1959, and two fellowships for research training in radiobiology at the Biophysical Institute of the Czechoslovak Academy of Sciences at Brno.
- 8. On the occasion of the second regular session of the General Conference, the Czechoslovak Government had decided to offer to the Agency the services of ten consultants and experts on the utilization of radioisotopes, reactor programmes, health measures and the handling of radioactive materials. The Czechoslovak Government had also decided to offer to the Agency free of charge, and as a voluntary contribution, special measuring apparatus of Czechoslovak manufacture to the value of 100,000 crowns. He recalled the keen interest shown by many countries and by the Agency itself in the Czechoslovak exhibits of measuring apparatus at the Second United Nations International Conference on the Peaceful Uses of Atomic Energy, held at Geneva.
- 9. One of the main tasks of the Agency was to contribute effectively to the building of reactors experimental and research reactors, and ultimately power reactors in order to provide States suffering from an acute shortage of power with a fresh source of energy to help them step up their economic development and raise the living standards of their populations.

^{4/} GC.1(S)/OR.10, paragraph 20.

- 10. Czechoslovakia had for years devoted considerable attention to the problem of utilizing nuclear processes for electric power production and had taken a number of practical steps towards solving it. Taking 1948 as 100, electric power production had increased to 252 in 1957, and was absorbing about 20 per cent of Czechoslovakia's coal output. Since coal was becoming increasingly important as a raw material for the modern chemical industry, it was therefore evident why Czechoslovakia was devoting so much attention to building nuclear power stations. The first was under construction, and in that connexion Czechoslovak scientists and engineers had greatly benefited from the invaluable and unselfish assistance of the USSR.
- 11. The Czechoslovak Government was following with sympathy the Agency's plans for helping those States for whose economic development nuclear energy was most essential. As it had demonstrated at the Second Geneva Conference, Czechoslovakia was prepared to assist other countries and to share with them the experiences and results obtained from its cwn research work. The Czechoslovak delegation was pleased to announce that the Czechoslovak Government was prepared to offer the Agency natural uranium for its programme of assistance to the less developed countries. Details of the offer would be given as soon as the needs of Member States for that material were known. In the future, Czechoslovakia could supply uranium concentrates and ore. In making that offer the Czechoslovak Government was confident that the Agency's activities relating to assistance in building reactors would proceed successfully.
- 12. It was to be regretted that in that important field very little, if anything, had been done in the first year of the Agency's activities. At the first session of the General Conference, the previous year, fissionable materials had been offered in large quantities up to 5,000 kg or more. However, the offer was apparently on a commercial basis; the terms had not been specified beyond the point that the price could not be lower than that fixed for the domestic market by commercial undertakings. The USSR offer, on the other hand, stated that the material would be made available at the lowest international prices obtaining at the time of delivery. As the Director General had said in his statement at the opening of the present session, some preferential terms must be given to the Agency by the offering countries to induce governments to utilize the channels of true international co-operation. The Czechoslovak

^{5/} GC.1/OR.1, paragraph 35.

^{6/} GC(II)/OR.14, paragraph 50.

delegation trusted that the Director General's appeal would receive favourable consideration and that the terms of the offers, in particular of the biggest one, would soon be satisfactorily clarified, so that Member States interested in obtaining fissionable material could submit their requests to the Agency. It was also to be hoped that the present session of the General Conference would help to solve the economic problem of creating conditions under which the less advanced countries could carry out reactor programmes with the ultimate objective of establishing an electric power industry, which was a keystone of national economic development and improved standards of living.

- 13. It was the Czechoslovak delegation's hope that the activities of the Agency would develop in accordance with its Statute and the United Nations Charter. The Agency should work in close co-operation with the United Nations. The basis for such co-operation was provided by the relationship agreement with the United Nations , which should now be brought into force.
- The Czechoslovak delegation could not accept the view that the special status of the Agency might be an obstacle to close relations with the United On the contrary, the purpose of the provisions governing the Agency's relationship with the United Nations General Assembly and Security Council was to make the relationship between the Agency and the United Nations even closer than that between the United Nations and the specialized agencies. it was essential for the Agency to become, in the shortest possible time, a living and efficient specialized technical organization. essential conditions for its development. The Agency might take an example from the methods of work of the Conference of Experts held recently at Geneva 8/ and from the first two United Nations Conferences on the Peacoful Uses of Negotiations could bring fruitful results if political contro-Atomic Energy. versy was left aside and the parties showed a genuine desire to centribute. through the progress of science and technology, to the improvement of living standards.
- 15. The Agency would be successful only if all countries were invited to take part in its work on an equal footing. It was significant that the Agency's Headquarters were at Vienna, the capital city of a neutral country.

^{7/} GC.1/3.

^{8/} Conference of experts to study the methods of detecting violations of a possible agreement on the suspension of nuclear tests.

- 16. Finally, he hoped that the Agency's work would help to bring nearer the day when atomic energy would serve all mankind; the Czechoslovak Government was determined to contribute to the achievement of that noble objective.
- 17. Mr. NYUNT (Burma) said that he would like to record his Government's satisfaction at the first annual report of the Board of Governors. The Burmese Government considered that the Board, the Secretariat and in particular the Director General had worked well during this first year.
- 18. Burna, with a population of about twenty nillions, whose per capita income and energy consumption were among the lowest in the world, could be considered a typical example of an under-developed country interested in the rapid development of atomic energy. In 1955, though short of technical staff, the Burmese Government had established the Union of Burma Atomic Energy Centre to deal with all matters relating to atomic energy. That organization had spent its first two years in acquainting itself with problems relating to nuclear energy and in studying local conditions. In order to formulate a definite fuel policy, his Government had been conducting a series of fuel The total installed electric power capacity in Burma was only about 160,000 kW. That power was supplied by thermal plants, and 80% of all the fuel used was wood. It was important to reduce that wasteful consumption. Burma was importing coal at the rate of 250,000 tons annually, and the prospects of explciting demestic resources economically did not seem good. reserves of 90 million barrels of oil would probably be exhausted in 25 years. Fortunately, however, Burma had a hydro power potential estimated at 2 - 3 million kW, and the first large-scale hydroelectric project of 240,000 kW was already under construction. When brought into service it was expected to satisfy the increased demand for a few years to come. It seemed, therefore, that nuclear power plants were not an urgent necessity for Burma, though the possibility of nuclear power becoming increasingly competitive with hydroelectric power must be seriously considered.
- 19. The President of the Geneva Conference, Mr. Perrin, had said that, for an under-developed country to benefit from the industrial applications of nuclear energy, it must first have reached a certain level of industrial development and technical competence. His country's problem, like that of many other small under-developed countries, was to plan an atomic energy development programme suited to local needs. The Union of Burma Atomic Energy

Centre had accordingly drawn up a programme comprising two main points: first, to continue and intensify the survey of the country's possible supply of uranium and thorium ores and, secondly, to establish at once a nuclear laboratory equipped to handle radioisotopes for use in research in agriculture, medicine, food preservation, industrial processes and protection against radiation. The laboratory would also serve as a training centre for specialists in reactor technology.

- 20. In conclusion he said that his Government had high hopes for the success of the Agency's work. His delegation had listened with great interest to the comments of fellow delegates, and it heped that the Agency's work could be carried on in an atmosphere of harmony and co-operation. After the very short trial period of one year, there were grounds for hoping that the Agency would continue to develop into a truly universal scientific organization, unhampered by politics, to which under-developed countries could turn with confidence.
- Mr. NADZHAKOV (Bulgaria) noted with satisfaction the organizational work already done by the Agency preparation of plans and establishment of technical and administrative services towards the implementation of the initial programme adopted at the first session of the General Conference. Among other tasks, the Director General and the Board of Governors should devote their attention to the exchange of specialists, the training of scientific staff, the organization of scientific conferences and seminars, the dissemination of technical information and the promotion of scientific research.
- 22. One of the most important activities of the Agency was undoubtedly the supply of fissionable and source materials and atomic fuels. He recalled that the General Conference at its first session had recommended the Board to give high priority to those activities which "will give the maximum possible benefit from the peaceful applications of atomic energy in improving the conditions and raising the standard of living of the peoples in the under-developed areas".
- 23. In his view, the Agency's activities so far had not been sufficiently in conformity with the recommendations made by the General Conference at its first session. For example, it was clear from paragraph 9 of the Board's Report that

^{9/}GC.1(S)/RESOLUTIONS; GC.1(S)/RES/5(c)3.

no substantial assistance had been given to any under-developed area in spite of the fact that considerable quantities of fissionable materials had been placed at the Agency's disposal. It was extremely regrettable that the Director General and the Board had not made sufficient effort to take advantage of those offers. The Board of Governors was right to stress, in the same paragraph, the desirability of working out some guidance on the prices and terms upon which fissionable and source materials would be supplied to Member States.

- 24. If the Agency could induce the supplying countries to deliver their materials at a more favourable price than that prevailing on the world market and on conditions precluding all interference in the domostic affairs of States, the problem would be easily solved; many States would then request assistance from the Agency and its authority would thus be enhanced. In any event, the last obstacles would disappear as soon as the supplying countries sincerely desired to give effective aid to the countries in need of it.
- 25. Bulgaria was benefiting from the valuable and altruistic help of the Soviet Union through a bilateral agreement, under which an atomic institute and several scientific research laboratories for the preparation and use of radioisetopes were being built. Bulgaria also had access to the Joint Institute for Nuclear Research at Dubna. The assistance provided by the Soviet Union was not subject to any conditions which might constitute interference in the internal affairs of Bulgaria.
- 26. It was thus understandable that Bulgaria could only accept assistance from the Agency on clearly-defined and favourable terms. The report of the Board of Governors showed that that attitude was shared by others, since so far no country, either of the East or the West, had asked for the Agency's help. The Director General should give close attention to the matter, for if the Agency were to fail in that respect its existence would no longer be justified.
- 27. One of the Director General's initial tasks had been to recruit the requisite administrative staff. A larger staff than that recommended in the initial programme should not be appointed. A small staff, which would assemble the necessary data not by its own research but by using the results obtained in other countries, would be in a better position to carry out the work of the Agency.

- 28. The choice of experts to be sent on mission to under-developed countries was particularly delicate, and called for precise guidance from the Board of Governors, since the work of such experts would relate not only to technical assistance by the Agency, but also to the question of safeguards designed to ensure that the materials supplied would be used for peaceful purposes only.
- 29. In 1956, during the discussion of the article in the Statute concerning safeguards, the United Kingdom and United States representatives had advocated a method of control which would have involved real interference in the domestic affairs of recipient countries. The assistance given by the Soviet Union under bilateral agreements, on the other hand, was not subject to any control or conditions.
- 30. So long as the detailed conditions of technical assistance, and especially safeguards, had not been worked out, the Agency would not be in a position to provide the services desired. It was significant that not a single gram of the 5,000 kilograms of uranium offered by the United States of America had yet been used.
- 31. Even the most resolute advocate of safeguards could not seriously believe that a country, especially a small country, which had obtained fissionable materials from the Agency, would undertake the manufacture of atomic or thermonuclear bombs instead of using the materials received for the advancement of science and of civilization.
- 32. He then made some suggestions for the Agency's programme. The Agency should circulate as soon as possible detailed information on the fissionable materials, radioisotopes and radioactive standards obtainable from its Member States. It should also publish summaries of prices and terms of supply of the equipment and products shown at the recent Geneva Conference on the peaceful uses of atomic energy. Further, the question of exchanging books and supplying Member States with photocopies of works in the Agency's library should be settled.
- 33. The Director General and the Board of Governors should endeavour to dispol the distrust which still subsisted with regard to certain countries and to promote a spirit of real co-operation within the Agency. In that respect, examples provided by the second Geneva Conference and by the meetings held at Kitzbühl and Vienna might well be followed.

- 34. Finally, he thought it would be in conformity with the objectives of the Agency for it to appeal to its Members to stop testing atomic and thermonuclear weapons, as the Soviet Union had already done. All delegations should show their countries' desire to promote the use of atomic energy exclusively for peaceful purposes for the greatest good of mankind.
- 35. Mr. AHMAD (Pakistan) first read the following message from the Prime Minister of Pakistan, Mr. Malik Firoz Khan Noon: "The inauguration of the International Atomic Energy Agency last year was an event of great historical During the years following the end of the second World War, the great constructive potentialities of the atom had been amply demonstrated; and it was rightly considered desirable that the nations of the world should co-operate in an all-out effort to harness the atom for the good of mankind. The Agency thus represents the first practical step towards this co-operative effort. Since then it has been engaged in the necessary task of organization and mobilization of staff and it is now in a position to move towards the realization of the objectives set out in its Statute. Its Member States, particularly the less developed countries, are eagerly looking forward to the fulfilment of its promise. They are convinced that the peaceful atom employed in the fields of power generation, agriculture, health and industry can yield rich dividends and help materially in raising the standard of living of their On behalf of the people and the Government of Pakistan, I wish all success to the Agency in the task ahead of it".
- 36. As a Member of the Board of Governors, Pakistan would leave it to the Conference to evaluate the Board's work. He wished to say, however, that the Board had worked diligently and conscientiously under the enlightened guidance of its Chairman, Mr. Winkler, and with the constant assistance of the Director General and the Secretariat. The Board should concern itself predominantly with deciding policy and leave its execution to the executive and administrative staff as much as possible. It might not be necessary for the Board to meet as frequently as it had done in the past.
- 37. Now that the work of organization had been done, the Agency could undertake the realization of the objectives which, at the time of its establishment, had aroused so much enthusiasm throughout the world. The real test of whether the Agency would be able to achieve positive results would come the following year, which might, indeed, prove crucial for it.

- 38. In regard to selection of staff, while due consideration should be given to the technical competence and integrity of candidates, it was no less important that recruitment should be carried out on as wide a geographical basis as possible; that would help to give the Agency a universal character and would offer the nationals of the less developed countries excellent training facilities and a wider field of work.
- 39. It was gratifying to note that the fellowship and training programme had started in a manner that augured well for the future, that the Agency had begun to send teams of experts to various countries and that it had undertaken the preparation of a directory of research and power reactors as well as of nuclear equipment. That type of work, however, was only a first step towards the realization of the greater objectives laid down in the Statute.
- 40. He emphasized the ever growing interdependence of the advanced and the less developed areas of the world. Doubtless the former were in a better position to take full advantage of the peaceful uses of atomic energy, but that advantage would remain comparatively restricted if the less developed areas were not helped to make use of the products of atomic energy. In the long run, therefore, it was in the interests of the advanced countries to narrow rather than to widen the gulf which separated them from the others.
- 41. While the use of radioisotopes could make a significant contribution to the health and well-being of the people, it was in generating power that the atom could be most useful. Moreover, it was in that application that the more advanced countries were making their greatest efforts. Power generation was in fact essential for developing the resources of an under-developed country and for raising the standard of living of its people. Where the conventional sources of energy were inadequate, impractical or uneconomic, it was necessary that they should be supplemented by nuclear power. It had been hinted that one of the lessons of the second Geneva Conference was that the development of nuclear power was not likely to be realized in the immediate future. the conclusions to be drawn from the reports submitted to that Conference and from the scientific progress achieved and planned by the more developed countries pointed in the opposite direction. Moreover, with the possibility of thermonuclear fusion as a source of power lying in the not too distant future, every effort should be made to utilize the tremendous reserves of energy

which could be released by the fission process, as otherwise the great effort made in that direction in the mining of source materials, production of enriched fuels, reactor technology, fabrication, etc., might not be utilized to the full extent.

- 42. Furthermore, the functions of the Agency in regard to such matters as safety and health measures and the disposal of waste products, would have little significance if they were restricted, for example, to the use of radicisotopes and labelled compounds, and did not extend to the installation of research and power reactors.
- 43. His Government hoped that in planning its future programme the Agency would pay special attention to the assistance in reacter technology leading to the generation of nuclear power, which it could give to those less developed countries that needed power, but were short of conventional fuels. Similarly, source and fissionable materials should be supplied without interruption, so that countries could plan their programmes of economic development on a firm basis.
- 44. It was to be hoped that the financial resources referred to in Article XIV of the Statute would be found adequate. However, as the voluntary contributions in each had not been very large and other sources of income had not yet begun to appear, the materials, equipment and services offered to the Agency should be supplied free or at a nominal charge and the less developed countries should be able to obtain them at as low a cost as possible. If those measures failed to yield adequate resources for the Agency, perhaps the position would have to be reviewed in order to ensure that the operational budget was in balance with the administrative budget.
- 45. He also shared the view that, so far as possible, duplication of work with other specialized agencies should be avoided, but that the Agency should be in a position to undertake studies and projects within its competence even though other bodies might have been concerned with them before it had been set up.
- 46. Finally, the Agency must be regarded primarily as a technical organization in which political controversies should be eschewed. The tasks before it were heavy, but with the machinery set up and the prevailing good will it was now in a position to go ahead. He hoped that its progress would be rapid and its

achievements many so that, in accordance with its Statute, it would make atomic energy an instrument of peace, health and prosperity throughout the world.

- 47. Mr. ELFASSI (Morocco) observed that the election as President of the General Conference of the representative of a country which had previously been a colony showed the general wish to put an end to colonialism and the desirability of self-determination of peoples.
- 48. Mankind could not ignore atomic energy, which could equally well become a grave menace or a source of incalculable benefits. The Agency should foster international co-operation in the peaceful uses of atomic energy. The second Geneva Conference had once more confirmed that the use of atomic energy was practicable. It should not be confined to the great economic Powers, but should be used to enable the less advanced countries to develop, so as to do away for ever with the poverty that bred unrest.
- 49. The hopes of millions were fixed on the Agency, and all men of good will must support the various activities on its programme: the supply of radio-isotopes, materials and specialized equipment; technical assistance to under-developed countries; the exchange of information and organization of scientific courses. Despite certain understandable delays, the progress made was promising, and the programme proposed for 1959 was in accordance with the Agency's main objectives.
- 50. Morocco was convinced that the General Conference would wish to re-elect to the Board of Governors the delegate of the United Arab Republic, who had taken such an active part in the work of the outgoing Board. The League of Arab States had decided on 6 September 1958 to submit his candidature, hoping thereby to participate effectively in the direction of the Agency in order to help it discharge its responsibilities in the interests of world peace.
- 51. Morocco, like the other Arab countries, placed great hopes in the Agency and asked for its help in several fields, first and foremost of which was the production of nuclear power. A brief reference to the power situation in Morocco would show the part that atomic energy could and should play in the development of a country which was at present less developed than others. In the part of Morocco bounded by the Mediterranean, the Atlantic Ocean and the Atlas mountains, an electricity grid provided an annual output of approximately

one thousand million kWh. In that area the problem was to develop basic industries, and atomic energy would help if it could be competitive with conventional sources of power.

- 52. But there were also semi-desert and completely arid regions in Morocco.

 No doubt the discovery of oil in the Sahara could be expected to add a significant power potential; but for the development of the abundant mineral resources of those regions and the execution of the irrigation works necessary for agriculture, Morocco had only expensive power at its disposal, owing to the high cost of transporting fuel. It therefore intended to ask the Agency whether it would be possible to install small power reactors in those regions. It was not deterred by the high cost. Whereas the average cost of electricity per kWh was from 3 to 4 French francs, in the arid regions of Morocco it was ever 25 francs. Thus the installation of reactors there would be an economic proposition, particularly as the presence of ores would make it possible to establish industries. In that field, the Agency could collaborate with UNESCO, one of whose major projects was the development of arid zones.
- 53. The second field was that of prospecting for radioactive ores which might be present in the very varied terrane of Morocco. Although it had a good 'geological service, Morocco would be glad to receive advice and expert missions from the Agency, as well as prospecting equipment. Experts sent by the Agency could also be of great help in solving the problem of separating uranium from the phosphates mined from Morocco's extensive deposits.
- 54. His country also wished to take advantage of radioisotopes, especially for its agriculture, but it wished first to know more about their various applications.
- 55. The Agency's fellowship scheme was one of the most positive items on its initial programme. Qualified candidates from the less developed countries being few, however, the Agency could usefully advise on which subjects and training programmes should be given priority.
- 56. The most vital form of assistance would appear to be the sending of groups of experts to assist the less developed countries to determine which of their problems atomic energy could help to solve. His delegation was very glad to note that extensive provision was made for that form of assistance in the 1959 programme.

- 57. Since the atomic era had begun, the world had been living under a terrible menace and even the future of the human race was at stake. It was to be hoped that, renouncing overweening ambition, mankind would give up nuclear weapons and use atomic science to bring about a better future. At a time when the leading atomic Powers were about to stop their ill-omened nuclear tests, it was regrettable that other great Powers should persist in their intention to produce their own atomic bombs and test them in regions which wished only to live in peace.
- 58. The United States proposal for a convention on third-party liability bound be supported. It was even highly desirable that the Agency should solemnly condemn the misuse of atomic energy; there could be no doubt that, if some kind of world referendum could be held, the result would confirm that view.
- Mr. FERNANDO (Ceylon) first observed how regrettable it was that controversies such as he had witnessed at the beginning of the present session should occur in a conference whose only concern should be the peaceful use of atomic energy. The General Conference was not a platform for airing political grievances, comparing ideologies, or indulging in propaganda; it had met to consider how the wonderful source of energy which the atom provided could be used to improve living conditions, not only for the people of a particular area, but for all mankind. Many less developed countries had sent delegations to the Conference because they hoped the Agency would help them to benefit from the forces concealed in the atom. He therefore made a solemn appeal to all Member States, and particularly to the Great Powers, not to allow the proceedings of the General Conference to be held up or compromised by politics.
- 60. He had been glad to note from the report of the Board of Governors that technical assistance for the less developed areas had been an essential part of most of the Agency's technical operations during its first year, and that measures had already been taken to organize expert missions and factfinding teams. Ceylon would be very happy to have the help of Agency experts in drawing up an atomic energy programmo. His delegation also favoured the proposal to set up a scientific advisory body.
- 61. He noted with satisfaction that the Agency had prepared a draft manual on protection against radiation and convened a panel of experts on the subject.

^{10/} GC(II)/OR.18, paragraph 21.

Under the terms of its Statute, the Agency was the body competent to draw up health and safety codes as a guide for Member States and to ensure that uniform standards were adopted. In that connexion, close co-operation was necessary with the specialized agencies to avoid duplication; he welcomed the steps taken to conclude draft agreements with the International Labour Organisation, the Food and Agriculture Organization, the World Health Organization and the United Nations Educational, Scientific and Cultural Organization.

- The fellowship programme was undoubtedly one of the Agency's most important activities; in drawing up that programme it must take account of the requirements of the less developed countries and their need for technicians. oral statement $\frac{11}{}$, the Director General had given the total number of candidates selected (132) and perhaps he would be able, before the end of the session, to show the distribution of fellowships according to countries. He (Mr. Fernando) supported the suggestion of the United States delegate 12/ that other measures should be taken to make the Agency the central co-ordinating body for training of scientific personnel. He also welcomed the United States suggestion that the Agency should provide laboratory facilities for Member States. the main functions of the Agency was to encourage the use of atomic energy in less developed countries, he hoped that such facilities would be provided in the areas which most needed them - i.e. in countries outside Europe. also a need for further research with a view to reducing the costs of small power reactors, which could be carried out only in co-operation with research institutes and universities. The Agency should study the possibility of reducing costs by using thorium, which was available in large quantities in certain countries of South-East Asia, including India and Ceylon.
- 63. The Agency should also find out what equipment the less developed countries needed and try to supply it. The Great Powers had promised to supply equipment, and the Agency might well become a centre for its allocation and distribution.
- Mr. LOPEZ (Argentina) recalled that his country had been a member of the Preparatory Commission and of the outgoing Board of Governors; he was glad that the Agency had successfully completed the first stages of its existence.
- 65. It was, of course, necessary to go carefully in opening up new ground as the Agency was doing. He thought he should warn the Agency against the

^{11/} GC(II)/OR.14, paragraph 39.

^{12/} GC(II)/OR.18, paragraph 22.

distinctly political trend sometimes taken by the debates - a trend which must inevitably impair the efficiency of its technical work. If it was to fulfil its statutory obligations, the Agency must operate calmly and dispassionately.

- 66. The programme for 1959 was realistic and would aid the less developed areas. During its first years, the Agency should attach special importance to assisting countries in process of development, to enable them to gain the fullest advantage from the peaceful uses of atomic energy. Thus the Agency's experts should not concentrate on pure research as if it were an end in itself. The Agency should be able to advise its Members on their national programmes, for the peaceful use of atomic energy, promote the dissemination of technical and scientific information, co-ordinate research and draw up programmes for international co-operation.
- 67. The mission which had gone to the Latin American countries to study their training needs had concluded that a centre was necessary in that region $\frac{13}{}$. Argentina had been happy to receive the mission, and its report would be carefully studied by his Government.
- 68. Technical assistance, health and safety, and radioactive waste disposal were the points of the 1959 programme which his delegation wished to stress.
- 69. The Agency could play a vital role in technical assistance. Duplication must be avoided, while ensuring close co-operation with other bodies dealing with technical assistance. The Argentine Government would collaborate to the best of its ability in that part of the programme. Since 20 January 1958, the Argentine Atomic Energy Commission had been operating a small training and research reactor, which had been built entirely in Argentina. The experience thus acquired was at the disposal of all Member States. Prospecting of uranium deposits was continuing in Argentina and the known reserves were considerable. Some deposits were already being exploited and limited quantities of ore were being concentrated and treated.
- 70. The drafting of health and safety codes and work on waste disposal should be pursued most vigorously, in order to allay the anxieties which atomic energy still aroused in many people. In that connexion, too, Argentina hoped to receive the necessary technical assistance from the Agency.

^{13/} GC(II)/INF/19.

- 71. Mr. SEVCHENKO (Byelorussian Soviet Socialist Republic) said that the last few years had been marked by enormous progress in nuclear physics and technology. That was clear from the papers presented at the second Geneva Conference. The Union of Seviet Socialist Republics, which had been operating the first atomic power station for four years, had been able to announce at the Geneva Conference that it was now setting up a 100,000 kW atomic plant. Further developments would follow, such as the building of an ice-breaker, of cargo and passenger ships etc. The use of isotopes was increasing, and detailed studies were being carried out on controlled thermo-nuclear reactions.
- 72. For all that activity considerable efforts and rescures were needed as well as extensive international co-operation. It was precisely for that purpose that the Agency had been established; but what practical results had it achieved since the previous year? The Byelorussian, together with other delegations, found that the Agency's activities could not be considered fully satisfactory. That was evident from the report of the Board of Governors and the statements made by several delegations. The Agency had been mainly concerned with questions of organization and administration and had therefore rather neglected the provision of practical help to Member States in the peaceful use of atomic energy.
- 73. A year ago the General Conference had adopted a resolution providing that the Board should give high priority to those activities "which will give the maximum possible benefit from the peaceful application of atomic energy in improving the conditions and raising the standard of living of the peoples of the under-developed areas 14. Unfortunately, however, it was clear that almost nothing had been done in that direction. Furthermore, according to paragraph 9 of the report of the Board of Governors, there was even some doubt as to the value and practicability of constructing power, research and training reactors "in the near future outside the atomically more advanced countries". Thus, instead of taking concrete steps to popularize the practical advantages of building reactors in under-developed countries, the Agency was still procrastinating and maintaining a hesitant attitude, which the Byelorussian delegation was unable to accept. Experience showed how groundless such doubts were and made it essential that the Agency should help the under-developed

^{14/} GC.1/RES/5.

countries to work out programmes for the peaceful use of atomic energy and to form their own senior scientific staff for the use of isotopes in industry, agriculture, scientific research and medicine.

- 74. Another significant fact was that the Agency had not yet put one gramme of fissionable material at the disposal of countries needing it. The report of the Board of Governors did not mention any requests for such a service. In the opinion of the Byelorussian delegation that was most significant; it proved that countries which needed fissionable materials were trying to procure them outside the Agency. But far from providing precise information on how to obtain such products at advantageous prices, the Agency had not yet established rules for determining the price of the fissionable materials which it could make available.
- 75. Paragraph 190 of the report of the Board of Governors mentioned, as an objective to be achieved in the near future, the establishment and equipment of a laboratory at the Agency itself. Everyone knew, however, what a modern laboratory involved and how expensive were even slightly complex basic equipment and scientific and technical apparatus. Hence it was too soon to consider that project, which would divert the Agency's resources from the urgent task of assisting the under-developed countries in numerous peaceful uses of atomic energy.
- 76. The report of the Board of Governors showed that the Agency had not in fact done much towards attaining the objectives mentioned in the Statute, namely to "accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world". That was due, among other causes, to the fact that certain Western countries had been trying to implant the idea of supervision in the Agency and to transform it into a supervisory body, whereas its main function should be to promote the use of atomic energy for peaceful purposes.
- 77. Atomic scientists, more than anyone else, were convinced of the inexhaustible possibilities of atomic energy; they also knew that its use for military purposes could result in incalculable calamities and sufferings for mankind. Nothing would contribute more to the success of the Agency's work than an end to the armaments race, and the conclusion of an agreement banning the manufacture of atomic and thermo-nuclear weapons. Particular attention should be

paid to the initiative taken by the Soviet Union which, by its unilateral decision to suspend atomic and thermo-nuclear weapon tests, had taken an important practical step towards bringing the armaments race to an end.

- 78. On 31 March 1958 the Supreme Soviet of the USSR had appealed to the United Kingdom Parliament and the United States Congress to follow its example. But the United States and the United Kingdom, far from following the example of the Soviet Union, were continuing the tests, which stimulated the armaments race, increased the risk of atomic war and contributed to the formation of a large mass of radioactive substances that were contaminating the air, the land and the sea. It was well known that the United Nations Scientific Committee on the Effects of Atomic Radiation had recently emphasized the danger that entailed for present and future generations.
- 79. The experts who had recently met in Geneva 15/ had expressed the unanimous opinion that it was possible to establish a system for supervising the observance of an agreement for the universal suspension of nuclear tests. He regretted that the United States delegate had not said in his statement whether his Government intended to heed the appeal of the peoples of the entire world who were demanding the cessation of nuclear tests. His delegation believed that if the Agency, with all its prestige and authority, were to decide in favour of banning atomic and thermo-nuclear weapons, such a stop would be welcomed with deep satisfaction by the peoples of the whole world.
- 80. His country attached great importance to applying the achievements of atomic science and technology in national economics. Its scientific research institutes were engaged in theoretical studies on fundamental physics and nuclear reactors, with particular reference to heat exchange in nuclear power plants and the process of non-stationary heat transfer in fuel elements. Papers on that work had been read at the second Geneva Conference. Among the many uses of radioisotopes in industry, mention should be made of studies on the mechanism of dehydration of substances, the diffusion of metals during plastic deformation, the viscosity of metals treated under pressure, wear of punches, quality of lubricants used for het punching, etc. In medicine, radioisotopes were used in the diagnosis and treatment of many diseases. They had helped biologists to reveal many interesting phenomena in biosynthesis and

^{15/} Conference of experts to study the methods of detecting violations of a possible agreement on the suspension of nuclear tests.

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photosynthesis. In agriculture, they had played an important part in the study of rational utilization of peat and the best methods of soil fertilization.

81. His delegation believed that the present was a particularly suitable time for the Agency to demonstrate by its actions that it was capable of giving practical assistance in the peaceful uses of atomic energy. What the peoples of the world desired was not empty words but positive achievements.

The meeting rose at 5.50 p.m.