

GENERAL
ASSEMBLY

TWENTY-SEVENTH SESSION

Official Records

MEETING

Friday, 6 October 1972,
at 3.20 p.m.

NEW YORK

Chairman: Mr. Hady TOURÉ (Guinea).

In the absence of the Chairman, Mr. Carasales (Argentina), Vice-Chairman, took the Chair.

AGENDA ITEM 39

Effects of atomic radiation: report of the United Nations Scientific Committee on the Effects of Atomic Radiation (concluded) (A/8725 and Corr.1, A/SPC/L.238)

1. The CHAIRMAN noted that draft resolution A/SPC/L.238, sponsored by Argentina, Australia, Belgium, Brazil, Canada, Czechoslovakia, Egypt, France, India, Japan, Mexico, Poland, Spain, Sweden, the Union of Soviet Socialist Republics, the United Kingdom of Great Britain and Northern Ireland and the United States of America, had been circulated to the Committee.

2. Mr. DE SOUZA E SILVA (Brazil) introduced draft resolution A/SPC/L.238. By comparison with similar draft resolutions of previous sessions, the current text contained new elements. They concerned operative paragraphs 4 and 5, which were based on observations made in paragraph 4 of the report of the United Nations Scientific Committee on the Effects of Atomic Radiation (A/8725 and Corr.1) to the effect that that Committee wished to be relieved of the obligation to submit a new report before the twenty-ninth session of the General Assembly, unless it was asked to undertake new tasks, for example, within the context of the environmental programme of the United Nations. The fifth preambular paragraph and operative paragraph 7 of the draft resolution took into account the role the Scientific Committee could play in the environmental programme of the United Nations. The sponsors hoped that the draft resolution would be unanimously adopted by the Special Political Committee.

3. Mr. MOTT (Australia) emphasized the importance of the report of the Scientific Committee and its technical annexes.¹ The Scientific Committee had reviewed all sources of ionizing radiation, natural or artificial, and had applied itself to assessing the levels of radiation doses received by large populations, such as those living in temperate latitudes; it had also studied the effects on small

population groups such as those living in the neighbourhood of nuclear power plants or those using gas stimulated by underground nuclear explosions.

4. His delegation attached importance to that section of the report which dealt with radiation from atmospheric and surface nuclear weapon tests. Since the publication of the previous report those doses of radiation had hardly varied. The Australian people, as well as others in the South Pacific region, were intensely concerned that atmospheric weapon tests were continuing. Australia would particularly like to see the negotiation of a comprehensive treaty totally and absolutely prohibiting nuclear weapon testing.

5. In examining the report of the Scientific Committee, his delegation noted that nuclear weapon tests had not ceased in 1971. Whatever the precautions taken, there was fall-out of radio-active products, and following recent series of nuclear weapon tests in the South Pacific detectable radiation had been found; such testing was unjustifiable since no discernible benefits were conferred on the populations of the region.

6. His delegation noted with satisfaction that in paragraphs 28 to 30 of the report the recommendations of the ILO, WHO, IAEA and the International Commission on Radiological Protection had contributed towards minimizing the radiation doses received by workers of certain occupations. He welcomed the co-operative relationship that existed between the Scientific Committee and the bodies just mentioned, and also between it and FAO and the International Commission on Radiation Units and Measurements.

7. His delegation strongly supported the work of the Scientific Committee and approved of its plans not to meet again before the end of 1973, as mentioned in paragraph 4 of the report. He acknowledged with appreciation the contribution made by the Secretariat, and in particular the Secretary of the Scientific Committee; he also thanked the scientists who had helped the Committee in preparing the detailed technical documentation for its report.

8. Australia's co-sponsorship of draft resolution A/SPC/L.238 derived from its traditional support for the work of the Scientific Committee, but on the current occasion it was based on the understanding that the wording of operative paragraphs 4 and 5 of the draft would make it possible, if circumstances justified it, for one or more member States of the Scientific Committee to request that that Committee should meet in 1973, and that, if the

¹ The annexes have been issued separately, in two volumes: *Ionizing Radiation: Levels and Effects*; Vol. I: *Levels* and Vol. II: *Effects* (United Nations publications, Sales Nos.: E.72.IX.17 and E.72.IX.18).

Committee were to meet, obviously it would have to make some report about its work.

9. Mr. STEPHEN (India) emphasized the importance of the Scientific Committee's work and expressed his delegation's appreciation of its role in disseminating scientific information and building a better understanding of the effects of ionizing radiation. It approved that Committee's decision to submit the results of its work in the form of a set of conclusions and to publish the scientific annexes separately. It was also grateful to the Scientific Committee for having prepared a basic paper for the United Nations Conference on the Human Environment, and it shared the views expressed in paragraph 4 of the report under consideration.

10. It was reassuring to learn from the report that the annual global dose to which the general public was exposed as a result of energy production at the 1970 rate constituted one hundred-thousandth of the average annual dose due to natural sources and that technological advances might make possible a considerable reduction of the doses expected for the year 2000.

11. The work of the Scientific Committee justified General Assembly approval and support of its activities, and his delegation hoped that the draft resolution would be adopted unanimously.

12. Mr. MARSCHIK (Austria) said that it was impossible not to feel concern at the proliferation of artificial sources of ionizing radiation, and Austria was gratified to know that bodies such as IAEA and the Scientific Committee were keeping an eye on developments in that field.

13. The report under consideration was worthy of interest, and his delegation was grateful to the Scientific Committee and those who had helped and advised it. It hoped that the adoption of the draft resolution would be merely one step in the consideration of the report and that the report, together with its technical annexes, would be transmitted to the scientific experts of the Governments of all Member States. His delegation welcomed the Scientific Committee's contribution to the United Nations Conference on the Human Environment and took note of the fact that the Committee was prepared to co-operate with environmental studies.

14. His delegation supported draft resolution A/SPC/L.238 and hoped that the Scientific Committee would continue its activities in co-operation with IAEA and the competent specialized agencies. It was in that spirit that his delegation interpreted paragraph 3 of the draft resolution.

15. Mr. NEWLANDS (Canada) commended the Scientific Committee for its report and the technical annexes, which represented a synthesis of the available knowledge on the effects of ionizing radiation. The size of the report was indicative of the work accomplished by that Committee and by its secretary and his co-workers.

16. His delegation believed that the Scientific Committee should continue to be the body providing the General

Assembly with advice on questions relating to the effects of atomic radiation from nuclear weapon testing; it should, however, refrain from making further reports on radioactive contamination of the environment from peaceful uses of nuclear energy until a body assigned to oversee environmental questions had had an opportunity to consider them. It was important to avoid duplication of effort between the Scientific Committee and the new environmental body. Consideration should be given to making its secretariat an integral part of the proposed environment secretariat, where it could serve both organs.

17. His delegation endorsed the recommendations in paragraph 4 of the report under consideration. It further believed that the new environmental council, if created by the General Assembly, should be entrusted with considering what measures should be taken in the United Nations system to deal with radio-active contamination of the environment and should be responsible for making institutional recommendations to the Economic and Social Council, bearing in mind the views of IAEA.

18. Mr. PANHWAR (Pakistan) said that the report of the Scientific Committee added to the necessary information on the effects of ionizing radiation and bore witness to the useful work of that Committee since its establishment in 1955.

19. Ionizing radiation had potentially harmful effects on genes and chromosomes and on the immune response and could cause various forms of cancer. Man's nuclear activities were constantly increasing the radio-active contamination of the globe. The creation of a climate of confidence by the States with preponderant nuclear power was necessary for securing the agreement of all nuclear Powers to a comprehensive nuclear test ban.

20. Forty-four non-nuclear Powers possessed nuclear reactors which were being used for peaceful purposes and added somewhat to the radio-active contamination of the environment. Moreover, the centrifuge technique for isotope separation was liable to increase the radiation danger by bringing about the wide dispersal of uranium-enrichment plants. Pakistan was operating a number of power and research reactors, but all necessary measures had been taken to avoid contaminating the environment with radio-active waves and to monitor radiation doses.

21. It might be useful to make a study of all aspects of all peaceful nuclear explosions, both to guard against their misuse and to make available to all countries the benefits of the peaceful uses of nuclear energy. It would also be useful if the Scientific Committee could undertake a quantitative study of the potential harmful effects resulting from peaceful nuclear explosions through the radio-activity they caused in the surrounding regions or neighbouring countries.

22. It was heartening to note in the report that some of the lowest rates of medical irradiation had been recorded in countries with the highest health standards. There was reason to hope, therefore, that improvements in radiologi-

cal techniques would further reduce the existing rates of irradiation.

23. In his delegation's view, the work of the Scientific Committee would become more useful if environmental monitoring techniques could be standardized. The Committee could also prove helpful in obtaining uniformity in regulating the discharge of radio-active wastes from nuclear plants. Lastly, it should study the problem of thermal pollution caused by discharges from nuclear power stations.

24. His delegation would support draft resolution A/SPC/L.238.

25. Mr. CHERNILIN (International Atomic Energy Agency), speaking at the invitation of the Chairman, pointed out that while the previous reports of the Scientific Committee had dealt essentially with global radio-active contamination due to nuclear weapon tests, the report now before the Special Political Committee (A/8725 and Corr.1) contained, in addition, information on radiation doses due to peaceful applications of nuclear energy. The International Atomic Energy Agency had participated in the preparation of the report and was happy to note that during the debate many delegations had recognized its contribution to the work of the Scientific Committee, which was reflected in the draft resolution under consideration. The Agency had always attached great importance to the co-operation it maintained with the Scientific Committee, as was shown by the decision of the IAEA Board of Governors in June 1971 to strengthen those working relations still further.

26. The programme of IAEA relating to environmental operations was essentially to protect man in his environment against the harmful effects of ionizing radiation and radio-active and non-radio-active discharges from nuclear facilities. The sixteenth General Conference of the Agency, held at Mexico City from 26 September to 3 October 1972, had adopted a programme based on the principle that the rapid development of nuclear-generated electric power made it incumbent on IAEA to focus attention on promoting nuclear safety and environmental protection. In February 1972 the Board of Governors had decided that one of the Agency's most important and urgent tasks was to recommend, in close collaboration with competent international organizations, standards of safety concerning the dispersion into the environment of radio-active waste resulting from the peaceful use of nuclear energy. The United Nations Conference on the Human Environment, held at Stockholm from 5 to 16 June 1972, had been informed of that decision, which was echoed in two of the Conference's recommendations relating to nuclear waste management.

27. The International Atomic Energy Agency had a statutory obligation to make active contributions to the understanding of the environmental consequences of large-scale uses of nuclear power. Having access to the advice of the élite of the world's experts in that field and having published many guidance manuals, recommendations and safety standards, it intended to take a more active role in advising Member States on health and safety conditions in existing facilities; one advisory mission was already in the field, and such activity would be intensified. While the

nuclear industry had thus far maintained a safety record unique in the history of industrial development, it was necessary to begin at once facing the problems that would be created by the expansion of nuclear energy when installed capacity would be raised from 27,000 MW to 190,000 MW in 1978 and to 3 million MW at the end of the century.

28. In the circumstances, the Agency intended in 1973 and 1974 to undertake new tasks and to intensify its current activities in various fields: study of methods of establishing the capability of various sectors of the environment to accept radio-activity; assessment of the environmental impact of nuclear power programmes; research on the fate and behaviour of radio-active materials released into the environment and other data necessary for establishing limits for such releases, etc. The Agency considered that the best course was to carry out that programme in co-operation with other organizations concerned, in particular WHO, the International Commission on Radiological Protection and the United Nations Scientific Committee on the Effects of Atomic Radiation.

29. He wished to renew the invitation, extended to the Scientific Committee at its last session, to hold its next session at IAEA headquarters at Vienna.

30. Lastly, with regard to draft resolution A/SPC/L.238, he noted that operative paragraph 3 would be more accurate if it read as follows:

"Requests the Scientific Committee to continue its work, in close co-operation with the International Atomic Energy Agency and the specialized agencies concerned, to increase knowledge of levels and effects of atomic radiation from all sources;"

31. Mr. LUDWICZAK (Poland) welcomed the fact that the Scientific Committee's report and the technical annexes were now being issued separately, since the Special Political Committee was not a body of experts. His delegation was a sponsor of draft resolution A/SPC/L.238, because it considered that the Scientific Committee could become an important element in the environmental programme of the United Nations, and it supported the recommendation that the Committee should report less frequently to the General Assembly.

32. Since the conclusion of the Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and under Water, signed in Moscow on 5 August 1963, there had been a decline in the contamination of the atmosphere and the sea. It was extremely important that all nuclear weapon States should accede to that Treaty as well as the Treaty on the Non-Proliferation of Nuclear Weapons, signed on 1 July 1968, and observe their provisions scrupulously.

33. His delegation supported the amendment suggested by the representative of IAEA and recommended its adoption. In conclusion, he stressed that the Scientific Committee should be able to receive information from all States, and not only from States Members of the United Nations.

34. Mr. HEDIN (Sweden) recalled that the paper prepared in 1971 by the Scientific Committee on its experience with artificial radio-activity had been regarded as a central and most valuable one during the preparatory work for the Stockholm Conference. With regard to the future involvement of the Scientific Committee in the environmental strategy of the United Nations, his delegation had some doubts as to the import of the request made by the Scientific Committee that it should be relieved of the obligation to report to the General Assembly before the twenty-ninth session: the Scientific Committee should not deprive itself of the possibility of continuing to report to the General Assembly at yearly intervals, but the Special Political Committee might leave it to the discretion of the Scientific Committee itself to defer the submission of reports on complicated questions which required longer periods for study and deliberation. The general surveys presented annually by the Scientific Committee were of great value and it did not seem necessary to revise the Committee's terms of reference as laid down in General Assembly resolution 913 (X). Maintaining the procedure followed so far would also have the advantage of making possible the submission of independent reports by IAEA.

35. His delegation hoped that draft resolution A/SPC/L.238 would be adopted unanimously and that the final decision concerning the reports of the Scientific Committee would be postponed until 1974.

36. His Government expressed once again its grave concern at the continuation of nuclear weapon tests: Sweden was strongly opposed to the testing of nuclear weapons in any environment and in any part of the world. It hoped that the work carried out in various bodies of the United Nations would soon lead to an international agreement banning all nuclear testing.

37. Mr. KATAKURA (Japan) noted that in recent years the Scientific Committee had directed its attention increasingly to problems of contamination resulting from peaceful applications of nuclear technology, both in the field of industry and in that of medical treatment. The fact that those applications were bound to multiply would inevitably cause concern over environmental pollution which might arise as a result of the accumulation of radio-active waste. There was therefore a need for research and study of the problem of radio-active contamination, and to that end international co-operation for the exchange of scientific information was of the utmost importance.

38. As the Japanese people had alone been exposed to nuclear explosions during the Second World War, his delegation traditionally attached particular importance to the part of the Scientific Committee's report concerning atmospheric and surface nuclear weapon tests. It was, of course, true that nuclear weapon tests had been carried out at a lower rate in the past few years and, as was stated in paragraph 13 of the report, the total *per capita* dose to be received between 1955 and 2000 by the whole world population from tests carried out between 1955 and the end of 1970 was equivalent to about two years of exposure to natural sources; that did not, however, give reason for optimism because, since nuclear weapon tests had not ceased in 1971,

it could not be excluded that a further dose commitment must be added. The report also noted that after each of the 1970 and 1971 series of tests in the southern hemisphere, the presence of iodine-131 in milk had been detected in a number of countries in that hemisphere, including Australia and New Zealand. Iodine-131 was a radio-nuclide that posed special problems because it was concentrated in the thyroid and irradiated that gland more than any other tissue, the doses per unit intake being highest in infants. Although, according to the information submitted by Australia and New Zealand, the magnitude of the annual average doses did not appear to constitute a health hazard, it was necessary to follow carefully the future effects of the residual, undecayed radio-activity from those nuclear tests. So long as the tests continued, the Japanese Government could not help sharing the legitimate concern of the Governments in the southern Pacific region.

39. The Scientific Committee had made a valuable contribution to the United Nations Conference on the Human Environment, and his delegation hoped that it would continue to play an active role in promoting the environmental strategy. It supported the recommendation that the Committee should be relieved of the obligation to report to the General Assembly before the twenty-ninth session.

40. His delegation, which was one of the sponsors of draft resolution A/SPC/L.238, hoped that the draft resolution would receive the unanimous support of the Special Political Committee and the General Assembly.

41. Mr. MACRIS (Greece) associated himself with previous speakers in paying a tribute to the Scientific Committee on its work on the effects of radiation from all sources. He noted with satisfaction that nuclear weapon tests were being carried out at a much lower rate and pointed out that his country had acceded to the various treaties concluded under the auspices of the United Nations in that field, including the Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and under Water, and would support any efforts aimed at protecting man and the environment from the effects of radio-active contamination. It would be desirable for the Scientific Committee to contribute, through its experience, to the protection of the environment, and his country therefore supported the draft resolution before the Committee.

42. Mr. STUBBS (Peru), noting that it could not be excluded, as was stated in paragraph 13 of the report of the Scientific Committee, that a further dose commitment must be added as a result of nuclear weapon tests, associated his delegation with the view expressed by the delegation of New Zealand at the previous meeting in requesting that the Scientific Committee should not be relieved of the obligation to report to the General Assembly before the twenty-ninth session, unless there were no further nuclear weapon tests in the atmosphere. It sufficed to read paragraph 14 of the report concerning the presence of iodine-131 in milk to understand the need to maintain the item on the Assembly's agenda each year. Like other delegations, the delegation of Peru wished publicly to express its concern at nuclear weapon tests, which contaminated the environment and, in particular, sea water—which was one of

his country's main natural resources—and threatened the health and safety of its population. It was essential that General Assembly resolution 2828 A (XXVI) should be implemented, and his country hoped that the Secretary-General's report on measures taken to that end by Member States would reflect encouraging developments.

43. Mr. BARTOLOME (Philippines) considered that the Scientific Committee's activities were an effective means of focusing public attention on the dangers of atomic radiation, a problem of global concern which called for efforts on a global scale. His delegation was convinced that the Scientific Committee could make an important contribution to the formulation and implementation of the environmental strategy of the United Nations.

44. He drew attention to the Scientific Committee's finding that levels of iodine-131 in milk in the southern hemisphere had risen after the 1970 and 1971 series of nuclear weapon tests in that region. It was therefore essential to heed the appeals made during the past eight years by the General Assembly which had, during the previous session (see resolution 2828 A (XXVI)), once again condemned all nuclear weapon tests, urged the early cessation of such tests and called upon States that had not yet done so to adhere to the Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and under Water. In spite of the General Assembly's resolutions, all of which his country had supported, a series of tests had again been conducted in the Pacific Ocean at the beginning of the current year. Like other countries in that region, the Philippines protested vigorously against those tests. At their ministerial meeting in Manila in July 1972, the member States of the Association of South-East Asian Nations had condemned such tests, as had the Asian and Pacific Council in December 1970. Moreover, another nuclear Power had continued tests in the atmosphere, and two others had carried out underground test explosions, which could not but produce needless risks for man and for the environment.

45. His delegation reserved its right to comment on the draft resolution before the Committee.

46. Mr. CHUANG (China) said that his delegation, which was participating for the first time in the Committee's work on the report of the Scientific Committee, would not comment on the report now under consideration. However, in reply to the representative of New Zealand, who, at the previous meeting, had mentioned nuclear weapon tests carried out by China, his delegation wished to state, as it had already done on several occasions, its position of principle on the question of nuclear weapons and nuclear tests. China had been compelled to develop nuclear weapons and to undertake tests in order to break the nuclear monopoly of the super-Powers and, ultimately, bring about the destruction of nuclear weapons. Its nuclear weapon tests were carried out in the centre of the country and were very few in number. China had always favoured the complete prohibition and total destruction of all nuclear weapons; however, since the super-Powers were producing nuclear weapons and pursuing a policy of nuclear monopoly and nuclear blackmail, stubbornly refusing to

ban completely and destroy all nuclear weapons, it could not abdicate its right to prepare to defend itself if that was necessary.

47. Mr. ŠIGUT (Czechoslovakia), recalling that his country had been a member of the Scientific Committee since it was first set up, said that he was completely satisfied with the high scientific standard of its work. In its report, the Scientific Committee had drawn attention to the large number of possible scientific applications of the widespread use of nuclear energy and stressed the responsibilities which that would entail. He recalled in particular the sections of the report dealing with occupational exposure, the genetic effects of radiation and its effects on the immune response, and radiation carcinogenesis.

48. In addition, since nuclear tests in the atmosphere had not yet been totally eliminated, the level of radiation to which man would be exposed in the future could not be foreseen. It was important to establish conditions which would make it possible to prohibit all nuclear weapon tests of any kind, including underground tests, and to ensure that such a ban was respected by all Powers. His delegation believed that the Scientific Committee should be recommended to continue its work with the same thoroughness and energy with a view to keeping the General Assembly regularly informed, and he assured the Scientific Committee that it would enjoy his delegation's support in its work.

49. Mr. ISSRAELIAN (Union of Soviet Socialist Republics) noted that the Scientific Committee's current report reviewed all sources of radiation and, in contrast to previous reports, even attempted to evaluate radiation doses resulting from the peaceful uses of atomic energy up to the year 2000. It also contained a study of the genetic effects of radiation, its effects on the immune response, and radiation carcinogenesis. Since mankind was constantly exposed to cosmic rays or to radio nuclides, the Scientific Committee's decision to take that constant element as a base for evaluating risks deriving from man-made radiation was completely justified. Thus, it had estimated that the total *per capita* dose to be received by the year 2000 by the whole world population was equivalent to about two years of exposure to natural sources. That estimate was, however, a provisional one and would probably have to be increased, since nuclear tests had continued during 1971. Those countries which had not yet done so should be urged to sign the Moscow Treaty on the partial banning of nuclear weapon tests, so that an end could be put to all contamination of the planet. During the discussion, one speaker had spoken in favour of a continuation of nuclear tests, but it was obvious that that point of view could not be seriously upheld; the Soviet Union, for its part, considered it essential to put an end to all tests, including underground tests, in order to slow down the arms race and improve the quality of the environment.

50. The ever-increasing use of nuclear energy for peaceful purposes could, by the year 2000, increase radiation doses by approximately two thousandths of the dose received annually from natural sources, and nuclear explosions for peaceful purposes would contribute only marginally to that increase in radiation. Nevertheless, the report noted that

such explosions entailed risks of contamination which called for careful study. The section dealing with genetic and biological effects, which was entirely based on experimental data, was extremely interesting, and for the first time the report estimated the effects of radiation on the immune response.

51. The work of the Scientific Committee was of undoubted importance. The peaceful uses of nuclear energy and the tests which certain countries persisted in carrying out in the atmosphere were factors which caused variation in the levels of radiation to which mankind was exposed, and it was therefore essential for the Scientific Committee to continue its work, as it was requested to do in draft resolution A/SPC/L.238 of which his delegation was a sponsor and which he hoped would be adopted unanimously.

52. Mr. DE LA GORCE (France) stressed the outstanding value of the Scientific Committee's current report, which went into all aspects of the risks that exposure to radiation entailed for man. One could only welcome the fact that the report's conclusions were on the whole reassuring. His delegation wished to congratulate and thank all the members of the Scientific Committee, and especially its Chairman and Secretary.

53. Several speakers had referred to France's nuclear tests. As the French Minister for Foreign Affairs had stated at the twenty-sixth session of the General Assembly (1942nd plenary meeting), those tests would cease to be justifiable if they jeopardized life, whether human life or marine and terrestrial fauna and flora. In the light of that position of principle, the French Government had always made every effort to provide safeguards and take precautions; they had, it seemed, proved effective, since the report noted that the level of radiation was decreasing and that, indeed, transitory exposure due to fall-out from nuclear tests represented only a minute dose in comparison with the level of natural radiation. It had been said that the radiation dose to which mankind would be exposed by the year 2000 might perhaps be increased as a result of the tests. However, the report only mentioned that possibility in a very carefully worded sentence which led one to wonder whether the dose in question would in fact be increased, and if so by how much. It might well be the case that only an insignificant amount relative to the level of natural radiation would be involved. It had also been said that the presence of iodine-131 in milk had increased following the tests which had come under criticism. However, iodine-131 was only a short-lived radio nuclide, and the situation which had been referred to could thus have been only very temporary. Doses to the thyroid had been estimated at only a few hundredths of the threshold doses, which had been set at 1,500 millirads per year throughout each lifetime. The French authorities thus considered themselves justified in asserting once again that the tests which they were carrying out had never involved any risk to human beings and that the radiation resulting from them was well below the level at which such risk occurred. Those conclusions were ones which the scientific bodies of some countries in the southern hemisphere had also arrived at, and they had not been formally challenged. The French

Government was determined to make an active contribution to the work of the Scientific Committee, as it had always done, and to co-operate at the international level in monitoring the situation with regard to radiation levels.

54. Mr. MIGLIUOLO (Italy) said that he felt that the work of the Scientific Committee was praiseworthy in all respects. The very comprehensive data which the Committee had collected were currently being studied with great interest by Italian experts; they were, moreover, presented in a concise form which made them intelligible to the layman. His delegation wished to thank the Scientific Committee and its Secretary for the excellent report. He was prepared to support draft resolution A/SPC/L.238; however, in view of the concern which he felt about radiation doses in the atmosphere, he wished to stress that he found operative paragraphs 4 and 5 acceptable in so far as they referred to a request made by the Scientific Committee itself but that his delegation interpreted them in the light of the explanation provided by the representative of Brazil in submitting the draft resolution—in other words, with the clear understanding that the frequency of future meetings of the Scientific Committee would be in no way prejudged.

55. Mr. JOB (Yugoslavia) associated himself with the compliments that had been expressed to the Scientific Committee. The draft resolution sought to relieve the Scientific Committee from the obligation to report to the General Assembly before the twenty-ninth session, since the Committee, as pointed out in operative paragraph 4 of the draft, would not meet before the end of 1973 "unless asked to undertake new tasks in the context of the environmental programme of the United Nations or to respond to any other special demand". His delegation considered that phrasing and operative paragraphs 3 and 5 of the draft resolution to mean that the Committee's schedule would depend on variations in the levels of radiation emitted by all possible sources.

56. Mr. TEKLE (Ethiopia) said that the report of the Scientific Committee was of great interest. Since its establishment in 1955, the Committee had done much noteworthy work, particularly in its early years, when the frequency of nuclear tests had led to a considerable increase in the level of radio-active pollution. A further cause for gratification was the contribution which the Committee had made to the United Nations Conference on the Human Environment. The use of nuclear energy for peaceful purposes would undoubtedly increase the amounts of radiation to which human beings were exposed, and it was important that the Committee should continue to assess and make known those amounts. However, in the light of the remarks just made by the representative of Brazil, his delegation agreed to the recommendations contained in operative paragraph 4 of the draft resolution, and it supported the draft resolution as a whole.

57. Mr. CUEVAS (Guatemala) commended the members of the Scientific Committee for their excellent report on the effects of atomic radiation, which considered all sources of radiation, including extraterrestrial and terrestrial natural radiation and radiation from artificial sources (such as

environmental radiation, medical and occupational exposure, and from miscellaneous sources). The report also reviewed the genetic effects of radiation, its effects on the immune response and its cancer-inducing role. It was clear from reading the report that, if mankind was to escape total destruction, it must resolve to do all in its power to ensure that the discovery of the atom was placed at the service of man and would represent for future generations the hope of a better future, instead of endangering all life on the planet. The Government of Guatemala had subscribed, and was prepared to subscribe, to all agreements designed to bring about peaceful coexistence among all peoples.

58. Mr. KANOUTE (Mali) on behalf of his delegation, congratulated the Scientific Committee on the excellence of its report. The work of the Committee was of universal importance; it affected every inhabitant of the earth, and it was to be hoped that such work could continue.

59. He suggested two minor amendments to draft resolution A/SPC/L.238: in operative paragraph 1 the words "report adopted" should be replaced by the words "report submitted", and at the beginning of operative paragraph 5 the word "accordingly" should be inserted after the word "requests".

60. Mr. CHUANG (China) said that in his statement the representative of the Soviet Union had mentioned the atmospheric pollution caused by continued nuclear weapon testing but had passed over in silence the hundreds of nuclear weapon tests that had been carried out, with no concern for their effects, by the two super-Powers. It was those Powers which had built, both within their own territories and in foreign countries, nuclear bases where they had stockpiled nuclear weapons, and it was they that bore the prime responsibility for radio-active pollution. Now that they believed they had enough atomic weapons to maintain their supremacy, they would like to prevent other nations from exercising their right to self-defence. China was utterly unable to accept that the super-Powers should arrogate to themselves the prerogative of tying the hands of other nations; China, united with the other peoples of the world, was determined to overcome such nuclear blackmail and bring about the total prohibition of atomic weapons.

61. Mr. ISSRAELIAN (Union of Soviet Socialist Republics) remarked that the representative of China did not seem very well informed concerning the agenda and the subject of the debate and that he took every opportunity to make slanderous allegations against the Soviet Union. Was it necessary to recall that there were in existence history books which the representative of China would do well to consult? He could learn from them that the Soviet Union had not been the first Power to place an atom bomb in its arsenal and that it was the nuclear blackmail to which the imperialists had resorted during the cold-war years that had compelled the Soviet Union to start producing its own nuclear weapons, in the interest both of itself and of the other socialist countries, including China.

62. The Soviet Union had always recognized the harmful effects on the environment of continued nuclear testing and

of the armaments race in general, and that was why it had constantly made concrete proposals in the United Nations for halting the armaments race, nuclear or otherwise. If the representative of China had any knowledge of history, he would be aware that the USSR was the first nuclear Power to have proposed an end to all testing and that it had done so as early as 1955, when it had itself carried out only a very small number of tests. Ever since 1955 it had been struggling for an end to such tests in all environments, as was known by those familiar with the history of the United Nations and of international relations. The conclusion in 1963 of the Moscow Treaty, whose signatories undertook not to carry out nuclear tests in the atmosphere, in outer space and under water, was due to the efforts of the Soviet Union and other countries and the effect had been to bring about a considerable reduction in the radio-active pollution of the environment, as was confirmed by the report of the Scientific Committee. Unfortunately, it had not yet been possible to reach general agreement on the total prohibition of nuclear tests, but the USSR, which untiringly continued its struggle to achieve that goal, had made an appeal to that effect, which it was determined to repeat as often as necessary. To admit that every State had the right to carry out the whole gamut of nuclear tests would indeed be to embark on a very dangerous course, and it was easy to imagine what would be the repercussions of such a decision on the quality of the atmosphere and of the environment.

63. The CHAIRMAN recalled that the representative of Mali had suggested two amendments to the draft resolution A/SPC/L.238, which were minor drafting changes. He asked whether the sponsors of the draft resolution would object to their adoption.

64. Mr. DE SOUZA E SILVA (Brazil) stated that he had been unable to consult the other sponsors of the draft resolution on the subject; however, as the suggested amendments were a matter of form rather than substance, he was willing to accept them if none of the co-sponsors had any objection.

65. The CHAIRMAN said that, if there was no objection, he would take it that the amendments suggested by the representative of Mali were adopted. The representative of IAEA had also suggested an amendment to operative paragraph 3. His amendment had been supported by one delegation but, as no delegation had become an official sponsor of the suggestion, it could be considered that no formal proposal had been made.

66. The Committee must therefore take a decision on the text of draft resolution A/SPC/L.238, as modified by the amendment proposed by Mali. In view of the practice followed at previous sessions, and as a majority of delegations had spoken in favour of the draft resolution, it seemed unnecessary, unless there was any express desire to the contrary, to put it to a vote. In the absence of objections, he would therefore take it that the draft resolution, as modified, was adopted.

It was so decided.

67. Mr. ZOHRAB (New Zealand) explained that his delegation respected the desire expressed by the Scientific Committee to be relieved from the obligation to report to the General Assembly before the twenty-ninth session but felt that, as nuclear weapon tests in the atmosphere had not ceased, work on assessing radiation levels should be continued. It was for that reason that his delegation had been unable to become a sponsor of the draft resolution. Furthermore, it interpreted operative paragraph 4 as not excluding the possibility of the Committee's reporting to the General Assembly at its twenty-eighth session, and it

might wish to speak in any subsequent debate on the matter.

68. The CHAIRMAN declared that the Committee had completed its consideration of agenda item 39. At its next meeting it would begin its consideration of agenda item 38, relating to the policies of *apartheid* of the Government of South Africa. He hoped that Mr. Touré would be able to preside.

The meeting rose at 5.45 p.m.