



UNITED NATIONS
GENERAL
ASSEMBLY



LIMITED
A/C.1/PV.777
2 November 1955
ENGLISH /

Tenth Session
VERBATIM RECORD OF THE SEVEN HUNDRED AND SEVENTY-SEVENTH MEETING
Held at Headquarters, New York,
on Wednesday, 2 November 1955, at 3 p.m.

Chairman: Sir Leslie MUNRO (New Zealand)

Effects of atomic radiation [59] (continued)

- (a) Co-ordination of information relating to the effects of atomic radiation upon human health and safety
- (b) Dissemination of information on the effects of atomic radiation and on the effects of experimental explosions of thermo-nuclear bombs.

Statements were made by:

Sir Percy Spender (Australia)
Mr. Naszkowski (Poland)

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EFFECTS OF ATOMIC RADIATION [Agenda item 59] (continued):

- (a) CO-ORDINATION OF INFORMATION RELATING TO THE EFFECTS OF ATOMIC RADIATION UPON HUMAN HEALTH AND SAFETY
- (b) DISSEMINATION OF INFORMATION ON THE EFFECTS OF ATOMIC RADIATION AND ON THE EFFECTS OF EXPERIMENTAL EXPLOSIONS OF THERMO-NUCLEAR BOMBS

Sir Percy SPENDER (Australia): The draft resolution before this Committee is one which the Government of Australia co-sponsors. Proposals for the collection and assembling of information on levels of radioactivity throughout the world and the consequences of such activity on mankind and his environment are proposals we consider to be of vital concern.

They deal with problems with which we have already become too familiar in recent years, and more familiar perhaps than we could wish; but for this reason all the more needful of close study.

The problems that we are facing have been the subject of diligent, indeed unremitting, examination over the past ten years by scientists in the fields of atomic and medical research. It is no reflection upon their energies or abilities that there is to be found an area of disagreement on some of the issues which are involved in the subject matter of this draft resolution. For example, there is a measure of disagreement on the likely long-term effects of discernible increases in the amount of radioactive material in the atmosphere we breathe, the food we eat, the water we drink or the elements with which we must come into contact in our daily lives.

It is perhaps because of this lack of unanimity that it becomes increasingly important that decisions should be taken at the political level. Since the achievements of science have armed the nations of the world with the most tremendous power yet unleashed, it is of surpassing importance that we should be sure in our decisions and it is equally important that the public in our respective countries should be satisfied with these decisions.

(Sir Percy Spender, Australia)

I know the reluctance of scientists themselves to have to make political decisions. People in the political arena are equally reluctant to have to inject their opinions and decisions into realms with which they are, in the nature of things, unfamiliar. But the facts are such that we cannot allow these questions to go unresolved for any length of time without laying ourselves open to charges from the people whom we represent that we are not shouldering our proper political responsibilities.

In this new era upon which the world has now entered -- an era whose extent and vastness of prospect is as yet uncomprehended -- it is surely our task to set the foundations for the procedures to be adopted in the future. For instance, we must be sure that we shall not create dangers whilst we are attempting to overcome others. Our planning must be of such a nature as to be capable of proper control.

At the same time the overwhelming consideration in all our deliberations must be to satisfy the people of the world that the action we are taking will forever ensure their safety. It is a maxim in our domestic law not only that justice should be done but that it should also appear to be done. In the present context, and by the same token, it is not sufficient for scientists to tell us that there is, from this or that activity in the atomic field, little or no danger; it is equally important that the public should be satisfied on these questions.

We are, in a sense, in a position to offer to mankind alternative prospects in the future. The first is one of vast, indeed limitless, horizons in which the forces of the atom may be properly marshalled for the good of human progress. The second could find us all peering into the pit of eternity.

The resolution seems to me a step in the right direction. By its adoption we shall have set our feet on the proper road and, if we continue to tread the path of international co-operation, I venture to hope that the prospect we shall come to see is the former one.

Radiation is not a new thing. Man has lived with it since his first ancestor appeared on the earth. The evolutionary processes which have brought mankind to its present stage of development have at all times been accompanied by processes of radiation which there is, so far as I am aware, no reason to regard as other than beneficent.

(Sir Percy Spender, Australia)

The sun has nurtured life on this earth, and the rays which men of science have harnessed have, in the main, been turned to the service of mankind. We have been concerned in this General Assembly, and will be further concerned, with the extension of this peaceful employment of the greatest power that man has yet been permitted to uncover through the patient and brilliant work of his fellows in the fields of scientific research.

But even if we come to worthwhile arrangements for the peaceful uses of atomic energy -- as we in our country, for our part, are determined that we will -- there will still emerge this besetting problem of the likely effects on all of us of the release into the world of particles of force whose potential for good or ill is as yet unproven.

I mentioned a few moments ago that man has been subjected to radiation in some form or another from the beginning of his evolution. That radiation has fallen into various categories, beginning with the rays of cosmic origin -- those coming to us from outer space and which presumably have been active since the very beginning of time.

At sea level these cosmic rays are of less intensity than at higher altitudes. Thus, at sea level, the amount of radiation which one individual might absorb from this source over a period of thirty years corresponds to about 1.5 units -- 1 1/2 roentgens of the measurement that the scientist uses. Susceptibility to cosmic radiation increases with altitude, reaching a value of approximately 3 units at a few thousand feet. I expect to make some further observations on this fact a little later. For the time being, however, I will continue with the different categories.

The second form of radiation to which man has been exposed throughout his history is the natural radiation from the soil and rocks of his environment on the surface of the earth. The radiation exposure produces a measurement, varying with the type of rocks in the particular area, from zero to about 3 units in the period of thirty years.

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The third form of radiation to which we are exposed in the natural order of things is that of potassium in the air body of our daily surroundings. Potassium, I am informed, is slightly radioactive, and the dosage in thirty years in the human body is of the order of one unit. Linked with this exposure is the abnormally higher exposure of miners working in potash mines located, in the main, in Eastern Europe.

Thus far I have drawn attention only to those forms of radiation which may be described as "natural", and which certainly at this stage of human development appear to be beyond any measure of control.

I now proceed to mention forms of radioactivity which man himself has introduced into his environment and which should, therefore, be the subject of some control.

In the first place, there are the X-rays, which were discovered in 1897, and certain other radioactive substances which, since 1920 or thereabouts, have been in fairly widespread use for medical, diagnostic and therapeutic purposes. It has been estimated by authorities, whose competence we have no reason to question, that in a country of highly-developed health and medical services the dosage to which we might be exposed in thirty years might amount to about one-half unit. In the ordinary course of events, we do not allow our citizens to become unduly exposed to radiation from this source. Even if there are no domestic laws governing such a matter, competent medical practice makes certain that individuals are adequately protected from excessive dosage.

Furthermore, the blessing which this discovery has vouchsafed to the human race in the early detection of disease has outweighed by far whatever minor risks may have been occasionally incurred by a lack of proper discretion in its employment.

We come then to the final form of radiation and the one which so far carries danger or threatened danger within it, namely the radiation deriving from the operation of nuclear reactors or nuclear weapons. Only since 1944 has man added this new source of radioactivity to his environment, and the best information at present available to us is that so far the total radiation which may have been added amounts to only a small percentage of the total radiation bombarding our bodies from the ordinary natural sources which I have enumerated earlier.

The new radiation of reactors or weapons, I have said, amounts to but a small percentage of the natural forms. Further, it decays and wastes away with time.

But it does reach man. It reaches him through the air he breathes, again through the food he eats and, in a very restricted area, through the dust or earth he touches.

What attitude are we to take on this problem? The best information is that so far, at least, there is no cause for immediate alarm. But are we justified in accepting this estimate without question? Our scientists are men of good faith and clearly with as much self-interest in this question as any of us, yet it seems

to me that we in this Committee have a responsibility to relieve them of their responsibility. We have a responsibility, I consider, to institute programmes of research and measurement which will guide us in all our future decisions and actions. I said in my speech on the peaceful uses of atomic energy that the Australian people and Government felt that now was the time to begin some co-ordinated world movement of research and assessment, even if only to provide bases of measurement in future years -- perhaps fifty or one hundred years hence. Whatever we do, posterity will thank us. If we do nothing, then history will judge us. What then can we do?

One hundred years may have to pass before we can assess the genetic effects which may result -- I do not say which will result -- from the forms of radiation which man himself has introduced. Those are the X-rays and the radiations of controlled reactors and uncontrolled weapons.

It is on this score that I say that immediate programmes of measurement throughout the world cannot help but be of value to the generations of the future. It is something that we cannot and indeed dare not neglect. It is imperative that we decide this matter soon.

And alongside such a programme we can institute a programme of research which could have immediate value to the peoples of the world. We could usefully begin at once a study by medical men and geneticists, of those areas where there is a naturally high incidence of radiation.

I suggest with humility that a beginning could be made in high altitude areas of the earth where there are communities which, presumably for generation upon generation, have undergone a greater exposure to cosmic radiation than their fellow men at lower altitudes.

Examination and correlation may provide us with useful information. I cannot hazard any guess whether these studies would indeed solve any problems for us, but it appears to me that, at this stage of human development, we cannot afford to overlook any avenue of study which may widen our knowledge on a subject which is indeed the key to the destiny of the human race.

Besides this study of dwellers in the high lands of the world, we could usefully begin parallel studies of the effects of natural radiation in areas where it has been shown to be of unusually high incidence; and again among the workers in potassium mining centres.

I am not unaware, in making these suggestions, of the disagreement which presently exists among the medical men and geneticists, on the likely levels at which radiation may produce genetic effects. The differences may not be resolved for many years.

But I do not accept that the disagreement is a sufficient excuse to set this problem aside. On the contrary, it is surely our task to decide this matter if we can -- not to say yea or nay -- but to see that every step that can be taken to look after the people is indeed taken.

We in Australia consider that we have special responsibilities in these matters. We have a responsibility not only to our own people but to the peoples of our island dependencies in the Pacific, a responsibility which we have at all times been most careful to discharge. In their interests we must see that such studies as may be necessary are undertaken to establish beyond any real controversy and so as to satisfy public opinion, the extent of the hazards of radiation from nuclear explosions.

Other countries have a similar responsibility, and I do not suggest that any one of them is less aware of this responsibility than we are.

The Governments of the United Kingdom, New Zealand, France, the United States and Australia, are associated in the South Pacific Commission, which might well be a body which could undertake a regional research programme. We ourselves will readily take up any proposals for regional research projects.

Perhaps only a relatively few countries have, however, the necessary scientific manpower to carry out the required measurements. Only about half the countries of the world have the necessary electronic resources to manufacture and calibrate equipment.

Regional programmes, co-ordinated within the United Nations, may, for the time being at least, present the best answer, but these regional programmes, it should be remembered, would need to cover the whole world, including the remote islands of the Pacific and Indian Oceans and the north and south polar regions.

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(Sir Percy Spender, Australia)

As to south polar research, the Government of Australia is in a position to offer to the world under proper arrangements the results of constant measurements now well established and of a continuing nature at our Antarctic base at Mawson on the mainland of the Antarctic continent. Perhaps a comparison of our results with those of nations undertaking similar measurement programmes in the north polar regions will disclose information of more than ordinary interest to the scientists who are concerned with the eventual distribution of the atomic clouds released by nuclear explosions.

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I am not now dealing with secrets. I simply envisage the possibility of these atomic clouds being slowly spun away along the axis of the earth. Perhaps Polar research on the northern and southern tips of our world will provide a key to our better understanding of so many things that, so far as I can see, now puzzle the men of science.

Co-operation and co-ordination can help in many ways. Atmospheric radioactive studies can give valuable aid to our meteorologists. At the present time, our weather forecasters trace air movements by the measurement of thermodynamic properties such as temperature, pressure, humidity, wind velocity and direction. World-wide measurements of atmospheric radioactivity would add another weapon to the meteorologists' armoury. In view of the importance of meteorology to the world's agriculture and aviation, radioactive measurements, freely available, could be of immense value to the world's weather forecasters and researchers. That, perhaps, is something on which we might consult the World Meteorological Organization.

In these relatively brief remarks, I cannot hope to have covered the immensity of this topic. Indeed, if I had attempted to do so, I should have been trespassing on eternity. I hope, however, that I have been able to show that we in Australia regard this problem of radiation as a world problem, and one intimately bound up with the future of mankind. We cannot hope here in these councils to solve the problems which it raises, but we can make a worthwhile beginning.

We believe that two important initial arrangements are vital. First, we should band together to undertake at once continuing studies, at as many points as possible, of the present and future level of radiation; and, second, we should undertake **research** projects, beginning immediately, on the effects of natural radiation of higher than **normal** incidence in those parts of the world where it is known to exist. If we endorse these propositions, we shall perhaps have set ourselves a course **which, by its results,** will prove to have been born in wisdom and nurtured in international good will. We shall have given our scientists a sign that we recognize their problems and that we are prepared to take over from them the political burdens born of the great discoveries of our time.

I reserve for a more suitable occasion my comments on the amendments which have been submitted to the draft resolution.

Mr. NASZKOWSKI (Poland) (interpretation from French): The problem of the effects of atomic radiation is closely linked to that of the peaceful uses of atomic energy. Indeed, if the efforts of scientists all over the world are focussed on ascertaining the effects of atomic radiation, that may well facilitate the more rapid and extensive utilization of atomic energy for peaceful ends.

In fact, the problem of radiation and its effects is older than the problem of atomic energy. The discovery of radioactivity and the effects thereof dates from the end of the last century. It is linked to the names of such eminent scientists as Becquerel, Roentgen, de Broglie, Pierre Curie, and my own compatriot, Marie Curie-Sklodowska, who laid the foundations of the modern conception of the structure of matter. In their research, these scientists were guided by a noble aim: to elicit the secrets of nature and to harness them in the service of mankind.

Owing to the harnessing of atomic energy, the problem of radioactivity has assumed a novel importance for mankind, both from the positive and creative point of view and from the point of view of the destructive capacities implicit in this discovery.

The problem has two different aspects. On the one hand, in learning the precise effects of radiation and its influence on matter, we may be able to utilize this phenomenon for the well-being of man, through the use of radioactive isotopes in medicine, agriculture, chemical processes, industry and so forth. On the other hand, preventive means must be found to ensure that radiation -- this indivisible element of the technological processes bound to atomic energy -- does not exercise a harmful effect on the human body, does not contribute to its destruction.

A good part of the proceedings of the biological and medical section of the Geneva Conference on the Peaceful Uses of Atomic Energy was devoted to problems of radiation and its effects on living organisms. Thus, that section discussed the problem of the protection of health against the harmful effects of radiation and the problem of the creative use of radioactive isotopes in diagnosis, therapy, and so forth. Papers presented to that section vigorously emphasized the dangers involved in radiation and the need to establish some procedure for the exchange

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of information concerning the protection of the health of workers, the effect of radiation on living tissues, on the nervous system, and so forth. The Secretary of the International Commission on Radiological Protection presented a report on the present state of knowledge in this field, and he pointed out that a great number of problems remained unsolved. A representative of the International Labour Organisation submitted a document on the protective measures proposed by that Organisation. Soviet scientists presented the results of experiments on the protection of health which they had carried out in laboratories and industrial enterprises of the Soviet Union. Japanese scientists spoke at some length on the effects of atomic radiation. The report of Professor Muller of Indiana University also dealt with this problem.

The Geneva Conference demonstrated the vast importance of international co-operation in this field. This is a need which was also emphasized by the President of the Geneva Conference, Mr. Bhabha. When he addressed this Committee Mr. Bhabha drew particular attention to the fact that the Geneva discussion of the genetic effects of radiation had demonstrated that our knowledge in this field presented great gaps and that there was need of a great amount of research work.

While we are fully conscious of the value of scientific research on atomic radiation, we must stress with some vigour that even the most fruitful scientific research will not be sufficient to afford absolute protection of mankind against the effects of radiation unless specific measures are taken in the field of international relations.

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While the phenomenon of radiation is relatively easy to study and master in laboratories and in industrial establishments where technicological procedures controlled by man are undertaken, where complete protection can be afforded the personnel, and where insulation can be arranged for, on the other hand experimentation with and testing of atomic and thermo-nuclear weapons, which bring about great concentration of radioactivity without any possibility of regulating or controlling the atmospheric conditions or foretelling the possible effect, direct or indirect, of such radiation, means that this latter radiation may entail destructive effects which are quite impossible to estimate.

The testing of thermo-nuclear and atomic bombs has stirred a great deal of anxiety throughout the world. This question has already been discussed in the parliaments of certain countries, and many statements by political leaders have been made on the topic. The response of the peoples of Asia was particularly vehement, if I may say so, because they live on the continent where the first atomic bombs were dropped at the end of the Second World War and where the population has already had some direct experience of the effects of atomic weapons.

The historic conference at Bandung pronounced itself in favour of the discontinuance of the testing of weapons of mass destruction, but this question is not limited in its effects to Asia. Many scientists have already drawn attention to the dangers of radiation. The appeal of Bertrand Russell and a group of fellow scientists has already been cited here. I should like to recall also that eighteen Nobel prize winners, including such eminent physicists as Drs. Otto Hahn, Muller, Max Born, Arthur Compton and others, made an appeal on 15 July last addressed to all Governments of the world and asking them to take measures for the absolute banning of war. These scientists emphasized that at the present stage of scientific development, and in view of the existence of atomic and thermo-nuclear weapons, warfare was pregnant with dreadful dangers for mankind. These Nobel prize winners commented:

"It is with pleasure that we have devoted our lives to the service of science. We are convinced that this is the path to follow in order to bring a happier life to man. We note with horror, however, that the same science has given to mankind the ways and means of self-destruction. Total military utilization of the weapons available today may contaminate the earth by radioactivity to the point where entire nations may be annihilated."

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Debates in the British, Italian and Indian Parliaments, the debate in the Trusteeship Council here, initiated by the complaints of the population of Bikini, and the resolutions of the World Peace Movement have shown that the anxiety brought about by the effects of radiation is ubiquitous and that it has affected all continents. The Indian memorandum requesting the inclusion of this question in the agenda refers clearly to this situation. There is no doubt that the anxiety of public opinion both in the United States and in other countries -- an anxiety which is due to the effects of radiation which, in turn, is caused by the testing of hydrogen and atomic bombs -- is one of the causes underlying the presentation of the United States proposal. The explanatory memorandum attached to the United States proposal for the inclusion of this item in the agenda says so in as many words. However, it would appear that some statements, and in particular that made by the representative of the United States, seek to reassure public opinion with regard to the dangers implicit in uncontrolled, high intensity atomic radiation. The representative of the United States said that scientific information at the disposal of the United States Government would indicate that nuclear tests subject to appropriate control measures did not constitute a serious danger to human life. This affirmation is surely correct, but solely when conditions obtain in which sufficiently thick layers of insulating material or other means of protection absorb harmful radiation -- in other words, only when atomic radiation is used for peaceful ends, and not otherwise.

It is difficult to speak of absolutely adequate protective measures when atomic or thermo-nuclear explosions take place. It is impossible to insulate or protect against harmful rays for a sufficiently long time and for a great number of persons within several hundred miles of ground zero of the explosion. In such cases it is possible only to devise protective measures adequate for the personnel employed in carrying out these test explosions, and none other.

Representatives will know of the tragic fate that befell the Japanese fishing vessel Fukuryo Maru, which was sailing rather far from the place where an explosion had occurred. Members of its crew suffered grave bodily harm as the result of fall-out of radioactive dust, and one of the fishermen died after six months of agony. The history of this hapless ship and of the disease and sufferings of its crew have been described in detail by Professor Tsuzuki at the Geneva Conference.

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The tests at Bikini have, moreover, shown that it is difficult to control radiation when explosions take place. These experiments have established that when thermo-nuclear explosions take place there is a great danger of radioactivity at large distances -- 240 to 250 kilometres -- which which may remain dangerous for months at a time. A new harmful effect connected with the explosion of thermo-nuclear weapons has been the radioactive dust swept very high and scattered by winds -- which cannot be controlled by man -- to places hundreds of miles away. It is also well known that after the Bikini explosion on 26 April 1954 radioactive rain fell on Japan between 3 May and 6 May, and for a long time radioactive dust remained in the area and was definitely harmful to plants, animals and man.

The consequences of the Hiroshima and Nagasaki explosions have proved that it is impossible to foresee the effects of uncontrolled radiation. The descriptions of the effects of these explosions was offered to the Geneva Conference by Professor Tsuzuki and, partly and indirectly, by Professor Muller. Again, American and Japanese data would indicate that after an atomic explosion deadly radioactive effects due to neutron radiation reach a radius of one kilometre, and those due to gamma rays two kilometres. Even today, the exact extent of suffering and casualties caused by the explosions of Hiroshima and Nagasaki is not fully known. Many are those who today are still suffering from wounds and other disabilities caused at that time. The influence of this radiation on plants has not been fully studied. It is evidently impossible to foresee all the consequences of radiation for the descendants of those who survived the effects of the explosion but were, nevertheless, exposed to doses of radiation which are as yet unknown.

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Some conclusions are alarming in nature. They are to the effect that the non-harmful consequences of radiation may have some influence on the descendants of those who were subjected to it, and if immediately succeeding generations are exposed, the effects might be cumulative and fraught with disastrous consequences.

The Polish delegation considers that our discussions on the dissemination and co-ordination of international exchanges of information concerning the effects of atomic radiation on the human body should keep in mind not only a narrow aspect of the problem, as some representatives would like us to do -- for example, evaluation of the levels of radiation throughout the world -- but should also go beyond this; we should see all aspects of the problem, this problem which is of vital importance to mankind. Even as we discuss the exchange of information on the effects of radiation, in order to protect men against disease, suffering and death which might be the result of such radiation, we should remain aware of the fact that the main obstacle which prevents the absolute safeguarding of man against the harmful effects of radiation is the explosions which occur when atomic and thermo-nuclear weapons are tested. Our Committee would be remiss in its duty if it failed to draw attention to this aspect of the problem. Our task will not be fulfilled as long as we do not reach agreement on the absolute and controlled prohibition of the production, possession and use of atomic and thermo-nuclear weapons.

The first stage might well be, as suggested by the representative of the Soviet Union, an undertaking for the discontinuance of the testing of atomic and thermo-nuclear weapons. This should not be construed as meaning that we should not even now reach some agreement on exchanges of information on the effects of atomic radiation. We consider such co-operation indispensable, and my country is prepared to take active participation in any work which may be done in this field.

Polish science fully appreciates the importance of these problems. During our debate on the previous item on our agenda we told the First Committee about the results of research carried out for more than three years in the Institute of Oncology in Gliwice, with the co-operation of Professor Zlopowsky and

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Dr. Jasinski, who sought to establish the maximum tolerable levels of X-rays and gamma rays for the human body. I may add that blood tests were made on 145 members of the staff of this Institute. These tests have led to the conclusion that a dose of 0.01 r. per day should not be exceeded, and this maximum dose derivable from our experiments is far below the maximum levels which are generally considered as tolerable.

X-rays have likewise been utilized in Polish research institutes, in industry, and in higher educational institutions for research in micro and macro structure. A number of metal-working enterprises and engineering industries have used X-rays in order to locate internal defects in metal objects and within wells. At the Electro-Technical Institute of Warsaw, gamma rays from cobalt are used for locating defects. This, of course, does not exhaust the possibilities of applying radioactive rays in industry and business. The Institute of Nuclear Studies recently set up in Poland has undertaken research into the applicability of radioisotopes. The Commission of Medical Science of the Polish Academy of Sciences has sponsored research concerning the effects of ionizing radiation on the human body, focusing particular attention on the protection of workers employed in laboratories and industry, and on the utilization of radioisotopes in diagnostic and medical therapy.

International co-operation in the study of the effects of radiation should not be confined to exchanges of information on the effects of atomic radiation as such. It should likewise cover exchanges of experiments and experience as regards prophylactic and therapeutic procedures with regard to radiation sickness and other effects of radiation. We should also deal with standards for protective devices and, so far as possible, place at the disposal of all nations such knowledge as has been accumulated concerning the effects of radiation.

We should not regard the exchange of information on the effects of radiation as being divorced from the whole of the problem of atomic energy. The well-being of mankind requires perseverance in the work in this field in order to discover, master and utilize new sources of energy, of radioactive

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isotopes, for diagnosis, medical therapy, technology, etc. We cannot inhibit work and research for the peaceful uses of atomic energy because of the dangers implicit in radiation. On the contrary, we must accelerate the pace of research on protection against the effects of radiation so as to expand the possibilities and potentialities of the peaceful uses of atomic energy. That is why we feel that exchanges of information, which were partly inaugurated at the Scientific Conference at Geneva, should take place between all States according to an established procedure.

As regards the various precise proposals in connexion with an international exchange of information on the effects of atomic radiation, the Polish delegation supports the proposal of the delegation of the United States that a committee should be established to study the effects of radiation. In line with the point of view which I have outlined on the tasks and objectives of such co-operation, we tend to believe that the field of action of that committee should be expanded so that the exchange of information should also cover research on protective devices and therapy. This committee, in our opinion, should be attached to the United Nations. Its composition should be in close conformity with the principle of equitable geographic representation to a greater extent than the draft resolution proposes.

We also consider that all countries, without exception, should have every opportunity of co-operating with the proposed committee in view of the fact that these problems are of interest and concern to all mankind. That is what the Soviet Union amendments will bring about, and these amendments have the support of the Polish delegation. The amendments proposed by India would likewise eliminate discriminatory restrictions concerning the co-operation of various States with the committee.

The Polish delegation is of the opinion that it is important to define from the outset the proper direction and field of action of the committee. This should be done bearing in mind the general objectives which should guide us in this matter. If we were to act in this manner we would be opening a new and important chapter in international co-operation for the greater well-being of all States and all peoples alike.

Mr. Krishna MENON (India): My intervention at this stage will be confined to introducing the various amendments which stand in our name. I would refer the Committee to document A/C.1/L.138, which is the substantive draft resolution now before the Committee, standing in the name of a number of countries and originally introduced by the United States and the United Kingdom. I am not at the present moment desirous of arguing these amendments, but in order that the Committee may be better seized of their import and be able to give them the consideration which every speaker who has spoken after the amendments were put in would give, we would like to point out that these amendments refer to certain aspects of the draft resolution where we think alteration and improvement is desirable.

I should like to say here, however, that there are a number of ideas which render the draft resolution one that covers both the sub-items of the item before us, both in the paragraphs of the preamble and in a number of the operative paragraphs. So far as the amendments are concerned, some of them refer to the proposed committee.

These amendments refer first of all to the character and the composition of the committee and to its functional aspect. We think that the original suggestion made and implied by the United States is what is more acceptable. In the observations made by the representative of the United Kingdom yesterday, the words "scientific committee" were introduced for the first time. In his statement on 31 October, the United States representative said:

"We have given much thought to the best way to accomplish this. We shall propose that this task be assigned to an ad hoc technical committee of qualified scientists nominated by Governments."

(A/C.1/PV.773, p. 6)

My delegation does not for one moment think that there should be any argument about the nomination of scientists for this committee, but we do not think it should be labelled "scientific committee" for reasons which we shall give when we move these amendments. In his statement yesterday, the representative of Canada also referred to the committee. He said:

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"...the committee envisaged by Mr. Wadsworth and by the Government of his country is to consist of a qualified group of scientists, nominated by governments...We therefore would like it understood that the scientific representatives on the committee could feel free to call in alternates and consultants as necessary, and my friend, Mr. Wadsworth, nods his head in approval." (A/C.1/PV.775, p. 26)

The Canadian representative went on to say:

"It is suggested, quite appropriately in our view, that the special committee will undertake what will in effect be a survey." (Ibid.)

We are not quarelling about words, and from what has been said in the speeches and in the observations made today, particularly the very informative statement of my colleague from Australia, it is quite clear that this committee, even though it may not at present reach the dimensions of a special organ, as was hinted this morning by the representative of Peru, should not be a scientific committee with all the connotation that those words imply. That it would be composed of scientists appears in the draft resolution.

Then, our amendments refer to the extension of this committee, because these are matters of concern not merely to those countries which at present have the equipment or the knowledge of these matters, but to the entire world. Therefore, we should like to see its constitution wider than it is, and that is the purpose of one of our amendments.

On the functional aspect, we believe that this committee should be on the same basis as the Advisory Committee and the committee which was proposed in the last draft resolution adopted by the First Committee, that is to say, it must be enabled to function and, therefore, the Secretary-General should function in this committee and the committee should work in co-operation with him. In other words, the function of the Secretary-General should not be merely to provide stationery, an office, a secretary and so on, but it should be a committee that functions with the principal organ of the United Nations, namely, the Secretary-General.

The next set of amendments, though they appear in so many places, relate to another matter about which I feel sure the Committee will feel sympathetic. We are here dealing with a problem from which no part of the world can be excluded.

(Mr. Krishna Menon, India)

Therefore, we have suggested that wherever there is a limitation to Member States, to specialized agencies, to groups and so on, this should be left out, even though nothing else is specified. The function of the committee is to receive information, and information, from wherever it comes, is necessary. One does not want to know the effect of cosmic rays in the high levels of Tibet, for example, and we are not introducing in these amendments any factors which are not relevant or which have no bearing upon other subjects and other items. Therefore, the amendments have been so drawn up as not to make difficulties in this way but merely to leave the question in general terms so that the committee can collect whatever information is necessary from all available sources. We subscribe to the view expressed this morning by the representative of Peru, and we are in favour of all possible flexibility in this matter. Therefore, it is not necessary even to refer to the political **appellation** of States in this matter; we are more concerned with territories, with areas and with countries.

We would even be willing to go so far as to say that the collection of material should be on a world-wide basis. That is all we want in this connexion. We do not see any relevance in introducing discrimination in this matter.

Thirdly, once the position of the Secretary-General is placed in the way we have suggested, he would issue the documents on behalf of the committee rather than have them transmitted to him.

Our other amendments are consequential upon what we have said, with the exception of the last two. We see no reason why special treatment should be accorded to the Japanese Government in this matter. On the other hand, it should be specifically laid down that the Secretary-General should convene this committee, otherwise the committee will remain in suspended animation. Who is to bring them together? Therefore, that is again a purely practical approach; the Secretary-General should take steps to convene the committee, and so on.

The last amendment suggests the normal procedure of transmitting to this special committee, whatever it may be called, the proceedings of this General Assembly.

(Mr. Krishna Menon, India)

I have already referred to the observations made by my colleague from Canada in support of what I have been saying, and I find that in regard to the flexibility we ought to afford to the committee, not only the representative of Peru but also the Soviet representative agrees. The representative of the Soviet Union said in his statement:

"Questions of protection from the dangerous effects of radiation and methods of treatment of diseases caused by radiation are also highly important." (A/C.1/PV.775, p. 41)

I also wish to refer to the following observations made by the representative of Sweden when he spoke in the Committee on Monday:

"In order to get a full picture of what has already been and is being done in different countries, reports from various Governments and other national bodies, or from individuals, should be assembled, reviewed and published." (A/C.1/PV.773, page 17)

It will be recalled that both the representatives of the United Kingdom and the United States referred yesterday to the different procedures that obtain in different countries. Therefore, this degree of flexibility is necessary.

These are the purposes of the amendments and they are put forward in the hope that it will be possible to incorporate the substance of them in the main draft resolution so that we can go forward to a unanimous decision. As I said at the beginning, it was not the desire of my delegation to work for or to put forward a separate draft resolution on this item. The suggestions that are made are contained in document A/C.1/L.138, and for the convenience of representatives my delegation has circulated an unofficial text which gives the resolution as it would be if it were amended according to the suggestions we have made.

These are the main amendments that have been introduced. There are a few others. I would therefore request my colleagues in this Committee to give them the objective and serious consideration which we think they deserve.

The CHAIRMAN: There are no other speakers on the list. The Committee will recall the fact that I have proposed that the list of speakers be closed by 6 p.m. today, and I trust that members will inscribe their names before that time.

The meeting rose at 4.20 p.m.

