
FINAL RECORD OF THE SEVEN HUNDRED AND SEVENTY-NINTH MEETING

held at the Palais des Nations, Geneva,
on Tuesday, 14 March 1978, at 10.30 a.m.

Chairman: Mr. Gerhard Herder (German Democratic Republic)

PRESENT AT THE TABLE

<u>Argentina:</u>	Mr. F.J. DÁVILA
<u>Brazil:</u>	Mr. I. MASTROGIOVANNI
<u>Bulgaria:</u>	Mr. P. VOUTOV Mr. G. GAVRILOV Mr. I. PETROV Mr. I. SOTIROV
<u>Burma:</u>	U TINT SO
<u>Canada:</u>	Mr. J.T. SIMARD
<u>Czechoslovakia:</u>	Mr. E. ZÁPOTOCKÝ Mr. J. JIRUSEK Mr. V. ROHAL-ILKIV
<u>Egypt:</u>	Mr. F. EL IBRASHI Mr. A. ABOUL KHEIR
<u>Ethiopia:</u>	
<u>German Democratic Republic:</u>	Mr. G. HERDER Mr. M. GRACZYNSKI Mr. M. RAKAU
<u>Germany, Federal Republic of:</u>	Mr. G. PFEIFFER Mr. J. POILMANN Mr. K. HANNESSCHLAGER
<u>Hungary:</u>	Mr. M. DOMOKOS Mr. I. KORMENDY Mr. A. LAKATOS
<u>India:</u>	Mr. C.R. GHAREKHAN Mr. S.T. DEVARE
<u>Iran:</u>	Mr. M. FARTASH Mr. D. CHILATY

PRESENT AT THE TABLE

Italy:

Mr. N. DI BERNARDO

Mr. H. MORENO

Mr. C. FRATESCHI

Japan:

Mr. M. OGISO

Mr. T. SAWAI

Mr. Y. NAKAMURA

Mr. M. OBATA

Mexico:

Mr. A. GARCIA ROBLES

Miss A. CABRERA

Mongolia:

Mr. D. ERDEMBILEG

Mr. L. ERDENECHULUUN

Morocco:

Mr. S.M. RAHHALI

Netherlands:

Mr. R.H. FEIN

Mr. A.J. MEERBURG

Nigeria:

Mr. O. ADENJI

Mr. S.T. ADAMU

Pakistan:

Mr. K. SALIEM

Peru:

Mr. J. AURICHI-MONTERO

Poland:

Mr. A. OLSZÓWKA

Mr. H. PAĆ

Mr. M. KRUCZYK

Romania:

Mr. V. TUDOR

Mr. G. TINCA

Sweden:

Mr. G. HAMILTON

Mr. L. HORBERG

Mr. U. ERICSSON

Mr. U. REINIUS

PRESENT AT THE TABLE

Union of Soviet Socialist
Republics:

Mr. V.I. LIKHATCHEV
 Mr. N.V. PESTEREV
 Mr. P.F. SHAKHOV
 Mr. L.A. NAUMOV
 Mr. Y.V. KOSTENKO
 Mr. E.D. ZAITSEV
 Mr. A.I. TIOURENKOV
 Mr. G.A. SHEVCHENKO
 Mr. I.P. PASECHNIK
 Mr. O.K. KEDROV

United Kingdom:

Mr. D.R. ASHE
 Mr. I.R. KENYON

United States of America:

Mr. A.S. FISHER
 Mr. A.R. TURRENTINE
 Mr. A. AKALOVSKY
 Mr. J. FILSSON
 Mr. R. HAGENGRUBER
 Miss B. MURRAY

Yugoslavia:

Mr. D. DJOKIĆ

Zaire:

Special Representative of
the Secretary-General:

Mr. Risto HYVARINEN

Alternate Representative of
the Secretary-General:

Ms. A. Segarra

Communiqué of the meeting

The Conference of the Committee on Disarmament today held its 779th plenary meeting at the Palais des Nations, Geneva, under the chairmanship of H.E. Ambassador Gerhard Herder, representative of the German Democratic Republic.

The representative of Sweden (H.E. Ambassador Gustaf Hamilton) made a statement in which he commented on the report of the seismological Ad Hoc Group transmitted to the CCD on 9 March 1978. He said that his delegation considered the report to be a most valuable contribution to the efforts to establish an international monitoring system under a CTBT. He pointed out that the report clearly expressed the need to obtain practical experience through the conduct of an experimental exercise. He stressed the importance of taking further measures in this matter, and he therefore proposed that the CCD decide to maintain the Ad Hoc Group and to give it a new mandate. He introduced a Swedish draft proposal for such a mandate. Mr. Hamilton reiterated the willingness of his Government to establish, finance and operate an international data centre. Sweden would also be prepared to set up and operate a temporary data centre for the experimental exercise recommended in the report of the Ad Hoc Group. He said that this offer was based on the assumption that a CTBT would comprise a monitoring system. In conclusion he expressed the hope that the decision on a new mandate for the Group could be taken shortly.

The representative of the People's Republic of Bulgaria (H.E. Ambassador Petar Voutov) made a statement in connexion with the proposed draft convention on the prohibition of the production, stockpiling, deployment and use of nuclear neutron weapons (CCD/559), sponsored by eight socialist countries.

The representative of the People's Republic of Bulgaria stated that the introduction of the draft convention was in accordance with United Nations General Assembly resolutions, as well as with the categorical stand of world public opinion against the neutron bomb. He underlined the military, political, economic and psychological implications, if the production of nuclear neutron weapons was started. The apprehensions about the very dangerous character of this new type of nuclear weapon, as well as the increased possibility of a nuclear war, were also noted.

Ambassador Voutov said that the proposed draft convention was a good basis for a constructive discussion and consequent elaboration of a mutually acceptable agreement, which would fill a gap in the disarmament field.

Therefore, Ambassador Voutov said, it was difficult for his delegation to understand the negative reaction of the United States delegation to the proposed draft convention. The reaction of the representative of the United States was unfounded and incompatible with the constructive atmosphere prevailing in the Committee.

The head of the Bulgarian delegation expressed the hope that the Committee would appreciate the initiative of the socialist countries, concerning the prohibition of the neutron bomb, that would prevent a possible new direction in the nuclear weapons arms race.

Such an attitude could enable the CCD to add a new important achievement to its work on the eve of the special session of the General Assembly.

The representative of the Netherlands (H.E. Ambassador Richard H. Fein), made a statement on the question of a comprehensive nuclear test ban. In particular, he expressed his satisfaction with the work of the Ad Hoc Group of Scientific Experts to Consider International Co-operative Measures to Detect and Identify Seismic Events. Ambassador Fein made some comments on the different parts of the seismic system as designed by the experts, i.e. the seismic observatories, the use of the WMO communication system and the necessary international data centres to process the seismic data.

He took note with great interest of the Swedish offer to establish an international data centre in Sweden.

The representative of the Netherlands stressed the need for a decision by the CCD to extend the mandate of the Ad Hoc Group of seismic experts for further technical development of the proposed seismic system, and supported, in this connexion, the Swedish proposal contained in document CCD/562. He stated that he would revert to other matters before the Committee in due course.

The representative of the United Kingdom of Great Britain and Northern Ireland (H.E. Ambassador D.R. Ashe) restated his Government's view of the importance of the CCD, the principal forum for negotiating measures of disarmament. He went on to regret that the CCD had been used by the Soviet Union as a platform for one-sided propaganda. He referred to the proposal to ban enhanced-radiation weapons, which had been advanced at a time when the Soviet Union was going ahead with the deployment of far more devastating weapons of its own. The CCD had a reputation as a serious expert body for the consideration and negotiation of disarmament agreements. That

reputation should be very carefully preserved. He hoped that the Committee would not hear much more about the proposed draft treaty, but that, instead, it would receive serious proposals for balanced and realistic steps towards the control of the nuclear arms race.

The representative of the United States of America (H.E. Ambassador Adrian S. Fisher) made a statement commending the work of the Ad Hoc Group of Scientific Experts to Consider International Co-operative Measures to Detect and Identify Seismic Events. He also endorsed the recommendation to conduct an experimental exercise of an international exchange of seismic data, which the Group made in its final report. Ambassador Fisher said that the United States was prepared to extend the mandate of the Ad Hoc Group for the purpose of planning and carrying out such an exercise.

The following document was submitted for the consideration of the Committee, "Letter dated 9 March 1978 from the Chairman of the Ad Hoc Group of Scientific Experts to Consider International Co-operative Measures to Detect and to Identify Seismic Events to the Co-Chairmen of the Conference of the Committee on Disarmament transmitting the Final Report of the Ad Hoc Group" (CCD/558).

The delegation of Sweden presented the "Terms of reference for the continued work of the CCD Ad Hoc Group of Scientific Experts to Consider International Co-operative Measures to Detect and Identify Seismic Events" (CCD/562).

The next plenary meeting of the Conference will be held on Thursday, 16 March 1978, at 10.30 a.m.

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The CHAIRMAN: Before calling on the first speaker, I would like to make an announcement. The Co-Chairmen have requested me to inform the Committee that they have given their consent to the circulation of the report of the Ad Hoc Group of Scientific Experts to Consider International Co-operative Measures to Detect and Identify Seismic Events as an official document of the CCD.

The document has already been circulated, and it is my understanding that the Committee will have to study this document in order to take action on it at an early date.

I now call upon the first speaker on my list.

Mr. HAMILTON (Sweden): Today the report of the seismological Ad Hoc Group has been presented to the CCD, and I will first give our comments on that important document. I will then introduce a Swedish working paper, CCD/562, which contains draft terms of reference for the continued work of the Ad Hoc Group. Finally, I will address the question of data centres as important elements of a global monitoring system under a CTBT.

The Swedish delegation finds the report of the Ad Hoc Group to be a most valuable contribution to the efforts to establish a monitoring system acceptable to all. The report is the result of considerable work carried out by scientific experts from a number of countries around the world. The Swedish delegation has much appreciated the co-operative and constructive way in which the work has been conducted. We feel that the open and penetrating technical discussions have considerably increased understanding of the verification problems among the countries which have been engaged in this work. Important contributions have been made by scientific experts from invited countries non-members of the CCD.

The report presents a consensus view among the experts on international co-operative measures to be undertaken for the detection and identification of seismic events. It states that there are three basic elements of such international co-operative measures; first a global network of some 50 seismological stations having a suitable geographical coverage. The stations should be equipped with highly sensitive instruments and be capable of the routine and rapid reporting of data not only for the detection and location but also for the identification of seismic events. Second, a fast international exchange of these data over the global telecommunication system of the World Meteorological Organization, and, third, special international data centres for the detection and location of seismic events and for the collection and compilation of identification data. The general technical recognition of these elements will certainly facilitate the further discussion of the establishment of an international monitoring system. Sweden has long been advocating the rapid establishment of such a system.

(Mr. Hamilton, Sweden)

The Ad Hoc Group also presents estimates of the capabilities of networks of seismological stations to detect and to locate seismic events and to obtain identification data. These estimates show that the present seismological capability is significantly lower in the southern than in the northern hemisphere. To obtain a high monitoring capability in the southern hemisphere also, further improvements have to be made by establishing additional highly sensitive stations in that part of the world.

Such estimates contain some elements of uncertainty that can be verified only by practical experiment. In our view, however, the results support our earlier conclusions that a monitoring system based primarily on presently operating stations would, at least in the northern hemisphere, provide a high degree of deterrence against clandestine explosions and a high ability to counteract unfounded suspicion that might be created by natural earthquakes.

The report of the Ad Hoc Group presented to us today is to a considerable extent based on theoretical considerations. The next obvious step is to obtain practical experience of how components of such a system should be arranged in practice. This brings me to the next point of my intervention today, the continuation of the Ad Hoc Group. The need to obtain practical experience through the conduct of an experimental exercise is clearly expressed in the report. In this connexion, we also take note of the interesting proposal by the Japanese delegation on 3 March 1977 (CCD/PV.733) to conduct an experimental exercise, and of the Japanese offer on 2 March 1978 (CCD/PV.776) to host an expert meeting as part of the preparation for such an experiment.

We believe it to be a most urgent task to test and to try out in practice a system of international exchange of seismological data. Indeed we see this as a natural continuation of the more theoretical work of the Ad Hoc Group. The experiences drawn from such experiments will certainly be indispensable for the further elaboration of an international monitoring system under a CTBT. The main purpose with the monitoring system is to enable also States which have limited resources as regards detection seismology to make an independent assessment of globally collected and pre-analysed data. In order to ensure that a CTBT will be generally adhered to, it is essential that all parties -- when the treaty enters into force -- are given equal opportunities to verify by such means compliance with the treaty. All parties should be ensured full access to all relevant data and information supplied in the framework of the international seismological monitoring system.

(Mr. Hamilton, Sweden)

It is important that the CCD now take further steps in this matter. The Swedish delegation therefore proposes that the CCD decide as soon as possible that the Ad Hoc Group should be maintained and continue its work under a new mandate. In working paper CCD/562, which I will now introduce, Sweden has tabled a draft proposal for such a mandate.

The suggested new terms of reference are similar to those which guided the earlier work of the Ad Hoc Group. The main difference is that the Ad Hoc Group in its continued work would study the more practical and operative aspects of the implementation of international co-operative measures. As outlined in the working paper, the Ad Hoc Group would study the over-all functioning of a system for the exchange and processing of seismic data relevant to test-ban monitoring between a number of globally distributed stations and seismological data centres. Furthermore, the technical arrangements studied during the experiments should not prejudice the final arrangements for a monitoring system, which obviously must be the result of the forthcoming multilateral CTB negotiations. The work should be purely scientific, and the Group should not assess the adequacy of the system for verifying a comprehensive test ban.

The composition of the Ad Hoc Group in its continued work would remain unchanged. We hope, however, that experts from additional CCD member States would participate. The facilities and data needed for the experiments would be contributed by participating countries on a voluntary basis, and no international funding is foreseen for this experiment. The Ad Hoc Group should work as quickly as possible and present a report to the CCD not later than during the Spring session of 1979. In this context, I must again remind you of the General Assembly resolution in which the three nuclear-weapon States involved in the trilateral talks regarding the CTB are urged to expedite their efforts and to transmit the results to the CCD. In the same resolution, the CCD is requested to take up the matter with the utmost urgency with a view to the submission of a draft treaty to the special session. It is a matter of deep concern to my Government that such multilateral negotiations in the CCD have not yet started.

I will now turn to one important component of a global monitoring system, namely, international data centres, which will be of importance also for practical experiments.

International seismological data centres are principal components of the international co-operative measures considered by the Ad Hoc Group of seismic experts. The essential task of the data centres would be to detect and locate

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seismic events from reported data and to collect and compile data for event identification. The final assessment of all data relevant to the monitoring of a CTBT should, however, be made by the individual States parties to the treaty.

The international data centres would enable States parties to a CTBT to get easy access to adequate data and thereby facilitate their active participation in the verification of a treaty. It will be essential that all parties to a CTBT have full confidence in the impartiality and proper functioning of the data centres. Therefore, to ensure a truly international nature of the seismological monitoring system, the data centres should not be established exclusively by the major nuclear countries or their allies.

In a statement earlier in this Spring session, my delegation expressed the preparedness of my Government to take measures to finance, to establish and to operate an international data centre in Sweden, provided that satisfactory arrangements can be made. That centre would be open to personnel from other States to work at the centre either on a permanent basis, as part of the operational staff, or on a temporary basis, to conduct research in connexion with the activity of the centre. Free and easy access would be given to all facilities at the centre.

For practical experiments, as part of the continued work of the Ad Hoc Group, we envisage that at least one data centre would be established and operated on a temporary basis. During the experiments the data centre would process reported data according to procedures worked out by the Ad Hoc Group and redistribute the results to participating countries. To facilitate the practical experiment, Sweden is prepared to set up and operate a temporary data centre for that purpose. We are prepared to put such a temporary data centre into operation in the course of this year, and to carry the associated costs. The Swedish offer regarding a temporary data centre is of course based on the assumption that a CTBT will comprise a monitoring system.

The report of the Ad Hoc Group is the only tangible result that has been achieved by the CCD up to this point of the Spring session. We hope that a decision on a new mandate for the Group can be taken shortly. By taking an active part in the work of the Ad Hoc Group and in the multilateral negotiations which we hope will soon come, members of the CCD would show that they are prepared to carry their responsibilities in the urgent task of achieving the early conclusion of a CTBT.

Mr. VOUTOV (Bulgaria): On 9 March, Ambassador Likhatchev, the distinguished representative of the USSR, introduced on behalf of eight socialist countries a draft convention on the prohibition of the production, stockpiling, deployment and use of nuclear neutron weapons. As you know, my country is a co-sponsor of this important and timely document (CCD/559). Ambassador Likhatchev, in his well-reasoned statement, expressed clearly the urgent necessity to examine this question in the Committee. We fully share and support the arguments presented in the joint draft. I would like to add some observations.

(1) We believe that the joint document of the socialist countries on the prohibition of neutron weapons is in accordance with the spirit of the decisions of the United Nations General Assembly on the prohibition of new types of weapons of mass destruction. If we add to this the categorical stand of world public opinion against the plans to start the production and deployment of nuclear neutron weapons, it is absolutely obvious that such a renowned and unique organ of disarmament as the CCD could not and should not remain a silent witness of this problem of paramount importance to the whole of humanity.

(2) The proposed draft convention is designed to contribute to the prevention of a new round in the arms race, which is bound to have dangerous military, political, economic and psychological implications. We completely disagree with those who say that nuclear neutron weapons will make war less probable than it is now. We think it is a false and misleading assertion, as numerous scientists and specialists are proving. I would like to quote only one of them, Dr. Frank Barnaby, Director of SIPRI, who is well known in disarmament circles: "It is very alarming that the decision on the use of the new types of nuclear weapons might be readily delegated from the presidential level to the military commanders of certain areas. The introduction of a new generation of nuclear weapons to non-nuclear States would also make the proliferation of nuclear weapons to non-nuclear-weapon States more probable. Finally, those new types of weapons could hamper the current talks on arms controls."

(3) Some of the delegations of the socialist countries have convincingly revealed in their statements in the Committee the character of the neutron weapon. I would especially recall the apprehensions expressed by you, Mr. Chairman, as representative of the German Democratic Republic, about the aggressive character of the neutron bomb. The very fact that the neutron weapon is aimed at human beings, while preserving material wealth, is quite instructive on the line of thinking of its creators. But I would add at once that those who believe that only the socialist countries are threatened by the nuclear neutron weapons are deceiving themselves. The danger for the countries whose Governments would permit

(Mr. Vcutov, Bulgaria)

the deployment of such weapons in the densely populated areas of Europe will be hardly a smaller one. I think this realization has come to be publicly admitted by a number of political and military leaders even in the NATO countries, some of these leaders having the rank of Prime Minister and Minister of Defence.

(4) The ban on nuclear neutron weapons will put an end to some absurd designs of western military planners who are trying to make "acceptable" the so-called "tactical nuclear war". The neutron bomb is a nuclear weapon, and its use could entail a full-scale nuclear war. I would like to quote here Lord Chalfont, well-known to many members of the Committee, who represented the United Kingdom in the CCD: "The neutron bomb is meant for use in the battlefield. The very fact that this weapon blurs the difference between nuclear and conventional weapons has grave implications. The threshold once eliminated, the battle will degenerate into full-scale nuclear war".

(5) My delegation believes that without diminishing in the least the efforts towards a successful conclusion of the negotiations on the nuclear-weapons-test ban, on the ban on chemical and radiological weapons, and on the new types and systems of weapons of mass destruction, the CCD should start without delay the discussion on the draft convention on the prohibition of nuclear neutron weapons. The peoples of the world expect the special session of the General Assembly to devote particular attention to this vital problem in the field of disarmament. So, with the beginning of negotiations on one more probable direction of the arms race, the CCD could boast yet another success in the fulfilment of its tasks as an important organ of disarmament.

(6) The draft convention is neither an appeal nor a general declaration. It is a well-prepared document, formulating the rights and obligations of the signatories. It reflects the international legal experience that has so far been accumulated in elaborating such conventions, and gives wide opportunity for co-operation in carrying out its aims as well as in the strict observance of its provisions. Its adoption will fill a threatening gap in the disarmament field.

(7) The Bulgarian delegation considers that this noble initiative has been correctly placed for consideration in the CCD, at the right moment. This Committee is the right place for discussion of such a problem. With the necessary deepening of our knowledge of the subject and with awareness of the responsibility that rests on this Committee, we can discuss all the proposals, so that a mutually acceptable convention on the prohibition of nuclear neutron weapons could be elaborated.

(Mr. Voutov, Bulgaria)

Inspired by such sincere intentions, my delegation, hand-in-hand with the delegations of seven other socialist countries, became a co-sponsor of document CCD/559. Having in mind all these serious considerations and arguments, we have been astonished to see the way our proposal was received by Ambassador Fisher, the distinguished representative of the United States, who just brushed aside our initiative, using a language which I would rather call rough than "plain". Ambassador Fisher hardly used any arguments, piling up instead all disarmament-related matters into a single basket. Out of this he derived the verdict that the proposed draft convention was nothing more than a "propaganda-campaign". I will be very frank and will not hide the fact that such statements remind me of those made 15-20 years ago. Some representatives of non-socialist countries in this Committee have privately expressed their impression, calling the statement of the United States delegation an "unwarranted confrontation which has connotations of the cold war".

I am sorry, but I cannot agree with Ambassador Fisher that it was "plain talk" in the CCD. His reaction was neither compatible with the business-like atmosphere in the Committee, nor with the extent of the hopes of humanity for strengthening international détente, for making it an irreversible process and method in international relations, for achieving practical results in disarmament negotiations, for prevention of all possible new rounds and stages in the arms race.

My delegation has been and will continue to be in favour of sincere constructive talks in the CCD. Unfortunately, in the statement in question, there was an attempt to avoid the substance of the problem, to avoid an answer on the main point -- the fact that the socialist countries are striving for a convention to prevent a new direction of the arms race. The initiative of the socialist countries does not deserve for any reason to be termed "propaganda". Of course, in the past, such initiatives by the Soviet Union and the socialist countries have on many occasions been described in the beginning in the same way, while later on they were accepted as a basis for the elaboration of major international treaties. But why should the same procedure be followed now?

Is it correct to describe as "propaganda" the introduction of a document in the CCD? Isn't it the right place for introducing a document of this kind? Isn't it presented for discussion when the neutron bomb has become an alarming problem for the world? Is the timing for the introduction chosen artificially, or is it the right moment, after so many appeals of Parliaments and Governments, after so many national and international initiatives against the neutron bomb have taken place, the latest among them held only two weeks ago, just a hundred yards

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from our Committee? I have in mind the NGO Conference on Disarmament that brought together in Geneva from all over the world more than 700 delegates, including former Presidents and Prime Ministers, prominent parliamentarians, including some from the United States Congress, representatives of different religions, of youth, student, women's and other organizations. An appeal to the special session was adopted unanimously and I would like to quote a passage from it: "Immediate and urgent steps should be taken to prevent development, production and deployment of any new varieties of nuclear weapons, such as neutron bombs".

I followed with great sympathy and interest at the Conference the address of a Japanese woman, victim of the first atomic bomb, thrown on Hiroshima. She described the horror of the nuclear explosion on that fateful day. I could see the answer to the question, what would be the prospects for the development and perfection of neutron nuclear weapons in the not too many years ahead of us, if we fail to impose a ban on them right now! This is not propaganda! This is an expression of reasonable apprehensions, based on historical and scientific experience!

The statements and proposals by a number of delegations from non-socialist countries at the thirty-second session of the United Nations General Assembly in connexion with the necessity to prevent the appearance of new types of nuclear weapons could also hardly be qualified as propaganda. I think that such accusations should not be levelled against any delegation which declares itself in the CCD in favour of the prohibition of nuclear neutron weapons. On the contrary, very serious attention is due, for example, to the statement by Ambassador Gharekhan, the distinguished representative of India, at the current session of the CCD, from which I would like to quote: "Thus, we believe that the development and deployment of the new weapon called Neutron Bomb, or the 'reduced-impact and enhanced-radiation' bomb, should be banned" (CCD/PV.771,p.13).

Actually, even Ambassador Fisher did not deny the anti-humane character of the neutron bomb, though he did his best to defend it, by pointing to the dangers of other nuclear and conventional weapons. However, he failed to mention that the problems connected with all other weapons were being discussed at bilateral, trilateral and multilateral negotiations in Geneva, Vienna and elsewhere. Therefore, only the neutron bomb continues to be in a privileged position, and remains outside the scope of disarmament negotiations, though there is no other such controversial weapon in the world today. Is it normal and natural?

(Mr. Voutov, Bulgaria)

It was not even mentioned that the Soviet Union had made a proposal for mutual renunciation of the production of nuclear neutron weapons which, if accepted by the other side, would contribute to the elaboration of other important agreements in the disarmament field. This proposal was renewed only three days ago.

In my statement in the Committee on 16 February this year, my delegation expressed our satisfaction and gratitude for the efforts which the CCD itself and the countries of the two co-chairmen, the Soviet Union and the United States, have been making in the elaboration of a number of treaties, as well as in the preparation of new agreements on the banning of nuclear-weapon tests, and on the prohibition of chemical and radiological weapons. This is a realistic approach to the problems of disarmament.

This is why the socialist countries are making in the CCD a constructive proposal for prohibition of the neutron bomb, a proposal which cannot be excluded in the climate of international détente, of the strengthening of co-operation between all peace-loving countries.

The Bulgarian delegation will welcome any additional initiative and suggestions which will bring us to the prohibition of nuclear neutron weapons. We believe that the proposal of the socialist countries reflects the attitude, the fervent wish and the aspirations of all people in the world. That is why we appeal for creative and constructive work by the Committee on the proposed draft convention.

Mr. FEIN (Netherlands): This is the first time that I have the honour to address this Conference.

I feel it a duty -- and a pleasant one at that -- to thank all those colleagues who were so kind as to welcome me generously in your midst. I shall make it my duty to co-operate with you to the fullest extent possible in order to forward the cause of disarmament, one that is of such tremendous importance to the well-being of mankind.

I have also taken note of the many expressions of goodwill addressed to my predecessor, who has now taken on duties of greater responsibility; your kind words to him have been brought to his notice and received with gratitude. He would wish me to return those sentiments of friendship to you.

It is my intention to speak today only on one particular aspect of the many issues which face this Committee. I hope to revert to other problems of a substantive and structural nature at some future date. Today I should like to make some remarks on the question of a comprehensive test ban, and in particular on the work of the Ad Hoc Group of Scientific Experts to Consider International Co-operative Measures to Detect and to Identify Seismic Events.

For quite some time now we have been waiting for the conclusion of a comprehensive nuclear-test-ban treaty. On many occasions the Netherlands Government has put forward its views on this issue, both here in the CCD and in the General Assembly of the United Nations. We are hopeful that positive results can be reached in the near future. Intensive trilateral negotiations are now taking place here in Geneva between the Soviet Union, the United States and the United Kingdom. Although apparently a number of difficult issues still have to be resolved, the intensity of the negotiations is for us a sign that there is light at the end of the tunnel. This does not mean that we are fully satisfied with the pace of progress thus far. Like many others, we would have hoped that the results of these negotiations could already have been tabled, thus making it possible to present substantial results on this issue to the special session of the General Assembly on disarmament.

I shall not comment in detail on the possible content of a CTBT. However, I would like to make a few general observations. First of all, I think it useful to underline that the test-ban treaty should be of substantial duration. A treaty that might fall apart after a few years would not be the kind of treaty we are looking for. We consider that a treaty should aim at a cessation of nuclear tests for all time. On this score, the three nuclear-weapon States will have to fulfil the pledge they made in the preamble to the partial-test-ban treaty of

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1963. The treaty should also provide for effective arrangements to uphold such a ban by prohibiting nuclear-explosion activities for whatever purpose.

I should like to refer to the statement made by Mrs. Inga Thorsson, the distinguished representative of Sweden, on 31 January this year. Mrs. Thorsson said:

"It is essential for the viability of a CTBT that verification is carried out with genuine international participation and that all parties to the treaty have full access to all relevant data and information" (CCD/PV.767, p. 47).

In our view, all States parties to the treaty should be able to participate in the consultative procedures, and verification must be carried out by the international community as a whole.

From these observations it follows that although my Government considers a CTBT first and foremost to be a contribution to curbing the qualitative nuclear arms race by existing nuclear-weapon States, the treaty must at the same time be so designed as to solicit adherence by as many non-nuclear-weapon States as possible. Only in that case could the treaty also be of substantial value with respect to the non-proliferation of nuclear weapons.

Let me now turn to a specific issue before us: the report of the seismic group. We consider the results of the Ad Hoc Group satisfactory, and in a sense unique. This is the first time that part of an international verification system has been worked out which would primarily apply to nuclear-weapon States. The only other international verification system in existence is the nuclear safeguards system of the International Atomic Energy Agency, but these safeguards are not applied in certain nuclear-weapon States.

On behalf of the Netherlands Government, I should like to thank the seismologists who participated in the seismic group for their important contribution to the work of the group. In particular, I should like to thank the Chairman of the group, Mr. Ericsson, and the scientific secretary, Mr. Ringdal. They and the other members of the group have brought a very complicated exercise to a satisfactory conclusion.

The report describes what theoretically can be achieved with a seismic system consisting of around fifty seismic observatories of high quality. Data from these stations would be fed into the Global Telecommunication System of the World Meteorological Organization and collected and processed in international data centres. The centres would provide Governments with processed data with respect to seismic events and could provide, if requested, additional information relevant

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for the identification of a seismic event. The system thus would be an important tool for States to determine whether a seismic disturbance is an earthquake or a clandestine nuclear explosion.

I would like to make a few comments on the three parts of the proposed system: the observatories, the WMO communication network and the data centres.

It is clear from the report that there exists already at present a rather good seismic network in the northern hemisphere. Some stations will need to be improved, and would have to provide data on a daily basis, which would mean additional efforts. However, these problems do not seem unsolvable. In the southern hemisphere, the situation is less satisfactory. The capability of the seismic system in the southern hemisphere is considerably less than in the northern hemisphere. For a viable comprehensive test ban, it seems desirable that the capabilities of the international seismic system in that region should be, in time, brought up to comparable world-wide standards. This would mean that quite an effort will have to be made in the southern hemisphere. In this connexion it may be pointed out that only a few experts from the southern hemisphere participated in the work of the Ad Hoc Group. My Government would hope, therefore, that other countries in or near the southern hemisphere would participate in the further development of the system.

It appears from the report submitted to us that the WMO communication network, mainly used for the exchange of meteorological data, has technically enough excess capacity to handle the extra data provided by the seismic observatories in the system. We might consider in the CCD, however, at what point WMO should be approached to establish co-operation with the parties to the eventual treaty, so that they can use the system for other than meteorological purposes. In consultations with WMO, we must find out, at an appropriate stage, what kind of arrangements would be suitable.

The third part of the system, the international data centres, was, as I understood, somewhat of a problem for the Ad Hoc Group. Some participants thought it useful to mention already now the possible places for such centres, while others, including our experts, thought it more suitable for the CCD to decide at an appropriate time in the future where seismic data centres should be established. The compromise reached mentions Moscow and Washington as possible centres— both being WMO communication knots— but it is also recognized "that it would be desirable and would be technically feasible to establish international data centres in other places as well". In this respect my Government has taken note with great interest that Sweden has offered, under suitable conditions, to provide and even finance such a centre. My country has taken note with appreciation of that offer.

(Mr. Fein, Netherlands)

It is clear from the report that the experts in the Ad Hoc Group have made a somewhat theoretical study. Exchange of information on a routine daily basis is outlined, which was never done before; new types of information must be exchanged; new codes have to be developed to exchange the data over the WMO communication network; communications between stations and the WMO-system have to be tested; procedures have to be developed to process data in the data centres, etc., etc. It is therefore understandable that the Ad Hoc Group sees a need to take further steps to test the designed system. The delegation of Japan has already mentioned this question several times.

The report makes clear that considerable planning is necessary for such an exercise. The testing of the system and the evaluation thereof would take about a year. Like everyone else, we, too, hope that a comprehensive-test-ban treaty will be concluded during our summer session. We would hope that such a treaty could come into force early next year. It is clear, therefore, that the designed international seismic system cannot be operational when the treaty enters into force, especially if the preparation of these testing phases and the testing itself are in any way delayed. Therefore, we would like to see a decision by the CCD this week to start the planning of such a test. My country supports in this connexion the Swedish proposal for a new mandate for the Ad Hoc Group of seismic experts, as contained in document CCD/562.

In conclusion, I would like to point out that the establishment of an international seismic system could bring additional benefits besides assisting in the verification of a comprehensive nuclear test ban. The system will work fast, which means that within a short time data will be available with respect to earthquakes all over the world. For the United Nations Disaster Relief Office this could be of great importance, for example as a warning system and for the assessment of damage. Also, for scientific reasons, a world-wide system of high quality could be of substantial value. It could potentially help in finding and developing methods for the prediction of earthquakes. The system could also be of use in studying earthquake source processes and lateral inhomogeneities in the earth.

It is the hope of my Government that the valuable work of the Group of Experts can be followed through by this Committee.

Mr. ASHE (United Kingdom): As this is the first time that I have spoken to this Conference during its spring session, I should like to add my voice to those which have already been raised in welcome to our new colleagues: Ambassador Voutov of Bulgaria, Ambassador Tadesse Terrefe of Ethiopia, Ambassador Pfeiffer of the Federal Republic of Germany, Ambassador Fein of the Netherlands and Ambassador Adeniji of Nigeria. I can assure them all of my delegation's desire for continued co-operation with theirs, and take this opportunity to ask them to convey our best wishes to their predecessors.

My Government has always considered the Conference of the Committee on Disarmament to be one of the most important international bodies in the world today. This is because it is the principal forum charged with the task of negotiating measures of disarmament, and we here would all agree that disarmament is one of the most important tasks -- perhaps even the most important task -- facing the international community, involving as it does the fundamental security of States and perhaps the survival of the human race. And in discharging this heavy responsibility we here would all agree as well, I think, that the highest priority should be given to nuclear disarmament. Certainly in his statement at our last meeting, on 9 March, the distinguished representative of the Soviet Union declared that he too considers the ending of the nuclear arms race and nuclear disarmament as being outstandingly important. He stressed the urgency of all States reaching agreement on a simultaneous halt in the production of nuclear weapons, and making a start on the gradual reduction of existing **stockpiles** of such weapons, and moving towards their complete destruction. There is no disagreement between us about the ultimate aim. You will see that the draft programme of action for the United Nations special session on disarmament which the United Kingdom sponsored along with nine other Western countries, and which was later tabled here as document CCD/549, called for

"the halting and the reversal of the nuclear arms race in its quantitative and qualitative dimensions"

and proposed that this could be achieved by

"further strategic arms negotiations with the objective of reducing and eventually eliminating nuclear weapons".

It was therefore with great regret that we heard the distinguished representative of the Soviet Union move on from this fundamental position of principle, which we share, to make a proposal which can only be described as one-sided propaganda. I see no need to repeat all over again the arguments and considerations which arise out of the issue of enhanced-radiation weapons -- the

(Mr. Ashe, United Kingdom)

so-called neutron bomb -- because these were plainly and comprehensively set out by the distinguished representative of the United States in his statement on the same day, 9 March. But I want to emphasize two of the principal points which he made. First, the decision to produce the reduced-blast, enhanced-radiation weapon has not yet been taken, and will not be taken without very careful consideration of all the relevant factors, including its implications for arms control and disarmament. But one thing is quite sure, and that is that when the decision is taken -- one way or the other -- it will not be influenced by propaganda of this sort. The second point is that at the same time as they are mounting this propaganda attack on enhanced-radiation weapons the Soviet Union are going ahead with the deployment of devastating new weapons systems of their own -- weapon systems far, far more devastating than enhanced-radiation weapons. The worst but by no means the only example is the SS20 missile system; each one of its three warheads could totally destroy any Western European city. That is why I call the draft treaty which the distinguished representative of the Soviet Union introduced at our last meeting one-sided propaganda. I can see no reason to alter this categorization as a result of listening to the speech of the distinguished representative of Bulgaria this morning. I listened to all that he said with the care which it deserved, but I can see no reason to alter that definition. He said that the statement of the distinguished representative of the United States of America last week reminded him of the kind of statements that were being made 15 or 20 years ago. It comes to me as no surprise. I would suggest that the answer is not hard to find. It is the introduction of one-sided propaganda in this Committee. So I repeat that definition -- one-sided propaganda.

So far, on the whole, this Conference has maintained its self-imposed standards of integrity and probity and, whatever other criticisms may have been levelled against it, has at least kept its reputation as a serious expert body for the consideration and negotiation of disarmament agreements. I believe that we should be very careful to preserve this reputation if we want the CCD to continue in anything like its present form and to achieve serious disarmament agreements. A good reputation is like virginity -- once lost it is gone for ever. But of course if we are bent on introducing propaganda into the Committee and turning it into a political circus, then we all have tricks to offer. Give me five minutes to write it out and I could offer you a draft treaty banning the production and deployment of the SS20. But I shall not do this, because I do not believe that such one-sided and unrealistic frivolity would be worthy of the dignity of this Committee, or of my own delegation and my own Government.

(Mr. Ashe, United Kingdom)

What it all boils down to was clearly set out by my Prime Minister, Mr. Callaghan, speaking in the House of Commons in London on 21 February, when he said:

"The neutron bomb and its serious effects are now being used by the Soviet Union as a propaganda cover to prevent discussion of some of the other serious weapons being developed. I want to ensure that this is on the record. Mr. Brezhnev can help in this matter if, instead of focusing propaganda on the neutron bomb, he will enter into serious discussions at the United Nations or elsewhere on how we are to deal with some of the other weapons that are now being developed and on which research is taking place. There is a formidable prospect facing the world on this particular matter. I do not want to see the world destroyed by our terror. Nor do I want us to succumb to blackmail by someone else's terror. It is in that spirit that I think we must approach this matter."

I speak in sorrow, not in anger -- and I speak in a spirit of conciliation, not of confrontation -- when I say that I hope that we shall not be hearing much more in this Committee about the draft treaty proposed by the Soviet Union and its allies of the Warsaw Pact last week, and that instead of this we shall be getting from them serious proposals for balanced and realistic steps towards the control of the nuclear arms race. Certainly we shall regret the day if we ever allow plain unashamed propaganda loose in this Committee.

Mr. FISHER (United States of America): At the outset of my remarks, I would like to say that I am sorry that my plain talk on the nature and effects of nuclear weapons made my distinguished Bulgarian colleague feel that he had to characterize it as "rough" talk. If this is his opinion, he is entitled to it, but I am not required to accept it and I do not; in fact, I reject it categorically. I can only repeat what I said last Thursday: "We are talking about weapons, particularly nuclear weapons, that are designed to kill and destroy. We live with the awesome realization that the face of war is the face of death; in the case of nuclear war, death on a massive scale. No amount of circumlocution can hide this fact". I do not intend to engage in such circumlocution.

Today we have before us the report of the Ad Hoc Group of Scientific Experts to Consider International Co-operative Measures to Detect and to Identify Seismic Events.

(Mr. Fisher, United States)

This Ad Hoc Group was formed pursuant to the decision of this Conference of the Committee on Disarmament at its 714th meeting, on 22 July 1976. That decision indicated that the Group should seek to achieve consensus in its report, but pointed out that, whenever consensus could not be achieved, each expert would be entitled to incorporate his own views. The United States considers it significant that the letter of transmittal indicated that there was a consensus and, correspondingly, did not contain any expression of separate views.

Any consensus document, of necessity, involves give-and-take on the part of those participating in its preparation. It is, therefore, probably true that had any individual member of the Ad Hoc Group had sole responsibility for the text, it would have read somewhat differently from the text we have before us. Nevertheless, we are pleased and encouraged to note that experts representing various Governments and with diverse scientific and practical experience in the complicated field of seismology could find the wide area of common opinion described in this report. The fact that members of the Ad Hoc Group were able to do so reflects the serious and conscientious manner in which they handled their task. I am sure that other representatives on this Committee will want to join me in commending the Ad Hoc Group for a job well done.

The report describes various technical aspects of a co-operative exchange of seismic data for the purpose of detecting, locating, and identifying seismic events. The term "identifying", of course, means discriminating between seismic events which are of natural origin and seismic events that are man-made, particularly seismic events produced by nuclear explosions.

This means that the report should be read in the context of a possible comprehensive test ban. This does not mean that the report assesses the adequacy of any system of exchanging seismic data for the purpose of verifying a comprehensive test ban. The terms of reference of the Ad Hoc Group specifically directed it not to do so. On the other hand, the terms of reference also made it clear that the report should provide analyses concerning international data exchange which could assist Governments in determining whether a comprehensive test ban would be in the interests of their over-all national security.

The report describes in detail the technical and procedural elements of an international network of stations which would continuously and rapidly exchange collected seismic data. It describes new international data centres which would analyse data from all national stations and provide access to all of their facilities designated as international. The role of these centres would be to detect and locate seismic events and to associate with these events reported data relevant to their identification.

(Mr. Fisher, United States)

The Group of Experts has provided us with a realistic picture of such an international data exchange network by considering existing and planned seismographic stations and equipment either available at those facilities or which could be provided within current technology. A key recommendation of the Group has been the use of the communications capabilities of the World Meteorological Organization.

We must, however, note that the experts caution that implementation of an international data exchange will require changes and improvements in equipment and procedures that may be expensive, and will certainly involve significant modifications to the routine operations executed presently. Further, the capability estimates in the report have been made in all cases on the basis of theoretical analyses and assumptions. These estimates can only be confirmed by experimental studies.

The Group has recommended that an experimental exercise be conducted to test the system it has described. This seems to us, generally, to follow a sound scientific method and, specifically, to be supported by the facts developed in the report. In general, when a new technical concept is introduced it is usually investigated theoretically and the possible advantages from it are set down on paper. The report does this. Then a model is made or a laboratory experiment conducted to see if the theory was correct and to point to any deficiencies in the model. Corrective action may be taken before the new concept is put into general use. The report recommends this.

There are particular reasons why this generally-accepted scientific method should be followed in this case. The report has made an estimate of the capability of various networks to detect and identify seismic events. It has, however, been a theoretical estimate. The actual results to date, based on data obtained from the major international seismic centre now existing, the ISC in the United Kingdom, differ approximately one-half magnitude units from the theoretical predictions made in this report.

For two underground explosions detonated under similar conditions, this difference corresponds to approximately a factor of three in yield. This leads to the conclusion that it would be useful to build on the theoretical estimates contained in the report of the Ad Hoc Group of Experts by conducting an actual experiment involving data exchange and evaluation of the type that this report envisages. For these reasons the United States would be prepared to extend the mandate of the Ad Hoc Group of Experts and would be prepared to join with others in the planning and carrying out of the experimental exercise recommended in the report.

The CHAIRMAN: Before adjourning the meeting, I would like to remind the distinguished delegates that at the 773th meeting the Committee took a decision to hold an informal meeting on the final report of the Ad Hoc Group of Scientific Experts to Consider International Co-operative Measures to Detect and Identify Seismic Events.

As we have still an adequate length of time, I suggest that we hold the informal meeting immediately after the adjournment of the plenary meeting.

It was so decided.

The meeting rose at 12.10 p.m.