CONFERENCE ON DISARMAMENT

CD/PV.372 22 July 1986

ENGLISH

FINAL RECORD OF THE THREE HUNDRED AND SEVENTY-SECOND PLENARY MEETING

Held at the Palais des Nations, Geneva, on Tuesday, 22 July 1986, at 10.30 a.m.

President:

Mr. U Tin Tun

(Burma)

The PRESIDENT: I declare open the 372nd plenary meeting of the Conference on Disarmament.

At the outset, allow me to extend a warm welcome in the Conference to the Chairman of the Norwegian Council on Arms Control and Disarmament, Ambassador Bjorn Kristvik, who is addressing the plenary today. I wish to thank him for the interest he shows in our work and for the active role that his country plays in disarmament activities.

I also wish to welcome among us the new Permanent Representative of Peru to the Conference, Ambassador Jorge Morelli Pando. He was Chairman of the Committee on Disarmament and has been associated with disarmament for a long time.

I take this opportunity to extend a welcome to the Under-Secretary-General for Disarmament Affairs, Mr. Jan Martenson, who is following the proceedings of this plenary meeting.

In accordance with its programme of work, the Conference continues today its consideration of item 4 on its agenda, entitled "Chemical Weapons". However, in accordance with rule 30 of the rules of procedure, any member wishing to do so may raise any subject relevant to the work of the Conference.

I have on my list of speakers for today the representatives of Norway, China, Australia and the Union of Soviet Socialist Republics.

In accordance with the decision taken by the Conference at its 338th plenary meeting, I now give the floor to the Chairman of the Norwegian Council on Arms Control and Disarmament, Ambassador Bjorn Kristvik.

<u>Mr. KRISTVIK</u> (Norway): May I thank you, Mr. President, for the warm words of welcome addressed to me and may I also, at the outset avail myself of this opportunity to congratulate you on your assumption of the Presidency of the Conference on Disarmament for the month of July. It is also a great pleasure for me to note the presence at this plenary meeting of Mr. Jan Martenson the Under-Secretary-General for disarmament.

I have asked for the floor today to present a Working Paper on seismological verification of a comprehensive nuclear test ban, document CD/714. The introduction of this document takes place on the day of the tenth anniversary of the decision to establish the <u>Ad hoc</u> Group of Scientific Experts to Consider International Co-operative Measures to Detect and Identify Seismic Events. On 22 July 1976 the then Conference of the Committee on Disarmament (the CCD) decided to establish this group to assist in the verification of a comprehensive nuclear-test ban. May I, in that connection, pay tribute to the Group's first Chairman, the late Dr. Ericsson and the present Chairman, Dr. Dahlman of Sweden. Since 1976 Dr. Ringdal of Norway has been the Group's scientific secretary.

Before introducing the new Norwegian Working Paper I would like to underline the singular importance of a comprehensive nuclear-test ban in the multilateral disarmament process. To be truly comprehensive a test ban must

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prohibit both nuclear-weapon tests and nuclear explosions for peaceful purposes. It must also be applicable to all States in all environments on a permanent basis. If these conditions are fulfilled a test ban would represent a significant contribution to the aims of both halting the nuclear-arms race and of promoting non-proliferation efforts. All possible efforts should, therefore, be taken to make concrete progress towards such a ban. The Norwegian Government thus welcomes the initiation of talks at expert level on nuclear testing verification issues between the Union of Soviet Socialist Republics and the United States. It is to be hoped that these talks can pave the way for progress in this field. In addition, the Conference on Disarmament, as the single negotiating forum for global disarmament questions, should take up the substantive examination of specific issues of a nuclear-test ban, such as scope, verification and compliance, with a view to negotiation of a treaty. With this in mind, Norway last year co-sponsored a proposal for a concrete programme of work for a subsidiary body on agenda item 1. The suggested programme identifies issues which need to be addressed in detail by this Conference. It would inter alia include examination of technical aspects concerning detection and identification of very low-yield explosions and of explosions which are conducted in an environment that produces very weak seismic signal, e.g. underground cavities.

Some headway and positive development have taken place in the Conference on Disarmament over the last few years. The Norwegian Government thus welcomes the readiness of China to participate in a Committee on a Nuclear-Test Ban. The 1983 Report of the Conference stated that it was generally recognized that an international exchange of seismic data constituted an essential element of a verification system of a nuclear-test ban. In March 1984 the Group of Scientific Experts presented a comprehensive third report, and it is hoped that the Group will be able to finalize a new report during its present session, which started yesterday. In this connection it is of importance that there now seems to be wide support for making use of relevant technological achievements in seismological verification of a test ban.

It is, in this field, of particular importance to take advantage of the rapid technological advances with respect to computer and data communication technology, which has opened up new possibilities to improve the effectiveness of a global exchange of seismic data. A primary objective of the workshop which Norway organized in June 1985 was to demonstrate the newly developed Norwegian Regional Array System (NORESS), which is a small-aperture seismic array designed to detect in particular small seismic events occurring at distances of less than 3,000 km and which incorporates some of the most recent technological and scientific advances in seismic array design. Document CD/599 of 20 June 1985 contains the conclusions which the Norwegian authorities drew on the basis of the demonstrations and briefings during the workshop. At that time only preliminary results from the NORESS data analysis were available. NORESS has now been in full operation for more than a year. The Working Paper which I have the honour to introduce today summarizes a more comprehensive assessment of the research results and their implications for the seismological verification problem. In particular, it contains a concrete proposal concerning utilization of small-aperture seismic arrays in a global seismological network.

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The first year of NORESS experience has confirmed the assertion that automated data processing will be essential at stations in a global network, given that it will be necessary to process the large number of low-magnitude seismic events occurring world wide. Thus, the automatic detector at NORESS has registered about 40,000 seismic signals during the first year, or more than 100 per day. The ability of an array to separate between local and remote seismic events is a most important feature which will greatly facilitate the processing of Level I data from a future global network at the international Data Centres envisaged by the Group of Scientific Experts. Although NORESS was designed for optimum performance in recording seismic events within a 3,000 km distance, a large number of events at greater distances are also being detected by the array. In fact, for many regions of the world, the small NORESS array approaches the teleseismic detection capability of the much larger NORSAR array, which has been in operation for 15 years and which is one of the world's largest seismological observatories. This is an observation of major importance, as it shows that the well-known benefits of using large and medium sized seismic arrays for detection purposes might be translated into arrays deployed over a very small geographical area, when emphasis is placed on high signal frequencies.

A global seismological network along the lines first proposed by the Group of Scientific Experts would comprise a variety of stations offered by the host countries participating in the envisaged international seismic data exchange. The Group has also recognized the need for such modernization and standardization. The NORESS system offers an example of how this could be achieved, taking into account the most recent developments in seismic instrumentation, automatic data processing and telecommunications technology. It thus includes considerable flexibility with respect to array configuration, sensor spacing and the number of array elements. Accordingly, the first year of operation of NORESS has demonstrated that the utilization of small-aperture arrays can provide a significantly increased capability within a global seismological network, as recommended by the group.

With the envisaged station network being supplemented by small-aperture arrays, the performance of such a global system would be greatly enhanced. This applies in particular to achieving reliable analysis of small seismic events, which is of crucial importance in ensuring confidence that a comprehensive nuclear-test ban is complied with. The NORESS concept offers a possible basis for standardization and modernization of a global seismological network to aid in the verification of a comprehensive nuclear-test ban.

Against this background, Norway proposes that the global seismological network, to the extent it is practically possible, incorporate the establishment of small-aperture seismic arrays. May I in that connection underline that NORSAR is prepared to offer technical assistance to seismological institutions interested in establishing such an array.

Before concluding, permit me to say a few words on quite a different subject. Mr. President, in your statement on 1 July when you assumed the Presidency of the Conference on Disarmament for the month of July you recalled that the question of the expansion of the membership was still pending. You further stated that you intended to consult with the group Co-ordinators on

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how to continue the efforts concerning this question. As the candidate of the Western Group for membership in the Conference on Disarmament Norway appreciates your statement and hopes that this question can be solved without delay by displaying flexibility of all present members of the Conference. I would like to recall that for a number of years Norway has been ready to assume the responsibilities of a full-fledged member of this important forum.

The PRESIDENT: I thank the representative of Norway for his statement and for the kind words addressed to the President. I now give the floor to the representative of China, Ambassador Fan Guoxiang.

Mr. FAN Guoxiang (China) (translated from Chinese): Mr. President, first of all, please allow me to congratulate you on your assumption of the Presidency of the Conference on Disarmament for the month of July. China and Burma are friendly neighbours. There has long existed between our two countries a profound friendship based on the Five Principles of Peaceful Coexistence. The Chinese delegation will fully co-operate with you. I am convinced that under your guidance, positive results will be obtained during this session. I also wish to take this opportunity to thank your predecessor, Ambassador Tellalov of Bulgaria, for the successful discharge of his functions.

I would like to welcome H.E. Mr. Kristvik, Director-General of the Ministry of Foreign Affairs of Norway, to the Conference on Disarmament and thank him for his kind words in welcoming the readiness of my country to participate in an Ad hoc committee on a nuclear-test ban. The Working Paper he introduced is a positive contribution to the Conference on Disarmament. I am also pleased to note the presence of Mr. Martenson, Under-Secretary-General for Disarmament Affairs, and of the Ambassador of Peru at our meeting.

Today, I wish to make some comments on the existing international legal instruments relating to outer space.

Nearly 30 years have elapsed since the first man-made earth satellite was launched into outer space in 1957, which marked the beginning of space activities by mankind. During the short span of 30 years, which was but a twinkling of the eye from the perspective of history, mankind made speedy progress in its activities in outer space. The exploration of outer space, representing the crystalization of human labour and wisdom, has opened up broad prospects for the development of science and technology and has had an increasingly important impact on human life. However, it is a cause of deep concern that the advanced space technology in the hands of the major space Powers has been used to pursue their arms race and to strive for military preponderance. Consequently, the prevention of an arms race in outer space has become an issue attracting world-wide attention, and one of the priority items in the Conference on Disarmament as well.

Over the past 20 years, the international community has worked out a number of treaties, conventions and agreements in an effort to regulate the activities of States in outer space. Some are devoted entirely to the activities in outer space, for instance, the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies, the Agreement Governing the Activities of

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States on the Moon and Other Celestial Bodies, etc., while others only touch upon outer space in certain aspects. By and large, these international legal instruments have reaffirmed the exclusively peaceful uses of outer space, advocated international co-operation in the peaceful exploration and use of outer space and provided that space activities must conform to the United Nations Charter and international law. The Outer Space Treaty stipulates that no objects carrying nuclear weapons or any other kinds of weapons of mass destruction shall be placed in orbit around the earth, nor shall such weapons be installed on celestial bodies or stationed in outer space in any other manner, and that the moon and other celestial bodies shall be used exclusively for peaceful purposes. The Convention on International Liability for Damage Caused by Space Objects provides that a launching State shall be absolutely liable to pay compensation for damage caused by its space object on the surface of the earth or to aircraft in flight. The Convention on Registration of Objects Launched into Outer Space has set up a preliminary régime of registering objects launched into outer space, a measure conducive to building mutual confidence. These international legal instruments have in some aspects played a certain role in restraining military activities in outer space.

With the advance in military space technology, the arms race between the super-Powers has extended from land, sea and atmosphere to outer space.

The major space Powers' efforts to use outer space for military activities began with their launching of military satellites. To date, the two space Powers have each built up a comprehensive system of military satellites of various functions, such as photo-reconnaissance, electronic reconnaissance, ocean surveillance, early warning, communication, navigation, meteorology and geodesy. In fact, these satellites make up a major component of their military systems. As military satellites play a crucial role in the military command systems, the two sides have been actively searching for various anti-satellite technologies. One space Power already has ASAT weapons in its possession, while the other is currently engaged in experiments for more advanced versions of these weapons. ASATs are only one dimension of their arms race in outer space. In their bid for greater strategic preponderance, the two sides have been pouring substantial resources into the development of more sophisticated space weapons capable of destroying each other's nuclear missiles. Currently, building upon their existing capabilities in high-energy laser, particle beams, advanced optical-electron sensoring techniques and computer technology, they are concentrating their efforts on the development of directed-energy, kinetic-energy and other types of space weapon systems. A successful development and deployment of such new space weapon systems will undoubtedly lead to further escalation of the arms race and pose a greater threat to international peace security. It is precisely for this reason that the development of space weapons has caused great anxiety and concern throughout the international community.

At a time when the two space Powers are intensifying their research and development of space weapons, the existing international legal instruments on outer space are obviously inadequate for the purpose of preventing an arms race in outer space as they all have drawbacks of one kind or another.

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These legal instruments contain no provisions explicitly banning any arms race in outer space, totally prohibiting military activities therein, or banning all space weapons. For instance, the Outer Space Treaty, though prohibiting the stationing of nuclear weapons and weapons of mass destruction in outer space, does not cover "non-nuclear space weapons" in its scope of prohibition. The fact that quite a few space weapons non-existent at the time of its formulation nearly 20 years ago have since appeared indicates that its arms control provisions are far from being adequate for the total preventionof an arms race in outer space. This shows that general provisions banning nuclear weapons and other weapons of mass destruction alone are not sufficient and that the scope of prohibition should be extended to include all space weapons, i.e., all devices or installations either space-, land-, sea-, or atmosphere-based, which are designed to attack or damage space-vehicles in outer space, or disrupt their normal functioning, or change their orbits, and all devices or installations based in space (including those based on the moon and other celestial bodies) which are designed to attack or damage objects in the atmosphere, or on land, or at sea, or disrupt their normal functioning. Furthermore, though the Treaty stipulates that the Moon and other celestial bodies should be used exclusively for peaceful purposes, it does not expressly provide that the entire outer space should be used exclusively for peaceful purposes. The Convention on International Liability for Damage Caused by Space Objects is another case in point. Though providing for the general liability of the launching State of space objects for damage caused by its space activities, the Convention is silent on the militarization of or the arms race in outer space, which threaten international peace and security, nor does it provide for the international liability for damage to other States caused by the testing, deployment and use of space weapons, or by other military activities in outer space. Consequently, this Convention cannot restrain the gradual militarization and weaponization of outer space. The Convention on Registration of Objects Launched into Outer Space provides another example. The Convention only stipulates that each State of registry shall provide the "general function" and additional information it wishes to furnish to the United Nations Secretary-General. As a result, though approximately two thirds of the satellites launched by the major space Powers are military satellites or used for military purposes, their military functions have not been specifically registered.

On the issue of verification, the provisions contained in some relevant international legal instruments on outer space are inadequate to ensure the effective monitoring of their compliance.

In the view of the Chinese delegation, the existing international legal instruments on outer space all have limitations to a certain extent, since they came into being under the specific circumstances prevailing at the time. With the development of space science and technology, particularly when the super-Powers are using new technology to extend their arms race to outer space, these legal instruments, though still of positive significance, can no longer meet today's needs, as they are inadequate for the total prevention of an arms race in outer space. The need therefore arises to conclude new international agreements.

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Over the past two years, preliminary discussions have been held in the Conference on agenda item 5, entitled "Prevention of an Arms Race in Outer Space", during which many members expressed useful views. We share the view expressed by Sweden, Pakistan, Argentina and some other countries that the Conference should start negotiations on the conclusion of a new international agreement which, in our view, should aim at achieving the "non-militarization of outer space" with the "non-weaponization of outer space" as its main objective at the present stage.

The United Nations General Assembly at its fortieth session adopted without any votes against a resolution urging the USSR and the United States to pursue intensively their bilateral negotiations in a constructive spirit aimed at reaching early agreement for preventing an arms race in outer space, and to advise the Conference on Disarmament periodically of the progress of their negotiations. We subscribe to the view held by many countries that the United States and the USSR should engage in earnest negotiations for the speedy conclusion of an agreement without prejudice to the interests of other States and that the Conference should meanwhile continue to play its positive role.

The <u>Ad hoc</u> Committee on the Prevention of an Arms Race in Outer Space was established by the Conference for the first time in 1985. After its re-establishment this year, and presided over by Ambassador Bayart of Mongolia, the members of the Conference further exchanged views on the definition of space weapons and the relevant international legal instruments, which served to clarify certain complex issues involved and contributed to the better understanding of each other's positions. We sincerely hope that the <u>Ad hoc</u> Committee will carry out its in-depth and practical work on the substantive issue of preventing an arms race in outer space, with a view to achieving greater progress than it did last year.

The PRESIDENT: I thank the representative of China for his statement and for the kind words addressed to the President. I now give the floor to the representative of Australia, Ambassador Butler.

Mr. BUTLER (Australia): May I say briefly, that I too am very pleased to see Under-Secretary-General Jan Martenson with us here in Geneva.

On 10 July, I foreshadowed that my delegation would be bringing to this Conference a Working Paper on the establishment of a global seismic monitoring network. Our proposal that such a network be established was first made by the Foreign Minister of Australia, Mr. Bill Hayden, at this Conference in August 1984. It has been repeated subsequently, here and at the General Assembly of the United Nations.

Australia strongly supports the earliest possible conclusion of a comprenehsive nuclear-test-ban treaty (CTBT) banning all nuclear explosions, by all States, in all environments, for all time. We remain convinced of the decisive importance of a CTBT as a clear and practical signal of determination to diminish reliance on nuclear weapons for the maintenance of security and thereby, to facilitate reductions in the nuclear arsenals. A CTBT would also

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raise new and effective physical and political barriers to the further horizontal proliferation of nuclear weapons and, in this way, make a very important contribution to international security and stability.

A review of the history of the quest for a CTBT reveals that a major impediment has been the question of verification and compliance and the associated issue of how to deal with so-called peaceful nuclear explosions.

While this Conference continues to consider the re-establishment of a committee to work on a CTBT there is something concrete and essential that can be decided upon and established now -- a global seismic monotoring network. Such a network would be required for a future comprehensive test-ban treaty. The decision to establish it now would avoid the situation where when it is decided to bring a comprehensive nuclear-test-ban treaty into existence we would be unable to take that step because we had not done the necessary practical work and had not established the necessary means of verification.

For its own part Australia is upgrading its national seismological network so that it can play a significant role in a future global network.

It has long been recognized that a global seismic monitoring network lies at the heart of the verification régime needed to support a CTBT. The scale and nature of such a network has been the subject of detailed study in several forums including by this Conference's Group of Scientific Experts. In a few weeks time that Group of Scientific Experts will complete its report on the global experiment it conducted in 1984.

The Group has already concluded that most of the procedures it developed to collect exchange, compile and analyse the seismic level I data, worked satisfactorily in practice. But its Technical Test also revealed problem areas that will have to be addressed. These included improving the links to the World Meteorological Organization's Global Telecommunications System, particularly for countries in South America, Africa and the Pacific.

More recently, in August 1985, Japan and the Federal Republic of Germany introduced Working Papers -- CD/626, CD/612 and CD/624 respectively. These papers have a common aim -- to create the best possible global network on the basis of existing seismic facilities and communications systems, and then to expand and refine that system progressively, to maximize confidence in its ability to detect and identify underground nuclear explosions. The Working Paper tabled by Norway today represents a very valuable contribution in this regard. Similarly the Five-Continent Peace Initiative includes a proposal to make available seismic facilities in the territories of the countries who have participated in that initiative. Their facilities are widely dispersed around the globe and would assist in monitoring a test ban.

The process of expanding and refining the initial network should focus, first, on the problem of maximizing the risk of detection even if attempts are made to test clandestinely in the ways addressed in the United Kingdom's Working Papers CD/502 and CD/610 and more recently, in the Swedish Working Paper CD/712.

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Another important first goal would be to seek to ensure that the network was truly global in coverage. This approach would then facilitate identification of additional measures needed to ensure complete confidence in compliance with a CTBT including on-site verification provisions which the major nuclear Powers have agreed, since 1958, are needed to complement the seismic network.

We are convinced that the most effective way of building the global seismic monitoring network that is required would be for the Conference on Disarmament to decide to build that network now. What we need and indeed all we need is the political decision to recognize that what we already have in hand is the beginnings of a global network in the form of existing seismic stations, means of communication and centres to process and analyse data, and to dedicate ourselves to the task of filling in the gaps and refining existing capabilities. This Conference on Disarmament can call the network into being by one simple act, that is, to express the will of the Conference that the network should exist. We propose that it takes that action before the end of the present session.

In a Working Paper we have distributed to the Conference today, Australia formally proposes that the Conference on Disarmament take the following actions: firstly, decide to establish forthwith a global seismic monitoring network based on existing facilities and equipment. Secondly, pledge to make available to this network appropriate national facilities and equipment. Thirdly, invite non-member countries to make appropriate national facilities and equipment available to this network; and fourthly, task the Group of Scientific Experts to prepare, within six months, a plan of action for the furuther development of the global seismic network.

In conclusion, Mr. President, may I return to a theme that is discussed repeatedly in this Conference -- the desired complementarity between bilateral and multilateral work on arms control and disarmament. Just last week new and significant developments were announced, in the bilateral field, with regard to the issue of nuclear testing and the verification of agreements regulating nuclear testing. Further developments are apparently expected. It is Australia's firm view that while such developments are very welcome the Conference on Disarmament, as the major multilateral body, must also be involved not least because what is required in the field of nuclear testing is a total ban, a multilateral treaty, to which all States can accede.

Thus, for the Conference on Disarmament to take the decision we are calling for today, and to take that decision this session, would not only represent an intrinsically significant move with regard to a comprehensive nuclear-test-ban treaty, but would also represent a decision which ensured that multilateral efforts were being pursued in their correct relationship to the bilateral consultations between the two States possessing the largest nuclear capabilities.

Mr. ISSRAELYAN (Union of Soviet Socialist Republics) (translated from Russian): May I first of all welcome to today's meeting of the Conference on Disarmament the Chairman of the Norwegian Council on Arms Control and

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Disarmament, Ambassador Kristvik, and the Under-Secretary-General of the United Nations, Mr. Jan Martenson, whose presence at the meeting today is, as in fact, always, the harbinger of some important event.

In its statement today, the Soviet delegation would like to address several aspects of verification of non-carrying out nuclear tests. This issue is still the focus of the attention of the Conference on Disarmament as well as of public opinion throughout the world.

We have repeatedly stated that the Soviet Union is open to verification that nuclear explosions are not being carried out; it is in favour of the most strict verification including on-site inspections and use of all achievements of seismology. We are ready to consider favourably any constructive proposals to this end no matter where they come from. In this regard there is a significant agreement between the USSR Academy of Sciences and the United States Natural Resources Defence Council under which American and Soviet scientists installed seismic equipment on Soviet territory near the testing site in the area of Semipalatinsk. This initiative once again proved the possibility of joint verification of the complete prohibition of nuclear tests. The Soviet Union welcomes this initiative of the Soviet and American scientists. Mikhail Gorbachev, General Secretary of the CPSU Central Committee, stated that "we are assisting and will be assisting the Soviet and American scientists in carrying out their initiative with the use of special equipment to verify that nuclear explosions are not being carried out.

The Conference on Disarmament is called upon to play an important role in resolving the problem of verification that nuclear explosions are not being carried out, and the Ad hoc Group of Seismic Experts is conducting its work within the framework of the Conference. Its regular session began yesterday on 21 July. The significance of the practical work of this Group stems among other things from the fact that all the prerequisites for the detection of any nuclear test with the help of seismic means of verification now exist. This is borne out, in particular, by the Working Paper of Sweden (CD 7/12), which contains a considerable amount of data in support of this important conclusion. Of special importance, in our view, is the statement in that paper to the effect that "it would be possible in principle to monitor nuclear tests explosions down to any requested level," as well as the conclusion that "the ability to distinguish between explosions and earthquakes with the aid of seismological measurements is so good that it should in fact deter any State from conducting explosions in violation of a treaty". These statements are consonant with the Declaration of the Forum of Scientists for an End to Nuclear Testing, held in Moscow, which says that "The latest achievements in seismology combined with relevant, mutually-observed international procedures, including on-site inspection, provide a high degree of certainty that nuclear tests are no longer carried out". We fully share this conclusion drawn by the scientists.

It is especially important in these circumstances that the work of the Ad hoc Group of Seismic Experts should continue beyond the preparation of its Fourth Report. Our support for the continuation of the Group's activities stems from our interest in the earliest prohibition of nuclear tests. In this

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regard, there arises a question of its terms of reference or mandate -- in other words, what issues it has to deal with later. The Soviet delegation would like to make some comments in this connection.

At present, as a result of the intensive development of digital recording devices as well as systems of data transmission and processing in large computer centres, there arises a possibility of a broader use of the actual signal recordings, or Level-2 data as they are called, in the international system of seismic data exchange developed by the <u>Ad hoc</u> Group of Seismic Experts.

It is well known that conventional seismic stations can record industrial explosions of chemical explosives substances with a yield of even 20 to 30 tonnes at a distance of 2,000 to 3,000 kilometres. The information on the recording of such explosions is published regularly in seismological bulletins of the International Seismological Centre. It is natural that the use of Level 2 data for detection at stations and processing at international centres should further increase the possibilities for the international data exchange system to locate and evaluate the parameters of a source of weak seismic events.

Since its establishment the <u>Ad hoc</u> Group of Seismic Experts has accomplished much useful work in developing automatic procedures for the analysis of seismic data at stations and international centres. The <u>Ad hoc</u> Group's experts have organized and successfully carried out a number of international technical tests to transmit Level 1 seismic data, that is, signal parameters, from stations to the temporary international centres using the Global Telecommunications System of the World Meteorological Organization, and in some cases other channels of communication. These tests and especially the last one in 1984 in which 72 stations from 32 States located virtually all over the globe participated, have demonstrated that the procedures developed are in general effective.

In view of the existing practical possibilities in terms of means and methods of recording as well as procedures for the transmission and processing seismic information, the Soviet Union deems it appropriate to go on to more profound research into the possibilities of using Level 2 data in the international exchange of seismic data. We consider that the timely transmission of Level 2 data from stations to the centres and their processing at international centres will significantly increase the effectiveness of this international system of data exchange for the purposes of verification of compliance with a treaty on the complete prohibition of nuclear tests by all participants in the treaty.

We specifically propose that the <u>Ad hoc</u> Group of Scientific Experts should start to develop a system of prompt transmission of Level 2 seismic data which would serve as a basis for international seismic verification of the prohibition of nuclear weapon tests. That data would be promptly transmitted from seismic stations participating in the global network using satellite communication channels for processing at the international data centres. There would also be automatic data exchange between those centres,

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using especially allocated communication channels. In studying these issues, the relevant experience gained by specific States could be taken into account.

We also propose that an international experiment on the exchange of Level 2 data should be carried out using both the GTS/WMO channels and other possible channels. The <u>Ad hoc</u> Group of Scientific Experts should, in our opinion, be entrusted with the thorough preparation of such an experiment, which could be conducted in 1988, for example.

We hope that our new proposals will be appraised according to their merits by delegations, since they reflect our sincere desire to resolve as soon as possible all questions pertaining to seismic methods of verification that nuclear explosions are not being carried out. The Soviet delegation is certainly ready to study the proposals of other States to this effect, including those contained in documents CD/712, CD/714 and CD/717. Our main aspiration, one that is, we are sure, largely shared by delegations, is to use all the opportunities offered by the Conference on Disarmament, including the Ad hoc Group of Scientific Experts, to accomplish a noble task -- to ban nuclear explosions.

The PRESIDENT: I thank the representative of the Union of Soviet Socialist Republics for his statement. That concludes my list of speakers for today, does any other delegation wish to take the floor?

You will recall that we had provisionally scheduled in the timetable for this week an informal meeting on the improved and effective functioning of the Conference, depending on the results of the open-ended consultations which were held on Friday on this subject. It seems to me that we had a useful discussion at the informal consultations on Friday and I would like to continue with that exchange of views today, if that is agreeable to member States. I do not think that we have covered enough ground to move to an informal meeting. Therefore, I suggest that, instead of an informal meeting of the Conference, we continue with an informal open-ended consultation immediately after we adjourn the plenary meeting. The informal open-ended consultation will be held in Conference Room I immediately after this meeting.

The next plenary meeting of the Conference on Disarmament will be held on Thursday, 24 July, at 10.30 a.m. The plenary meeting stands adjourned.

The meeting rose at 11.40 a.m.