CONFERENCE ON DISARMAMENT

CD/1039
Appendix I/Volume III
30 August 1990

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REPORT OF THE CONFERENCE ON DISARMAMENT

APPENDIX I

VOLUME III

Text of documents issued by the

Conference on Disarmament

GE.90-62780

CONFERENCE ON DISARMAMENT

CD/1002
14 June 1990

ENGLISH
Original: RUSSIAN

LETTER DATED 13 JUNE 1990 FROM THE REPRESENTATIVE OF THE UNION OF SOVIET SOCIALIST REPUBLICS ADDRESSED TO THE PRESIDENT OF THE CONFERENCE ON DISARMAMENT TRANSMITTING THE TEXTS OF A PRESS RELEASE AND A DECLARATION ADOPTED AT THE MEETING OF THE POLITICAL CONSULTATIVE COMMITTEE OF THE STATES PARTIES TO THE WARSAW TREATY IN MOSCOW ON 7 JUNE 1990

I have the honour to inform you that a meeting of the Political Consultative Committee of the States Parties to the Warsaw Treaty was held on 7 June 1990 in Moscow.

The meeting adopted a press release as well as a declaration by the States parties to the Warsaw Treaty.

As a representative of the country which organized the meeting, and in accordance with established practice, I hereby request you to distribute these papers as official documents of the Conference on Disarmament.

(signed) S. Batsanov
Representative of the USSR to
Conference on Disarmament

Press release on the outcome of the meeting of the Political Consultative Committee

A meeting of the Political Consultative Committee of the States Parties to the Warsaw Treaty was held on 7 June 1990 in Moscow. It was attended by the following:

People's Republic of Bulgaria - Petar Mladenov, President and head of delegation; Andrei Lukanov, Chairman of the Council of Ministers; Dobri Dzhurov, Minister of Defence; and Boiko Dimitrov, Minister for Foreign Affairs;

Republic of Hungary - Jozsef Antall, Prime Minister and head of delegation; Arpad Goncz, interim President; Lajos Für, Minister of Defence, Ferenc Somogyi, Secretary of State in the Ministry of Foreign Affairs; and Sandor Gjörke, Ambassador Extraordinary and Plenipotentiary to the USSR;

German Democratic Republic - Lothar de Maizière, Prime Minister and head of delegation; Sabina Bergmann-Pohl, Chairman of the People's Chamber, Markus Meckel, Minister for Foreign Affairs; and Rainer Eppelmann, Minister of Disarmament and Defence;

Republic of Poland - Wojciech Jaruzelski, President and head of delegation; Tadeusz Mazowiecki, Chairman of the Council of Ministers; Krzystof Skubiszewski, Minister for Foreign Affairs; and Florian Siwicki, Minister of Defence;

Romania - Ion Iliescu, President and head of delegation; Petre Roman, Prime Minister; Victor Stanculescu, Minister of Defence; Romulus Neagu, Deputy Minister for Foreign Affairs; and Vasile Sandru, Ambassador Extraordinary and Plenipotentiary to the USSR;

Union of Soviet Socialist Republics - Mikhail Sergeevich Gorbachev, President and head of delegation; Nikolai Ivanovich Ryzhkov, Chairman of the Council of Ministers; Eduard Ambrosievich Shevardnadze, Minister for Foreign Affairs; Aleksandr Nikolaevich Yakovlev, member of the President's Council; and Dmitri Timofeevich Yazov, Minister of Defence;

Czech and Slovak Federal Republic - Vaclav Havel, President and head of delegation; Marian Calfa, Head of Government; Jiri Dienstbier, Deputy Head of Government and Minister for Foreign Affairs; and Miroslav Vacek, Minister of Defence.

The Secretary-General of the Political Consultative Committee, I.P. Aboimov, and the Commander-in-Chief of the Joint Armed Forces of the States parties to the Warsaw Treaty, Army General P.G. Lushev, also took part in the work of the meeting.

The participants examined the prospects for the CSCE process, the creation of new security structures and the strengthening of stability in Europe.

The participants exchanged views concerning the review of the nature, functions and activities of the Warsaw Treaty, and the possibility of its being fundamentally restructured.

The President of the USSR informed the leaders of the allied Governments of the results of the Soviet-American summit talks held between 30 May and 4 June 1990.

The representative of the Czech and Slovak Federal Republic, Deputy Minister for Foreign Affairs Zdenek Matejka, was appointed as Secretary-General of the Political Consultative Committee for the next term of office.

The participants adopted a declaration by the States parties to the Warsaw Treaty, which is being issued separately.

The meeting was held in a friendly and business-like atmosphere.

The next meeting of the Political Consultative Committee of the States Parties to the Warsaw Treaty will be held in Prague.

Declaration by the States parties to the Warsaw Treaty

The high-level representatives of the States parties to the Warsaw Treaty who gathered in Moscow on 7 June 1990 at a meeting of the Political Consultative Committee adopted the following statement.

I.

Current developments in Europe are creating the conditions for overcoming the bloc-based model of security and the division of the continent. These developments are becoming irreversible. They are in line with the interest of peoples in living in harmony, without artificial barriers or ideological enmity. The participants favour the establishment of a new, pan-European security system, and a united Europe of peace and co-operation.

The States which were represented at the meeting are actively participating in this dynamic process, and consequently consider it essential to review the nature and functions of the Warsaw Treaty. They are convinced that only thus can the Warsaw Treaty fulfil, in a period of transition, new urgent tasks related to disarmament and the creation of a pan-European security system.

The States parties to the Warsaw Treaty concur that the ideological image of the enemy has largely been overcome by the convergent efforts of East and West, while the very concepts of East and West are reacquiring purely geographical significance. They consider that danger could emanate only from those threatening the security of countries in any form, including threats of force or the use of force, whoever might be involved. Elements of confrontation contained in documents of the Warsaw Treaty and the North Atlantic Alliance in past years no longer correspond to the spirit of the times.

In this new situation, the Governments which were represented at the meeting are undertaking a review of the nature, functions and activities of the Warsaw Treaty, as well as its transformation into a treaty among sovereign States with equal rights, built upon democratic foundations. For that purpose they have created a temporary commission of government plenipotentiaries which will submit appropriate concrete proposals to the Political Consultative Committee by the end of October 1990. The Committee will examine these proposals before the end of November 1990. In this way the States parties to the Warsaw Treaty wish to contribute to strengthening peace, security and stability in Europe and furthering the Helsinki process.

The participants reaffirmed their readiness to co-operate constructively with the North Atlantic Alliance and its members, and also with the neutral and non-aligned States of the continent, on a bilateral and multilateral basis, in the interest of stability and disarmament in Europe, the strengthening of trust and the consolidation of the principle of defensive sufficiency.

The participants also consider that the consistent and comprehensive institutionalization of the Helsinki process is an important step in this regard. This is the objective of proposals recently made by individual

participants in CSCE. The participants in the meeting expect that the first important decisions on this problem will be adopted at the forthcoming summit meeting of European States, the United States and Canada.

The States parties to the Warsaw Treaty take a positive view of certain concrete steps recently taken by NATO. They expect that the trend towards changes in NATO that has been observed will become more rapid and more thorough-going, and also that it will be reflected in appropriate substantive changes in the Alliance's activities.

II.

The States parties to the Warsaw Treaty expressed their wish for a successful conclusion to the Vienna talks on conventional armed forces and on confidence-building and security-building measures in Europe, in order that agreements on these subjects can be adopted at a meeting of leaders of CSCE participating States at the end of 1990.

Concerning the external aspects of the unification of Germany, a general conviction was expressed that it should be effected in the context of the CSCE process and on the basis of the principles of that process, stimulating and intensifying its development, taking account of the legitimate security interests of Germany's neighbours and all other States, and furnishing firm guarantees of the inviolability of European frontiers.

The States which were represented at the meeting will actively promote the establishment of a European economic and juridical space, as well as the full realization of fundamental human rights and freedoms.

The participants noted that the agreements reached at the meeting between the Presidents of the USSR and the United States are conducive to further progress towards disarmament and the improvement of the international situation.

The States parties to the Warsaw Treaty express their conviction that all States participating in the Helsinki process fully acknowledge their responsibility to ensure that the historic opportunity to create a Europe without blocs and enmity will not be missed.

CONFERENCE ON DISARMAMENT

CD/1003
14 June 1990

Original: ENGLISH

Programme of Work for the Second Part of the 1990 Session of the Conference on Disarmament

(Adopted at the 556th plenary meeting on 14 June 1990)

In compliance with Rule 28 of the Rules of Procedure, the Conference on Disarmament adopts the following programme of work for the second part of its 1990 Session:

12-15 June	Statements in plenary meetings. Consideration of the programme of work, as well as of the establishment of subsidiary bodies on items on the agenda and other organizational questions.
18-29 June	(Nuclear Test Ban. ((Cessation of the nuclear arms race and nuclear (disarmament.
2-6 July	Prevention of an arms race in outer space.
9-13 July	Prevention of nuclear war, including all related matters.
16-27 July	Chemical Weapons.
30 July-3 August	(Effective international arrangements to assure (non-nuclear-weapon States against the use or threat (of use of nuclear weapons. ((New types of weapons of mass destruction and new (systems of such weapons; radiological weapons.
6-10 August	Comprehensive programme of disarmament.
13-...	Reports of ad hoc subsidiary bodies, consideration and adoption of the Annual Report to the General Assembly of the United Nations.

The Conference will continue consideration of its improved and effective functioning and will report to the General Assembly of the United Nations on that subject.

The Conference will further intensify its consultations in pursuance of paragraphs 14 and 15 of its report (CD/956) with a view to taking a positive decision at its 1990 annual session with regard to expansion of its membership by not more than four States and the need to maintain balance in the membership of the Conference and will inform accordingly the forty-fifth session of the General Assembly of the United Nations.

Meetings of subsidiary bodies will be convened after consultations between the President of the Conference and the Chairmen of the subsidiary bodies, according to the circumstances and needs of those bodies.

The Ad Hoc Group of Scientific Experts to Consider International Co-operative Measures to Detect and Identify Seismic Events will meet from 30 July to 10 August 1990.

In adopting its programme of work, the Conference has kept in mind the provisions of rules 30 and 31 of its Rules of Procedure.

CONFERENCE ON DISARMAMENT

CD/1004
20 June 1990

Original: ENGLISH

LETTER DATED 19 JUNE 1990 FROM THE REPRESENTATIVE OF THE UNITED STATES OF AMERICA ADDRESSED TO THE PRESIDENT OF THE CONFERENCE ON DISARMAMENT TRANSMITTING JOINT STATEMENTS ON THE TREATY ON STRATEGIC OFFENSIVE ARMS AND ON FUTURE NEGOTIATIONS ON NUCLEAR AND SPACE ARMS AND FURTHER ENHANCING STRATEGIC STABILITY, ADOPTED AT THE UNITED STATES-SOVIET SUMMIT MEETING IN WASHINGTON ON 1 JUNE 1990 */

I have the honour to forward to you the following documents of the United States-Soviet summit meeting in Washington:

- Joint Statement on the Treaty on Strategic Offensive Arms, adopted on 1 June 1990;

- Joint Statement on Future Negotiations on Nuclear and Space Arms and Further Enhancing Strategic Stability, adopted on 1 June 1990.

In accordance with past practice, Minister S. Batsanov, USSR Representative to the Conference on Disarmament, will transmit these documents in Russian to the Conference on Disarmament.

I ask that you take the appropriate steps to issue these statements as official documents of the Conference on Disarmament and have them distributed to all member delegations and non-member States participating in the work of the Conference.

(Signed) STEPHEN J. LEDOGAR
Representative of the United States of America
to the Conference on Disarmament

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*/ The official Russian texts of the documents mentioned herein are to be found in CD/1005.

JOINT STATEMENT ON THE TREATY ON STRATEGIC OFFENSIVE ARMS

The President of the United States, George Bush, and the President of the Union of Soviet Socialist Republics, Mikhail S. Gorbachev, discussed the status of the Treaty on the Reduction and Limitation of Strategic Offensive Arms. The two Presidents expressed their satisfaction with the great progress which has been made in the negotiations on this Treaty. In particular, they welcomed the mutually acceptable solutions which have been found on major issues in the talks and reaffirmed their determination to have the Treaty completed and ready for signature by the end of this year. They instructed their negotiating teams in Geneva to accelerate their work to complete the Joint Draft Text recording the details of these solutions in order to fulfil this goal.

The START Treaty will be a major landmark in both arms control and in the relationship between the United States of America and the Union of Soviet Socialist Republics. It results from the recognition by both sides of the special obligation they bear to reduce the risk of outbreak of nuclear war, enhance strategic stability, and strengthen peace and international security. As such, the START Treaty will signal a turning point in United States-Soviet arms control efforts toward a more rational, open, co-operative, predictable and stable relationship. The Treaty will complement to a remarkable degree the important political changes which have recently begun to remove the hostility and suspicion and will facilitate the reduction of the sizeable stockpiles of strategic offensive arms which now exist.

The benefits of this Treaty are many. For the first time ever, both sides will carry out significant reductions in strategic offensive arms - up to 50 per cent in certain categories. More importantly, these reductions will be designed to make a first strike less plausible. The result will be greater stability and a lower risk of war.

Major agreed provisions of the Treaty are as follows:

The total number of deployed ICBMs and their associated launchers, deployed SLBMs and their associated launchers and heavy bombers will be reduced to no more than 1,600; within this total deployed heavy ICBMs and their associated launchers will be reduced to no more than 154.

The total number of warheads attributed to deployed ICBMs, deployed SLBMs and heavy bombers will be reduced to no more than 6,000. Of these, no more than 4,900 will be warheads on deployed ICBMs and deployed SLBMs, no more than 1,540 will be warheads on heavy ICBMs, and no more than 1,100 will be warheads on mobile ICBMs;

The aggregate throw-weight of the deployed ICBMs and SLBMs of each side will be limited to an agreed level which will be approximately 50 per cent below the existing level of the aggregate throw-weight of deployed ICBMs and SLBMs of the Union of Soviet Socialist Republics as of a date to be determined. This limit will not be exceeded for the duration of the Treaty;

Heavy bombers equipped for long-range nuclear air-launched cruise missiles (ALCMs) will be distinguishable from other heavy bombers. Heavy bombers equipped for nuclear armaments other than long-range nuclear ALCMs will be counted as one delivery vehicle against the 1,600 limit and will be attributed with one warhead against the 6,000 limit;

Heavy bombers equipped for long-range nuclear ALCMs will be counted as one delivery vehicle against the 1,600 limit and shall be attributed with an agreed number of warheads against the 6,000 limit. Existing and future United States heavy bombers equipped for long-range nuclear ALCMs will be attributed with 10 warheads each. Existing and future Soviet heavy bombers equipped for long-range nuclear ALCMs will be attributed with 8 warheads each;

Within the 1,600 limit on delivery vehicles the United States of America may have no more than 150 heavy bombers equipped for long-range nuclear ALCMs that are attributed with 10 warheads each. The Union of Soviet Socialist Republics may exceed that number of heavy bombers by 40 per cent. If the United States of America exceeds the 150 number, each additional heavy bomber equipped for long-range nuclear ALCMs will be attributed with the number of long-range nuclear ALCMs for which it is actually equipped. If the Union of Soviet Socialist Republics exceeds 210 heavy bombers equipped for long-range nuclear ALCMs, each such heavy bomber will be attributed with the number of long-range nuclear ALCMs for which it is actually equipped;

Existing and future United States heavy bombers may be equipped for no more than 20 long-range nuclear ALCMs; existing and future Soviet heavy bombers may be equipped for no more than 12 long-range nuclear ALCMs;

Long-range ALCMs will be considered those with a range in excess of 600 kilometres. Future long-range non-nuclear ALCMs will not be considered nuclear if they are distinguishable from long-range nuclear ALCMs. There will be no restrictions on deploying such ALCMs on aircraft not limited by the Treaty.

Reductions will be carried out in three phases over a period of seven years. Specific, equal interim levels for agreed categories of strategic offensive arms will be achieved by the end of each phase of reductions;

The numerical limitations provided for by the Treaty will be achieved and complied with through conversion or elimination in accordance with agreed procedures.

Sea-launched cruise missiles (SLCMs) will not be constrained in the START Treaty. Each side will provide the other with a unilateral declaration of its policy concerning nuclear SLCMs and, annually for the duration of the Treaty, with unilateral declarations regarding its planned deployments of nuclear long-range SLCMs, i.e. those with a range in excess of 600 kilometres. Those declarations will be politically binding. In the annual declarations the maximum number of deployed nuclear SLCMs for each of the following five Treaty years will be specified, provided that the number declared will not exceed 880. In the declarations of policy it will be specified that the United States of America and the Union of Soviet Socialist Republics will not produce or deploy nuclear sea-launched cruise missiles with multiple independently targetable warheads. The sides reaffirmed their 1987 Washington Summit Joint Statement to continue to seek "mutually acceptable and effective methods of verification".

Except as specifically prohibited, modernization and replacement of strategic offensive arms may be carried out.

The START Treaty will include specific prohibitions on certain categories of strategic offensive arms, basing modes and activities. The following are among the bans under the START Treaty:

- new types of heavy ICBMs;

- heavy SLBMs and launchers of heavy SLBMs;

- mobile launchers of heavy ICBMs;

- new types of ICBMs and SLBMs with more than 10 re-entry vehicles;

- flight testing and deployment of existing types of ICBMs or SLBMs with a number of re-entry vehicles greater than the number specified in the Washington Summit Joint Statement of December 1987;

- rapid reload of ICBM launchers;

- long-range nuclear ALCMs equipped with multiple independently targetable warheads.

The far-reaching reductions and other constraints contained in the Treaty will be accompanied by the most thorough and innovative verification provisions ever negotiated.

Taken together, the START Treaty's comprehensive verification régime will create a degree of transparency in the military sphere which would have been unthinkable only a short time ago. It will not only provide for effective verification of the obligations of the Treaty, but will also greatly increase the mutual confidence which is essential for a sound strategic relationship. In addition, this verification system can provide a model which may be incorporated into future agreements. The verification régime under development includes:

- On-site inspections: For the purpose of ensuring verification of compliance with the Treaty, each side will, on the basis of reciprocity, conduct 12 kinds of on-site inspections, as well as continuous monitoring of mobile ICBM production facilities, in accordance with agreed procedures. Inter alia, each side will conduct short-notice inspections at facilities related to strategic offensive arms, including inspections to verify the numbers of re-entry vehicles on deployed ballistic missiles, inspections to verify elimination of strategic offensive arms and facilities related to them, suspect site inspections, and various exhibitions.

- National technical means of verification: For the purpose of ensuring verification, each side will use national technical means of verification at its disposal in a manner consistent with generally recognized principles of international law. The Treaty will include a series of co-operative measures to enhance the effectiveness of national technical means of verification. There will be a ban on interference with such means;

- Ban on denial of telemetric information: The sides agreed to make on-board technical measurements on ICBMs and SLBMs and to broadcast

all telemetric information obtained from such measurements. Except for strictly limited exemptions, there will be a ban on any practice, including the use of encryption, encapsulation or jamming, that denies full access to telemetric information;

- Information exchange: Before signature of the Treaty the sides will exchange data on the numbers, locations and technical characteristics of their strategic offensive arms. These data will be updated on a regular basis throughout the lifetime of the Treaty;

- A comprehensive agreement on the manner of deployment of mobile ICBM launchers and their associated missiles and appropriate limitations on their movements so as to ensure effective verification of adherence to the numerical limitations provided for in the Treaty. In addition, the number of non-deployed ICBMs for mobile launchers will be limited and mobile ICBMs will be subject to identification through the application of unique identifiers, or tags.

To promote the objectives of the Treaty, the sides will establish the Joint Compliance and Inspection Commission.

The sides have agreed that the Treaty will have a duration of 15 years, unless superseded earlier by a subsequent agreement. If the sides so agree, the Treaty can be extended for successive five-year periods, unless superseded.

The progress outlined above fulfils the aim, set forth by the Presidents of the United States of America and the Union of Soviet Socialist Republics during their Malta meeting, of agreeing upon the basic provisions of the strategic offensive arms Treaty by the time of their Washington meeting. The two Presidents express confidence that the Foreign Ministers and the delegations of the two countries at the Geneva talks will be able to reach agreement in the remaining months on the outstanding issues that are still being negotiated.

Washington 1 June 1990

Joint Statement on Future Negotiations on Nuclear and Space Arms and Further Enhancing Strategic Stability

The United States of America and the Union of Soviet Socialist Republics, building on the results of the current negotiations, agree to pursue new talks on strategic offensive arms, and on the relationship between strategic offensive and defensive arms. The objectives of these negotiations will be to reduce further the risk of outbreak of war, particularly nuclear war, and to ensure strategic stability, transparency and predictability through further stabilizing reductions in the strategic arsenals of both countries. This will be achieved by seeking agreements that improve survivability, remove incentives for a nuclear first strike and implement an appropriate relationship between strategic offenses and defences.

In order to attain these objectives, the sides have agreed as follows:

First. This year the sides will complete work on the Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Reduction and Limitation of Strategic Offensive Arms. Following the signing of the Treaty, the sides will hold consultations without delay regarding future talks and these important talks will begin at the earliest practical date. Both sides in these future talks will be free to raise any issues related to any strategic offensive arms.

Within the existing negotiating framework on Nuclear and Space Arms in Geneva, the two sides will continue negotiations on ABM and space without delay.

Thus, in the future talks the two sides will discuss strategic stability issues of interest to them, including the relationship between strategic offensive and defensive arms, taking into account stabilizing reductions in strategic offensive arms and development of new technologies. The sides will work toward the important goal of reaching an early outcome in these negotiations.

Second. The United States of America and the Union of Soviet Socialist Republics, as is the case in the emerging START Treaty, will, in the new negotiations, seek to reduce their strategic offensive arms in a way consistent with enhancing strategic stability. In the new negotiations, the two sides agree to place emphasis on removing incentives for a nuclear first strike, on reducing the concentration of warheads on strategic delivery vehicles, and on giving priority to highly survivable systems.

In particular, the two sides will seek measures that reduce the concentration of warheads on strategic delivery vehicles as a whole, including measures related to the question of heavy missiles and MIRVed ICBMs. Effective verification will be provided by national technical means, co-operative measures, and on-site inspection.

Third. Having agreed on the need to ensure a predictable strategic relationship between the United States of America and the Union of Soviet Socialist Republics, the sides will, for the entire duration of the START Treaty, exchange, at the beginning of each calendar year, information on planned changes in the numbers of strategic offensive arms as of the end of the current year.

Fourth. The sides will pursue additional measures to build confidence and ensure predictability of the military activities of the United States of America and the Union of Soviet Socialist Republics that would reduce the possibility of an outbreak of nuclear war as a result of accident, miscalculation, terrorism, or unexpected technological breakthrough, and would prevent possible incidents between them.

Fifth. The sides believe that reducing the risk of outbreak of nuclear war is the responsibility not only of the United States of America and the Union of Soviet Socialist Republics, and that other States should also make their contribution toward the attainment of this objective, in particular in the field of non-proliferation of nuclear weapons. They call upon all States to consider the new opportunities for engagement in mankind's common effort to remove the risk of outbreak of nuclear war worldwide.

Accordingly, the United States of America and the Union of Soviet Socialist Republics will give these future negotiations the highest priority so that the benefits of strengthened stability can be realized as soon as possible.

CONFERENCE ON DISARMAMENT

CD/1005
20 June 1990

ENGLISH
Original: RUSSIAN

LETTER DATED 19 JUNE 1990 FROM THE REPRESENTATIVE OF THE UNION OF SOVIET SOCIALIST REPUBLICS ADDRESSED TO THE PRESIDENT OF THE CONFERENCE ON DISARMAMENT TRANSMITTING JOINT STATEMENTS ON THE TREATY ON STRATEGIC OFFENSIVE ARMS AND ON FUTURE NEGOTIATIONS ON NUCLEAR AND SPACE ARMS AND FURTHER ENHANCING STRATEGIC STABILITY, ADOPTED AT THE SOVIET-UNITED STATES SUMMIT MEETING IN WASHINGTON ON 1 JUNE 1990 */

I have the honour to forward to you the following documents of the Soviet-United States summit meeting in Washington:

- Joint Statement on the Treaty on Strategic Offensive Arms, adopted in Washington on 1 June 1990;

- Joint Statement on Future Negotiations on Nuclear and Space Arms and Further Enhancing Strategic Stability, adopted in Washington on 1 June 1990.

In accordance with past practice, Ambassador S. Ledogar, Representative of the United States of America to the Conference on Disarmament, will transmit these documents in English to the Conference on Disarmament.

I ask that you take the appropriate steps to issue these documents as official documents of the Conference on Disarmament and to distribute them to the delegations of all States members of the Conference and States non-members of the Conference participating in the work of the Conference.

REPRESENTATIVE OF THE USSR
TO THE CONFERENCE ON DISARMAMENT

(Signed) S. BATSANOV

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*/ The official English texts of the documents mentioned herein are to be found in CD/1004.

CONFERENCE ON DISARMAMENT

CD/1006
20 June 1990

ENGLISH
Original: ENGLISH/FRENCH

LETTER DATED 19 JUNE 1990 FROM THE REPRESENTATIVE OF THE UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND ADDRESSED TO THE SECRETARY-GENERAL OF THE CONFERENCE ON DISARMAMENT TRANSMITTING A DOCUMENT ADOPTED AT THE MINISTERIAL MEETING OF THE NORTH ATLANTIC COUNCIL AT TURNBERRY, UNITED KINGDOM, ON 7 AND 8 JUNE 1990

On behalf of those States which belong to the North Atlantic Alliance and are members of the Conference on Disarmament, I have the honour to forward to you the following document:

"Message from Turnberry, and Final Communiqué from the Ministerial Meeting of the North Atlantic Council at Turnberry, United Kingdom, on 7 and 8 June 1990".

The document is attached in the official English and French versions. I should be grateful if you would circulate, as an official document of the Conference on Disarmament, this letter together with the document adopted by the Ministerial Meeting of the North Atlantic Council in its English and French versions.

(Signed) T.A.H. Solesby
Ambassador

N A T O — O T A N

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PRESS COMMUNIQUÉ M-1(90)29

For immediate release
8 June 1990

MINISTERIAL MEETING OF THE NORTH ATLANTIC COUNCIL AT TURNBERRY, UNITED KINGDOM 7th-8th June 1990

MESSAGE FROM TURNBERRY

We, the Foreign Ministers of the Alliance, express our determination to seize the historic opportunities resulting from the profound changes in Europe to help build a new peaceful order in Europe, based on freedom, justice and democracy. In this spirit, we extend to the Soviet Union and to all other European countries the hand of friendship and co-operation.

True and enduring security in Europe will be best assured through mutual acknowledgement and understanding of the legitimate security interests of all states. We are ready to contribute actively to building confidence and closer relations between all European countries, including the members of the two alliances. We welcome the statement issued by the members of the Warsaw Treaty Organization in Moscow on 7th June. We are encouraged by the positive spirit conveyed in this declaration and in particular by the readiness on the part of the countries issuing it for constructive co-operation.

The CSCE process, which will become even more important as an instrument for co-operation and security in Europe, should be strengthened and given effective institutional form. We are committed to work for a rapid and successful conclusion of the Vienna negotiations on conventional forces. The arms control process must be vigorously pursued.

We are convinced that German unification is a major contribution to stability in Europe.

Recognising the eminently political importance of these tasks, we are ready to do our utmost for their accomplishment.

* * *

FINAL COMMUNIQUÉ

1. The historic events that have occurred since we met last December in Brussels confirm that Europe is entering a new era. The countries of Central and Eastern Europe are taking steps to establish democratic institutions, hold free elections and

promote political pluralism and market-oriented economic policies. Germany is peacefully and democratically moving towards unity. We welcome the expansion and deepening of political exchanges at all levels. The visits to NATO by the Soviet, Czechoslovak and Polish Foreign Ministers exemplify this broadened dialogue. We look to further such opportunities in the future. A continent divided for four decades is searching for new patterns and structures of co-operation. These positive trends are having repercussions beyond Europe: democracy, the search for peaceful solutions and respect for human values are gaining ground in other parts of the world as well. Our Alliance remains vitally important as an instrument both for ensuring the security of its members and the stability of Europe and as a keystone of our efforts to build a new European order of peace. At this meeting, we have looked ahead to both continuing and new Alliance tasks in support of the positive changes in Europe, in preparation for the decisions to be taken by our Heads of State and Government next month in London. To that end, we have confirmed our agreement on the following points.

2. We strongly emphasise that we attach the highest priority to the conclusion this year of a CFE treaty. This must encompass all subjects under negotiation, and result in substantial, binding, verifiable reductions of conventional forces in Europe, thus eliminating destabilising disparities and the capability to launch a surprise attack or initiate large-scale offensive action. Such a treaty would be a dramatic advance towards greater stability and security in Europe. That goal is within sight, and it is now imperative that the remaining obstacles to its achievement be removed. We remain ready to take account of the stated interests of the other participants and to explore all open issues on the basis of a willingness on all sides to make reasonable compromises. We have therefore instructed our negotiators in Vienna to pursue new approaches to mutually acceptable solutions, in particular on aircraft, armour and verification. We call on the Soviet Union to co-operate in reaching agreement on all substantive issues this Summer, in order that progress can be made on the broader agenda for the construction of a new Europe, including a CSCE Summit later this year.

3. Allied governments will continue to work for substantive results in the CSBM negotiations, in the form of an agreement later this year. To that end, Allies have recently proposed a series of innovative co-operative measures, such as a mechanism for discussion of unusual activities of a military nature and annual implementation assessment meetings. We will continue to build on the contributions to confidence-building flowing from the Military Doctrine Seminar held in January in the framework of the CSBM negotiations in order to further expand military contacts and exchanges on military matters.

4. As soon as a CFE agreement is reached, Allies will be prepared to undertake follow-on negotiations to further enhance security and stability in Europe. The objectives of these follow-on negotiations, and of our further quest for European security, including through conventional arms control, will be considered at our meeting of Heads of State and Government.

5. We welcome the progress attained in the US-Soviet Summit held last week and, in particular, the agreement on major outstanding issues governing a START treaty that will result in deep reductions in both sides' strategic nuclear weapons and greatly expand bilateral military transparency in that area, as well as agreement to begin further talks on strategic nuclear forces specifically devoted to achieving a more stable strategic balance after the current treaty is completed. We took special note of the progress represented by the signature at the Summit meeting of verification protocols for treaties limiting nuclear testing and expressed our satisfaction with the bilateral agreement that will drastically reduce both sides' stocks of chemical weapons.

6. We believe the US-Soviet agreement on reducing chemical weapons stockpiles will provide great impetus towards the earliest possible conclusion of the convention for an effectively verifiable, global and comprehensive ban on chemical weapons now being negotiated, which remains our goal. All Allies hereby state their intention to be among the original signatories to the convention and to promote its early entry into force. We call on all other states to undertake a similar commitment. We reaffirm our determination to work to prevent the proliferation of nuclear and chemical weapons and of missiles capable of carrying such weapons.

7. We will pursue the "Open Skies" initiative, convinced that such a regime would make a significant contribution to the openness and transparency we wish to encourage. We therefore regret that our efforts to reach such an agreement have thus far not been successful and look to the Soviet Union to join with us to take the steps necessary to create an "Open Skies" regime that will increase calculability, mutual confidence and the security of all participants.

8. Recognising that the verification of arms control treaties is destined to become a long-term task for the Alliance, we have decided to establish a co-ordination mechanism for this purpose.

9. We agree on the crucial importance of the political and economic reforms underway in the states of Central and Eastern Europe and the Soviet Union. The continued progress of these states towards becoming democratic and economically prosperous partners co-operating with us will be an important element in the future security and stability of Europe. We are prepared to support their efforts to integrate their economies more closely into the world economy and to widen and deepen the scope of our co-operation with them as they progress, thus contributing to the success of their reform programmes.

10. We strongly hope that the processes of economic re-orientation and development and of democratic institution-building in these countries, necessarily complicated and uneven, will successfully overcome periods of uncertainty and potential instability. The historic changes already underway and the prospects for further positive developments have not removed all grounds for concern about the stability and security of Europe. Moreover, we cannot be oblivious to the fact that the Soviet Union will retain substantial military capabilities, which it is

continuing to modernise and which have implications for our defence.

11. The need to maintain our common defence remains vital. The Alliance's role of preventing conflict, precluding the use or threat of force against any of its members and guaranteeing stability will continue to be essential. That role is built upon the principle of the indivisibility of security for all member countries and embodies an indispensable link between North America and European democracies. For the foreseeable future, the prevention of war will continue to require an appropriate mix or survivable and effective conventional and nuclear forces, at the lowest levels consistent with our security needs. Our resolve, our commitment to the equitable and widespread sharing of responsibilities, and our solidarity with which we have maintained adequate collective defence arrangements for so long, including the presence of significant North American conventional and nuclear forces in Europe, will continue to be crucial factors in the maintenance of peace in Europe.

12. The military risks facing the Alliance have already decreased substantially, and implementation of a successful CFE agreement would result in a further dramatic improvement. The principles of Alliance security set out in May 1989 in the Comprehensive Concept of Arms Control and Disarmament are the basis for our further work in assessing the implications of the changing situation in Europe for our strategy. Thus, those governments among us participating in the Defence Planning Committee welcome its recent decision to undertake a review of NATO's military strategy, and the means of implementing it, in the emerging circumstances. They also welcome the invitation to the NATO Military Authorities to undertake a study of the possibilities of greater use of multi-national forces. They endorse the US President's recent proposal that negotiations on US and Soviet short-range nuclear weapon systems in Europe begin shortly after a CFE agreement is concluded.

13. We see the CSCE process as an important framework for far-reaching reforms and stability and as a central element in the construction of a new Europe, along with other European institutions including the Alliance itself. The function of the CSCE will be complementary to that of the Alliance. The CSCE, having from the outset served to ease the burden of the division of Europe, will now become even more vital as an instrument for developing structures for a Europe whole and free and for co-operation within a united continent. The Allies look forward to an early outcome to the CFE negotiations which are taking place in the CSCE framework and to continued progress in the talks on confidence and security-building measures, which, along with results of CSCE inter-sessional activities, will lay the necessary basis for the CSCE Summit this year. The Summit should reflect the new role of the CSCE and take appropriate decisions. Furthermore, it is the hope of the Allies that the "2 + 4" process will be completed prior to the CSCE Summit. That Summit will help consolidate the changes that have taken place in Central and Eastern Europe, and provide substantial new impetus to the CSCE process in all main areas of the Helsinki Final Act. To this end, implementation in letter and spirit of all CSCE

obligations by all CSCE participating states remains essential. Meanwhile, we believe that the time has now come to determine the modalities of institutionalisation without depriving the process of its flexibility and balance. A number of valuable proposals have been raised within the framework of Alliance consultations for the further development of the C$CE process and for enhancing regional co-operation efforts. They include a consultation mechanism on a high level as well as other arrangements in specific fields of co-operation. Our governments continue to develop these ideas as our preparations continue for the CSCE Summit. We are pleased that other CSCE participants are equally developing their ideas. We welcome the decision of the Foreign Ministers of the 35 CSCE states at their meeting in Copenhagen on 5th June 1990 to establish a preparatory Committee for the Summit, and for Ministers of the "35" to meet in the United States this Autumn.

14. Welcoming agreement at the recent Bonn Conference on Economic Co-operation in Europe on fundamental principles to guide the conversion from planned to market-oriented economies, we fully support the efforts of the Copenhagen meeting of the Conference on the Human Dimension now underway to reinforce and extend the protection and guarantee of human rights and individual freedoms. Allies place particular importance on resolutions concerning the right to free and fair elections held at regular intervals, a commitment to the rule of law, and rights of persons belonging to national minorities among many proposals put forward for consideration at the Copenhagen meeting. We hope that the Palma de Mallorca meeting on the Mediterranean will contribute to enhancing co-operation also in that region. We also welcome the interest recently expressed by the Albanian Government in associating itself with the CSCE process and the commitments therein. We look to the Albanian Government to demonstrate its willingness to comply with all existing CSCE commitments, including those on human rights.

15. We note with pride that after 40 years as a divided city, Berlin is finally growing together again. The Berlin Wall has come down. This heralds the long-awaited ending of the post-war era and of the division of Germany and of Europe. The realisation of the unity of Germany has always been a primary goal of our Alliance. Therefore, on the basis of our close and continuing consultations within the Alliance, we are united in actively supporting the process that has already been achieved in the process of German unification; we also support the efforts underway in the "2 + 4" talks to seek a final settlement under international law terminating the Four Power rights and responsibilities relating to Berlin and Germany as a whole, and without the establishment of constraints on the sovereignty of Germany. A united Germany must have the right, recognised in the Helsinki Final Act, to choose to be a party to a treaty of alliance. We believe that European stability, as well as the wishes of the German people, requires that a unified Germany be a full member of this Alliance, including its integrated military structure,without prejudice to stated positions about nondeployment of NATO forces on the present GDR territory. The security guarantee provided by Articles 5 and 6 of the North Atlantic Treaty will extend to all the territory of a united

Germany. We seek no unilateral advantage from German unity and are prepared to demonstrate this, taking into account legitimate Soviet security interests. A free and democratic Germany will be an essential element of a peaceful order in Europe in which no state need harbour fears for its security against its neighbours. We underline the importance of the points on German unification discussed with the Soviet leadership in Washington, which fully reflect our consultations.

16. We express the wish that the problems accompanying the difficult internal transition of the Soviet Union be solved in a constructive manner and to the satisfaction of all concerned. In this context, we firmly support the expectations and aspirations of the Baltic peoples. It is our understanding that the leaders of Lithuania and the Soviet Union have indicated their willingness to begin a dialogue upon the suspension - and not retraction - by the Lithuanian leadership of the implementation of their declaration of independence. We appeal to all parties to show flexibility and enter into true dialogue to reach an early solution.

17. Our activities in the scientific and environmental fields, known as NATO's "Third Dimension", remain of major benefit to our member nations and are an expression of their solidarity. In the spirit of the 40th Anniversary Summit Declaration, we shall pursue measures to invite scientific experts from Central and Eastern Europe to participate in work on the environment connected with pilot studies within the framework of the Committee on the Challenges on Modern Society.

18. The NATO Summit in May 1989 launched a Democratic Institutions Fellowship programme intended to help qualified applicants from Central and Eastern Europe, as well as those from Alliance countries, to study our democratic values and way of life. We intend to pursue this initiative and are pleased with the strong response it has received in its first year.

19. Mindful of the continuing need to inform our publics better about the work and objectives of the Alliance, we expressed our strong support for the network of Atlantic Committees and Associations brought together under the Atlantic Treaty Association. We are convinced that they have a vital role to play in deepening public understanding of the role of the Alliance. We underline the great value of the exchanges of views in the North Atlantic Assembly on issues facing the Alliance.

20. The developments which we are now witnessing and of which we have been and will continue to be among the principal architects, are producing far-reaching changes in the political and military fundamentals of European security, and consequently in the conditions under which our Alliance is required to work.

These changes call into question neither the necessity for maintaining the Alliance nor the permanence of its fundamental features. We will keep our Alliance dynamic and cohesive and will continue to foster a solid and fruitful transatlantic relationship between North America and an increasingly united Europe. We will remain cognisant of the need for intra-Alliance

co-operation and assistance. We must continue, in the face of historic change, to deepen and strengthen our political consultation and, where appropriate, co-ordination.

Thus, while ensuring that the permanent principles which form the basis of our Alliance and guarantee its effectiveness are preserved, we must today adapt it to the enormous changes now taking place.

We have already begun this process in the political and defence spheres, as demonstrated by our Ministerial consultations this Spring. We have shown ourselves ready, through the arms control negotiations in which we are participating or which we are preparing to initiate, to adjust the size of the Allies' conventional and nuclear forces. We have noted that the Defence Ministers who participate in the Nuclear Planning Group and the Defence Planning Committee have decided to reconsider their strategy. Although the prevention of war will always remain our fundamental task, the changing European environment now requires of us a broader approach to security based as much on constructive peace-building as on peace-keeping.

21. We recognise, against the background of the changes now taking place in Europe, that the modifications in certain aspects of the Alliance's policies and functioning will form part of a broader pattern of adaptation within the Organization. This process should encompass all activities of our Alliance and must be consistent with the principles which we have declared to be permanent and with the requirements of the new era upon which we are embarking. We have, therefore, instructed our Council in Permanent Session to oversee the work in hand, with a view to ensuring that it is effectively co-ordinated, and to report regularly to us on the progress made.

22. We express our deep appreciation for the warm hospitality provided by the Government of the United Kingdom.

N A T O — O T A N

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REUNION DU CONSEIL DE L'ATLANTIQUE NORD EN SESSION MINISTERIELLE A TURNBERRY, ROYAUME-UNI 7 ET 8 JUIN 1990

MESSAGE DE TURNBERRY

Nous, Ministres des affaires étrangères des pays membres de l'Alliance, exprimons notre détermination à saisir les occasions historiques qui découlent des profonds changements intervenus en Europe et à contribuer ainsi à l'instauration d'un nouvel ordre pacifique en Europe fondé sur la liberté, la justice et la démocratie. Dans cet esprit, nous adressons à l'Union soviétique et à tous les autres pays européens un message d'amitié et de coopération.

Le meilleur moyen d'assurer à l'Europe une sécurité véritable et durable est de faire en sorte que les intérêts légitimes de tous les Etats en matière de sécurité soient mutuellement compris et reconnus. Nous sommes prêts à contribuer activement à l'édification et au resserrement de relations de confiance entre tous les pays européens, y compris entre les membres des deux Alliances. Nous accueillons avec satisfaction la déclaration faite par les membres de l'Organisation du Traité de Varsovie à Moscou le 7 juin. Nous jugeons encourageante la tonalité positive de cette déclaration, et notamment la volonté de coopération constructive manifestée par les pays qui l'ont publiée.

Le processus de la CSCE, qui revêtira une importance encore plus grande comme instrument de coopération et de sécurité en Europe, devrait être renforcé et faire l'objet d'une forme d'institutionnalisation. Nous sommes attachés à oeuvrer en faveur de la conclusion rapide et satisfaisante des négociations de Vienne sur les forces conventionnelles. Le processus de maîtrise des armements doit être poursuivi avec vigueur.

Nous sommes convaincus que l'unification allemande apporte une contribution majeure à la stabilité en Europe.

Reconnaissant l'importance éminemment politique de ces tâches, nous sommes prêts à tout mettre en oeuvre pour les mener à bien.

* * *

COMMUNIQUE FINAL

1. Les événements historiques survenus depuis la réunion que nous avons tenue en décembre de l'année dernière, à Bruxelles, confirment que l'Europe se trouve à l'aube d'une ère nouvelle. Les pays d'Europe centrale et orientale sont en train de franchir des étapes décisives vers la mise en place d'institutions démocratiques, la tenue d'élections libres et le développement du pluralisme

politique et de systèmes économiques orientés par les lois du marché. L'Allemagne s'achemine, pacifiquement et démocratiquement, vers l'unité. Nous nous félicitons de ce que les échanges politiques se multiplient et s'intensifient à tous les niveaux. Les visites que les Ministres des affaires étrangères d'Union soviétique, de Tchécoslovaquie et de Pologne ont effectuées au siège de l'OTAN sont autant d'exemples de ce dialogue élargi. Nous espérons que cette évolution favorable se poursuivra à l'avenir. Un continent divisé depuis quarante ans s'efforce de trouver de nouveaux schémas et de nouvelles structures de coopération. Ces tendances positives ont des répercussions qui dépassent le cadre de l'Europe : la démocratie, la recherche de solutions pacifiques et le respect des valeurs humaines gagnent du terrain dans d'autres parties du monde également. Notre Alliance conserve une importance vitale comme instrument propre à garantir la sécurité de ses membres en même temps que la stabilité de l'Europe, et comme élément clé de nos efforts pour construire un nouvel ordre de paix en Europe. A la présente réunion, nous avons envisagé les tâches que l'Alliance devra poursuivre et entreprendre en faveur des changements positifs en Europe pour préparer les décisions que prendront le mois prochain, à Londres, les Chefs d'Etat et de gouvernement de nos pays. A cette fin, nous avons confirmé notre accord sur les points suivants.

2. Nous rappelons avec vigueur que nous accordons la priorité la plus élevée à la signature, dans l'année, d'un traité sur les FCE. Celui-ci devra porter sur l'ensemble des questions faisant l'objet de négociations et conduire à des réductions substantielles, contraignantes et vérifiables, des armes conventionnelles en Europe, éliminant ainsi des déséquilibres, facteurs d'instabilité, et la capacité de lancer des attaques par surprise ou de mener des opérations offensives de grande envergure. Un tel traité représenterait un progrès majeur vers le renforcement de la stabilité et de la sécurité en Europe. Cet objectif est en vue, et il est maintenant impératif de surmonter les derniers obstacles qui subsistent sur la voie de sa réalisation. Nous restons prêts à tenir compte des intérêts que les autres participants font valoir et à examiner toutes les questions en suspens avec, de part et d'autre, la volonté de parvenir à des compromis raisonnables. C'est pourquoi nous avons chargé nos négociateurs à Vienne de définir des approches nouvelles pour arriver à des solutions mutuellement acceptables en ce qui concerne particulièrement les avions, les blindés et la vérification. Nous appelons l'Union soviétique à coopérer en vue de la conclusion, cet été, d'un accord sur toutes les questions fondamentales afin que des progrès puissent s'accomplir vers la mise en oeuvre de l'objectif plus général de l'édification d'une Europe nouvelle, avec notamment l'organisation d'un Sommet de la CSCE avant la fin de cette année.

3. Les gouvernements des pays alliés continueront d'oeuvrer pour obtenir, aux négociations sur les MDCS, des résultats substantiels sous la forme d'un accord d'ici la fin de l'année. A cet effet, les Alliés ont récemment proposé une série de mesures nouvelles privilégiant la coopération, telles que l'adoption d'un mécanisme d'examen des activités militaires inhabituelles et l'organisation de réunions annuelles consacrées à l'évaluation de la mise en oeuvre. Afin de développer encore les contacts et les échanges dans le domaine militaire, nous continuerons de tirer tout le parti possible des contributions que le Séminaire sur les doctrines militaires, tenu en janvier dans le cadre des négociations sur les MDCS, a apportées au renforcement de la confiance.

4. Dès la conclusion d'un accord sur les FCE, les Alliés seront prêts à engager d'autres négociations pour renforcer la sécurité et la stabilité en Europe. Les objectifs de ces autres négociations et des efforts que nous continuerons de déployer en faveur de la sécurité européenne, notamment par la maîtrise des armements conventionnels, feront l'objet d'un examen à la réunion des Chefs d'Etat et de gouvernement de nos pays.

5. Nous accueillons avec satisfaction les progrès enregistrés lors du Sommet américano-soviétique de la semaine dernière, et notamment l'accord sur les grandes questions en suspens qui conditionnent la signature d'un traité START devant conduire à d'importantes réductions des armes nucléaires stratégiques des deux parties, à un accroissement considérable de la transparence militaire bilatérale dans ce domaine, ainsi qu'à la décision d'entamer une nouvelle série de pourparlers sur les forces nucléaires stratégiques dont l'objet sera, plus particulièrement, de parvenir à un équilibre stratégique plus stable après la conclusion du traité actuel. Nous prenons bonne note du progrès que représente la signature, à l'occasion de ce Sommet, de protocoles de vérification de traités visant à limiter les essais nucléaires et nous nous félicitons de l'accord bilatéral qui entraînera une réduction radicale des stocks d'armes chimiques des deux parties.

6. Nous considérons que l'accord américano-soviétique sur la réduction des stocks d'armes chimiques donnera un grand élan aux travaux visant à la conclusion, dans les plus brefs délais possible, de la convention sur l'interdiction universelle, globale et effectivement vérifiable des armes chimiques, convention dont la négociation se poursuit et qui demeure notre objectif. Tous les Alliés proclament leur intention de figurer au nombre de ses signataires originaires et de favoriser son entrée en vigueur à une date rapprochée. Nous appelons tous les autres Etats à prendre un engagement similaire. Nous réaffirmons notre détermination à lutter contre la prolifération des armes nucléaires et chimiques ainsi que des missiles pouvant servir de vecteurs à de telles armes.

7. Nous donnerons suite à l'initiative concernant un régime "Ciel ouvert", car nous sommes convaincus qu'il contribuerait grandement à l'ouverture et à la transparence que nous souhaitons encourager. Nous regrettons par conséquent que nos efforts pour parvenir à un tel accord n'aient pas encore abouti et nous attendons de l'Union soviétique qu'elle se joigne à nous, afin de prendre les mesures nécessaires à l'établissement d'un régime propre à accroître la prévisibilité, la confiance mutuelle et la sécurité de tous les participants.

8. Conscients que la vérification de traités sur la maîtrise des armements est appelée à devenir une tâche à long terme de l'Alliance, nous avons décidé de mettre en place un mécanisme de coordination à cet effet.

9. Nous considérons que les réformes politiques et économiques en cours dans les Etats d'Europe centrale et orientale et en Union soviétique revêtent une importance cruciale. Les progrès qu'ils continueront d'accomplir sur la voie de la démocratie et de la prospérité économique, pour devenir les partenaires de nos pays, constitueront un facteur important pour la sécurité et la stabilité de l'Europe. Nous sommes prêts à soutenir les efforts qu'ils déploient pour

intégrer plus étroitement leurs systèmes économiques à l'économie mondiale, ainsi qu'à élargir et à intensifier notre coopération avec eux en fonction de leurs progrès, et à contribuer de la sorte au succès de leurs programmes de réformes.

10. Nous espérons vivement que la restructuration et le développement économiques, ainsi que la mise en place d'institutions démocratiques dans ces pays - processus forcément complexes et délicats - permettront de mettre fin aux périodes d'incertitude et aux instabilités potentielles. Les changements historiques déjà en cours et la perspective d'autres développements positifs n'ont pas effacé toutes les causes de préoccupation quant à la stabilité et à la sécurité en Europe. Par ailleurs, nous ne saurions méconnaître le fait que l'Union soviétique conservera des capacités militaires substantielles dont elle poursuit la modernisation, ce qui a des implications pour notre défense.

11. La nécessité de maintenir notre défense commune demeure vitale. L'Alliance continuera de jouer un rôle essentiel pour prévenir les conflits, pour empêcher de recourir à l'emploi ou à la menace de la force contre l'un ou l'autre de ses membres et pour garantir la stabilité. Ce rôle se fonde sur le principe de l'indivisibilité de la sécurité de tous les pays membres, et concrétise le lien indispensable entre les démocraties nord-américaines et européennes. Dans un avenir prévisible, la prévention de la guerre exigera encore une combinaison appropriée de forces efficaces et aptes à la survie, conventionnelles comme nucléaires, au niveau compatible avec les besoins de sécurité de nos pays. Notre résolution, notre volonté d'assurer un partage large et équitable des responsabilités et la solidarité dont nous faisons preuve depuis si longtemps pour préserver des arrangements appropriés de défense collective, avec notamment la présence en Europe d'importantes forces nord-américaines, conventionnelles comme nucléaires, resteront des facteurs cruciaux pour le maintien de la paix sur ce continent.

12. Les risques auxquels l'Alliance est exposée dans le domaine militaire se sont déjà sensiblement atténués, et la mise en oeuvre d'un accord satisfaisant sur les FCE se traduirait par une nouvelle amélioration spectaculaire. Les principes régissant la sécurité de l'Alliance, exposés en mai 1989 dans le Concept global de maîtrise des armements et de désarmement, sont la base de notre évaluation future des conséquences que l'évolution de la situation en Europe peut avoir sur notre stratégie. Ainsi, les gouvernements des pays qui participent aux réunions du Comité des plans de défense accueillent avec satisfaction la décision qu'il a prise, récemment, d'entreprendre une révision de la stratégie militaire de l'OTAN, et des moyens de la mettre en oeuvre, en tenant compte de la situation nouvelle qui se fait jour. Ils se félicitent également de ce que les autorités militaires de l'OTAN aient été invitées à examiner les possibilités d'un recours accru aux forces multinationales. Ils souscrivent à la proposition formulée, il y a peu, par le président Bush, selon laquelle des négociations sur les systèmes de missiles nucléaires à courte portée des Etats-Unis et de l'Union soviétique en Europe devraient commencer peu après la conclusion d'un accord sur les FCE.

13. Le processus de la CSCE constitue à nos yeux un cadre important pour de vastes réformes et pour la stabilité, ainsi qu'un élément central dans la

construction d'une Europe nouvelle, aux côtés d'autres institutions européennes comme de l'Alliance elle-même. La mission de la CSCE sera complémentaire à celle de l'Alliance atlantique. La CSCE, qui sert depuis le début à atténuer les pénibles effets de la division de l'Europe, va désormais jouer un rôle encore plus vital, en tant que moyen d'établir des structures pour une Europe entière et libre et pour une coopération dans un continent uni. Les Alliés souhaitent que les négociations sur les FCE, qui se tiennent dans le cadre de la CSCE, aboutissent rapidement et que celles qui sont consacrées aux mesures de confiance et de sécurité continuent de progresser. Ces négociations constitueront, avec les résultats des activités intersessionnelles menées au titre de la CSCE, l'assise nécessaire du Sommet de cette année. Celui-ci devrait traduire le nouveau rôle de cette instance et permettre de prendre les décisions appropriées. Par ailleurs, les Alliés espèrent que les pourparlers "2+4" auront abouti avant le Sommet de la CSCE. Ce dernier contribuera à consolider les changements survenus en Europe centrale et orientale, et imprimera un nouvel élan important au processus de la CSCE dans tous les principaux domaines couverts par l'Acte final d'Helsinki. A cette fin, la mise en oeuvre, dans la lettre et dans l'esprit, de toutes les obligations au titre de la CSCE par tous les Etats participant à la CSCE demeure essentielle. Nous considérons, en même temps, que le moment est venu de déterminer les modalités d'institutionnalisation, sans nuire pour autant à la souplesse du processus ni à son équilibre. Un certain nombre de propositions intéressantes ont été avancées, dans le cadre des consultations au sein de l'Alliance, concernant l'évolution du processus de la CSCE et l'intensification des efforts de coopération au niveau régional. Elles comportent un mécanisme de consultation à un niveau élevé, ainsi que d'autres dispositions dans certains domaines spécifiques de coopération. Les gouvernements de nos pays continuent de réfléchir à ces idées, alors que se poursuivent nos préparatifs en vue du Sommet de la CSCE. Nous constatons avec plaisir que d'autres participants à cette Conférence ont également engagé un travail de réflexion dans ce sens. Nous accueillons avec satisfaction la décision que les Ministres des affaires étrangères des trente-cinq Etats participant à la CSCE ont prise, à la réunion tenue à Copenhague le 5 juin 1990, d'établir un Comité préparatoire pour le Sommet et de se réunir à l'automne aux Etats-Unis.

14. Nous nous félicitons de l'accord conclu, à la récente Conférence de Bonn sur la coopération économique en Europe, sur les principes fondamentaux qui doivent guider le passage de l'économie planifiée à l'économie de marché, et nous soutenons sans réserve les efforts déployés à la réunion qui se tient à Copenhague dans le cadre de la Conférence sur la dimension humaine, en vue de renforcer la protection et le respect des droits de l'homme et des libertés individuelles. Parmi les nombreuses propositions soumises pour examen à la réunion de Copenhague, les Alliés accordent une importance particulière aux résolutions concernant le droit à des élections libres et justes à des intervalles réguliers, le respect de l'Etat de droit et des droits des personnes appartenant à des minorités nationales. Nous espérons que la réunion de Palma de Majorque sur la Méditerranée contribuera à renforcer la coopération dans cette région également. Nous notons aussi avec satisfaction que le gouvernement albanais a marqué récemment sa volonté de s'associer au processus de la CSCE et de souscrire aux engagements qui en découlent. Nous attendons de ce gouvernement qu'il se montre prêt à se conformer à tous les engagements existants au titre de la CSCE, notamment dans le domaine des droits de l'homme.

15. Nous constatons avec fierté que Berlin, après quarante années de division s'engage enfin sur la voie de l'unité. Le mur de Berlin est tombé. Cette évolution annonce la fin, tant attendue, de la période de l'après-guerre et de la division de l'Allemagne et de l'Europe. L'unité de l'Allemagne a toujours été l'un des objectifs primordiaux de l'Alliance. C'est pourquoi, nous fondant sur les consultations étroites que nous poursuivons au sein de l'OTAN, nous nous réjouissons tous vivement des progrès déjà accomplis sur la voie de l'unification de ce pays; nous apportons également notre appui aux efforts en cours, dans le cadre des pourparlers "2+4", pour parvenir à un règlement définitif de droit international mettant fin aux droits et aux responsabilités des Quatre Puissances concernant Berlin et l'Allemagne dans son ensemble, sans qu'aucune limitation ne soit imposée à la souveraineté de ce pays. Une Allemagne unifiée doit avoir le droit - reconnu dans l'Acte final d'Helsinki - de décider d'être ou non partie à un traité d'alliance. Il importe selon nous, pour assurer la stabilité de l'Europe et répondre aux voeux exprimés par le peuple allemand, que l'Allemagne unifiée soit membre à part entière de l'Alliance et de sa structure militaire intégrée, sans préjudice des prises de position concernant le non-déploiement de forces de l'OTAN sur le territoire actuel de l'Allemagne de l'Est. Les garanties de sécurité prévues aux termes des Articles 5 et 6 du Traité de l'Atlantique Nord s'étendront à l'ensemble du territoire de l'Allemagne unifiée. Nous ne cherchons à retirer aucun avantage unilatéral de l'unité allemande et nous sommes prêts à le prouver, en tenant compte des intérêts légitimes de l'Union soviétique en matière de sécurité. Une Allemagne libre et démocratique sera un élément essentiel d'un ordre pacifique en Europe dans lequel aucun Etat ne devra craindre de voir sa sécurité mise en cause par ses voisins. Nous soulignons l'importance des points relatifs à l'unification allemande qui ont été débattus avec les dirigeants soviétiques à Washington et qui reflètent intégralement nos consultations.

16. Nous formulons le voeu que les problèmes inhérents au difficile processus de transition interne engagé par l'Union soviétique trouveront une solution constructive et satisfaisante pour tous ceux qui sont concernés. A cet égard, nous soutenons fermement les attentes et les aspirations des peuples baltes. Nous croyons savoir que les dirigeants de la Lituanie et de l'Union soviétique ont marqué leur volonté d'engager un dialogue sur la suspension - non sur l'annulation - par les autorités lituaniennes, de la mise en oeuvre de la déclaration d'indépendance qu'elles ont prononcée. Nous appelons toutes les parties à faire preuve de souplesse et à entamer de véritables pourparlers afin de parvenir rapidement à une solution.

17. Les activités que nous menons dans le domaine scientifique et dans celui de l'environnement - la "Troisième dimension" de l'OTAN - conservent tout leur intérêt pour les membres de l'Alliance, et sont l'expression de leur solidarité. Dans l'esprit de la Déclaration du Sommet du 40ème anniversaire, nous étudierons les mesures à prendre en vue d'inviter des experts scientifiques d'Europe centrale et orientale à participer à des travaux sur l'environnement liés aux études pilotes menées dans le cadre du Comité sur les défis de la société moderne.

18. La réunion au Sommet de mai 1989 a marqué le début d'un programme de bourses de recherche de l'OTAN sur les institutions démocratiques, dont le but

est de faciliter l'étude de nos valeurs et de nos modes de vie démocratiques par des candidats qualifiés d'Europe centrale et orientale, ainsi que des pays de l'Alliance. Nous avons l'intention de donner suite à cette initiative et nous sommes satisfaits du vif intérêt qu'elle a suscité dès la première année.

19. Conscients de la nécessité permanente de mieux informer le public sur les travaux et les objectifs de l'Alliance, nous avons apporté un ferme soutien à notre réseau d'associations et de comités nationaux qui forment l'Association du Traité atlantique. Nous croyons que ces groupes ont un rôle essentiel à jouer en faisant mieux comprendre au public le rôle de l'Alliance. Nous soulignons le grand intérêt des échanges de vues, au sein de l'Assemblée de l'Atlantique Nord, sur les problèmes auxquels l'Alliance se trouve confrontée.

20. Les évolutions dont nous sommes les témoins et dont nous avons été et continuerons d'être largement les artisans sont, nous en sommes conscients, en train de transformer en profondeur les données politiques et militaires de la sécurité européenne, et donc les conditions dans lesquelles notre Alliance est amenée à exercer son action.

Ces changements ne mettent en cause ni la nécessité de maintenir l'Alliance, ni la permanence de ses traits fondamentaux. Nous préserverons le dynamisme et la cohésion de notre Alliance, et continuerons de promouvoir une association transatlantique, solide et féconde, entre l'Amérique du Nord et une Europe toujours plus unie. Nous garderons présente à l'esprit la nécessité de la coopération et de l'assistance entre les pays membres de l'Alliance. Face au changement historique, il nous faudra continuer d'approfondir et de renforcer notre processus de consultation et, au besoin, de coordination politiques.

Aussi, tout en veillant à préserver les principes permanents qui fondent notre Alliance et en assurent l'efficacité, il nous faut aujourd'hui l'adapter aux vastes mutations en cours.

Nous avons déjà entamé ce processus, tant sur le plan politique que sur celui de la défense, comme l'ont montré les consultations ministérielles de ce printemps. A travers les négociations de maîtrise des armements auxquelles nous participons ou que nous nous préparons à ouvrir, nous nous sommes montrés prêts à ajuster le volume des forces conventionnelles et nucléaires dont disposent les Alliés. Nous avons noté que les Ministres de la défense de ceux d'entre nos pays qui participent au Groupe des plans nucléaires et au Comité des plans de défense ont décidé d'entreprendre un réexamen de leur stratégie. Certes, la prévention de la guerre demeurera notre tâche essentielle, mais l'évolution du contexte européen exige à présent, de notre part, une approche plus large de la sécurité, fondée tout autant sur la construction de la paix que sur son maintien.

21. Devant la mutation qui s'opère en Europe, nous reconnaissons que les changements qui affectent certains aspects des politiques et du fonctionnement de l'Alliance devront s'inscrire dans une adaptation d'ensemble de l'Organisation. Ce processus devra englober toutes les activités de l'Alliance et être mis en cohérence avec les principes dont nous avons affirmé la permanence, de même qu'avec les besoins de l'ère nouvelle dans laquelle nous entrons. Nous avons par conséquent chargé le Conseil en session permanente de

superviser les travaux en cours afin d'en assurer la coordination efficace et nous l'avons invité à nous rendre compte régulièrement de leur état d'avancement.

22. Nous tenons à exprimer notre profonde gratitude au gouvernement du Royaume-Uni pour l'accueil chaleureux qu'il nous a réservé.

CONFERENCE ON DISARMAMENT

CD/1007
25 June 1990

Original: ENGLISH

LETTER DATED 15 JUNE 1990 FROM THE PERMANENT OBSERVER OF THE DEMOCRATIC PEOPLE'S REPUBLIC OF KOREA ADDRESSED TO THE SECRETARY-GENERAL OF THE CONFERENCE ON DISARMAMENT TRANSMITTING A NEW DISARMAMENT PROPOSAL ADOPTED AT THE JOINT MEETING OF THE CENTRAL PEOPLE'S COMMITTEE, THE STANDING COMMITTEE OF THE SUPREME PEOPLE'S ASSEMBLY AND THE ADMINISTRATION COUNCIL OF THE DEMOCRATIC PEOPLE'S REPUBLIC OF KOREA HELD IN PYONGYANG ON 31 MAY 1990

I have the honour to transmit herewith a new disarmament proposal adopted at the joint meeting of the Central People's Committee, the Standing Committee of the Supreme People's Assembly and the Administration Council of the Democratic People's Republic of Korea held in Pyongyang on 31 May 1990.

I would be grateful if you could circulate it as an official document of the Conference on Disarmament.

(Signed) Ri Tcheul
Ambassador

GE.90-61748/3742a

A NEW DISARMAMENT PROPOSAL FOR PEACE ON THE KOREAN PENINSULA

A joint meeting of the Central People's Committee, the Standing Committee of the Supreme People's Assembly and the Administration Council of the Democratic People's Republic of Korea held in Pyongyang on 31 May discussed the question of easing the tensions on the Korean Peninsula and creating a peaceful climate for national reunification and put forward the following new disarmament proposal putting in a more concrete shape the peace package proposed in November 1988 to suit the practical conditions:

Confidence building between the North and the South

1. The North and the South should limit military training and military manoeuvres.

A. Any joint military manoeuvres and military training with foreign troops should be banned.

B. Military training and military manoeuvres of and above the divisional level should be banned.

C. All military manoeuvres should be banned in the area along the Military Demarcation Line (MDL).

D. Military manoeuvres of foreign troops should not be allowed in the territory of the North or the South.

E. The North and the South should notify each other in advance of military manoeuvres.

2. The North and the South should convert the Demilitarized Zone (DMZ) along the MDL into a peace zone.

A. All the military personnel and military equipment should be withdrawn from the DMZ.

B. All the military set-ups in the DMZ should be dismantled.

C. The DMZ should be opened to civilians and be used for peaceful purposes.

3. The North and the South should take security measures to prevent an accidental conflict and its expansion.

A. Direct telephone links should be installed and operated between the high-level military authorities of the two sides.

B. All acts of military provocation against the other side should be banned in the area along the MDL.

Arms reduction in the North and the South

4. The North and the South should reduce their armed forces stage by stage.

A. The reduction of military strength should be carried out in three phases in the period of three or four years after a disarmament agreement is reached between the two sides.

Each side should reduce its military strength to the 300,000-men level in the first stage, to the 200,000-men level in the second stage and to the level of less than 100,000-men in the third stage.

B. Military equipment should be reduced or dismantled in proportion to the phased military reduction.

C. All the civilian military organizations and civilian armed forces should be dissolved in the first stage of the reduction of the regular armed forces.

5. The North and the South should stop the qualitative improvement of military equipment.

A. The introduction of new military technology and equipment and the development of military equipment should be stopped.

B. New military technology and equipment should not be introduced from foreign countries.

6. The North and the South should inform each other of the process of disarmment and verify it.

A. Both sides should inform each other of the process of arms reduction.

B. The implementation of the disarmament agreement should be verified through mutual spot inspection of the other side's area.

Withdrawal of foreign forces

7. The North and the South should convert the Korean Peninsula into a nuclear-free zone.

A. Joint efforts should be made to get all the nuclear weapons deployed in South Korea withdrawn immediately.

B. Nuclear weapons should not be produced or purchased.

C. Foreign planes and warships loaded with nuclear weapons should be banned from entering or passing through Korea.

8. The North and the South should make joint efforts to get all foreign troops withdrawn from the Korean Peninsula.

A. Steps should be taken to make the United States troops and their equipment present in South Korea totally withdraw on a phased basis in keeping with the arms reduction of the North and the South.

B. Steps should be taken to have the United States military bases in South Korea dismantled on a phased basis in keeping with the pullout of the United States troops.

Disarmament and guarantee for peace after it

9. The North and the South should take measures for disarmament and guarantee of peace after it.

A. A neutral nations inspection force might be deployed in the DMZ along the MDL.

B. A North-South joint military committee headed by a person at the level of the chief of general staff from each side should be formed and operated to control armament and discuss and settle possible military disputes between the North and the South.

10. The North and the South should adopt a non-aggression declaration through negotiation and reach an agreement on drastic arms reduction.

For a complete and durable peace on the Korean Peninsula, the present state of armistice must be converted into a state of peace.

CONFERENCE ON DISARMAMENT

CD/1008
CD/CW/WP.298
26 June 1990

Original: ENGLISH

NORWAY

USE OF SORBENT EXTRACTION IN VERIFICATION OF ALLEGED USE OF CHEMICAL WEAPONS

1. INTRODUCTION

An extensive study of the possibility of verifying alleged use of chemical weapons was initiated by the Norwegian Ministry of Foreign Affairs in 1981. The research has been carried out by the Division for Environmental Toxicology of the Norwegian Defence Research Establishment at Kjeller near Oslo. The annual reports and working papers submitted to the Conference on Disarmament have been compiled in the publication Contributions by Norway to the Conference on Disarmament 1982-1987 (document CD/813 dated 7 March 1988).

The 1988 report was mainly concerned with the development of complete procedures for verification of alleged use of chemical weapons. This includes procedures for localization of the contaminated area and for field analyses, sample collection, sample handling, sample preparation and laboratory analyses (CD/857 of 12 August 1988 and CD/861 of 22 August 1988).

The research in 1989 focused on the development and testing of a new, supplementary technique in verification of alleged use of chemical weapons. This technique, headspace gas chromatography, allows liquid and solid samples to be analysed without pretreatment. The headspace technique is a supplement to the sample preparation method developed earlier during the Norwegian research programme, and is of particular advantage in rapid analysis of samples with a high contamination level. The research results are described in document CD/936 of 21 July 1989 and the research report was presented to the Conference with document CD/940 of 31 July 1989.

The sample preparation method developed by the Norwegian research programme is based on the adsorption of chemical warfare agents from aqueous solutions onto a polymer sorbent and its subsequent removal by an organic solvent. This technique, referred to as sorbent extraction, has in the 1989-1990 programme been optimized in order to isolate as efficiently as possible chemical warfare agents and related compounds from different sample materials. The aim of the investigation was to find a general procedure which

can be used for screening samples suspected of being contaminated with chemical warfare agents. The preparation method was tested on samples from different materials. The results and conclusions are summarized in this working paper.

2. DETERMINATION OF OPTIMAL CONDITIONS IN SORBENT EXTRACTION FOR ISOLATING CHEMICAL WARFARE AGENTS FROM AQUEOUS SOLUTIONS

2.1. Principles of sorbent extraction

The sorbent extraction technique is widely used for cleaning samples in areas such as biochemistry, environmental chemistry and food analysis.

The technique is based on the principle of adsorption of chemical compounds from an aqueous solution passed through a cartridge containing a polymer sorbent. With this technique the agents are retained on the sorbent.

This procedure requires no advanced laboratory equipment and may be carried out in the field close to the contaminated area. The sample is concentrated on a cartridge and thus reducing the quantity of material which has to be transported back to the laboratory for analysis and making it easy to handle. At the laboratory the chemical warfare agents are removed from the cartridge by means of an organic solvent and analysed by gas chromatography combined with selective detectors or mass spectrometry.

2.2 Factors influencing sorbent extraction

There are several factors which may affect the efficiency of sorbent extraction, and the most important of these have been investigated in order to make the process as efficient as possible. The compounds used in this investigation were the nerve agents tabun, sarin, soman and VX, the related compounds diisopropyl methylphosphonate (DIPMP), isopropyl methyl methylphosphonate (IPMMP) and 1,2,2-trimethylpropyl methylphosphonate (MTMP) and the blister agent mustard gas. Several different polymer sorbents were examined to find the most effective in retaining the above chemical warfare agents and related compounds from aqueous solutions. The amount of sorbent required depends on the sample volume. Different combinations of sample volume and sorbent amount were examined in order to find the optimal combination.

The adsorption of chemical warfare agents to the sorbent may be followed by a washing step where the sorbent may be washed with appropriate solvents to remove sample impurities. The effect of washing with different solvents has been examined. The solvent selected must not remove the chemical warfare agents from the sorbent.

Before analysis, the chemical warfare agents are removed from the polymer sorbent with an organic solvent. The solvents dichloromethane, chloroform, carbon tetrachloride, diethyl ether, acetone, ethyl acetate, hexane, 2-propanol and methanol were examined. Different volumes of the solvents were also investigated in order to find the smallest volume capable of removing the agents from the sorbent.

The temperature during transport or storage required investigation in order to prevent degradation of the chemical warfare agents. The agents tabun, sarin, soman, VX and mustard gas were retained on the sorbent and then stored for different periods of time at +21°C, +2.5°C and -24.5°C before analysis. These temperatures correspond respectively to storage at room temperature, in a refrigerator and in a freezer.

2.3 Results

The results from the 1989-1990 investigation showed that among the non-polar polymer sorbents examined, octadecylsilane (C_{18}) and octylsilane (C_8) sorbents were the most effective in retaining chemical warfare agents and related compounds from aqueous solutions. C_8 was slightly more effective than C_{18} in retaining tabun and mustard gas from small sample volumes, whereas C_{18} was most effective for DIPMP, IPMMP and MTMP. When the sample volume exceeded 10 ml, the C_{18} sorbent was most effective for all agents. The amount of sorbent required to retain the compounds depended on the sample volume. The investigation showed that cartridges containing 200 mg, 500 mg and 1,000 mg should be used for sample volumes of 50 ml, 100 ml and 500 ml respectively. If the sample contains much organic matter, the amount of sorbent should be increased.

After the aqueous sample has been passed through the cartridge, and the chemical agents adsorbed onto the polymer, the sorbent may be washed with water to remove highly polar impurities. If necessary, the sorbent can also be washed with hexane to remove organic impurities. No loss of agents was observed when water was used as the washing solvent and less than 15 per cent loss was observed with hexane.

Investigation of different solvents showed that methanol and acetone were most effective in removing the selected chemical warfare agents and related compounds from the C_{18} cartridges. Since most of the chemical warfare agents are unstable with respect to nucleophilic attack by alcohols, acetone is preferred. The experiments showed further that the optimal volumes of solvent needed to remove the compounds from the sorbent were 300 µl, 500 µl, 800 µl and 1,500 µl for cartridges containing 100 mg, 200 mg, 500 mg and 1,000 mg C_{18} sorbent respectively. Larger volumes may be used, but this would result in lower concentrations in the eluate owing to dilution of the compounds. When optimal volumes were used, the proportion removed was 90 per cent for tabun, soman and MTMP, and 30 per cent for mustard gas and VX. In the case of sarin, the proportion removed varied from 60 per cent for the 200 mg sorbent to 90 per cent for the 1,000 mg sorbent.

The investigation of different storage temperatures showed that all compounds were rapidly degraded on cartridges stored at room temperature (+21°C). For tabun and sarin less than 5 per cent was recovered after two days' storage. For soman, VX and mustard gas the rate of degradation was slower but the proportions recovered had dropped to less than 10 per cent after five days. Thus, if the cartridges need to be stored for more than seven days a freezer should be used for all the compounds investigated. For shorter storage times a refrigerator may be used. The samples should also be kept cool during transport to the laboratory and a box filled with dry ice or other cooling devices such as an insulated bag with cooling elements may be used. The need for such precautions is time dependent and should especially be used if the transport takes more than 24 hours.

3. METHOD VALIDATION

The optimal procedure for sample preparation was applied in the isolation of the nerve agents tabun, sarin, soman and VX, the blister agents mustard gas and the sarin impurity DIPMP from different sample materials. The materials used were water, soil, sand, grass, paper, silicone, neoprene, butyl rubber, a polyurethane foam with activated charcoal, and a polyester/cotton fabric. Of these 10 materials the last five are used in protective clothing. The yield for all the agents, except VX, was established for both 1 mg and 1 µg added to 2 g of soil, sand, grass, paper, neoprene and butyl rubber and to 1 g of silicone, polyurethane foam with activated charcoal and polyester/cotton fabric. The yields were clearly dependent on the sample material and on the chemical warfare agent. More than 50 per cent of tabun, soman and DIPMP and more than 30 per cent of sarin, VX and mustard gas was recovered from most of the materials contaminated with 1 mg of the respective chemical warfare agent. From samples contaminated with 1 µg, the yields were lower, but values above 10 per cent were observed for all but a few combinations of sample material and chemical agent. The recovered amounts of chemical warfare agents were higher from water, sand and paper than from grass, butyl rubber and polyurethane foam with activated charcoal.

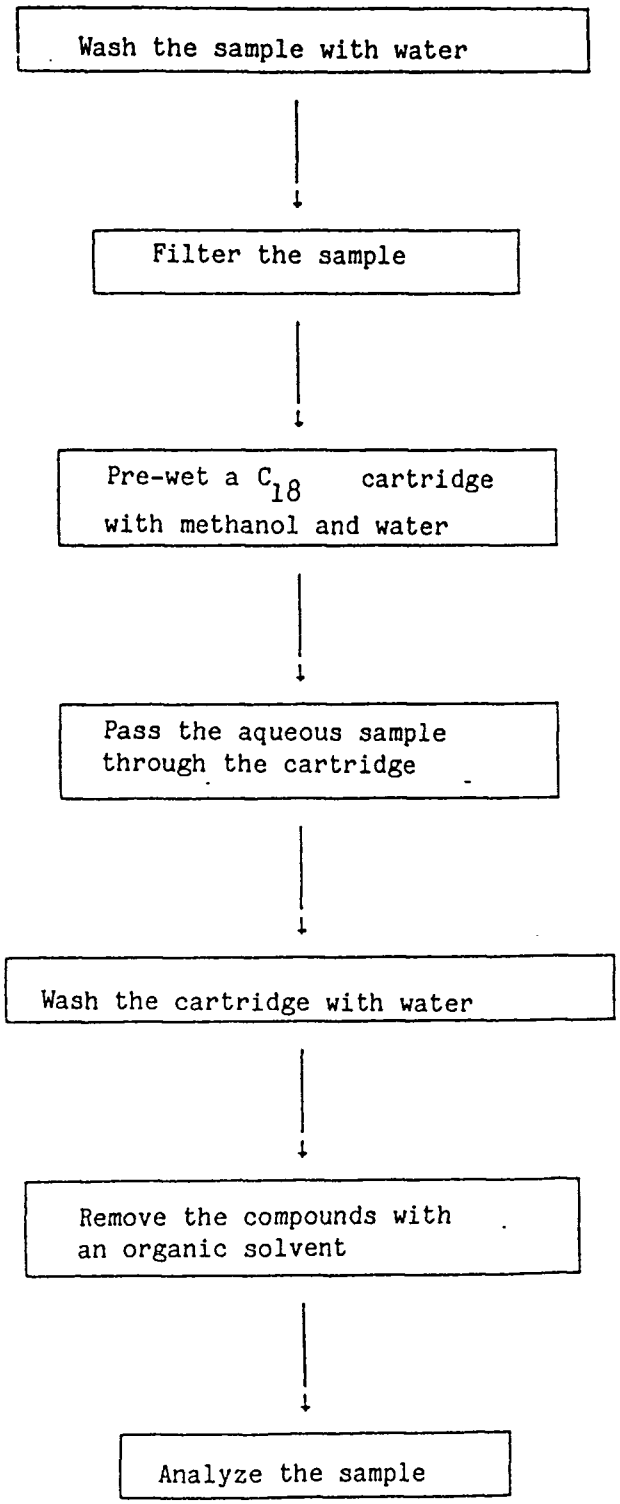
4. CONCLUSIONS

The investigations carried out in 1989-1990 have resulted in an optimal sorbent extraction procedure for isolating chemical warfare agents and related compounds from aqueous solutions. The procedure has been made as general as possible for use in screening samples suspected of being contaminated with chemical warfare agents. Non-polar sorbents were shown to be best suited for sorption of chemical warfare agents and related compounds, and the octadecylsilane (C_{18}) sorbent has proved to be the most efficient of such sorbents. The amount of sorbent needed depends on the volume of the sample. After application of the sample, the sorbent may be washed with water to remove most of the polar impurities. Before analysis the chemical warfare agents are removed from the polymer sorbent using acetone as the preferred organic solvent.

A flow chart showing the complete sample preparation procedure for isolating selected chemical warfare agents and related agents from different sample materials is shown in an annex to this document. The sorbent extraction technique used in this investigation has been successfully applied in the verification of chemical warfare agents obtained from water, grass soil, sand, paper, silicone, butyl rubber, neoprene, a polyurethane foam with activated charcoal, and a polyester/cotton fabric.

ANNEX

FLOW CHART SHOWING THE COMPLETE SAMPLE PREPARATION PROCEDURE FOR ISOLATION OF CHEMICAL WARFARE AGENTS FROM ENVIRONMENTAL SAMPLES



CONFERENCE ON DISARMAMENT

CD/1009
5 July 1990

Original: ENGLISH

LETTER DATED 4 JULY 1990 FROM THE PERMANENT REPRESENTATIVE OF FINLAND ADDRESSED TO THE SECRETARY-GENERAL OF THE CONFERENCE ON DISARMAMENT TRANSMITTING THE LATEST VOLUME OF THE BLUE BOOK SERIES ON VERIFICATION OF CHEMICAL DISARMAMENT ENTITLED "INTERNATIONAL INTERLABORATORY COMPARISON (ROUND-ROBIN) TEST, F.1 TESTING OF EXISTING PROCEDURES" 1/

I have the honour to enclose herewith the latest volume of the Blue Book series on verification of chemical disarmament entitled "International Interlaboratory Comparison (round-robin) Test, F.1 Testing of Existing Procedures".

The previous 14 volumes of the Blue Book series have been research reports of the Finnish CW Verification Project. The present report describes the results of an experiment with participation from 10 different countries and co-ordinated by Finland. The presentation of this report would not have been possible without close co-operation by all participants throughout the experiment and it should indeed be considered as a joint contribution of all 10 laboratories.

I would kindly request you to circulate the report as an official document of the Conference on Disarmament.

I also wish to inform you that Dr. Marjatta Rautio, Director of the Finnish Research Project on the Verification of Chemical Disarmament, will introduce the report on behalf of the participating laboratories at the plenary meeting of the Conference on Disarmament on Thursday, 5 July 1990.

(Signed) Antti Hynninen
Ambassador
Permanent Representative
of Finland

1/ A limited distribution of this document in English only has been made to the members of the Conference on Disarmament. Additional copies are available from the Permanent Mission of Finland at Geneva.

CONFERENCE ON DISARMAMENT

CD/1010
26 June 1990

Original: ENGLISH

NORWAY

Verification of a Comprehensive Nuclear Test Ban

Report on the Workshop on Seismological Aspects of Nuclear Test Ban Verification in Oslo, Norway, 14-17 February 1990

A Comprehensive Nuclear Test Ban (CTB) must be accompanied by effective verification measures aimed at ensuring that nuclear explosions do not take place in any environment, i.e. in the atmosphere, in space, underwater and underground. Seismology is the principal tool for detecting and identifying underground nuclear explosions, and thus forms the basis for CTB monitoring in the underground environment. This is the background for the workshop on seismological aspects of nuclear test ban verification which was held in Oslo, Norway, 14-17 February 1990.

The workshop was hosted by the Norwegian Ministry of Foreign Affairs and organized by the Norwegian Seismic Array (NORSAR) in co-operation with the Norwegian Council on Arms Control and Disarmament.

The objective of the workshop was, through briefings and demonstrations on seismological facilities in Norway, and through presentation of recent research achievements, to shed further light on seismological verification aspects of a comprehensive nuclear test ban.

The workshop was attended by 76 scientists and representatives from 21 countries, including a large number of seismologists participating in the work of the Conference on Disarmament's Group of Scientific Experts (GSE) in Geneva. Ambassador Miljan Komatina, Secretary-General of the Conference on Disarmament, participated as a special guest on the basis of an invitation by the Norwegian Government.

In his welcoming address the Norwegian State Secretary of Foreign Affairs, Mr. Knut Vollebaek, stated that the holding of this workshop in Oslo demonstrated the great importance which the Government of Norway attaches to the Conference on Disarmament and to Norway's participation in the Conference. He stressed that an efficient verification is a vital component of a test ban, both in order to ensure compliance and to build confidence. With reference to

the work of the Group of Scientific Experts, Mr. Vollebaek said that a global seismological network would constitute an essential element of a verification system for a nuclear test ban. In the opinion of the Norwegian Government such a network should be equipped with instrumentation of high standards and should incorporate recent technological advances with respect to computer and data communication technology. In this regard, Mr. Vollebaek made special reference to the advanced small-aperture arrays NORESS and ARCESS installed in Norway in recent years, and said that arrays of this type could form important contributions to a global seismic network as proposed by the GSE.

The State Secretary of Foreign Affairs stressed that the research at NORSAR is one of Norway's efforts to find solutions to outstanding verification issues relevant to a nuclear test ban. Considerable importance is attached to maintaining NORSAR as a research facility open to scientists from all countries, some of whom have conducted research at NORSAR for periods up to two years. Mr. Vollebaek also confirmed that the Norwegian Government will make the seismological facilities in Norway available as contributing observatories within a global network.

The NORSAR Director, Dr. Frode Ringdal, gave an introductory presentation of the Norwegian seismological verification program. At the NORSAR Data Processing Center, the participants were given a demonstration which included:

- Presentation of the Norwegian arrays

- Detection of earthquakes and underground nuclear explosions

- Seismic signal analysis using regional array data

- International exchange of seismic data, with emphasis on the GSETT-2 experiment undertaken by the Group of Scientific Experts.

The participants also surveyed the field installations of the Norwegian Regional Seismic Array System (NORESS), which is a small-aperture seismic array, incorporating the most recent technological and scientific advances in seismic array design, instrumentation and data processing. A sister array (ARCESS) is located in the arctic region of Finnmark, Northern Norway. In light of the potential of such arrays to provide a much improved monitoring capability for a future comprehensive nuclear test ban treaty. Norway, has proposed to the Conference on Disarmament (CD/714) that the NORESS/ARCESS concept should form the basis for seismic stations within the global network envisaged by the GSE.

The briefings and demonstrations were followed by a three-day scientific symposium, the purpose of which was to assess the state-of-the-art of research on regional seismic arrays and associated topics. In particular, the symposium focused upon research results using NORESS and ARCESS. A special session was devoted to summarizing the experience and discussing further plans for the ongoing international GSE experiment (GSETT-2).

In an annex to this paper, we give a brief review of some of the results presented during the scientific symposium.

In conclusion, the Oslo workshop demonstrated the considerable progress in the field of seismic monitoring during recent years. It particularly highlighted the technological advances in seismic instrumentation, data communication and computer processing, as exemplified by the development of advanced regional seismic arrays with very sophisticated automatic and interactive signal processing facilities. The presentations at the scientific symposium show that these technological advances are accompanied by considerable scientific progress, although much work remains in order to fully exploit the potential offered by regional arrays in a seismic monitoring context. Research toward this end will form the focus of the continued efforts within the Norwegian seismic verification program, and the results will be presented to the Group of Scientific Experts in Geneva.

Annex

Summary of scientific presentations given during the 1990 Oslo Symposium on Regional Seismic Arrays and Nuclear Test Ban Verification

Development of regional arrays

Reviews of recent developments with regard to regional seismic arrays are presented for NORESS and ARCESS in Norway [1], GERESS in the Federal Republic of Germany [2] and FINESA in Finland [3]. Paper [1] summarizes the design considerations leading to the establishment of the first regional array, NORESS, and describes how the success of this new array concept motivated the deployment of additional arrays of this type. The paper documents the basic signal processing techniques used in real-time data analysis for regional arrays, and demonstrates the excellent detection performance of such arrays at regional distances (less than 2,000 km). It is shown that NORESS and ARCESS are capable of detecting seismic events of magnitude 2.5 with 90 per cent probability, if these events occur within 1,000 km distance. It is stressed, however, that the event identification threshold is necessarily higher than the detection threshold. The FINESA array is also documented to have an excellent performance [3], and together, these three arrays are capable of locating weak seismic events in Fennoscandia very accurately (typically to within 10-20 km). The GERESS array currently under development shows many of the same excellent features [2], and will contribute further to an excellent regional coverage of large parts of Northern Europe.

Processing of data from a network of regional arrays

Recent technological advances have allowed very sophisticated processing techniques to be applied in seismic monitoring research using a network of seismic arrays and single stations, and this is highlighted by the development of the Intelligent Monitoring System (IMS) [4], [5]. Two of the goals for this system are (1) to demonstrate the monitoring performance and capability of the system for small events at regional distances and (2) to explore the promise of an expert-systems approach for providing improved monitoring performance as experience accumulates. The first operational version, described in [4], processes data from NORESS and ARCESS, whereas later versions will be expanded to networks including both arrays and single station. The IMS is ambitious in exploring and integrating many new computer technologies, but the validity of the concept is documented in an evaluation of its initial operational performance [5].

Signal analysis methods

A number of presentations addressed methods for processing seismic signals recorded by arrays as well as 3-component stations. It was demonstrated that both types of stations can provide information very useful in phase identification, azimuth estimation and estimating the apparent velocity of detected phases. From theoretical considerations as well as from experimental comparison [12], [26], [14] arrays are shown to be superior in this regard at low signal-to-noise ratios, although the precision e.g. of azimuth estimates is influenced by a number of factors, including phase

type, frequency of the signal and systematic bias caused by earth heterogeneities [14], [18], [26]. A very promising approach, discussed in [17] is that of joint analysis of 3-component and array data.

Signal detection methods are discussed in several papers. In [11], a system for on-line detection and signal analysis is presented as applied to a Soviet 3-component station in Kazakhstan. In [13], a detection technique is described using NORESS array and 3-component data. A statistical approach, using adaptive techniques, to detection processing and estimation is presented in [7] for array data and [15] for 3-component data. A new approach to obtain precise relative location estimates of seismic events, using high frequency recordings, is presented in [25].

Source identification

Traditionally, seismic discrimination research has focused on distinguishing between earthquakes and underground nuclear explosions. Under a comprehensive test-ban treaty, emphasis will be on detecting and identifying weak seismic events, and a third category, large chemical explosions for industrial purposes (e.g. mining work) will become important to consider. In [10], a very promising method is applied to NORESS data to discriminate between earthquakes and ripple-fired quarry blasts (mining events consisting of several explosions closely grouped in space and time). Using spectral characteristics of the signals, an "automatic" discriminant is proposed computing the likelihood that ripple-firing occurred in each given case.

In [8], a novel approach making use of artificial neutral network is used to develop a classification procedure between earthquakes and mining explosions. Also in this approach, the spectral characteristics of the signals form the basis for the discriminants. The neutral network appears to improve in particular the classification of outliers in the population, and reduce the number of uncertain events. Application of neutral networks in improving seismic processing performance is also addressed in [9].

Of considerable interest for source identification is also the method proposed in [16], applying transfer functions to transform e.g. between recordings of presumed single explosions and ripple-fired explosions, and also between recordings at different NORESS sensors for a given event. This gives promise to improve the coherence of seismic phases recorded at an array, with ensuing implications for improved source parameter estimation. In [6], a case-based reasoning approach to event identification is discussed, and a waveform envelope matching technique is applied to a set of Western Norway earthquakes and explosions.

Detection thresholds and in-country networks

While regional arrays were originally designed to enhance the capabilities for detecting and characterizing weak seismic events at regional distances, they have also been found very effective in the teleseismic distance range. As an example, published yields of Soviet underground nuclear explosions at Semipalatinsk have been used to evaluate the NORESS detection threshold, in terms of explosive yield for events at this test site [21]. The threshold for detection at NORESS is estimated to be as low as 0.1 kt, assuming

full coupling and normal noise conditions. It is pointed out that NORESS has particularly favourable conditions for detecting small events from this test site, and that the seismic identification threshold necessarily will be higher than the detection threshold.

Data from new Global Seismic Network stations in the Soviet Union, installed as a co-operative project between American and Soviet scientists, have been applied in several studies to address problems relevant to an in-country monitoring network. Seismic noise levels at these stations are analysed in [19], and found to be higher than at NORESS in the band 1-20 Hz, with maximum difference ranging from 7 to 25 dB, depending on the station. However, significant noise reduction can be achieved by borehole deployment.

Using data from stations in the USSR, the frequency-dependent attenuation of regional seismic phases has been studied in [22]. Attenuation characteristics are found to be similar to those observed in Scandinavia, but with an absolute Pn amplitude almost a factor of 2 higher in eastern Kazakhstan for a fixed Lg magnitude.

Recordings of Semipalatinsk nuclear explosions at the new Global Seismic Network station in the Soviet Union, together with data from stations in China have been analysed in [20] and it is shown that RMS Lg can be measured at widely separated stations with a remarkable degree of consistency. The standard deviation of the differences between pairs of stations is as low as 0.03-0.04 in logarithmic units, and reliable measurements may be made at magnitude (m_6) down to about 4.0 for stations situated about 1,500 km away from Semipalatinsk. The importance of this observation in terms of supplying yield estimates for nuclear explosions down to and even below the one kiloton is pointed out.

Earth structure, wave propagation, scattering

Several of the papers were devoted to studies of general problems in seismology and geophysics, in areas relevant to the seismic monitoring issue. The structure of the crust and upper mantle in parts of Northern Eurasia is addressed in papers [23], [24], [27] and [29], with the three latter papers specifically making use of regional array data. Seismic wave propagation and scattering are addressed in a number of papers, e.g. [13], [26], [28], [29], [30].

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Proceedings from the symposium will be published as a Special Issue of the Bulletin of the Seismological Society of America, scheduled to appear in the fall of 1990. Copies of this Special Issue will be distributed to all participants in the Group of Scientific Experts.

CONFERENCE ON DISARMAMENT

CD/1011 */
9 July 1990

ENGLISH
Original: SPANISH

LETTER DATED 6 JULY 1990 FROM THE REPRESENTATIVES OF PERU AND VENEZUELA ADDRESSED TO THE PRESIDENT OF THE CONFERENCE ON DISARMAMENT TRANSMITTING THE TEXT OF THE "GALAPAGOS DECLARATION: ANDEAN AGREEMENT ON PEACE, SECURITY AND CO-OPERATION" SIGNED AT GALAPAGOS (ECUADOR) ON 18 DECEMBER 1989 BY THE FIVE HEADS OF STATE OF THE COUNTRIES MEMBERS OF THE ANDEAN GROUP AND THE CORRESPONDING SECTION OF THE "MACHU PICCHU ACT" (CUZCO, PERU) SIGNED BY THE LEADERS OF THE FIVE COUNTRIES ON 23 MAY 1990

We have the honour to transmit to you herewith the text of the "Galápagos Declaration: Andean Agreement on Peace, Security and Co-operation" signed at Galápagos (Ecuador) on 18 December 1989 by the five Heads of State of the countries members of the Andean Group, Bolivia, Colombia, Ecuador, Peru and Venezuela. Also enclosed is the corresponding section of the "Machu Picchu Act" (Cuzco, Peru) signed by the leaders of the five countries on 23 May 1990.

We should be very grateful if, in accordance with established practice, you would arrange for these texts to be issued as an official document of the Conference on Disarmament and distributed to all delegations, both those of the member States and those having observer status and participating in the work of the Conference.

(Signed) Felix Calderón
Minister Counsellor
Acting Head of the delegation of Peru
to the Conference on Disarmament

(Signed) Horacio Arteaga
Ambassador
Head of the delegation of Venezuela
to the Conference on Disarmament

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*/ Re-issued for technical reasons.

I. At the close of their Second Summit Meeting, the Presidents of the five countries members of the Andean Pact, meeting at Galápagos, Ecuador, on 18 December 1989, signed the following "Galápagos Declaration: Andean Agreement on Peace, Security and Co-operation":

"The Presidents of Bolivia, Colombia, Ecuador, Peru and Venezuela:

1. Convinced that the process of Andean integration is creating a new type of relations that is furthering solidarity and increasing mutual trust in the context of peace, friendship and good-neighbourly relations;

2. Conscious that peace, security and co-operation are essential for integrated development and that, as a consequence, Governments must spare no efforts to preserve, consolidate and deepen them on the basis of respect for the principles and rules of international law governing relations between States;

3. Desiring to strengthen Andean integration in a framework of solidarity and growing mutual trust through vigorous action to promote them;

4. Persuaded of the importance for our countries' economic and social development of the link that exists between disarmament and development;

5. Convinced that the democratic system is the most suitable for securing the ideals of peace, the realization of human rights and co-operation among peoples and that it contributes to regional security;

6. Bearing in mind that the scourge of trafficking in drugs and psychotropic substances is generating economic, social and political dangers and distortions and criminal violence, and that it is moreover seriously damaging the peace, development and stability of our societies and even threatening the security of the region, especially when its activities are combined with terrorist acts;

7. Considering that terrorism is a threat to life and peace in democratic societies and constitutes a systematic violation of human rights;

8. Aware that, to strengthen the region's negotiating capacity, it is essential to act jointly, co-ordinating positions based on a renewed concept of solidarity and common defence of regional interests;

9. Taking into account the adverse consequences that the conditions and terms of foreign debt represent for the security of the region and the counter-productive effects of protectionist measures;

10. Convinced of the importance for the rational exploitation of their natural resources of protecting the environmental heritage and the sovereign right of States;

11. Persuaded that security would be strengthened through the establishment of agreements preserving the region against the strains and disputes between the major Powers, and drawing inspiration from the Treaty of Tlatelolco, the Declaration of Ayacucho of 9 December 1974, the

Final Document adopted in 1978 by the tenth special session of the United Nations General Assembly, which was devoted to disarmament, and the principles contained in other instruments relating to the vital need for co-operation and integration, collective security in all its forms, peace and democracy;

12. Acknowledging the outstanding and decisive importance of all the principles contained in the Charters of the United Nations and the Organization of American States, including those of:

(a) Refraining from the use or the threat of the use of force against States' territorial integrity or political independence;

(b) The peaceful settlement of disputes;

(c) Non-interference in the internal affairs of other States;

(d) The equality of States in law, the self-determination of peoples, respect for sovereignty and protection of human rights;

(e) Refraining from discriminatory practices in economic relations between States and respect for States' political, economic and social systems;

(f) Respect for the obligations deriving from international treaties and other sources of international law,

Have agreed on the following Declaration:

1. They declare their commitment to the purposes and principles of the Charters of the United Nations and the Organization of American States;

2. They reassert their commitment to strengthening peace and co-operation in the subregion, to observing in their relations the principles of prohibition of the threat or use of force, the peaceful settlement of disputes, respect for national sovereignty and compliance with the obligations deriving from international legal instruments, and to refraining from action against the territorial integrity, political independence or unity of any State;

3. They declare their resolve to take action to facilitate the creation of a climate of understanding and trust conducive to the strengthening of integration and a policy of good-neighbourly relations in all fields between the countries of the region, with a view to the removal in a spirit of good will of the problems that affect or could affect the process of integration and their relations, friendship, co-operation and solidarity;

4. They declare their willingness jointly to promote the pursuit of the objectives and the fulfilment of the undertakings set forth in the Treaty of Tlatelolco and the Treaty on the Non-Proliferation of Nuclear Weapons;

5. They assert their intention of promoting regional and subregional initiatives embodying a positive response by the region to the questions raised by the relationship between disarmament and development, and the adoption of confidence-building measures in the fields of political, economic and military co-operation, with special reference to frontier areas;

6. They undertake to institute or improve confidence-building measures aimed at the establishment of practical procedures, including prompt bilateral consultations, for avoiding or resolving frontier incidents; the exchange of information and regular meetings between their armed forces and the co-ordination of policy in the fight against terrorism and drug trafficking; and co-operation by their armed forces in development projects of mutual interest, and to continue holding meetings at the level of their military high commands for the purpose of evaluating the application of the confidence-building measures;

7. They recommend to the Andean Council that it agree on joint action with regard to the taking by third parties of economic adjustment measures affecting one or more of the Andean countries;

8. They decide to bring their national development plans into line with the requirements of environmental safety and to agree on joint positions on environmental matters in the various international agencies and conferences;

9. They Reaffirm their commitment to achieving subregional food security and to establishing food aid machinery for dealing with emergency situations, in accordance with each country's circumstances;

10. They agree to co-ordinate their national policies for combating drug trafficking and to strengthen the Rodrigo Lara Bonilla Agreement. In this respect, they agree to co-ordinate subregional action to prevent and combat trafficking in, and the abuse of, drugs and psychotropic substances;

11. They agree to promote programmes to provide substitutes for illegal coca-growing in the subregion within the framework of integrated rural development policies and decide to that end permanently to co-ordinate such action as may be necessary to obtain the international financial co-operation that this effort requires;

12. They undertake to co-ordinate action and to agree on common strategies in the organs having competence for the problem of drug trafficking, with a view to reinforcing international action and co-operation against such trafficking on the basis of the principle of collective responsibility;

13. They agree to establish consultative machinery for the adoption of action aimed at collaboration in preventing and suppressing the crimes of terrorism, arms trafficking and air piracy and at reaching agreement on joint strategies in the various international forums for obtaining support with respect to the control and suppression of those offences;

14. Responsibility for the fulfilment and evaluation of this Declaration shall lie with the Andean Council.

Done at Galápagos on the eighteenth day of December, one thousand nine hundred and eighty-nine.

(Signed)

President of the Republic of Bolivia

President of the Republic of Colombia

President of the Republic of Ecuador

President of the Republic of Peru

President of the Republic of Venezuela".

II. Similarly, the "Machu Picchu Act" signed by the Andean leaders at the conclusion of their Third Summit Meeting (Cuzco, 23 May 1990) includes the following paragraph:

"4. Reiterate their commitment to peace, security and co-operation as expressed in the Galápagos Declaration and their willingness to promote a climate of trust and solidarity that will facilitate understandings in all fields of relevance to the process of integration, the removal of obstacles detrimental to that process and the redirecting of resources to urgent development tasks. In this respect, they emphasize the full validity of the 1974 Declaration of Ayacucho".

CONFERENCE ON DISARMAMENT

CD/1012
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Original: ENGLISH

UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND

Verification of the Chemical Weapons Convention: Practice challenge inspections of Government facilities: Analysis of results

Introduction

1. In CD/921 the United Kingdom described two Practice challenge Inspections (PCIs) which it had carried out at military facilities and the interim conclusions which had been drawn. The United Kingdom indicated that the PCI programme would continue, and that a further paper would be tabled on the outcome. Since CD/921 was presented a further four exercises have been held. This paper records the outcome of the programme and the conclusions the United Kingdom has drawn.

The Programme

2. The PCI programme addressed a range of sites representative of fundamental United Kingdom national security activities and equipment in order to assess the impact, procedures, and conduct of challenge inspection at different types of facilities. A brief description of the programme is at Annex. The following paragraphs address the main issues raised by the series of exercises, the lessons learned and the United Kingdom's conclusions.

Security

3. A number of different aspects of security were considered.

(a) Physical Security

The implications of challenge inspection for physical security at challenged sites were a common concern at all the sites visited. Certain intelligence advantages accrue from gaining physical access to a site beyond those available from other sources.

(b) Presence and location of sensitive stores

There was concern that intrusive on site inspection would reveal to the Inspection Team and Challenging State Observer the presence and location of sensitive stores. For instance the location of stores for nuclear weapons in the UK is classified and it is UK policy to neither confirm nor deny their presence at a particular site.

(c) Stockholding, Throughput and Capacity

At the site of PCI3 information concerning stockholdings, and at the PCI 4 site, throughput and capacity was highly classified. There was concern that this would be compromised during a challenge inspection.

(d) Weapons design information

A particular concern has been that the demonstration of compliance should not result in the Inspection Team gaining access to classified weapon design details, especially nuclear weapon design information. In the latter case there is also a possible issue relating to obligations under the 1968 Nuclear Non-Proliferation Treaty not in any way to assist non-nuclear weapons states to manufacture or acquire nuclear weapons. On the other hand the Inspection Team must have sufficient access and information to be able to satisfy themselves that any weapons they find in the course of an inspection are not chemical weapons.

4. In order to meet these concerns the UK's PCIs were conducted under varying degrees of managed access.

Managed Access

5. The UK identified a wide range of managed access techniques for dealing with the security concerns about sensitive buildings, rooms, equipment, processes and weapons systems, while still enabling a good deal of information to be made available to help the inspectors to determine whether the area was concerned with undeclared activities relevant to the Convention. The techniques might be divided into routine managed access measures for use at

most sites, and exceptional measures for sites where particularly sensitive national security concerns were at stake.

(a) Routine Measures

(i) A number of simple precautionary measures are available to protect security at many sites. These include the implementation of a previously formulated and tested inspection plan for the the removal of notices charts and displays, the locking away of all papers, and the logging off of computer systems any of which might disclose sensitive information not relevant to the inspection, and the locking away of sensitive equipment in workshops laboratories and test areas.

(ii) The use of shrouding is another important option. The key principle here is to ensure that the "stay out" zone is kept to the minimum size possible. Whenever possible the Inspectors should be allowed to touch through the shroud and use instruments to sample the air inside and around it. The impact of shrouding on an inspection team will vary from case to case. A small shrouded object in an otherwise open electronic laboratory or drawing office is less likely to arouse inspectors' suspicions than a large shrouded area in an ammunition storage facility.

The UK firmly believes however from its experiences on the PCI programme that good and sensible shrouding is an invaluable technique to meet the Challenged State's national security concerns while allowing sufficient access to meet the Inspection Team's needs. It is better to be able to visit a room where objects are shrouded than to be refused access at all.

(iii) Other technique involve the use of instrumentation. These could include the use of x-ray equipment for example to demonstrate whether ammunition has a solid or liquid fill. The UK has also commissioned a feasibility study into neutron activation analysis as a non-intrusive alternative to x-ray; another possible technique is gamma ray spectrometry to establish the presence or absence of nuclear materials. Gravity meters or other geophysical survey instruments could also be useful in detecting concealed underground storage facilities.

(iv) The use of sampling, both by itself and as a back up to the use of instrumentation is another means of verifying compliance both generally and in the absence of complete access. Sampling techniques are discussed further below.

(b) Exceptional Measures

(i) In sensitive sites where the concerns over physical access described at para 3(a) above are particularly acute, the UK has identified a number of measures to alleviate these concerns, albeit at some operational and/or financial cost. These include shrouding of defensive positions, alarms, sensors etc and deliberately changing normal security practices.

(ii) In order to prevent compromise of highly classified information about stockholdings, throughput and capacity - a particular concern at nuclear weapons facilities - which could be deduced by an Inspection Team if allowed access to all the relevant buildings on a particular site, the UK developed a system of Random Selective Access whereby only a given percentage of buildings within a site or part of a site, and/or a given percentage of rooms within a building and/or items within a room were available for inspection at the Inspection Team's choice. During the 4 inspections where the system was applied the percentage used was normally 20% although it need not be set at this level. The system can be applied by the Challenged State in a variety of ways:

- One method would be to let the Inspection Team negotiate access to buildings or parts thereof on a step by step basis until they are satisfied or until they have reached the [x]% limit.

- An alternative would be to state from the outset that within the challenged site or parts thereof only [x]% access would be allowed at the Inspection Team's choice.

- There is no clear cut balance of advantage between the two approaches. The disadvantage of the former is that the Inspectors have to negotiate each extra degree of access which if protracted can generate needless suspicion. The disadvantage of the latter is that more access might be given than would in normal circumstances be necessary to satisfy the Inspection Team.

- The system can also be applied by the Challenged State in different ways. Sites can be divided into areas, buildings into

Zones which do not correspond exactly to whole buildings and rooms respectively (eg a room may be divided into several zones).

- Alternatively, the system can be applied in a more straightforward way to buildings within a site or part of a site, and rooms within a building.

- Finally Random Selective Access can be applied on either a truly random or a selective basis. Under the former system, the Inspectors could be invited to simply pick a card at random with a building, room or zone number on it; under the latter, the Inspectors could be allowed to select buildings, rooms or zones from an initial tour or from a site or building plan with some prior indication of their function. The option represents a stronger deterrent since the inspectors would have the right to choose which building or item to inspect.

- <u>The UK experience has been that Random Selective Access as part of an overall managed access scheme is a major</u>

contribution to meeting security concerns while at the same time giving an inspection team sufficient access at their choice to enable them to conclude with a high degree of confidence that the location or item subject to managed access was unrelated to chemical weapons.

6. It has been the UK experience from its 6 PCIs that within challenged sites certain rooms, buildings or areas which are obviously not engaged in chemical weapons activity (eg drawing offices, computer rooms etc), only require a brief inspection to satisfy an Inspection Team. Moreover we have often found that the areas of greatest concern to a challenged state from a security viewpoint are of little interest to a CW Inspection Team. On the other hand within certain sites further clarification is required as to whether managed access might have to include denial of access to a very limited number of highly sensitive buildings.

Notice of Inspection

7. It is clear that even in as short a period as 48 hours considerable quantities of ammunition could be shipped out of a storage facility; the question of clean-up times in chemical facilities is also relevant in this context. On the other hand the challenged state will require a minimum period of time, which

from our experience we estimate could be up to 48 hours, to prepare to receive the Inspection Team, including the provision of transport and communications, and the assembly of the appropriate personnel, and the implementation of the challenged facility's reception plan. One solution would be to allow for an advance party to arrive within [ ] hours of a challenge being issued to seal the facility and monitor movements in and out, although there could be practical difficulties to overcome. The alternative is to allow the Inspection Team to arrive earlier than 48 hours after the challenge is issued. At particularly sensitive facilities where considerable preparation is required this could mean that the Inspection Team would have to be kept out of certain buildings pending the completion of preparations. The inspectors could however be allowed to seal such buildings until entry was permissible.

Definition of Challenged Facility

8. The effectiveness of an inspection will to some extent depend on the specificity of the Challenge. Our experience shows that very accurate and specific definition of the challenged facility is necessary if confusion and controversy at the outset of the inspection is to be avoided. The challenged facility should be clearly defined by a combination of geographic co-ordinates, facility name and/or description, and where possible a local map showing the boundaries of the area under challenge. The onus is on the challenging state to ensure the

accuracy of this definition. Clarification and agreement of the geographical limits of the challenge between representatives of the Challenged State, the Inspection Team and the Challenging State Observer will be an essential early task at the Point of Entry. While it will be at the discretion of the Challenged facility to draw attention to any "lodger" units or contractor-controlled areas within the area under challenge, the onus will be on the host facility to arrange access.

Size and Composition of Inspection Team

9. The size and composition of the Inspection Team needs to be tailored to the size and type of facility under challenge. Our experience has shown that a minimum of 4 Inspectors is necessary at even the smallest sites. On larger sites however it would be difficult for a team of this size to carry out all their inspection duties, even if they exercise their right to split into two sub-teams. The UK believes the Inspection Team should be accompanied by sufficient support staff to seal the site, monitor movements in and out on a 24 hour basis, assist in the collection and monitoring and analysis of samples both on and off site (see para 25-32 below) and provide general administrative services to the Inspection Team.

10. The resource implications of a larger support staff will need further examination.

11. The Inspection Team will need to include appropriate expertise for the type of facility under challenge and the nature of the challenge, including knowledge of all aspects of production, weaponisation, testing and storage of Chemical weapons. They will need to be able to judge whether visual and other evidence is consistent with the explanations offered for the nature of activities at the site.

Securing the Site

12. From our exercises we have found that sealing the site at a large facility with many access points poses its own problems. Where the site is completely enclosed by a security fence, this might best be achieved by sealing all but the main gate with seals which have inherent integrity but are frangible for emergency access. Seals would need to be checked regularly for signs of tampering. The main gate could then be left open with an Inspection Team security assistant left behind to monitor and check all transport in and out.

13. At sites which are not totally secured by fencing there is clearly little point in attempting to completely seal the site. However movements in and out could still be monitored, and the Inspection Team could seal secure areas within the site or buildings which particularly aroused their suspicions.

Reception Plan

14. The PCI programme has demonstrated the clear advantage in all facilities likely to be subject to challenge inspection of preparing and exercising beforehand a reception plan including the preparation of shrouding, managed access strategies, and fallback positions for instances where the Inspection Team are not convinced by the initial degree of access. Such decisions should not be left to the day of a real inspection as this can cause major problems and delays which only arouse Inspectors' suspicions. Our experience has shown that in the majority of cases the best approach would be to cease normal operations/work and send home any non-essential staff. This facilitates the Inspection Team's task and enables all the efforts of the challenged facility's senior staff to be devoted to the inspection. Such an approach does however have resource and cost implications which are at present unquantifiable but which could well be substantial.

Introductory Briefings

15. The UK has found that an introductory briefing on the work and lay out of the challenged facility preferably over a site plan or model can be of great benefit to the Inspection Team,

both in helping them familiarise themselves with the lay out of the site and in ascertaining the type of activity and facilities to expect to see in the course of their inspection. This introductory briefing should also include any safety briefing which the Challenged State wishes or in the case of the UK is obliged by Health and Safety Legislation to provide.

Initial Tour of Challenged Facility

16. Our experience has shown that an initial tour of the challenged facility after the introductory briefing is essential to the Inspection Team both in orientating themselves on site and in formulating their initial inspection plan. On larger sites where safety regulations permit, a helicopter overflight provides the best means of covering the ground quickly and has the advantage of giving the inspectors an overview.

Inspection Plan

17. After an initial tour of the challenged site the Inspection Team will need to consider their inspection plan. On some of our PCIs the challenged facility proposed an inspection plan to the Inspection Team on the basis that if the Inspectors followed the plan offered to them, this would facilitate the inspection by following a logical route through the facility and by enabling the "Home Team" to ensure that staff with appropriate expertise

to answer inspectors' questions, and with the necessary keys to buildings were on hand. However, the Inspection Team may prefer to decline such offers. An important element in the deterrent effect of the challenge inspection regime arises from the uncertainty for the challenged state as to what the inspectors will choose to examine, and in how much detail. On larger sites our experience has shown that a modular approach - inspecting clusters of buildings on the same part of the site at the same time - has advantages over totally random selection of buildings at different parts of the site by avoiding the loss of too much time in travelling from one end of a site to another.

Transport

18. The UK has concluded that from its exercises that the Challenged State should provide sufficient transport for the Inspection Team, Sampling Team and support staff together with their equipment. Adequate provision should also be made for the Inspection Team dividing into two sub-teams. Our experience is that at larger sites, where safety regulations permit, a helicopter would be extremely useful to expedite the inspection.

Communications

19. In addition to providing adequate communications for the Inspection Team to report to the Technical Secretariat and the

Challenging State Observer to his embassy, we have also found that the Challenged State should provide effective communications - preferably portable two-way radios - to enable Inspection sub-teams to communicate with each other if the Inspection Team divides. UK experience also suggests that a Central Control room monitoring the movements of the inspection party around the site, and in communication with the "Home Team" leader and his deputy (for when the Inspection Team divides) is essential.

Sampling

20. The UK conducted a full sampling exercise in order to assess the likely impact of extensive sampling on the conduct of an inspection, the management task for the Inspection Team in directing and overseeing the activities of the samplers, and the logistics and practicalities of sampling during a challenge inspection.

21. Real time sampling had a marked effect on the inspection. It significantly affected progress especially in the early stages while the relationship between the Inspection Team and Sampling Team was established. For the Home Team the major impact was in terms of additional logistic problems, notably the need to provide additional transport, personnel to accompanying the samplers, and communications.

22. Our experience suggested that the Inspection Team should not wait for the samplers to carry out their sampling before moving on to new areas of the site. They should instead leave instructions as to the area they would like to have sampled, and the types of material they might be looking for. It will also be essential to make available a lockable and sealable store room for the holding of samples ammunition etc, prior to their analysis.

23. In the case of ammunition a variety of techniques are available to test for sampling purposes. If x-ray is not permitted for security reasons such techniques include the use of cutting charges to open the munition for sampling, incineration and demolition. It is the UK's experience that the use of cutting charges followed by vapour and wipe samples is the most advantageous method of verifying munition contents.

24. In order to save time on the inspection the pre-labelling of sample containers and the use of pre-printed sample, log sheets is essential. These should be water-proof. Tamper proof seals will be essential for samples use not accompanied by Inspectors.

25. In the UK's experience each sampling sub-team should as a minimum comprise two samplers, a record keeper and a fourth member to fetch and carry and guard items where necessary.

26. In the course of a two day PCI a total of 66 samples were taken. Duplicates were provided to the challenged state representatives for verification purposes. It was estimated that it would take a single analyst 7-10 weeks to analyse the samples taken. However in a real challenge inspection it would be desirable to analyse at least some of the samples overnight in order to have the results available to the Inspection Team for the next day.

27. Particular problems could arise at facilities which legitimately handle radioactive material, primarily from the safety/health physics concerns of collecting, packaging and moving samples.

Seals

28. The Inspection Team will require a variety of seals to assist them in their task. These will include seals for securing the site (see para 18 above), seals on samples containers and tags to mark items selected for sampling (eg munitions). All should be tamper proof.

Equipment

29. The UK's PCI experience suggests that it will be essential to have an agreed list of equipment which the Technical Secretariat shall make available for an Inspection Team. The Challenged State must have the right to inspect any equipment on arrival of the Inspection Team at the Point of Entry. This inspection will be facilitated by the Inspection Team presenting type approval certificates from the Technical Secretariat to authenticate the equipment.

Photography

30. Clearly defined and consistent rules will be required for the use of photography during an inspection. In the UK's experience photographic equipment should be provided and operated by the "Home Team" at the request of the Inspection Team. We have found that the ideal practice is to provide two instant Polaroid photos - one for the "Home Team", one for the Inspection Team followed by a 35mm photograph to give better definition. The use of battery operated flash equipment needs to be in compliance with any safety regulations, eg in explosives storage facilities.

Safety

31. It will be essential that the Inspection Team comply at all times with the safety regulations in force at the challenged facility, and, in the event of an emergency, follow the standard emergency procedures and instructions by representatives of the challenged site.

Role of Challenging State Observer

32. The role of the Challenging State Observer is important especially in the early stages of an inspection. Our work has shown that further clarification is required, particularly as regards his rights and status, and his relationship with the Inspection Team.

Conclusions

33. The extensive practical work the United Kingdom has undertaken involving a series of practice challenge inspections at Government controlled facilities has enabled a number of conclusions to be drawn on the concept, conduct and implications of challenge as a verification instrument.

(i) The extent and throughness of Inspection Team activities achievable at even the largest UK sites, coupled with the degree of access even the most sensitive

facilities have been able to provide, suggests that Challenge inspection should be a powerful means both of assuring compliance and deterring contravention or circumvention of the Convention.

(ii) There are no UK sites so sensitive from a national security viewpoint that we could not allow some form of access within the site, appropriately managed, to an international inspection team under the provisions on Challenge inspection of a Chemical Weapons Convention. There is a wide variety of managed access techniques available to minimise the compromise of sensitive and classified information unrelated to CW even at the most sensitive sites.

(iii) It is clear that detailed national guidance will be required for all sites on the reception of a challenge inspection. At sensitive sites inspections could only be accepted under strictly managed access, which might have to include extensive shrouding, the locking away of sensitive equipment and components and the removal of sensitive notices and displays. At most sites an inspection would be most effectively managed by closing down all non-essential normal activity to facilitate management of the inspection. This has inevitable resource implications both financial and manpower which cannot be quantified at this stage but which at certain sites are likely to be substantial.

(iv) Even after all the managed access techniques described in this paper have been applied physical access to a sensitive site will inevitably mean that the inspectors will discover some information unrelated to CW which the host country might prefer to shield. The extent and importance of this will vary from site to site. These factors need however to be reviewed in the context of the overall gains to a state's national security from more effective assurance of compliance with the CW Convention following from such access.

(v) The United Kingdom has concluded that at a wide range of sites comprehensive access can readily be given to an Inspection Team. Even at sites of importance to national security managed access techniques could allow sufficient access to enable the inspectors to fulfil their task effectively. Within a small number of especially sensitive sites the techniques of managed access would need to be more rigorously employed, including the possible need to deny access to a very limited number of highly sensitive buildings. We cannot of course predict on the basis of this programme of practice challenge inspections at Government controlled facilities that managed access will enable inspectors to fulfil their task in all conceivable cases. But on the basis of our experience our conclusion is that difficulties need arise very rarely, if at all, if the host state uses the full range of managed access techniques.

ANNEX

DESCRIPTION OF UK's PRACTICE CHALLENGE INSPECTIONS

1. The six PCIs were as follows:

PCI	TYPE OF FACILITY	DATE
1	Army Conventional Ammunition Storage	October 1988
2	Navy Conventional Ammunition Storage	March 1989
3	RAF Operational Base Storing Nuclear Weapons	September 1989
4	Nuclear Weapons research and development/ component manufacture	February 1990
5	Conventional Ammunition Proof and Experimental/Range facilities	March 1990
6	Sensitive Communications Centre	April 1990

In addition the UK PCI team made visits to a number of other facilities to talk through the implications of challenge inspection. These included a command and control facility, research and development facilities, a nuclear missile processing facility, and civil nuclear processing and research facilities.

2. The United Kingdom's first two Practice Challenge Inspections (PCIs) were described in the Annex to CD 921. The following paragraphs describe PCIs 3-6.

PCI 3

3. The third PCI was held between 11 and 12 September 1989 at an RAF base. In addition to a standard explosive storage area, general administration and engineering support buildings, aircraft hangars and hardened aircraft shelters, the base contains a special storage area (SSA) which can house nuclear weapons. In addition to the general aims of the PCI programme, the specific objective of this exercise was to test the implications of intrusive on site inspection at a very sensitive facility and the extent to which any compromise of security could be minimised through preparatory measures by the "Home" Team.

PCI 4

4. The fourth PCI was held between 20 and 22 February 1990 at a site engaged in the design, development and production of components for the UK's nuclear weapons programme. The site covers some 650 acres and contains over 900 buildings. In addition to the obvious national security considerations, the UK has to comply with the 1968 Non-Proliferation Treaty on Nuclear Weapons (NPT) which requires the UK not to assist non-nuclear weapons states to manufacture or acquire nuclear weapons.

PCI 5

5. The fifth PCI was held between 27-28 March 1990 at three

contiguous sites. Total acreage within the area comprising the sites was 7,500 acres, with a further 35,000 acres of sands. The main roles of the facilities were (a) the testing and proofing of manufacturers' conventional munitions and ammunition for all three armed services during development and production; (b) the testing under controlled conditions of explosive-filled stores in service environments; (c) theoretical and experimental studies in support of both the UK nuclear and conventional weapons R&D programmes. A particular focus of this PCI was on sampling procedures at the extensive range facilities.

PCI 6

6. The sixth PCI was held on 26 April at a facility engaged in the research and development of secure communications. It is a small site comprising some 15 buildings including a laboratory complex.

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CONFERENCE ON DISARMAMENT

CD/1013
13 July 1990

Original: ENGLISH

LETTER DATED 13 JULY 1990 FROM THE REPRESENTATIVE OF THE UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND ADDRESSED TO THE SECRETARY-GENERAL OF THE CONFERENCE ON DISARMAMENT TRANSMITTING A DOCUMENT ENTITLED "DECLARATION ON A TRANSFORMED NORTH ATLANTIC ALLIANCE ISSUED BY THE HEADS OF STATE AND GOVERNMENT PARTICIPATING IN THE MEETING OF THE NORTH ATLANTIC COUNCIL IN LONDON ON 5-6 JULY 1990"

On behalf of those States which belong to the North Atlantic Alliance and are members of the Conference on Disarmament, I have the honour to forward to you the following document:

"Declaration on a transformed North Atlantic Alliance issued by the Heads of State and Government participating in the meeting of the North Atlantic Council in London on 5-6 July 1990."

The document is attached in the official English and French versions. I should be grateful if you would circulate this letter and the attached declaration as an official document of the Conference on Disarmament.

T.A.H. Solesby
Ambassador

LONDON DECLARATION

ON A

TRANSFORMED NORTH ATLANTIC ALLIANCE

Issued by the Heads of State and Government participating in the meeting of the North Atlantic Council in London on 5-6 July 1990

1. Europe has entered a new, promising era. Central and Eastern Europe is liberating itself. The Soviet Union has embarked on the long journey toward a free society. The walls that once confined people and ideas are collapsing. Europeans are determining their own destiny. They are choosing freedom. They are choosing economic liberty. They are choosing peace. They are choosing a Europe whole and free. As a consequence, this Alliance must and will adapt.

2. The North Atlantic Alliance has been the most successful defensive alliance in history. As our Alliance enters its fifth decade and looks ahead to a new century, it must continue to provide for the common defence. This Alliance has done much to bring about the new Europe. No one, however, can be certain of the future. We need to keep standing together, to extend the long peace we have enjoyed these past four decades. Yet our Alliance must be even more an agent of change. It can help build the structures of a more united continent, supporting security and stability with the strength of our shared faith in democracy, the rights of the individual, and the peaceful resolution of disputes. We reaffirm that security and stability do not lie solely in the military dimension, and we intend to enhance the political component of our Alliance as provided for by article 2 of our Treaty.

3. The unification of Germany means that the division of Europe is also being overcome. A united Germany in the Atlantic Alliance of free democracies and part of the growing political and economic integration of the European Community will be an indispensable factor of stability, which is needed in the heart of Europe. The move within the European community towards political union, including the development of a European identity in the domain of security, will also contribute to Atlantic solidarity and to the establishment of a just and lasting order of peace throughout the whole of Europe.

4. We recognize that, in the new Europe, the security of every State is inseparably linked to the security of its neighbours. NATO must become an institution where Europeans, Canadians and Americans work together not only for the common defence, but to build new partnerships with all the nations of Europe. The Atlantic Community must reach out to the countries of the East which were our adversaries in the Cold War, and extend to them the hand of friendship.

5. We will remain a defensive alliance and will continue to defend all the territory of all our of members. We have no aggressive intentions and we commit ourselves to the peaceful resolution of all disputes. We will never in any circumstance be the first to use force.

6. The member States of the North Atlantic Alliance propose to the member States of the Warsaw Treaty Organization a joint declaration in which we solemnly state that we are no longer adversaries and reaffirm our intention to refrain from the threat or use of force against the territorial integrity or political independence of any State, or from acting in any other manner inconsistent with the purposes and principles of the United Nations Charter and with the CSCE Final Act. We invite all other CSCE member States to join us in this commitment to non-aggression.

7. In that spirit, and to reflect the changing political role of the Alliance, we today invite President Gorbachev on behalf of the Soviet Union, and representatives of the other Central and Eastern European countries to come to Brussels and address the North Atlantic Council. We today also invite the Governments of the Union of Soviet Socialist Republics, the Czech and Slovak Federal Republic, the Hungarian Republic, the Republic of Poland, the People's Republic of Bulgaria and Romania to come to NATO, not just to visit, but to establish regular diplomatic liaison with NATO. This will make it possible for us to share with them our thinking and deliberations in this historic period of change.

8. Our Alliance will do its share to overcome the legacy of decades of suspicion. We are ready to intensify military contacts, including those of NATO Military Commanders, with Moscow and other Central and Eastern European capitals.

9. We welcome the invitation to NATO Secretary-General Manfred Wörner to visit Moscow and meet with Soviet leaders.

10. Military leaders from throughout Europe gathered earlier this year in Vienna to talk about their forces and doctrine. NATO proposes another such meeting this Autumn to promote common understanding. We intend to establish an entirely different quality of openness in Europe, including an agreement on "Open Skies".

11. The significant presence of North American conventional and United States nuclear forces in Europe demonstrates the underlying political compact that binds North America's fate to Europe's democracies. But, as Europe changes, we must profoundly alter the way we think about defence.

12. To reduce our military requirements, sound arms control agreements are essential. That is why we put the highest priority on completing this year the first treaty to reduce and limit conventional armed forces in Europe (CFE) along with the completion of a meaningful CSBM package. These talks should remain in continuous session until the work is done. Yet we hope to go further. We propose that, once a CFE Treaty is signed, follow-on talks should begin with the same membership and mandate, with the goal of building on the current agreement with additional measures, including measures to limit manpower in Europe. With this goal in mind, a commitment will be given at the time of signature of the CFE Treaty concerning the manpower levels of a unified Germany.

13. Our objective will be to conclude the negotiations on the follow-on to CFE and CSBMs as soon as possible and looking to the follow-up meeting of the CSCE to be held in Helsinki in 1992. We will seek through new conventional arms control negotiations, within the CSCE framework, further far-reaching measures in the 1990s to limit the offensive capability of conventional armed forces in Europe, so as to prevent any nation from maintaining disproportionate military power on the continent. NATO's High Level Task Force will formulate a detailed position for these follow-on conventional arms control talks. We will make provisions as needed for different regions to redress disparities and to ensure that no one's security is harmed at any stage. Furthermore, we will continue to explore broader arms control and confidence-building opportunities. This is an ambitious agenda, but it matches our goal: enduring peace in Europe.

14. As Soviet troops leave Eastern Europe and a treaty limiting conventional armed forces is implemented, the Alliance's integrated force structure and its strategy will change fundamentally to include the following elements:

- NATO will field smaller and restructured active forces. These forces will be highly mobile and versatile so that Allied leaders will have maximum flexibility in deciding how to respond to a crisis. It will rely increasingly on multinational corps made up of national units.

- NATO will scale back the readiness of its active units, reducing training requirements and the number of exercises.

- NATO will rely more heavily on the ability to build up larger forces if and when they might be needed.

15. To keep the peace, the Alliance must maintain for the foreseeable future an appropriate mix of nuclear and conventional forces, based in Europe, and kept up to date where necessary. But, as a defensive Alliance, NATO has always stressed that none of its weapons will ever be used except in self-defence and that we seek the lowest and most stable level of nuclear forces needed to secure the prevention of war.

16. The political and military changes in Europe, and the prospects of further changes, now allow the Allies concerned to go further. They will thus modify the size and adapt the tasks of their nuclear deterrent forces. They have concluded that, as a result of the new political and military conditions in Europe, there will be a significantly reduced role for sub-strategic nuclear systems of the shortest range. They have decided specifically that, once negotiations begin on short-range nuclear forces, the Alliance will propose, in return for reciprocal action by the Soviet Union, the elimination of all its nuclear artillery shells from Europe.

17. New negotiations between the United States and the Soviet Union on the reduction of short-range nuclear forces should begin shortly after a CFE agreement is signed. The Allies concerned will develop an arms control framework for these negotiations which takes into account our requirements for far fewer nuclear weapons, and the diminished need for sub-strategic nuclear systems of the shortest range.

18. Finally, with the total withdrawal of Soviet stationed forces and the implementation of a CFE agreement, the Allies concerned can reduce their reliance on nuclear weapons. These will continue to fulfil an essential role in the overall strategy of the Alliance to prevent war by ensuring that there are no circumstances in which nuclear retaliation in response to military action might be discounted. However, in the transformed Europe, they will be able to adopt a new NATO strategy making nuclear forces truly weapons of last resort.

19. We approve the mandate given in Turnberry to the North Atlantic Council in Permanent Session to oversee the ongoing work on the adaptation of the Alliance to the new circumstances. It should report its conclusions as soon as possible.

20. In the context of these revised plans for defence and arms control, and with the advice of NATO Military Authorities and all member States concerned, NATO will prepare a new Allied military strategy moving away from "forward defence", where appropriate, towards a reduced forward presence and modifying "flexible response" to reflect a reduced reliance on nuclear weapons. In that connection, NATO will elaborate new force plans consistent with the revolutionary changes in Europe. NATO will also provide a forum for Allied consultation on the upcoming negotiations on short-range nuclear forces.

21. The Conference on Security and Co-operation in Europe (CSCE) should become more prominent in Europe's future, bringing together the countries of Europe and North America. We support a CSCE Summit later this year in Paris which would include the signature of a CFE agreement and would set new standards for the establishment, and preservation, of free societies. It should endorse, inter alia:

- CSCE principles on the right to free and fair elections;

- CSCE commitments to respect and uphold the rule of law;

- CSCE guidelines for enhancing economic co-operation, based on the development of free and competitive market economies; and

- CSCE co-operation on environmental protection.

22. We further propose that the CSCE Summit in Paris decide how the CSCE can be institutionalized to provide a forum for wider political dialogue in a more united Europe. We recommend that CSCE Governments establish:

- a programme for regular consultations among member Governments at the Heads of State and Government or Ministerial level, at least once each year, with other periodic meetings of officials to prepare for and follow up on these consultations;

- a schedule of CSCE review conferences once every two years to assess progress toward a Europe whole and free;

- a small CSCE secretariat to co-ordinate these meetings and conferences;

- a CSCE mechanism to monitor elections in all the CSCE countries, on the basis of the Copenhagen Document;

- a CSCE Centre for the Prevention of Conflict that might serve as a forum for exchanges of military information, discussion of unusual military activities, and the conciliation of disputes involving CSCE member States; and

- a CSCE parliamentary body, the Assembly of Europe, to be based on the existing parliamentary assembly of the Council of Europe, in Strasbourg, and include representatives of all CSCE member States.

The sites of these new institutions should reflect the fact that the newly democratic countries of Central and Eastern Europe form part of the political structures of the new Europe.

23. Today, our Alliance begins a major transformation. Working with all the countries of Europe, we are determined to create enduring peace on this continent.

CONFERENCE ON DISARMAMENT

CD/1014/Rev.1
CD/CW/WP.305/Rev.1
27 July 1990

Original: ENGLISH

ROMANIA

Data relevant to the Chemical Weapons Convention

In the context of the negotiations on the Chemical Weapons Convention, in order to contribute to the progress of these efforts, Romania is presenting below data relevant to the future Convention, according to the proposals contained in document CD/828, dated 12 April 1988.

These data reflect the situation in Romania during the first half of 1990 and are relevant to the last three years. Data have been provided on a voluntary basis by respective Romanian bodies and institutions.

The chemicals refer to those listed on Schedules 1, 2 and 3 of document CD/961 dated 1 February 1990.

TABLE 1

Type of data	Response	Note
1. Presence of CW on own territory	No CW are located in the territory of Romania	
Possession of CW on territory of another State	No	
2. Aggregate number of facilities for the production and storage of CW	None	
Aggregate number of facilities for the production, processing and consumption of chemicals on Schedules 1, 2 and 3	11	x
3. Types and names of CW agents	Romania does not produce or possess CW	
Types of CW munitions stored; CW agents stored in bulk	None	
Number and names of chemicals on Schedules 1, 2 and 3 produced in the chemical industry	7	x
4. Plans and methods for the destruction of CW including the number of facilities and the anticipated length of their operation during the 10-year destruction period	Not applicable	

x Detailed information listed in table 2.

TABLE 2

National data concerning production, consumption, export and import of chemical products listed on Schedule 3

1. Chemical name: carbonyl dichloride

Common or trade name: phosgene

Structural formula: $O{=}CCl_2$

Chemical Abstracts Service Registry Number: (75-44-5)

The total amount:

- produced 3-4,000 t/y
- consumed 3-4,000 t/y
- imported - nil
- exported - nil

Existing plant - at Chemical Works Rîmnicu Vîlcea, located in Rîmnicu Vîlcea, 1, bulevardul Chimistilor.

Normal capacity: 4,000 t/y

Destination: production of pesticides

2. Chemical name: cyanogen chloride

Common name: chlorocyan

Structural formula: Cl-C-N

Chemical Abstracts Service Registry Number: (506-77-4)

The total amount:

- produced 3-5,000 t/y
- consumed 3-5,000 t/y
- imported - nil
- exported - nil

Existing plants:

- Petrochemical Works Pitesti, located in Pitesti, 127 bulevardul Petrochimistilor, Arges district. Nominal capacity 4,000 t/y. The plant is scheduled for dismantling.

- Synthetic Fibres and Yarns Complex Savinesti, located in Savinesti, 1, uzinei Street, Neamt district. Nominal capacity 3,000 t/y.

- Chemical Works Borzesti, located in Borzesti, 3, Cauciucului Street, Bacau district. Nominal capacity 15,000 t/y. Partially commissioned.

Uses: production of cyanuryl chloride for pesticides, production of detergents, dyes, bleaching agents.

3. Chemical name: hydrogen cyanide

Common name: hydrocyanic acid

Structural formula: H-CN

Chemical Abstracts Service Registry Number: (74-90-8)

The total amount:

- produced 7-9,000 t/y
- consumed 7-9,000 t/y
- imported - nil
- exported - nil

Existing plants:

- Petrochemical Works Pitesti - nominal capacity 5,500 t/y

- Synthetic Fibres and Yarns Complex Săvineşti - nominal capacity 3,160 t/y

- Chemical Works Borzeşti nominal capacity 11,650 t/y, partially commissioned

- Carbosin Factory Copşa Mică, located in Copşa Mică, 1, Uzinei Street, Sibiu district. Nominal capacity 3,000 t/y. The plant is scheduled for dismantling.

Uses: production of chlorocyan and cyanides.

4. Chemical name: phosphorus oxychloride

Common name: phosphonyl chloride

Structural formula: $P(O)Cl_3$

Chemical Abstracts Service Registry Number: (10025-87-3)

The total amount:

- produced 50-80 t/y
- consumed 50-80 t/y
- imported - nil
- exported - nil

Existing plant - at chemical Works Borzeşti - nominal capacity 100 t/y.

Uses: organic synthesis.

5. Chemical name: Phosphorus trichloride

Common name: Phosphorus trichloride

Structural formula: PCl_3

Chemical Abstracts Service Registry Number: (7719-12-2)

The total amount:

- produced 1,000-1,500 t/y
- consumed 1,000-1,500 t/y
- imported - nil
- exported - nil

Existing plant - at Chemical Works Borzeşti. Nominal capacity 2,000 t/y.

Uses: chlorinating agent in organic synthesis.

6. Chemical: <u>Phosphorus pentachloride</u>

Common name: phosphorus pentachloride

Structural formula: PCl_5

Chemical Abstracts Service Registry Number: (10026-13-8)

The total amount:

- produced 20-50 t/y
- consumed 20-50 t/y
- imported - nil
- exported - nil

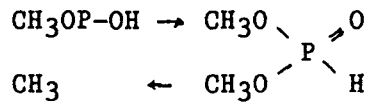
Existing plant - at Chemical Works Borzeşti. Nominal capacity 100 t/y.

Uses: intermediate for production of pesticides and lubricating oils.

7. Chemical name: <u>Dimethyl hydrogen - phosphite</u>

Common name: Dimethylphosphite

Structural formula:



Chemical Abstracts Service Registry Number: (868-85-9)

The total amount:

- produced 500-1,000 t/y
- consumed 500-1,000 t/y
- imported - nil
- exported - nil

Existing plant - at Chemical Works Borzeşti. Nominal capacity 1,300 t/y.

Uses: production of pesticides.

CONFERENCE ON DISARMAMENT

CD/1015
CD/US/WP.42
18 July 1990

ENGLISH
Original: SPANISH

ARGENTINA

Working paper

Proposals for the strengthening of the régime established by the Convention on Registration of Objects Launched into Outer Space

I.

The use and exploration of outer space are governed by a body of law that has developed in parallel with the advances in science and technology that have given man growing access to space.

This increasing presence of man in space has not been limited to scientific or economic activities, but has been strongly apparent in the area of activities directly or indirectly linked to the military sphere.

This has required adaptation and analysis of the existing legal instruments in the light of those military activities, thereby giving rise to debate as to the legal interpretation of principles common to the use of space, such as those of peaceful use, non-interference in the use and exploration of space, etc.

Irrespective of the interpretation given to those principles, it is an undeniable fact that the possible extension of the arms race to space is a reality requiring, at both the bilateral and the multilateral levels, consideration and action in order to avoid the adverse effects that would result from the indiscriminate militarization of space.

II.

The efforts are, as indicated above, being made both bilaterally, between the major space Powers, and multilaterally, through the action of the United Nations General Assembly (Committee on the Peaceful Uses of Outer Space, COPUOS) and the deliberations of the sole multilateral disarmament negotiating body, the Conference on Disarmament.

As regards the bilateral efforts, to the existing agreements of special relevance to the militarization of space (the Treaty on the Limitation of Anti-Ballistic Missile Systems, or ABM Treaty) must be added the negotiations currently in progress within the framework of the Space and Defence Talks, the objective of which is precisely the strengthening of stability in the military uses of space in accordance with the criteria agreed by the States participating in that negotiating process.

As regards the Conference on Disarmament, the Ad hoc Committee on Prevention of an Arms Race in Outer Space provides, in its programme of work, both for the analysis of the existing legal régime (item 2) and for the study of additional proposals and initiatives (item 3).

These two items are intrinsically linked, since in the case of a body like the Conference on Disarmament, whose objective is to negotiate agreements on the issues it studies, the exegesis of the rules in force must have a practical purpose. In other words, analysing the existing legal régime is, in the Conference on Disarmament, an exercise aimed at evaluating the scope of the rules that we have today, with a view to determining:

(a) Whether those rules are suited to the emerging needs of the task of preventing an arms race in outer space;

(b) Whether they can be adjusted or reinforced to make them more suitable for that purpose;

(c) Whether there are any important lacunae that would require the elaboration of new agreements to regulate areas of present or future space activity.

III.

The work of the Conference on Disarmament, after five years of general and substantive consideration of the subjects connected with the prevention of an arms race in outer space, has demonstrated the existence of what, although they converge in a common objective of preserving space from militarization, are separate schools of thought.

One of these schools is that which approaches the problem from a general or comprehensive point of view, which has identified certain areas that, in its opinion, require the presence of further specific rules or the amendment of existing rules to the same end. Into this category fall proposals like those concerning the elaboration of treaties completely or partially banning anti-satellite weapons, proposals for the amendment of article IV of the Outer Space Treaty, or for a convention on the non-use of force in space, etc.

The common denominator of these proposals, whether of those that propose new legal instruments or of those that prefer the amendment of existing agreements, lies in their global approach to the problem of preventing the militarization of space and, in keeping with that, the proposing of comprehensive measures to limit or prohibit certain developments or activities deemed harmful or potentially destabilizing.

The other school of thought is that which, while sharing with the first a similar interpretation of the space problem, considers it feasible, in view of the persistence of differing interpretations of most of the measures of a global nature to have been proposed, to adopt a partial or specific view, concentrating its efforts on partial measures that are not directly classifiable as measures of disarmament or arms limitation, but are useful inasmuch as they contribute in a gradual manner to the same goal.

The measures belonging to this school of thought are those that have been defined as confidence-building measures.

They include such proposals as those concerning the drawing up of a code of conduct for outer space or systems for protecting satellites or ensuring their immunity, etc.

Among the existing agreements, one that has a practical nature of great value in the field of confidence-building measures and transparency as regards State's activities is the 1975 Convention on Registration of Objects Launched into Outer Space.

This legal instrument was drawn up following the direct precedent established by resolution 1721 A (XVI) of the United Nations General Assembly, the reference in space matters, since it was adopted unanimously by the Assembly, thereby making it de facto a rule of law recognized by all States. 1/

In the resolution, the General Assembly urged launching States to provide information on their launches and also requested the Secretary-General to maintain a public register containing that information. Although neither resolution 1721 nor, later, resolution 1962 (XVIII), known as the "Declaration on Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space", includes specific references to the military uses of space, both indicate that space activities must be carried out for peaceful purposes.

The Convention on Registration of Objects Launched into Outer Space, then, responded to the gradual elaboration of international law applicable to outer space by continuing the process begun in the above-mentioned General Assembly resolutions and spelling out in detail some aspects of subsequent instruments, particularly the Outer Space Treaty (1967) and the Convention on International Liability for Damage Caused by Space Objects (1972). The first of those instruments is linked to the Registration Convention through the mention of the "State of registry" which is to be found in articles V and VIII of the Treaty. The link with the Convention on International Liability derives from the very nature and object of this latter instrument.

In the context of the analysis of the Registration Convention from the viewpoint of security and confidence-building, it is important to point out that the Convention, while it is not directly an agreement specifically directed at the military sphere, acknowledges a function in this sphere that cannot be ignored.

That function derives in the first place from the close link with the body of space law, law which recognizes peaceful use as one of the guiding principles of human activity in outer space. Concretely, the Registration Convention reflects the primacy of that principle by quoting it in its first preambular paragraph. 2/

However, the link with the principle of peaceful use is not confined to the references to other, earlier texts. It is also apparent from the text of the Convention itself, which, in article IV, paragraph 1(e), calls upon the launching State to provide, in addition to information concerning itself and the designator and orbit, etc., of the space object, information concerning the "general function of the space object".

There is, then, express acknowledgement in the text of the Convention of the usefulness of compliance by States parties with certain concrete technical requirements as regards information, but, at the same time, it is established that, for the purposes of the Convention, the general function of the space object is a necessary additional criterion.

This fact confers upon the Registration Convention a more comprehensive nature than that of a mere inventory of purely technical generic information.

IV.

The operation of the Convention has made it clear that launching States provide the information superficially and partially. 3/

The fact that no State has registered a single launch for military purposes although the majority of launches basically have a function linked to military activities speaks for itself.

Furthermore, for the great majority of launchings, notifications have been submitted to the United Nations two to six months after launch. In a few cases, launchings have been notified within a week or two of launch, and in others, more than a year after it. 4/

The unsatisfactory level of compliance with the Registration Convention has led some States, aware of the importance of the instrument and of its unquestionable potential as regards security, to propose that States parties should take more committedly and seriously the undertakings freely assumed by them as contracting parties to the Convention. 5/

Other proposals have been made within the Ad hoc Committee. All attest to the practical importance of the Convention and its value as a legal support tool for detailed proposals aimed at establishing a space order based on greater transparency and co-operation and less exclusivity and confrontation. 6/

V.

The present proposal forms part of a tradition of initiatives all having to do with the possibility of strengthening the réqime established by the 1975 Convention on Registration of Objects Launched into Outer Space. The Registration Convention, as we know, arose from the need to give greater

concreteness and specificity to considerations that were already present in a very general way in the 1967 Outer Space Treaty. In practical terms, it also supplemented the provisions of the 1972 Convention on International Liability.

In short, the Convention is an instrument which, while it cannot be described as relating directly to aspects linked to disarmament or arms limitation, unquestionably forms part of the body of space law, the tradition of which since the adoption by the General Assembly of resolutions 1721A (XVI), 1884 (XVIII) and 1962 (XVIII) is one of consistency and common objectives, prominent among which is that of using outer space for the benefit and in the interests of the international community.

Consequently, the Registration Convention, by providing concrete information about the nature and functions of objects launched into outer space, is, de facto, an essential data base for any subsequent development aimed at generating confidence regarding the uses of space.

To deny in this connection its unquestionable security value would simply be to show ignorance of the instrument and of its nature or, what is worse, to fail to observe its provisions if one is a party to it.

The drafters of the Convention began from the premise, which we now recognize as wholly valid, that broad knowledge of the presence of objects in outer space would generate the conditions necessary for the peaceful, harmonious and rational use of that environment. That being so, it was felt that a limited number of unilateral obligations regarding the provision of information would suffice to give concrete expression to that idea.

Article IV of the Registration Convention established this criterion through five basic reporting parameters:

(a) Launching State;

(b) Designator or registration number of the object;

(c) Date and location of launch;

(d) Basic orbital parameters (period, inclination, apogee, perigee);

(e) General function of the object.

Similarly, it stated that all this information should be provided "as soon as practicable".

Thus, the Convention established a highly generic framework and in itself constituted a not inconsiderable achievement, since the international community at that time lacked organized information in the field in question.

Hence, a principle of orderliness, or at least, the institutional legal framework for attaining it, was defined.

In practice, the results have been far from the least that was expected. The flow of information generated as a result of the application of the Convention has been meagre, incomplete and untimely, entirely subject to the

will of the State supposed to supply the information and with no possibility at all of stimulating the States parties to the registration régime to demonstrate more meticulous compliance with the terms of the agreement.

The adoption of minimalist wording, and the granting in the text of the Convention of almost total discretion ("... as soon as practicable ...") have in fact neutralized an instrument whose potential remains enormous.

Specifically, the strengthening of the régime ought to be undertaken on two levels: first, that of the scope of the information, and second, that of its timeliness.

As regards scope, we would refer in particular to the terms of article IV, paragraph 1(e). In this respect, we believe that States should provide something more than the "general function" of the space object, as that criterion makes it hypothetically possible to describe a military reconnaissance satellite as, for example, a communications satellite.

It can be seen how useful a more precise register would be, for example for the subsequent elaboration of rules to protect civilian satellites, or even military satellites, given its stabilizing function.

It must be emphasized that there is no reason why a more detailed description should affect the discreetness or effectiveness of a mission if the criteria that constitute a full and satisfactory general description of the functions of a space object are adequately defined.

As regards other additional information, we feel that the definition of common criteria could be the specific responsibility of a group of governmental experts under the auspices of the Conference through its Ad hoc Committee.

Turning to the timeliness of the provision of information, it is clear that, as the Convention is currently worded, the information can arrive late, if at all, or never, which is also probable.

A political decision properly backed up from the scientific and technical points of view should determine what time-limits would be acceptable if the Convention is to be useful and effective. That does not mean, for example, that information should be supplied prior to launching. The time-limits and the scope of the information could be defined in each case in accordance with the nature and functions of the object to be launched.

Strengthening the Registration Convention would not only suit the instrument better to the objectives originally sought, but would also make it a valuable additional factor of confidence and transparency with regard to the peaceful uses of outer space.

The Convention would then also yield positive complementary effects with other proposals that have been put forward in the Conference, such as those concerning the definition of codes of conduct for outer space, for which a reliable and systematic record of the objects launched into outer space is a basic prerequisite.

Notes

1/ As was recognized by the delegations of the United States of America and the Soviet Union before the Legal Sub-Committee of COPUOS, in Hurwitz, Bruce A., The Legality of Space Militarization, North-Holland, Amsterdam, New York, 1986.

2/ "Recognizing the common interest of all mankind in furthering the exploration and use of outer space for peaceful purposes", in Hurwitz, op. cit.

3/ See, from the United Kingdom on 29 July 1985, document CD/OS/WP.7, para. 15 in fine.

4/ See document A/AC.105/382, para. 16.

5/ See, from Australia and Canada, document CD/OS/WP.25, p.3.

6/ See, from Poland, document CD/OS/WP.38, as well as related proposals, such as document CD/937 from the delegation of France concerning satellite immunity and the establishment of a trajectography centre, and various statements by the delegation of the Federal Republic of Germany concerning a code of conduct for outer space (complete list of references to the relevant verbatim records in, from Mongolia and Venezuela, document CD/OS/WP.28/Rev.1, pp.26 and 27).

CONFERENCE ON DISARMAMENT

CD/1016 */
17 July 1990

Original: ENGLISH

Mandate for an Ad Hoc Committee under Agenda Item 1

"Nuclear Test Ban"

(Adopted at the 565th plenary meeting on 17 July 1990)

In the exercise of its responsibilities as the multilateral disarmament negotiating forum in accordance with paragraph 120 of the Final Document, the Conference on Disarmament decides to re-establish an Ad Hoc Committee under item 1 of its agenda entitled "Nuclear Test Ban".

The Conference requests the Ad Hoc Committee to initiate, as a first step towards achieving a nuclear test ban treaty, substantive work on specific and interrelated test ban issues, including structure and scope as well as verification and compliance.

Pursuant to its mandate, the Ad Hoc Committee will take into account all existing proposals and future initiatives. In addition, it will draw on the knowledge and experience that have been accumulated over the years in the consideration of a comprehensive test ban in the successive multilateral negotiating bodies and the trilateral negotiations.

The Conference also requests the Ad Hoc Committee to examine the institutional and administrative arrangements necessary for establishing, testing and operating an international seismic monitoring network as part of an effective verification system of a nuclear test ban treaty. The Ad Hoc Committee will also take into account the work of the Ad Hoc Group of Scientific Experts to Consider International Co-operative Measures to Detect and Identify Seismic Events.

The Ad Hoc Committee will report to the Conference on Disarmament on the progress of its work before the conclusion of the 1990 session.

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*/ Re-issued for technical reasons.

CONFERENCE ON DISARMAMENT

CD/1017
19 July 1990

Original: ENGLISH

BULGARIA

Submission of data in connection with the Convention on the Prohibition of Chemical Weapons

Desirous of making its contribution to accelerating the negotiations, the People's Republic of Bulgaria submits the enclosed data in accordance with the USSR Memorandum on the multilateral data exchange in connection with the drafting of the Convention on the complete and effective prohibition of chemical weapons and their destruction, as well as working documents CD/828 and CD/984, submitted by the Federal Republic of Germany.

The data laid down in the following table is communicated by the Ministry of Defence, the Ministry of Industry and Technology, and the Ministry of Economics and Planning.

The thresholds for production and consumption are for Schedule 1: 100 grams/year, Schedule 2: 1 ton/year and Schedule 3: 30 tons/year.

GE.90-62164/3969a

BULGARIA

Type of data	Answer
1. Presence of CW on our territory	No
Possession of CW on the territory of another State	No
2. Aggregate number of facilities for production and storage of CW	Bulgaria does not produce or store CW
Aggregate number of facilities for production, processing and consumption of permitted chemicals in Schedules 1, 2 and 3 above thresholds indicated in this document	1
3. Types and names of CW agents produced	Not applicable
Types of CW munitions stored; CW agents in bulk	Not applicable
Names of chemicals in Schedules 1, 2 and 3 produced in the chemical industry	Hydrogen cyanide (74-90-8)
4. Plans and methods for the destruction of CW including the number of facilities and the anticipated length of their operation during the 10-year destruction period	Not applicable

CONFERENCE ON DISARMAMENT

CD/1018
CD/CW/WP.307
19 July 1990

Original: ENGLISH

THE NETHERLANDS

Report on a Trial Challenge Inspection

1. INTRODUCTION

On 27 March 1990, the Kingdom of the Netherlands conducted a national chemical weapons trial challenge inspection of a military airbase. The inspection, carried out jointly by the Ministries of Foreign Affairs and of Defence in collaboration with the Netherlands Organisation for Applied Scientific Research (TNO), was the first of its kind in the Netherlands.

It demonstrated that it is perfectly possible to carry out such an inspection with the help of managed access measures. Nevertheless, it also showed that all the participants were in need of more practice in such inspections, and that the inspection procedures, based on the Geneva Draft Convention, may require some further refinement.

2. AIMS OF THE INSPECTION

The aims of the trial challenge inspection were:

A. To ascertain whether compliance with the Chemical Weapons Convention could be determined without sensitive information being divulged.

B. To gain practical experience in carrying out trial challenge inspections.

C. To put the Protocol on Inspection Procedures of the "Rolling Text" to the test under real and practical conditions.

3. THE FACILITY INSPECTED

The trial challenge inspection was carried out at a 400-hectare operational airbase belonging to the Royal Netherlands Air Force. A number of the base's facilities were located outside it; these included an ammunition dump, a mobilisation storage depot, a radio transmission station, and a storage depot for communications equipment.

On the base itself there are 18 ammunition bunkers and 32 aircraft hangars, an administrative area with offices and living quarters, and a technical area. The base has one main entrance and 19 other entrances. A railway track also runs through the base.

4. COMPOSITION OF THE TEAMS

A. The Inspection Team

In the light of the earlier experience of the Federal Republic of Germany, the Inspection Team was kept as small as possible. This was facilitated by the decision not to secure the site during the inspection (see 5C below) and not to have samples analysed on-site (see 5D below). It was considered necessary that the team should include at least:

i. a chemical expert well acquainted with the CD negotiations;

ii. chemical experts with the necessary training and equipment to take samples. In consultation with TNO, it was decided that in view of the size of the airbase, at least two such experts should be included in the team;

iii. an ammunitions expert;

iv. an NBC (nuclear, bacteriological and chemical protection) expert;

v. an infrastructure expert who, especially in instances of managed access, would be able to ascertain before entering the site whether the buildings and the layout of the site were suitable for the storage of chemical weapons. The inclusion of such an expert was also useful in order to comply with the requirement that the inspection be carried out in a number of increasingly intrusive stages.

The inclusion in the team of a doctor/pharmacist was also considered. But since the inspection was only a trial one and its results - namely that no chemical weapons would be found on the airbase - were known in advance, a doctor was not included in the team. In a real challenge inspection, inclusion in the inspection team of a doctor, military or otherwise, would certainly be worth considering.

B. The In-Country Escort

The In-Country Escort consisted of 3 persons from the Ministries of Foreign Affairs and of Defence.

Given the nature of the inspection, an arbiter and a co-arbiter were added to ensure that the trial inspection took place in accordance with correct procedures. They had the authority to settle differences of opinion where necessary and were not considered to be representatives of the Inspected State Party. The arbiter also assumed the role of the (Director-General of the) Technical Secretariat whenever necessary.

C. The Observer

In Geneva, there is as yet no clearly formulated concept of the role of the Observer representing the state that has requested an inspection. Some delegations consider that the Observer may be present throughout the inspection. Others believe that, while the Observer should be in the vicinity, he or she need only be informed of the progress of the inspection without being present at all stages of the inspection. Yet others believe apparantly that the presence of an Observer at the inspection is not warranted at all.

The Netherlands is of the opinion that the presence of the Observer during a challenge inspection is absolutely indispensable and a prerequisite for the succesful outcome of such an inspection.

In order to take full advantage of the role-play elements inherent in the trial inspection and to allow the rights and obligations of the Observer to become clear, it was decided that the Observer could attend all stages of the inspection, but with some restrictions regarding access granted. For an evaluation of the role of the Observer see section 6 F below.

5. PREPARATIONS FOR THE INSPECTION

A. The Inspection Protocol

The trial challenge inspection was carried out in accordance with an Inspection Protocol based on the Rolling Text of the Chemical Weapons Convention (CD/961 of 1 February 1990) with some changes to take into account the particularities of the trial inspection.

All the Protocol's procedures relating to the periods before arrival at and following departure from the Point of Entry were disregarded.

It was assumed that advance notice of the inspection had been given and that at the Point of Entry the site to be inspected would be communicated to the Inspected State Party. The "trial" thus commenced when the Inspection Team arrived at the Point of Entry and ended with their return there.

Procedures relating to events outside the in-country period practically all require the close involvement of the Technical Secretariat. For this reason, these procedures could not easily be simulated in a national trial inspection. Wherever necessary, the role of the Technical Secretariat was played by the arbiter and co-arbiter.

The procedures that were disregarded concerned such matters as the nomination and appointment of the Inspectors and provisions governing their diplomatic privileges and the selection and certification of equipment and instruments. With regard to the latter, a similar procedure was included in the Inspection Protocol.

Instead of a mandate from the Director General of the Technical Secretariat to the Inspection Team, specific instructions to the various participants in the trial inspection were added to the Inspection Protocol.

B. The suspicion

Deciding on the suspicion to be levelled at the inspected state was straightforward enough. The most likely violation of the Chemical Weapons Convention at a military airbase would be the storage of chemical ammunition (i.e. bombs) and, maybe, the presence of a depot for the bulk storage of lethal chemicals and/or a facility for filling chemical ammunition. It was decided that the trial would only involve suspicion of the presence of chemical weapons munitions or devices.

C. Warning time

It was decided to inform the airbase commander in advance of the time of the trial inspection. The commander was also extensively briefed on the in's and out's of the Geneva "Rolling Text" some weeks before the inspection. While this decision had the drawback that it eliminated the element of surprise, it also had a number of benefits:

1. It made it possible to reduce the size of the Inspection Team and to save time. The Inspection Protocol gives the Inspection Team the authority to secure the site and check all incoming and outgoing traffic. It was agreed with the airbase commander that he could choose a working day to ascertain what staff resources such an operation would involve; this made it unnecessary to determine this during the trial inspection itself.

2. Informing the commander resulted in a great deal of cooperation in the preparations for the inspection. It also enabled the base's senior personnel to take adequate measures to facilitate managed access etc. and to brief the rest of the base personnel, matters which will in due course be embodied in standing orders for all the armed forces.

3. A real challenge inspection under the Chemical Weapons Convention would have led to a complete suspension of the base's activities, with all the additional costs which that would have entailed. It was therefore decided not to disrupt the day-to-day activities of the airbase for the purpose of the trial inspection.

Bringing the base to a standstill would have created an extra problem for the crews of its aircraft on quick reaction alert, who would have had to be allowed to continue their operational duties. If the base had been brought to a standstill, these aircraft would presumably have had to be inspected first, before they be allowed to leave as necessary.

D. Testing instruments

As regards the testing instruments to be used in chemical weapons inspections, three types of test must first be distinguished:

i. The analysis of ammunition without opening cartridge cases or taking samples.

ii. The analysis of samples from ammunition.

iii. The analysis of the immediate vicinity of the ammunition.

As was inter alia shown during the recent "Munster workshop" in the Federal Republic of Germany, the analysis of ammunition without opening it can be performed using:

a. a shell-mantle thickness meter;

b. a stethoscope;

c. an X-ray machine;

d. a gamma radiography system.

Analysis after opening ammunition and taking samples can be performed using:

e. a mass spectrometer.

Instrument (a) can be used to determine whether an ammunition cartridge case is of an unusual type, which in itself does not of course prove that it is a chemical weapon.

Instruments (b) and (c) can be used to determine whether ammunition contains a liquid. If such a test is positive, the ammunition is almost certainly a chemical weapon. If only solid material is found, this is by no means to say, however, that the munition or bomb case concerned contains no chemical weapon substance.

The use of an X-ray machine, although quite possible, would require a larger Inspection Team.

Instruments (d) and (e) are more difficult to transport because of their size and weight. The use of instrument (d) requires exposure times of around three hours per item. Moreover, both instruments meet with the objection that their use requires additional personnel.

In the light of such considerations as the high costs and extra security requirements, it was decided not to use any of the above instruments during this first trial inspection but to take soil and air samples to be analysed by TNO later. On-site detection methods, such as gas detection and water analysis equipment, which can ascertain quickly the presence of chemical weapons, were used, however.

As an alternative to using the instruments detailed above, the Royal Netherlands Army's Explosives Ordnance Disposal Command agreed to provide descriptions and X-ray photographs of numbers and types of ammunition selected at random by the inspection team. The Disposal Command also agreed to be on

call on the day of the inspection in order to give advice and answer questions. However, the Inspection Team did not make use of either facility. In a real challenge inspection, samples from munitions would have to be taken or ammunition/shells selected for inspection elsewhere.

TNO promised to make both Inspectors and equipment available to take air and soil samples and analyse them later. The organisation also promised to provide some on-site detection equipment. This consisted of three small cases with descriptions of their contents, respectively containing gas detection equipment, water analysis equipment, and equipment for taking samples of solid materials.

In addition, the Disposal Command advised that air samples be taken from the space in ammunition reserved for the detonator. This thin-walled space, a possible location for any traces of toxic chemicals, is usually closed off by a metal screw cap when ammunition is in storage.

In view of the fact that the inspection was only a trial, it was decided not to provide the receiving state with any duplicate samples, since only TNO would be analysing them. Furthermore, the samples were not sealed, and vehicles were not specially equipped for the transport of samples that might contain highly toxic chemicals.

E. Miscellaneous

1. The Royal Netherlands Air Force promised to contact the airbase commander in order to reach a decision on the use of the two-way radio provided for in the Inspection Protocol. The Inspection Team was prepared to take the radio equipment with it only with the express permission of the commander and upon provision of a list of permitted frequencies. It was considered essential that any sort of disruption of air traffic be avoided. In a real inspection, of course, this problem would not arise, because the whole base would be brought to a complete standstill anyway.

2. The provision of NBC clothing was considered the responsibility of the Inspection Team. During the inspection, however, the Team was allowed to make use of clothing present on the base if it wished so.

6. CONCLUSIONS AND RECOMMENDATIONS

A. The briefing

At the beginning, lack of in-depth knowledge of the elaborate procedures of the Inspection Protocol was clearly a stumbling block for all parties concerned. It would seem advisable that, in future, more time be made available before the briefing to allow the leader of the Inspection Team to explain the nature and aim of the inspection and the Observer to give a brief account of the accusation, upon which the leader of the In-Country Escort can introduce the briefing. The base's senior staff can then begin the briefing itself.

The briefing provided by the airbase was comprehensive and helpful. This attitude played a significant part in boosting goodwill and ensuring a good relationship with the Inspection Team.

However, although no information relevant to national security was divulged, the briefing was perhaps excessively candid in view of the presence of a person such as the Observer. For example, information about the functions of particular buildings could quite justifiably have been revealed only if it had been explicitly requested.

The maps provided were of limited suitablility as a basis for planning the inspection. However, this flaw was adequately offset by the presence in the briefing room of a large outline map and the additional information given by the base's deputy commander.

B. The inspection plan

The inspection plan was fairly detailed. Since it had to be altered quite frequently during the inspection, valuable time was wasted. Moreover, a plan that is too specific both stands in the way of spontaneous probing by the Inspection Team and gives the Inspected State Party more opportunity to take last-minute obstructive measures. This is equally true of the practice of announcing interviews in advance, as a result of which personnel to be interviewed were given a good two hours to prepare themselves.

Although the Inspection Team is perfectly entitled to draw up its inspection plan in private, for practical reasons it may be useful to have the In-Country Escort present.

The Observer ought also to have been present when the plan was drawn up. In discussions such as these, suggestions made by an Observer can be especially useful. After all, it cannot be ruled out that he or she will possess more information than has been provided in the inspection request, information which has not been included by the challenging state in order to protect its sources. Furthermore, if the Observer is not present when the inspection plan is drawn up, a great deal of time is taken up afterwards in briefing him or her about it.

A helicopter overflight of the site by an infrastructural expert, held after the pre-inspection briefing, provided interesting information which was used to revise the inspection plan.

Finally, the use of statistical calculations is to be recommended in the drawing-up of the inspection plan in order to determine the chance of detection based on the testing of random samples and the selection of such buildings as ammunition bunkers.

C. The Inspection Team

The Inspection Team had insufficient experience of the many procedures and practical problems it faced. There was also a

lack of organisation in the Team, which was worsened by its limited means of communications. The Protocol's requirement that the Team's division into subgroups be laid down in the inspection plan had a detrimental effect on the team's flexibility.

These problems could be solved either by enlarging the Team or by including Team members with expertise in several fields. The latter solution is preferable. Inspectors working in the Technical Secretariat ought to have such expertise. Consideration could also be given to amending the relevant provisions of the Protocol on Inspection Procedures, or give these a flexible interpretation.

D. The In-Country Escort

Like the Inspection Team, the In-Country Escort should also have a greater ready knowledge of the Inspection Protocol. During the inspection, the In-Country Escort should both prevent the Inspectors and the Observer from obtaining confidential information unrelated to chemical weapons and ensure that members of the base personnel - who, even in the event of a real inspection could not be expected to be fully informed of its scope - do not divulge such information. The In-Country Escort team should therefore, in addition to its task of escorting the Inspection Team and its subteams, include persons whose only duty it is to accompany the Observer continuously. (See F below for observer's powers.)

E. The base personnel

Given the circumstances, the staff and other personnel were well prepared for the inspection, especially with regard to their logistical duties such as accommodation, transport, etc. The only problem was the communications equipment (see I below).

The briefing was informative and sufficiently detailed to serve as a basis for the inspection plan. Except for during the inspection of the HAWK missiles, which was not originally planned, base personnel were always present in good time to escort the Inspectors, open doors, etc.

As regards their preparation in respect of answering questions and allowing access to documents, buildings, etc., the personnel proved willing to provide the inspectors with relevant information. This is one of the major responsibilities of those accompanying the inspectors.

F. The Observer

During the inspection - as in the discussions about inspections in Geneva - the role of the Observer was the most controversial. Although his exclusive duty was to ensure to his own satisfaction that the inspection followed correct procedures in investigating the suspicions voiced by the Requesting State, the Observer obtained somewhat more sensitive information than desirable, despite repeated interventions by the in-country escort.

It may be impossible at this stage to provide any conclusive solutions to this problem. In practice, the escort team may have to decide on an ad-hoc basis on the acceptability of an Observer being present during all stages of the inspection.

There should be a separate escort for every Observer, who should also be given his own transport. It would be advisable for the Inspection Team to take the Observer's suggestions into account in establishing the inspection plan. This reduces the chance of irritation and interference during the inspection. Of course, the Inspection Team must have the last word with regard to the inspection plan.

The presence of an Observer is crucial and is primarily intended to be a confidence-building measure to reassure the Requesting State that the inspection is being carried out correctly and that its suspicions are being taken seriously. But the Observer need not necessarily take part in all stages of the inspection nor be concerned with all the technical aspects of its implementation.

The Observer's duties may need to be bound by a fixed set of narrowly defined rules in specific sensitive cases. He or she may be present at the briefing and make suggestions concerning the inspection plan. At any time during the inspection, he or she may investigate whether the Inspectors are implementing the inspection plan properly. To this end, the Observer should be kept constantly informed of how the inspection is progressing.

G. Managed access

It is essential that all parties be aware that the Inspection Team may ultimately gain access everywhere. Although classified information can be protected during a very intrusive inspection, the Inspection Team cannot be prevented from learning a great deal about such matters as the location and function of the buildings, the presence of protective clothing, etc.

Initially, access was refused by the Commander to the Electric Counter Measures shop, the command bunkers, and the ammunition dumps. Eventually, however, after classified material had been shrouded, access was allowed to the ECM shop, and a random sample of 33% of the ammunition dumps was allowed.

With regard to some sensitive bunkers, after quite limited access had been granted, it was shown that the presence of chemical weapons was very unlikely, although it could not be determined with absolute certainty whether there were any more rooms in the building - underground, for example. In a real inspection at such an airbase therefore, more access might be needed. In this case however, confidence with regard to compliance was sufficiently established, without gaining access to the whole building.

In due course, national guidelines must be established to determine under which conditions managed access measures should be taken and what their nature and extent should be. This is necessary to ensure that all representatives of the Inspected State (base personnel and In-Country Escort) adopt the same approach in protecting confidential information from the Inspection Team.

H. Safety

A problem which arose at the airbase concerns the guaranteeing of the safety of the Inspectors. The Netherlands is of the opinion that this cannot be required if national safety rules are violated or if activities are carried out which - nationally - may only be carried out by personnel specially trained to do so. During the inspection, the danger to the Inspectors of the highly explosive hydrazine in the hydrazine depot was pointed out. The Inspectors were asked to take air samples there at their own risk and to sign a declaration to that effect, which they did under protest, since the Protocol stipulates that the Inspected State must guarantee the safety of the Inspectors. However, the Protocol also provides for limitative preconditions concerning safety which may be imposed upon the Inspectors.

Nevertheless, situations must be avoided where a state can hamper the inspection of certain buildings by means of these provisions. Further consideration will have to be given to the relationship between the liability for Inspectors borne on the one hand by the Inspected State and on the other by the Organisation in those cases in which the Inspected State no longer wishes to take upon itself responsibility for the safety of the Inspectors.

I. Accommodation and communications

During the inspection, it became clear that the various teams, including the Observer, all needed their own offices.

Communication between the various subgroups proved to be insufficient, though in a real inspection the Inspection Team would take its own means of communication. A separate command post, in which the leader of the Inspection Team, the leader of the escort team and the base commander, all with their own means of communication, are present throughout the inspection, might be one solution. In this way, the inspection could take place in a more coordinated and efficient way.

The Observer also ought to have his or her own communications equipment, unless he or she is continuously being briefed by the leader of the Inspection Team in the central command post. Partly because of the considerable pressure of time, the Inspectors were unable to keep the Observer reasonably informed during this trial inspection.

J. Interviews

It is advisable not to announce interviews in advance and not to speak with senior personnel only. Every interview should be attended by a member of the in-country escort. It is recommended that the Observer should not be allowed to attend the interviews. Consideration could be giving to providing Inspectors with some training in investigation and interrogation methods.

K. Size of the teams

For the inspection of the airbase, the size of the teams would in principle have been sufficient within the parameters set, if:

- the teams had had more experience;
- the inspection plan had been more flexible as regards the division into subgroups;
- if communications had been better.

As stated above, the Observer should have his or her own escort. If the base had been sealed off, an advance team with at least six members would have been necessary to organise and check that everything had been done correctly. In the case of the airbase under inspection, the fact that a railway track runs through the base might have required the involvement of additional personnel. However, an advance team would not appear to be necessary if the inspection team only announced its destination at the Point of Entry.

L. Duration

It is difficult to determine if the time available for the inspection was sufficient. Since time was short, a number of buildings located outside the base were not inspected, though

it should be noted that the Inspection Team did not make use of the possibility of prolonging the inspection, as provided for in the Inspection Protocol. Also, some buildings were visited twice by different subgroups.

The picture was also obscured by the fact that at some stages, at which certain persons (such as the Observer) were not supposed to be present, and which for this reason would have taken up extra time, the procedures were not carried out in full. This was also due to a lack of sufficient office space. On the other hand, a great deal of time could have been gained if the teams had been more experienced.

The same holds true here as, mutatis mutandis, in the case of the factors which determine the size of the teams. Three factors - namely available time, size of the teams, and size and nature of the inspection site - affect each other and are mutually dependent. In practice, the time available and size of the teams will probably have to be determined from case to case.

During a next trial inspection it would be preferable to make available as much time as is necessary to enable all the procedures and provisions, as laid down in the Inspection Protocol, actually to be tested in practice.

M. Testing instruments

In the event of a follow-up trial inspection, an attempt should be made to have analyses carried out on-site. The Inspection Team should take suitable equipment for this purpose with it. Furthermore, it is also to be recommended that gas samples should be taken more rapidly, using tenax tubes. Every subteam also ought to have gas detection equipment. The procedures for the transport and analysis of samples, provided for in the Rolling Text, should be tested.

N. Standard forms

For the sake of simplification and the expedition of the inspection, the parties ought to have at their disposal standard forms for such things as the inspection plan, provisional reporting, requests, and declarations. The Inspection Team should also be able to have at its disposal a checklist with indicators of the presence of chemical weapons.

CONFERENCE ON DISARMAMENT

CD/1019
23 July 1990

Original: ENGLISH

LETTER DATED 20 JULY 1990 FROM THE CHARGE D'AFFAIRES A.I. OF NORWAY ADDRESSED TO THE PRESIDENT OF THE CONFERENCE ON DISARMAMENT TRANSMITTING A RESEARCH REPORT ENTITLED "USE OF SORBENT EXTRACTION IN VERIFICATION OF ALLEGED USE OF CHEMICAL WARFARE AGENTS. PART IX" */

I have the honour to transmit to you a research report entitled Use of Sorbent Extraction in Verification of Alleged Use of Chemical Warfare Agents. Part IX, published by the Royal Norwegian Ministry of Foreign Affairs.

I would appreciate if the report would be circulated as an official CD document.

(Signed) Torbjørn Aalbu
Chargé d'Affaires a.i.

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*/ A limited distribution of the document in English only has been made to the members of the Conference on Disarmament. Additional copies are available from the Permanent Mission of Norway in Geneva.

CONFERENCE ON DISARMAMENT

CD/1020
CD/CW/WP.310
26 July 1990
Original: ENGLISH

GERMAN DEMOCRATIC REPUBLIC

Report on a Trial Challenge Inspection

A national trial challenge inspection was carried out in March 1990 at an army ammunition depot belonging to a military district of the National People's Army. It was conducted on the understanding that the GDR does not possess any chemical weapons and has not deployed on its territory any such weapons of another country. The inspection had been prepared taking into account the "rolling text" of the draft convention on chemical weapons as well as the experience gathered in the implementation of the INF Treaty and of confidence- and security-building measures.

Aims

The basic aim was to test existing conceptions on challenge inspections and make national preparations for the implementation of the convention.

Specifically, the following objectives were pursued:

- to dispel the suspicion that chemical weapons are stored at the site, and
- to identify the extent of the tasks to be performed in inspecting a military facility.

Inspection Site

An army ammunition depot of a military district was chosen as inspection site, where - in accordance with its operational purpose - all types of ammunition forming part of organic armament are stored. The depot is located in the vicinity of other military facilities. The ammunition depot consists of an administrative area with various functional buildings and a storage area comprising various ammunition bunkers and storage rooms. The storage area is secured by a high-voltage electric fence. Access for motor and railbound vehicles is only possible through gates which are also secured by an electric fence. The ammunition bunkers have different markings depending on the types of ammunition stored in them and on the danger category to which they belong. Arranged in clusters within the depot area, the bunkers are connected by concrete roads.

Inspection Team

The inspection team consisted of ten inspectors, comprising four military ammunition specialists, two military experts for protection against chemical weapons, and four specialists for storage management. In view of the limited inspection aim of the trial, the role of a foreign observer or of personnel for securing the site was not examined.

Conduct of the Inspection

The inspection team was met by the depot manager at the entrance of the facility to be inspected and was then taken through the main gate to a room for a briefing. That room

served also as a meeting room for the inspectors. Using a scale model with a site map, the manager explained:

- the purpose and types of stored ammunition,
- the geographical location of the depot,
- the location of functional buildings and ammunition bunkers and storage rooms according to danger classifications,
- facilities of a sensitive nature, with explanations of the reasons for that,
- locations of the high-voltage electric fence and entrance gates.

It was possible to identify when the gates had been opened for transports on the basis of evidence produced by records on the times when the electric fence had been switched off.

With the help of models, the inspectors familiarized themselves with the types and markings of the ammunition stored. They were introduced to the leading officers of the depot and asked them questions related to the inspection.

The inspectors used the opportunity to spell out the inspection programme in greater detail and to modify it, taking into account the discussion held during the briefing. Subsequently, the depot manager informed them of the security regulations, signals and actions in case of accidents.

In conclusion he stated that no chemical ammunition was stored on the site and that no facility or measures had been prepared which would make the storage of chemical ammunition possible. The personnel of the depot did not have any

knowledge that would be necessary to handle chemical ammunition.
The time for the briefing of about one hour was not counted within the duration of the inspection.

The inspection itself was carried out in several stages:

Stage 1

A bus tour, using the site map as a basis, helped to give an initial impression of the entire depot area in order to

- verify the accuracy of the site map, and
- undertake a first visual inspection of the site.

During that inspection attention was paid to external signs which might indicate a possible storage of chemical weapons, such as

- open storage sheds and ammunition piles,
- availability on the site of means and facilities to decontaminate, monitor and discharge toxic waste water,
- construction facilities for ground water protection,
- means and facilities to provide medical aid in case of injuries from warfare agents,
- a facility to indicate wind direction and speed on the site,
- installations for ventilating or sealing off ammunition stores and availability of filter-based ventilation systems,

- changes in the vegetation and existence of biological indicators.

None of the aforementioned signs of a possible chemical ammunition storage were found during the inspection tour.

The inspection team asked for more detailed information concerning two bunkers classified as "sensitive". A respective query of the accompanying personnel with the depot management showed that this classification only related to certain elements of the ammunition and that access was possible.

Stage 2

For closer inspection the inspectors selected, and were granted access to, two ammunition bunkers. They checked the inscriptions, arrangement and number of ammunition cases, having some of them opened at random. They established that the contents of the cases corresponded with the inscriptions. A visual check of the ammunition gave no indication of chemical weapons (no hermetically sealable charging holes and closing devices). Closer checks on ammunition were regarded as unnecessary, and were therefore not undertaken.

The inspectors used the opportunity to address some questions relating the inspection to the depot personnel. These questions were duly answered. Information concerning wall strength and compactness of ammunition stores/rooms and protective barriers were classified as sensitive and pertinent questions remained unanswered. Subsequently, the surface of the bunker as well as its ceiling and walls were more closely examined to rule out the existence of special filter systems in the area.

Given the results of the inspection so far and having questioned the depot personnel, the inspectors found it unnecessary to examine other buildings, e.g. the repair and medical centres, or to inspect medical records.

After five hours the head of the inspection team stopped the investigations, stating that the suspicion of chemical ammunition storage was regarded as disproved on this site.

Conclusions

The conclusions from the findings of the trial inspection were largely identical with those drawn by inspectors in the United Kingdom, the Union of Soviet Socialist Republics and the Federal Republic of Germany. In sum, it can be said that the combined evaluation, as used in this trial inspection, of secondary characteristics and on-site checks provides, in the case of the selected site, sufficient evidence to prove that chemical weapons were non-existent.

The following observations can be added:

- The numerical strength of the team with 10 inspectors proved adequate. If required, the team could have been subdivided into smaller groups at times, but that was found unnecessary.

- The composition of the team, with experts from different fields, proved the right approach.

- Apparently, it remains a difficult question to determine in advance the size of an inspection team. In order to fix the number of inspectors and the duration of the inspection, it would be necessary to have prior knowledge of the operational purpose of the site to be inspected. Having only data concerning the size of the site, as envisaged in the "rolling text" of the draft convention, does not, in this context, allow a clear-cut decision on the number of inspectors needed.

- An initial analysis of the inspection results should already be undertaken on the site.

- For a number of organizational matters concerning preparations and monitoring, arrival of inspectors, conduct of the inspection and departure of the inspection team, it seems useful to draw on the experience gathered in the implementation of the INF Treaty as well as in the CSCE framework.

CONFERENCE ON DISARMAMENT

CD/1021
CD/CW/WP.311
26 July 1990

Original: ENGLISH

THE CZECH AND SLOVAK FEDERAL REPUBLIC

REPORT ON A TRIAL CHALLENGE INSPECTION AT A CHEMICAL FACILITY

1. Systematic verification under Chemical Weapons Convention will only cover facilities which have been declared by the State Parties. However, prohibited activities might occur at facilities which have not been declared or were declared, but not subject to, international monitoring. To assure full compliance with the projected Convention, additional verification methods are discussed. In case of serious suspicion of allegation Chemical Weapons Convention challenge inspection might be applied.

2. In principle, challenge inspection can be applied to both military and civilian facilities. To learn the practical problems of this type of inspection, many States participating at the Conference on Disarmament have made challenge trial inspections at military facilities; however, the problem of challenge inspections at chemical facilities has been addressed by the Netherlands (CD/925) and Canada (CD/987). This document describes the results of a trial challenge inspection at a multipurpose chemical facility in Czechoslovakia.

3. The aim of the inspection was to check the possibility of misuse of the inspected facility equipment for producing chemicals on Schedules 1 and 2, the presence of declared chemicals on Schedule 3 and their use and the absence of non-declared chemicals.

4. Some provisional observations

4.1 The choice of inspected facility

At the multipurpose facility, one unit producing herbicides from phosgene was chosen.

4.2 Notice of inspection

The facility was informed of the exact date of the inspection 24 hours prior to the inspection.

4.3 Inspection team

The members of the inspection team were those designated for assistance to the United Nations Secretary-General for examination and analyses in the event of an investigation of reports of alleged use of chemical weapons (CD/980) and others designated to help in the forming of the Czechoslovak Preparatory Committee of the Czechoslovak National Secretariat for the future Chemical Weapons Convention. The total number of persons from whom the choice was made was 23. For this group, 2-day sessions were arranged to prepare for the inspection. From these experts, the following members of the inspection team were designated:

Industrial production experts	3
Storage and record-keeping experts	2
Analytical expert	1
Expert of the Czechoslovak delegation to the CD	1
Observers (Ministry of Foreign Affairs, Ministry of National Defence)	5

The representative of the Ministry of Industry was elected as the Head of the inspection team.

4.4 Point of entry

As only Czechoslovak nationals participated, the point of entry was the Ministry of Foreign Affairs in Prague. The transport of participants was by minibus and two cars. The time between assembly in Prague and transport to the site was 9 hours.

4.5 The facility was specified by name, owner and name of the production unit. The production unit within the complex was specified on the plan of the whole facility (App. I).

4.6 Opening conference

The management of the whole facility was informed about the aims of the inspection. The inspection group was then transported by cars to the production unit specified for inspection. The chief of the production unit explained to the inspection team the following points:

- scheme of the production unit reflecting its dedicated purpose;
- sensitive places and possibilities of their protection;
- security and special measures which were signed by members of the inspection team;
- organizational aspects;
- securing the site.

In this case, it was very difficult to secure the whole unit because of its incorporation into the complex and its connection with the complex by pipes etc. The problem was solved by the control of input and output of chemicals or raw materials and by random control of transport in the inspected area. It could be better solved using seals for exits and entrances; this would require more personnel on the inspection team or personnel specially dedicated to securing the site.

4.7 Orientation visit

On the basis of information given by the management, a visit to the whole area was undertaken.

4.8 Inspection plan

After this first visit, the inspection team divided into inspection subgroups and the Head of the inspection team elaborated an inspection plan. On this basis the management of the facility designated responsible persons for each subgroup.

4.9 Inspection - second visit

4.9.1 Subgroup for production

The members of this group studied technological documentation. Some questions on confidentiality arose. The inspected unit involved three reactors for batch production: each was designed for unitary production. From inspection of the production unit it appeared that without substantial changes of technological equipment it would not be possible to produce chemicals on Schedules 1 and 2. Daily operational evidence was considered by management as not important for the purpose of inspection. On the other hand, monthly computed evidence was available (without commercial information) and it was considered appropriate for inspection. One problem could be the inability to determine directly the consumption of phosgene because of the lack of specific instrumentation. However, calculation of consumption on the basis of final product quality was an alternative method of quantitative control of this Schedule 3 compound. The following features were inspected:

- production schedules and adherence to these;
- equipment, with special attention to the containment aspects of valves, reactors, etc. and to special safety security measures;
- the number of reactors, their connection with other parts of the unit/complex;
- technological scheme;
- fluoride resistant pipes;
- exchangeability of the equipment;
- the level of automation;
- duplicated valves, pipes, containers;
- input and output control;
- automatic monitoring of dangerous chemicals;
- safety signs, precautions;
- standby emergency electricity, gas etc.;
- special safety regulations;
- use of protective masks, clothes etc.;
- methods of calibration;
- service;
- waste treatment;
- containers of raw material and products;
- production and consumption of intermediates;
- production documentation;
- operational records, movements of chemicals in the unit;
- transport;

- evidence of intermediates;
- duplicated record-keeping;
- data on service and calibration.

Following discussion points might be of interest:

- the presence of a so-called "lodger" unit;
- at the specific unit, isocyanates are produced; detailed technological procedures were characterized by management of the facility as confidential, with control of input/output materials only;
- the knowledge of filters and masks would be needed.

4.9.2 Subgroup for personnel examination/interview

The members of this group focused their attention on the following questions:

- organization of the work;
- health service;
- occurrence of accidents, fires, etc.;
- security and protective measures;
- knowledge of activities in case of accidents;
- first aid, medical kits;
- medical documentation.

A problem might occur with obtaining data dealing with special examinations (for hepatotoxicity, carcenogenicity etc.). The medical station was not included within the area of access of inspectors. Medical data were obtained on request. They were of general nature but not for individuals.

4.10 Short meeting of the inspection group

The following points were discussed in this meeting:

- evaluation of the data obtained;
- comparison of these data (obtained by subgroups) - cross information;
- anomalies;
- requests for sampling, possible further visit.

It was concluded by the analytical expert that sample analysis was not necessary.

4.11 Further visit and sampling (if necessary)

Nevertheless, air samples from the production unit were subsequently analysed using indicator tubes for the presence of cholinesterase inhibitors, phosgen, mustards, lewisites, HCN, cyanogen chloride and chlorpicrin. The results were negative.

4.12 Final meeting of the inspection group

This was a short meeting with an exchange of views between different members of the inspection team.

4.13 End of the inspection

Meeting with the management of the facility to announce the end of the inspection.

4.14 Transport to Prague

5. Report of the inspection team (App. II)

This was elaborated following the return to Prague.

6. Conclusions

6.1 Some difficulties might occur in securing the site.

6.2 Importance of practical experience in all members of the inspection team is recognized.

6.3 The method of cross-referencing might be useful.

6.4 The number of inspectors depends on the type of facility; in the case of a small production unit, five are considered necessary.

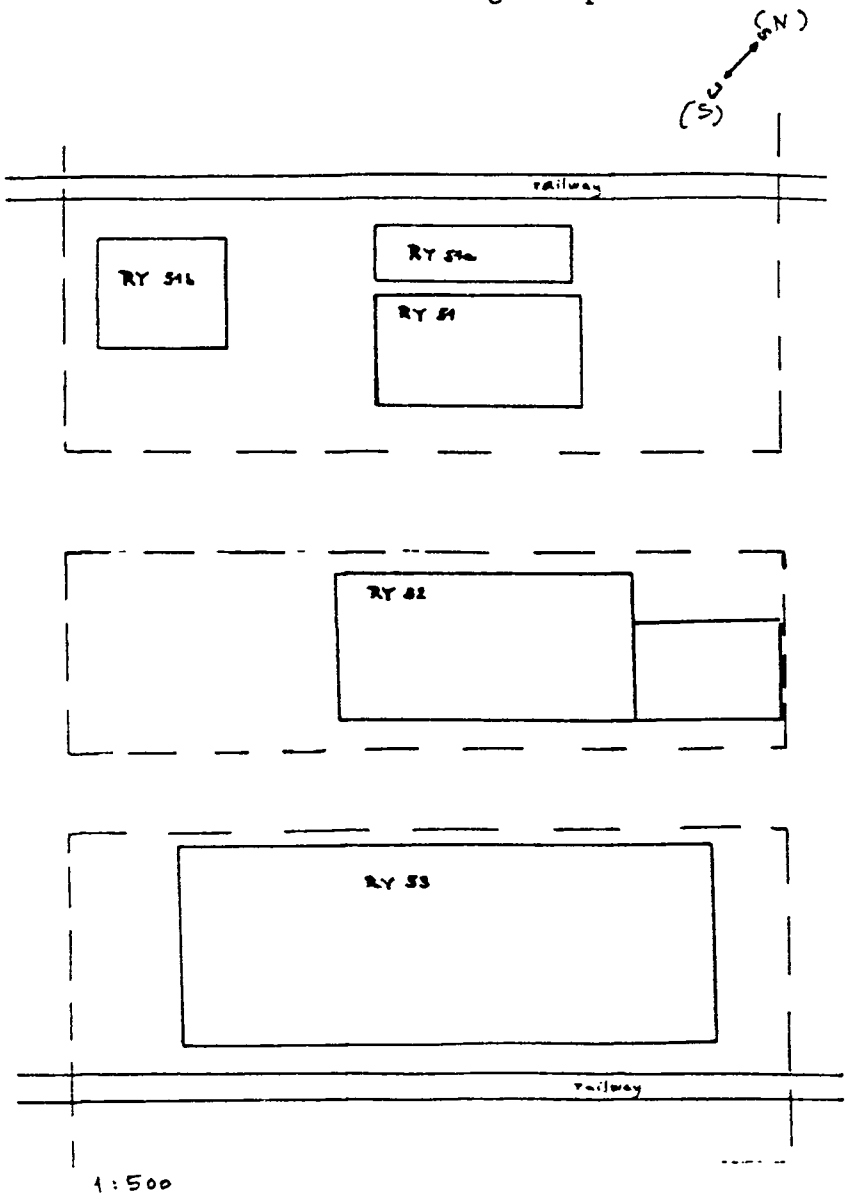
6.5 Confidentiality is closely connected with technology and production data; the problems may arise from requests for this type of information; in this area, considerable co-operation between the management of the facility and the inspection team is needed.

6.6 The level of safety measures can be considered a useful indicator of possible production of toxic substances not on the Schedules.

Appendix I

SCHEMATIC PLAN OF THE INSPECTED UNIT (HERBICIDES DERIVED FROM PHOSGENE)

----------	road
----------	railway
RY 51	storage of liquid materials
RY 51a	storage of liquid materials
RY 51b	storage of dimethylamine
RY 52	production unit
RY 53	storage of products



Appendix II

REPORT OF THE INSPECTION TEAM

A Czechoslovak trial challenge inspection was carried out at a chemical facility VCHZ Synthesia Pardubice, production unit herbicides - Rybitví on 4 July 1990. Following the inspection, the inspection team decided that the activity of inspected facility is in full compliance with the Chemical Weapons Convention. Collaboration of inspection team with the Management of the inspected facility was very good. No anomolies or disputes were observed.

Prague, 5 July 1990

SIGNED:

Dipl. Eng. Milan MAXA	Ministry of Industry
Col. Assoc. Prof. Jiří BAJGAR, M.D., Ph.D. Major Dipl. Eng. Viliam FOLDOSI, Ph.D. Dr. Josef VACHEK	Federal Ministry of National Defence
Dipl. Eng. Jiří KUČLER	Ministry of Industry
Dipl. Eng. Antonín LICKA, Ph.D.	Res. Inst. Org. Synthesis, Pardubice
Dipl. Eng. Vladimír SOCHA, Ph.D.	Chemical Faculty, Pardubice

Observers:

Col. Dipl. Eng. Jiří DVOŘÁK Col. Dipl. Eng. Jan RYŠAVÝ Lieutenant-Col. Dipl. Eng. František MAIER Captain Dipl. Eng. Jiří CABAL	Federal Ministry of National Defence
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CONFERENCE ON DISARMAMENT

CD/1022
CD/CW/WP.312
26 July 1990

Original: ENGLISH

THE CZECH AND SLOVAK FEDERAL REPUBLIC

Report on a Trial Challenge Inspection at a Military Facility

1. National trial inspections of many States participating at the Conference on Disarmament were conducted in 1988 and 1989. Verification of compliance with the provisions of the Chemical Weapons Convention are under discussion and constitutes one of the most important issues in the framework of the Ad hoc Committee on Chemical Weapons. There are many questions to be resolved especially in the light of challenge inspection.

2. Challenge inspection has both political and technical aspects. Czechoslovakia believes that the principle of challenge on the basis of its obligatory character, without right of refusal, any time, anywhere and at short notice is in agreement with its previous statements. The technical aspects of challenge might be solved on a practical level by evaluating real experiences from national experimental challenge inspections. Czechoslovakia fully agrees with the proposal of the United Kingdom that a number of countries participating to the Conference on Disarmament conduct national challenge inspections, as was suggested in United Kingdom documents CD/921 and CD/1012. The present document refers to the results of a trial challenge inspection at a military facility in Czechoslovakia.

3. The aim of the inspection was to verify the present/absence of chemical weapons at the facility.

4. Some provisional observations

4.1. The choice of inspected facility

On the basis of a proposal of the Federal Ministry of Foreign Affairs, the Czechoslovak Army declared 10 military facilities (simulating all military regiments, plants, laboratories, etc.)

One of these was chosen on a random basis.

4.2. Notice to inspection

The facility was informed of the exact date of the inspection 24 hours prior to the inspection.

4.3. Inspection team

The members of the inspection team were those designated for assistance to the United Nations Secretary-General for examination and analyses in the event of an investigation of reports of alleged use of chemical weapons (CD/980) and others designated to help in the forming of the Czechoslovak Preparatory Committee of Czechoslovak National Secretariat for the future Chemical Weapons Convention. The total number of persons from whom the choice was made was 23. For this group, 2-day sessions were arranged to prepare for the inspection (programme enclosed, Appendix I). From these experts, the following members of the inspection team were designated and were granted full access to the inspected regiment.

Specialists in chemical detection	2
Industrial experts	2
Military experts	3
Lawyer	1
Storage and record-keeping experts	3
Negotiator at the Conference on Disarmament	1

From this staff, one was elected as a Head of the inspection group, whilst another person, who was familiar with the negotiations on the chemical weapons ban and who has analytic, toxicological and military experiences, was designated as a Deputy Head of the inspection group. The members of the inspection team obtained a certificate for their work from the Ministry of National Defence guaranteeing full access to the inspected military facility.

4.4. Transport and point entry

As only Czechoslovak nationals participated, the point of entry was the Ministry of Foreign Affairs in Prague. The transport of participants was by minibus and two cars. The time between assembly in Prague and transport to the site was nine hours.

4.5. Inspected facility

The facility was specified by name and local position; nevertheless, precise location of access was done on-site using a plan of the facility. The facility inspected was military regiments artillery brigade in East Bohemia and had the following characteristics, area, about 18 ha, perimeter, 860 m, number of buildings, 52, storage building only, 1, combined storage buildings, 4, nature of terrain, lowland; accommodation and administrative area, 1355 m^2, storage area, 860 m^2, garage area, 4100 m^2, perimeter 2200 m, number of gates 7.

4.6. Opening conference

The Head of the inspection team described the aim of inspection. The Commander of the inspected facility described the character of the regimental facility including its schematic plan (Appendix II) and sensitive places such as mobilization plans. The inspection team was acquainted with the facility's security measures which were signed by all members of the inspection team. This was followed by information on organizational aspects (room, telephone, health service etc.). The site was then secured by the Commander's order.

4.7. Orientation visit

On the basis of information given by the Commander, and using the plan of the facility, a visit to the whole area was undertaken. During this visit, random checks on the securing of the site were made, including transport control (three vehicles left the place, two arrived and two cars were checked by inspectors). Securing the site by inspectors for the facility inspected showed that one person appropriately equipped, would require 90 minutes.

4.8. Inspection plan

After this initial visit, the inspection team divided into inspection subgroups and elaborated inspection plans. The Management of the facility designated responsible persons for each subgroup. The following subgroups were established:

- subgroup for personnel examination/interview

- subgroup for storage.

4.9. Inspection - second visit

4.9.1. Subgroup for personnel examination/interview

The members of this subgroup had discussions with different workers, including the Commander of the regiment, officers and soldiers. The nature of information obtained was as follows:

- organization of the work
- health service
- occurrence of accidents, fires, etc.
- security and protective measures
- knowledge of activities in case of accidents
- first aid, medical kits
- medical documentation.

The person designated by Commander was present during these discussions and disputes were resolved with the Head of the subgroup; some problems arose from these interviews, e.g. access to medical documentation.

The relevant data can be obtained in general but not for individual persons; in some cases the contact of soldiers with inspectors was difficult; it is likely that this will be exacerbated where translation is required.

4.9.2. Subgroup for storage

This subgroup studied documentation of randomly selected ammunition and physically inspected three storage sites. The identification of ammunition stored was made on the basis of standards (designation of the shells). Other items investigated were as follows:

- presence of filters, ventilation etc.
- guard of the stocks
- transport
- service
- presence of decontaminants
- methods of evidence
- exchange of protective measures (collective and individual)
- movement of the material stockpiled
- evidence of controls in the stocks
- data on education of personnel
- duplicated records.

In two storage sites, detection of some listed chemicals by indicator tubes was undertaken with negative results. With these tubes, cholinesterase inhibitors, mustards, lewisites, cyanogen chloride, hydrogen cyanide and chlorpicrin may be detected; indication of the presence of BZ, toxins, DF and QL is not possible by this method.

4.10. Short meeting of inspection group

Requests for further visit and for possible sampling were discussed. Anomalies and disputes were also considered.

4.11. Further visit and sampling (if necessary)

4.12. Final meeting of inspection group

4.13. Closing the inspection

Short meeting with the Commander of the regiment who did not have information on the results of inspection and finished the inspection.

4.14. Transport to Prague

5. Report of the inspection team (Appendix III)

6. Conclusions

6.1. Challenge inspection on a Czechoslovak military facility showed that, in principle, this inspection can be carried out using some of the provisions contained in document CD/961.

6.2. It appears from our results that the approach used in the orientation, and possibly further, visits can be considered as useful. However, in some cases, the time-consuming first visit could be supplemented by detailed study of the plan of the inspected area and visits to selected places by a designated subgroup.

6.3. Our results emphasized the important role of the Head of the inspection team and the necessity of appropriate qualifications for all its members. The training of inspectors is strongly recommended.

6.4. The importance of personnel examination/interview. Information on the health service and results of medical examinations might be a problem in some cases.

6.5. The level of protection (physical security, its equipment, protective measures etc.) can be considered also as useful pointers.

6.6. The minimum number of inspectors for short time challenge inspection would be five.

6.7. Confidentiality can be achieved during this type of inspection; it is very dependent on co-operation between inspection team and the Commander of inspected facility.

6.8. Securing the inspected site is important and a potentially difficult problem; additional personnel would be required for this and other roles (translation, administration etc.).

Appendix I

PROGRAMME TO PREPARE INSPECTORS FOR THE CZECHOSLOVAK TRIAL CHALLENGE INSPECTION - 2-DAYS SESSION

LECTURE	HOURS
- Introductory remarks	0.5
- Development of CW ban - Present stage of negotiations on CW Convention - Verification measures contained in the rolling text	4
- Results of NTIs - Results of trial challenge inspections - Instrumental monitoring	4
- Proposal for Czechoslovak trial challenge inspection	2
- Discussion	2.5
- Closing remarks	1
	14

Examples of literature for inspectors:

. Documents of the CD, especially CD/981, reports on NTIs (i.e. CD/CW/WP 213, 216, 228, 233, 236, 237 ... etc.); reports on other inspections (i.e. CD/921, 925, 966, 975, 983, 987, ... etc.); "Blue books" of Finland (i.e. CD/794, 765, 843, 873, ... etc.), instrumentation (CD/CW/WP 272).

. SIPRI CBW Studies (i.e. No. 4 and 5: The Chemical Industry and the Projected Chemical Weapons Convention. Proceedings of a SIPRI/Pugwash Conference, Vo. I and II; No. 9: Non Production by Industry of Chemical Warfare Agents: Technical Verification under a Chemical Weapons Convention, S.J. Lundin, Ed.)

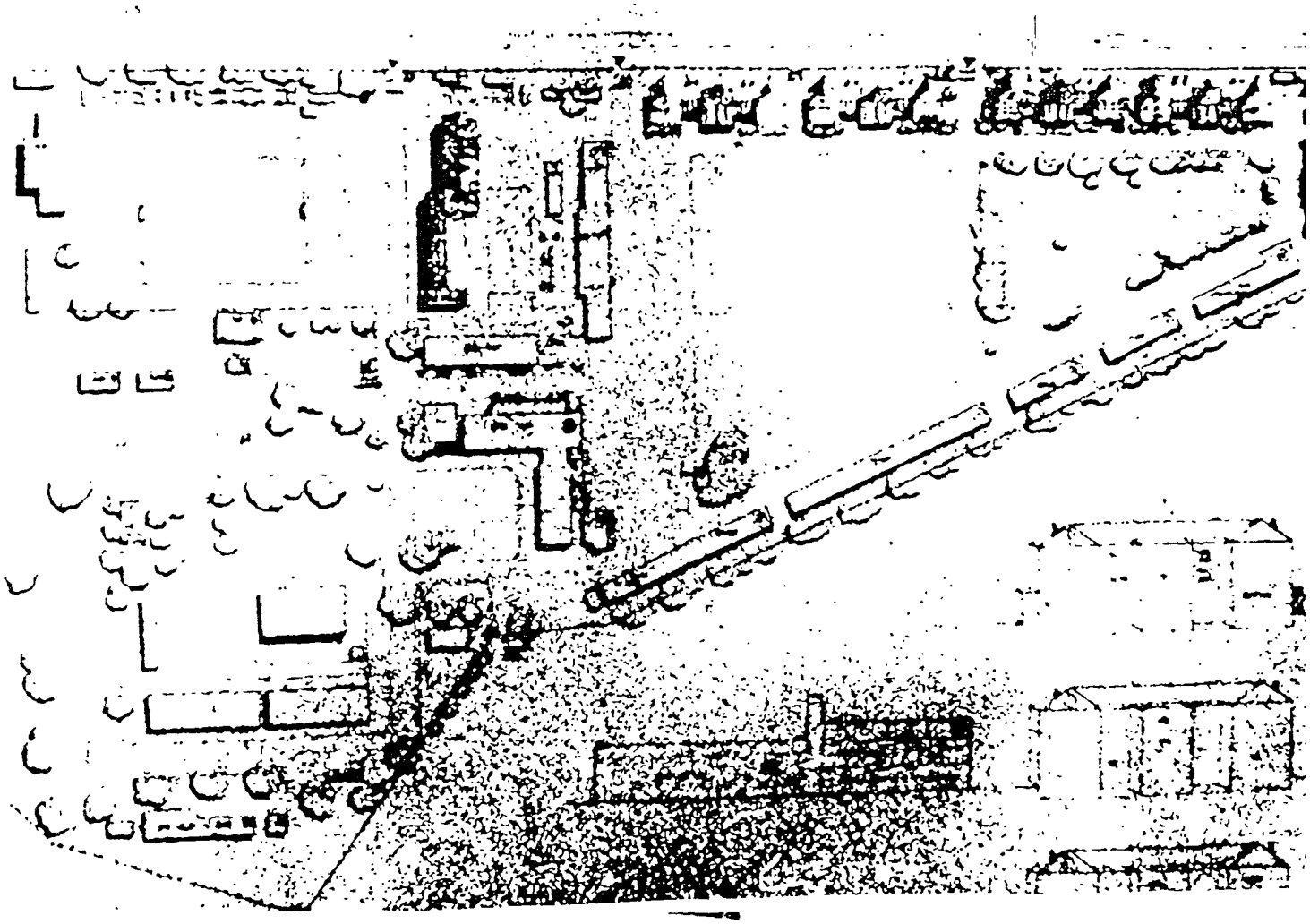
. Bajgar, J., Stibor, Z.: Prohibition and Destruction of Chemical Weapons; from the Past to the Present. Information Bulletin of the Military Medical Academy 30, No. 1, 1989, pp. 5-100, Battle tradition of chemical troops, Naše Vojsko, Praha 1990, pp. 1-80 (in Czech)

. Papers of different authors published in international Journals (JAMA 262, No. 5, 1989, p. 640, Chemical Weapons Convention Bulletin, No. 1-8, 1988-1989) and national (in Czech) (A-revue 43, No. 4, 1990, p. 32; People's Army 42, No. 24, 1989, p. 1045, Czechoslovak Pharmacy 37, No. 3, 1988, p. 116, 38, No. 5 1989, p. 239; Chemical Industry 29, No. 2, 1989, p. 1 etc.).

Appendix II

SCHEMATIC PLAN OF INSPECTED FACILITY;
SCHEMATIC PLAN OF STORAGE SITES

PLÁN KASÁREN PARDUBICE



PLÁN ROZMÍSTĚNÍ SKLADŮ

Appendix III

REPORT OF THE INSPECTION TEAM

A Czechoslovak trial challenge inspection was carried out at an artillery brigade (Pardubice) on 3 July 1990. Following the inspection, the inspection team decided that the activity of inspected regiment is in full compliance with the Chemical Weapons Convention. Collaboration of the inspection team with the command of the inspected facility was very good. No anomalies or disputes were observed.

Prague, 5 July 1990

SIGNED:

Col. Dipl. Eng. Jiří DVOŘÁK

Col. Assoc. Prof. Jiří BAJGAR, M.D., Ph.d.

Col. Dipl. Eng. Jan RYŠAVÝ

Lieutenant-col. Dipl. Eng. František MAIER - Federal Ministry of National Defence

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CONFERENCE ON DISARMAMENT

CD/1023
27 July 1990

Original: ENGLISH/FRENCH

LETTER DATED 25 JULY 1990 FROM THE REPRESENTATIVE OF THE FEDERAL REPUBLIC OF GERMANY ADDRESSED TO THE SECRETARY-GENERAL OF THE CONFERENCE ON DISARMAMENT TRANSMITTING A DOCUMENT ENTITLED "RESULTS OF THE INTER-PARLIAMENTARY CONFERENCE ON DISARMAMENT"

(Bonn, 21 to 25 May 1990)

From 21-25 May 1990 the Inter-Parliamentary Union held an "Inter-Parliamentary Conference on Disarmament" in Bonn. Considerations in this conference touched on many subjects of importance for the work of the Conference on Disarmament. I have the honour to forward to you the outcome of the deliberations contained in the following document:

Results of the Inter-Parliamentary Conference on Disarmament".

The document is attached in the official English and French versions. I should be grateful if you would circulate the document in its English and French versions as an official document of the Conference on Disarmament.

(Signed) Adolf von Wagner

GE.90-62288/7116A

INTER-PARLIAMENTARY UNION

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Results of the

Inter-Parliamentary Conference on Disarmament

(Bonn, 21 to 25 May 1990)

Contents

	Pages
CONFERENCE PROCEEDINGS	2
CONCLUSIONS AND RECOMMENDATIONS OF THE CONFERENCE	5

	Paragraphs
A. GENERAL CONSIDERATIONS	1 - 4
B. CURRENT DISARMAMENT EFFORTS AND FURTHER SUGGESTED MEASURES	
I. Nuclear disarmament	5 - 7
II. Non-proliferation of nuclear weapons	8 - 11
III. Chemical disarmament	12 - 17
IV. Conventional disarmament	18 - 22
V. Confidence- and security-building measures .	23 - 29
VI. Regional disarmament and security arrangements	30 - 41
VII. Verification of compliance with agreements .	42 - 48
VIII. Economic and social aspects of disarmament .	49 - 57
C. RECOMMENDATIONS FOR PARLIAMENTARY ACTION	58 - 59

ANNEX I Observations made by certain delegations at the time of the adoption of the Conclusions and Recommendations

ANNEX II Resolution of thanks

Results of the

Inter-Parliamentary Conference on Disarmament

(Bonn, 21 to 25 May 1990)

CONFERENCE PROCEEDINGS

The Inter-Parliamentary Conference on Disarmament, organized by the Inter-Parliamentary Union with the support of the United Nations, took place in Bonn from 21 to 25 May 1990 at the invitation of the Inter-Parliamentary Group of the Federal Republic of Germany.

The Conference was designed to allow Parliamentarians from all regions of the world to take stock of the current situation as regards disarmament and to discuss future prospects in the light of the new climate prevailing in international relations.

Representatives of the Parliaments of the following 61 countries participated in the work of the Conference: Algeria, Austria, Belgium, Brazil, Bulgaria, Cameroon, Canada, China, Colombia, Cuba, Cyprus, Czech and Slovak Federal Republic, Democratic People's Republic of Korea, Denmark, Djibouti, Egypt, Finland, France, German Democratic Republic, Germany (Federal Republic of), Greece, Hungary, Iceland, Indonesia, Iran (Islamic Republic of), Iraq, Ireland, Italy, Jamaica, Jordan, Kenya, Libyn Arab Jamahiriya, Luxembourg, Malawi, Malaysia, Mali, Morocco, Netherlands, Norway, Pakistan, Papua New Guinea, Peru, Philippines, Poland, Portugal, San Marino, Senegal, Spain, Sweden, Switzerland, Thailand, Tunisia, Turkey, United Arab Emirates, United Kingdom, United States of America, Uruguay, USSR, Venezuela, Yugoslavia and Zambia. The observers at the Conference included representatives of ten international parliamentary, governmental and non-governmental organizations, as well as of Palestine.

The Inaugural Ceremony took place in the Bundestag on the morning of 21 May when the speakers were **Mrs. R. Süssmuth**, Speaker of the Bundestag, **Mrs. M. Geiger**, Leader of the delegation of the Federal Republic of Germany, **Mr. Y. Akashi**, Under-Secretary-General of the United Nations, representing the UN Secretary-General, and **Mr. D. Sow**, President of the Inter-Parliamentary Council. Mrs. Süssmuth and Mrs. Geiger were elected respectively as President and Vice-President of the Conference.

At the opening of the final plenary sitting on the morning of 25 May, the Conference heard a statement by Mr. H. Kohl, Chancellor of the Federal Republic of Germany.

At the beginning of its work, the Conference heard the following guest speakers: Mr. H.-D. Genscher, Vice-Chancellor and Minister of Foreign Affairs of the Federal Republic of Germany; Mr. Y. Akashi, Under-Secretary-General of the UN, Department for Disarmament Affairs; Colonel-General N. Chervov, Head of Directorate, Chiefs of Staff of the USSR; Mr. M. Kampelman, former Chief START Negotiator for the United States of America.

On the afternoon of 21 May, 26 speakers from all regions of the world took part in the General Debate on the following broad themes:

- The rationale for disarmament (political, environmental, economic and social development, etc.)
- Changing patterns in international relations and their impact on the concepts of security and disarmament; evolution of security doctrines (deterrence, strategic stability, non-offensive defence, reasonable defence sufficiency, common security, etc.) and their relationship to disarmament
- Role of the United Nations and multilateral disarmament negotiating fora in the transition to disarmament; reduction of political causes of tension

The morning and afternoon sittings on 22 and 23 May, were devoted to the following four Specialized Plenary Debates, each of which was introduced by Keynote Speakers:

Debate I: Confidence- and security-building measures; verification of compliance with agreements

This debate was chaired by Mr. M. Mejak (Yugoslavia), and the Rapporteur was Mr. I. Bruce (United Kingdom). The Keynote Speakers on these two topics were, respectively, Mr. R. Ekeus (Sweden), Head of the Delegation to the Vienna Negotiations on Confidence- and Security-Building Measures, and Mr. F. Bild (Canada), Assistant Deputy Minister, Political and International Security Affairs, Department of External Affairs.

Debate II: Non-proliferation of nuclear weapons and reduction of nuclear arsenals; non-proliferation of conventional weapons and reduction of conventional forces and armaments; ban on chemical weapons

The chairman for this debate was Mr. M. Chauty (France), and the Rapporteur was Mr. K.H. Badeir (Egypt). The Keynote Speakers on these three issues were, respectively, Mr. J. Dhanapala, Director of the United Nations Institute for Disarmament Research (UNIDIR); Mr. M. Vejvoda (Czech and Slovak Federal Republic), Member of the UN Secretary-General's Advisory Board on Disarmament Matters; and Mr. P. Morel (France), Head of the Delegation to the Conference on Disarmament in Geneva, former Chairman of the Ad Hoc Committee on Chemical Weapons of the Conference on Disarmament.

Debate III: Regional disarmament and security arrangements

This debate was chaired by Mr. C.T. Goh (Malaysia), and the Rapporteur was Mr. M. Palous (Czech and Slovak Federal Republic). The Keynote Speaker was Mrs. A Knippenberg, United Nations, Co-ordinator of the World Disarmament Campaign.

Debate IV: Economic and social aspects of disarmament

Mr. G. Owona (Cameroon) presided over this debate for which the Rapporteur was Mr. S. Holemark (Norway). The Keynote Speaker was Mr. O. Adeniji (Nigeria), Ambassador to France, Chairman of the Ad Hoc Committee of the Special Session of the UN General Assembly devoted to Disarmament and member of the UN Secretary-General's Advisory Board on Disarmament Matters.

The task of preparing the draft Conclusions and Recommendations of the Conference was assigned to a Drafting Committee composed of the Chairmen and Rapporteurs of the Specialized Debates (see above) and of Mrs. P. Venne (Canada), Mr. F. Rojas (Cuba), Mr. H. Soell (Federal Republic of Germany) and Mr. V.P. Zolothukhin (USSR). The Drafting Committee, which was assisted by the Keynote Speakers, met throughout the day of 24 May, with Mr. Soell as its Chairman and Mr. Mejak as its Rapporteur.

At the final plenary sitting on 25 May, Mr. Mejak presented the outcome of the work of the Drafting Committee, after which the Conference heard a number of statements by certain delegations. On the proposal of the Austrian delegation, the Conference **decided** by 39 votes to 6, with 2 abstentions, formally to vote on section C of the text, which was **approved** by 56 votes to 1, sections A and B being **accepted by consensus** with the observations of the various delegations being reproduced separately. The Conclusions and Recommendations of the Conference will be found attached, with the observations of delegations in Annex I.

At the close of its work, the Conference adopted by acclamation a resolution of thanks (see text in Annex II).

CONCLUSIONS AND RECOMMENDATIONS OF THE CONFERENCE

A. GENERAL CONSIDERATIONS

1. The Inter-Parliamentary Conference on Disarmament considered that at no time since World War II has the international climate been more propitious for far-reaching arms control and disarmament. Indeed, profound political changes which are taking place in the Soviet Union, as well as in Central and Eastern Europe, have directed the evolution of East-West relations towards constructive co-operation, away from hostile cold-war confrontation. In a nuclear and space age, disarmament has become a political imperative without which no problems of the coming century can be resolved.

2. Wasteful spending on armaments of all categories has undermined the economies of States and hampered efforts to deal effectively with such vital problems as poverty, hunger, public health, illiteracy, population growth and degradation of the human environment. An increasing number of nations accept the idea that settlement of conflicts is more effective and durable when it is brought about by peaceful means - as provided for in the UN Charter and Resolutions - rather than by the use of force. A real opportunity now exists to reverse the armaments spiral which has plagued the world during the past four and a half decades.

3. The Conference noted with satisfaction that serious disarmament negotiations are currently being undertaken at the bilateral (USA-USSR), regional and multilateral levels. All these disarmament efforts benefit from the extensive deliberation activities of the United Nations, which is a forum for new ideas for negotiations and which symbolizes the right and obligation of all States to participate in such negotiations. Similarly, through the Inter-Parliamentary Union, the world community of parliamentarians has greatly contributed to the international disarmament endeavours.

4. The Conference called upon Governments to build common security through joint efforts with due regard for the interests of all countries, large and small, on the basis, above all, of political means, to pursue the reduction of the military potential of States to the level of reasonable sufficiency for defence. A safe future will be that of confidence building, co-operation, constructive disarmament negotiations and peaceful settlement of conflicts by established methods, and not confrontation. The Conference called on Governments to make the disarmament process global, lasting and irreversible.

B. CURRENT DISARMAMENT EFFORTS AND FURTHER SUGGESTED MEASURES

I. Nuclear disarmament

5. Since 1945, the spectre of nuclear war has cast a shadow over the world, particularly in relations between the two major blocs of States. Attempts to remedy the situation by regulating the arms competition between the Soviet Union and the United States did not produce a major break-through until 1987, when the Treaty on Intermediate-Range Nuclear Forces (INF) was

concluded to eliminate a whole class of nuclear weapons possessed by the superpowers. This Treaty is being successfully implemented under strict reciprocal control, and the conclusion of a treaty providing for deep cuts in strategic offensive arms appears to be a possibility before the end of the current year. In view of the rapidly changing situation in Europe, some delegations expressed the belief that there is a need promptly to begin talks to reduce tactical nuclear weapons on the continent to the lowest possible level, starting from complete elimination of such weapons in the European central region.

6. The Conference welcomed all these positive developments. Many delegates were of the opinion that the envisaged reductions of nuclear arsenals were not sufficient and urged complete nuclear disarmament; some others argued that nuclear deterrence is currently indispensable for the maintenance of world peace, while stating that deterrence could be effective at a considerably lower level of nuclear armaments.

7. A few delegations noted with satisfaction that the verification protocols to the 1974 and 1976 Treaties regulating underground nuclear explosions were to be signed at the next US-Soviet summit meeting. An overwhelming majority of delegations was in favour of the speedy conclusion of a comprehensive nuclear test ban. Various delegations expressed support for a special conference to be convened in January 1991 with the task of amending the 1963 Partial Test-Ban Treaty prohibiting nuclear weapon tests in the atmosphere, outer space and under water, and converting it into a treaty banning all nuclear explosions in all environments.

II. Non-proliferation of nuclear weapons

8. The Conference noted that the 1968 Treaty on the Non-Proliferation of Nuclear Weapons (NPT) is at an important stage before the 1990 Review Conference, and particularly before the 1995 Conference which is to decide on the period of the Treaty's extension. It was acknowledged that, with over 140 of the nations of the world adhering to it and with the widely acclaimed verification system of safeguards administered by the International Atomic Energy Agency (IAEA), the NPT has acted as an effective brake on horizontal proliferation; nevertheless, it has had no impact on arresting vertical proliferation.

9. Admittedly, several nuclear-weapon-capable States, so-called "threshold" States, which have refused to join the NPT, operate unsafeguarded sensitive nuclear facilities and deliberately maintain an ambiguous stance regarding their nuclear-weapon status. But the fact that none of these States has openly crossed the threshold to become a fully-fledged and generally recognized nuclear-weapon power testifies to the strength of the established international non-proliferation norm which cannot be easily disregarded.

10. Other objectives pursued by the NPT include the cessation of the nuclear arms race followed by nuclear disarmament, as well as promotion of co-operation among the parties in the peaceful uses of nuclear energy, including assistance to developing non-nuclear-weapon States. Neither of these objectives has so far been fully achieved. Moreover, the demands of non-nuclear-weapon States to obtain international and legally binding security assurances are still a subject of negotiation. It was felt that these questions should be considered at the next NPT Review Conference.

11. The greatest danger of the spread of nuclear weapons exists in conflict areas where one or several countries remain outside the NPT. In these cases it seemed reasonable to many delegates that the root causes of the conflicts had to be tackled in the first place, so as to remove the incentives for the protagonists to "go nuclear".

III. Chemical disarmament

12. The Conference noted that the Geneva negotiations for a multilateral convention banning the development, production, stockpiling and use of chemical weapons have entered the final stage. There is general consensus that, if the present negotiating momentum is sustained, a convention could be completed in 1991. Some delegations underlined the importance of expanding the mandate of the negotiations in the Conference on Disarmament with the inclusion of the unrestricted prohibition of the use of chemical weapons so as to guarantee that the future convention constitutes a comprehensive, non-discriminatory and total ban on chemical weapons, which is a prerequisite for universal adherence to the convention. The difficulties which must still be overcome are related to: certain aspects of on-site inspection; order of destruction and assistance and protection against chemical weapons; the contents of lists of substances subject to prohibition or limitation; the role, decision-making powers and composition of the executive council of the organization to be set up by the convention; the relationship between the convention and the 1925 Geneva Protocol prohibiting the use of chemical weapons; and sanctions in response to violations.

13. The Conference supported the objective of a total ban on chemical weapons. It was recalled that the use of these weapons was forbidden by the 1925 Geneva Protocol, a rule which was confirmed by the Paris Conference in 1989. Many speakers stressed the need for universal adherence to the future convention and for parliamentarians to take urgent action with their Governments to that end.

14. Certain delegations considered however that there was a need to establish zones free of both chemical and nuclear weapons. Others argued that such an approach was unacceptable since the two types of weapons are not equivalent and should, therefore, be considered and dealt with separately. They pointed out that chemical weapons have been resorted to several times in recent years, have indiscriminately increased the suffering of both combatants and civilians, and that this use has been condemned by the UN Security Council.

15. Undue delay in concluding the convention may increase the risks of chemical weapon proliferation. Already some 20 countries are now known to possess, or are suspected of possessing or striving for chemical-weapon capability. The Conference welcomed the announcement that the Soviet Union and the United States - the two main chemical-weapon powers - have removed the last hurdles to an agreement for the destruction of the major part of their stocks and that this agreement will follow the guidelines of the draft multilateral treaty which is under consideration at the Conference on Disarmament.

16. Parliaments have an important role to play in achieving the universality of the convention. They should take action so that as many States as possible adhere to the convention at the initial stage; they have an exceptional role in decision-making on the participation of their countries in the convention.

17. Several delegates expressed concern with regard to compliance with the 1972 Convention which prohibits biological and toxin weapons, and postulated the improvement of the verification procedures. The conference of the parties planned for 1991 to review the operation of this Convention may provide an opportunity for taking appropriate measures.

IV. Conventional disarmament

18. The Conference attached great importance to the achievement of conventional disarmament. It welcomed the substantial progress made at the Vienna talks between the 23 members of the Warsaw Treaty and NATO on the reduction of conventional forces in Europe. There is agreement as to the categories of weapons to be cut and as to the need for on-site inspection of all important military installations and supply bases. The issues that still remain to be solved include the definitions of certain types of arms, the destruction of weapons subject to reductions, and possible use or conversion of some military equipment for peaceful purposes.

19. The Conference noted that the developments in Central and Eastern Europe are ahead of the Vienna talks. The bloc approach to negotiations is weakening; more and more delegations in Vienna are submitting proposals based on the belief that the treaty on conventional forces in Europe must strengthen the rights of individual sovereign States rather than those of groups of States.

20. Bearing in mind that a number of questions have yet to be resolved at the Vienna talks in order to achieve a mutually acceptable agreement, the Conference called upon the participants in those talks to intensify their efforts in order for the treaty on conventional forces - which is called upon to lay a solid basis for greater security and stability in the European continent - to be signed as early as 1990.

21. The process of conventional disarmament in Europe will not end with this first agreement. It will certainly be continued until reasonably sufficient levels of armed forces and armaments are reached. These levels will depend on the nature of the evolving European security order. In conditions of the dramatically transformed political environment, security arrangements in Europe could be based on the harmony of military alliances, existing European institutions and the Conference on Security and Co-operation in Europe (CSCE). The possibility of creating a special body for security in Europe under CSCE auspices was also mentioned and strongly supported.

22. As regards arms transfers on a global scale, conditions should be created to make it possible for States to refrain from acquiring arms which might destabilize the situation in their respective regions. Security of States should be based exclusively on military forces with non-offensive structures. To deal with these problems, the following suggestions were made inter alia: to establish a register of international arms transfers within the UN framework; to refrain from transfers of offensive armaments and weapons systems as well as small arms in volume and weapons technology which may be perceived as threatening the security of other countries; to negotiate among the recipient countries regional agreements imposing restrictions on arms importation; to prevent the dumping of surplus weapons on the world market and consider conversion of excess arms production capacity to civilian production.

V. Confidence- and security-building measures

23. The Conference noted that treaties reducing the existing arsenals of weapons are necessary for international security. However, by itself, no treaty can create security. Additional measures of a confidence-building nature are necessary, including openness or transparency in military matters. This is the main purpose of the 35-nation CSCE taking place in Vienna.

24. Building on the provisions of the 1986 Stockholm Document, the Vienna negotiators are addressing themselves to a new set of proposals regarding the exchange of military data subject to verification. The combined effect of the measures in question makes major surprise attack against any of the parties very difficult, if not impossible.

25. The new generation of confidence- and security-building measures is focused on long-term military developments, such as possible build-ups of military strength through qualitative improvement as well as restructuring of armed forces. Proposals have been put forward at the CSCE regarding prior notification in case of the introduction of major new weapons systems. There are also proposals for greater openness of military budgets. Planned expenditures would have to be reported in sufficiently detailed manner, so as to provide information about envisaged weapons programmes and military activities.

26. All these measures taken together could contribute to setting up a security system in Europe which would provide for both crisis stability and long-term strategic stability. Once the present asymmetry of forces in Europe has been eliminated, there will be room for contemplating measures of constraint which are more binding than confidence-building undertakings.

27. Although the security situation in Europe is unique owing to special military and geopolitical configurations, the possibility of using the experience of European confidence- and security-building measures in other regions of the world must not be overlooked. Indeed, the Conference expressed strong support for confidence- and security-building measures. It was felt that such measures could be a supporting complement to UN peace-keeping operations.

28. Institutionalization of security arrangements was pointed out by many speakers as the most appropriate next step in developing a new security order in Europe. In this context, the possibility of establishing common mechanisms for early warning, for the prevention and settlement of conflicts, as well as for the interpretation of satellite images, was mentioned. The broadening of the concept of confidence building to embrace co-operative and consultative security arrangements was supported. Representatives of neutral and non-aligned States indicated that they were in a position and willing to assist in the implementation of confidence- and security-building measures and in carrying out the required international verification.

29. In the context of civil and military convergence, some delegates also raised the possibility of co-operation on international disaster relief, using military technology and resources as a valuable step in promoting confidence-building measures.

VI. Regional disarmament and security arrangements

30. The Conference noted that regional measures can contribute to the negotiations on arms control regarding specific weapons. Collateral and confidence-building commitments among the countries of a region can enhance their security. This, in turn, can improve prospects for progress in disarmament, both in the region itself as well as on a global scale. It was also noted that regional disarmament efforts should bear in mind the specific characteristics of each region.

31. It was emphasized that a flexible approach should be taken with regard to the concept of "region". While the area of application of measures must be precisely defined, it should be expandable and not fixed once and for all. The existence of cultural, economic, ideological and political links adding to the homogeneity of the region was also mentioned as an important factor. On the other hand global trends point strongly in the direction of multi-cultural societies.

32. The 1959 Antarctic Treaty was mentioned as the first multilateral agreement to isolate an entire continent from military competition. It was pointed out that in order to contribute to exclusively peaceful uses of the Antarctic region, additional measures might be taken, primarily to protect the ecology of the Antarctic.

33. The success of the CSCE process was held up as an example that might be emulated in other parts of the world. While a Euro-centric approach was rejected, it was acknowledged that Europe was moving in the right direction. The guidelines followed in the CSCE process could be applied elsewhere. Those specifically mentioned were balance of forces, equal sense of security, stability, and adequate verification. Exchange of information on military doctrines was considered to be a good instrument to enhance transparency about States' intentions.

34. Ecological security was deemed to be part of regional disarmament measures. The dumping of nuclear wastes and the disposal of chemical weapons were mentioned in this context.

35. The area of the Mediterranean was singled out as the region which would most benefit from the relaxation of international tension. The delegates appreciated that a large number of States (both from within and outside the region) had an interest in the Mediterranean, and emphasized the fragile security situation in the Middle East. Because of the alleged nuclear-weapon capability in the region, great importance was attached to attracting all the relevant countries to the NPT and to the nuclear safeguards régime.

36. The proposal to make the Middle East a zone free of nuclear weapons and of other weapons of mass destruction was discussed, and in this context the suggestion was made that a support group be established by IPU to promote the implementation of the initiative.

37. Another suggestion sought to expand the CSCE process to the Mediterranean. It was pointed out that the agenda of the meeting of the CSCE States, which will take place later this year and which will be dealing with environmental and economic questions relating to the Mediterranean, should include political/security considerations.

38. Naval armament was considered by a number of delegations to be a destabilizing factor. In this context, references were made in particular to the Mediterranean, the Indian Ocean, the Gulf, the Arctic Ocean, the Pacific Ocean and the North Atlantic, as well as to the Central and Latin American regions. Some delegates deplored the lack of arms control in this field, but recognized that the position of States with the largest military potential at sea has recently shown signs of softening, and expressed the view that confidence-building measures at sea should be given increased attention.

39. Some delegates felt that there is a need for a new agreement on confidence-building measures to cover all the components of armed forces in Europe. In that context, they stressed the importance of opening talks on naval forces and their armaments as soon as possible in the belief that, to overcome military confrontation, disarmament and confidence-building measures in the military field should be of a comprehensive nature.

40. The concepts of zones of peace, nuclear-free zones and nuclear-weapon-free zones were commended by many as instruments enhancing security and stability in a given region. In addition to those mentioned above, proposals for North-East Asian and South Asian nuclear-weapon-free zones were discussed. It was pointed out that States in the region concerned had the primary responsibility for entering into negotiations. Similarly, the Southern African region was mentioned as an area where although the security situation had improved, support from the international community was still needed to achieve the total elimination of apartheid.

41. A call was made to promote education and training for disarmament, to instil in young people a sense of peaceful co-existence and the negation of war and conflict. Other suggestions centered on the monitoring role of the United Nations, the establishment of crisis management/early warning centres, and a study to be conducted on the possibilities for applying confidence-building measures in various regions of the world.

VII. Verification of compliance with agreements

42. The Conference noted that verification is a means of reinforcing confidence, not an end in itself. The greater and the more ambitious the arms limitation objective, the greater will be the need for verification, especially as parties to the agreement perceive options for gaining rapid strategic advantages. Only time and a gradual growth in mutual confidence will reduce the need for extensive verification.

43. The specific functions of verification can be summarized as follows: effective verification increases the probability of detection of a violation and thus increases the prospects of compliance. Continued evidence of compliance strengthens confidence in the intentions of the parties to an agreement. Ambiguous activity is clarified by evidence of compliance; if doubts persist about the legitimacy of an activity, this may be an indication of inadequacies in the treaty itself. Verification data can thus provide the basis for reviewing, adjusting or improving the operation of the treaty.

44. The process of verification involves technical, legal and political considerations at virtually every stage. However, the political factors become dominant at the stage of drawing conclusions. Since the diversity and complexity of future verification requirements are bound to be considerable, questions have arisen as to whether there is a need to foresee extensive UN involvement, and whether the UN should become the world's master verifier. These questions are under consideration within the UN.

45. The Conference noted that certain verification techniques have been successfully applied in peace-keeping operations and that such applications would, no doubt, increase. Agreements on the protection of the environment will, quite likely, also have verification clauses in which the techniques and technology used for arms control verification will be relevant. Verification is becoming diversified and highly specialized. For these reasons, inter alia, verification organizational requirements will generally be determined by the negotiators of the agreements and not predetermined by existing facilities.

46. The discussion at the Conference focused on: the usefulness of verification clauses not backed up by sanctions against violations; the requirement of minimum mutual trust before meaningful arms control and disarmament negotiations can begin; costs; the economic benefits of a new verification "industry"; how to reduce the implicit suspicion in verification activities; the relationship between confidence-building measures and verification; and the relationship between verification and the "open skies" proposition.

47. The Conference agreed that verification is an essential aspect of arms limitations and disarmament and is likely to remain so for the foreseeable future and for most agreements. While it must be treaty-specific and tailor-made to the needs of the parties, it can benefit from services provided by multilateral or even private organizations. Its longer term success will depend on its adaptability to rapidly changing international conditions, the emergence of unpredictable requirements and its keeping pace with technological developments.

48. The Conference stressed that verification is not a substitute for the minimum of trust that must exist to start on the road to arms limitation and disarmament negotiation, but its techniques enhance whatever trust exists and should be further refined.

VIII. Economic and social aspects of disarmament

49. The Conference stressed the adverse economic and social consequences of the arms race and agreed that disarmament was necessary to allow the resources which are devoted to armaments to be diverted towards more productive ends.

50. Even in the strongest market economy countries, constant growth of military budgets often leads to the reduction of budgetary allocations for vital areas of health, housing and other social services. For the developing countries, the burden of military expenditure is more direct, making the difference between food and hunger, between education and illiteracy, between health and disease, and adding to their debt burden, thus hindering their development.

51. Political developments of the past year have made disarmament a probability to a degree that would have been considered utopia until very recently. The rapid series of events raises a new set of problems, and makes clear the need for new political and also economic thinking concerning disarmament. One such problem which was mentioned by some parliamentarians during the general debate relates to how to cope with the economic and social consequences of disarmament. Conversion of military industries and re-training of personnel will have to be undertaken through concrete measures by Governments and Parliaments. The latter have the duty to take the lead and provide the resources for conversion.

52. The fear of disruption in the shift from military to civilian expenditure should not be exaggerated. Particular regions, communities, industries and occupations may encounter some difficulties in adjusting to reduced military spending, but advance planning and the availability of economic support measures which can be targeted on problem areas and groups will go a long way towards mitigating the effects.

53. The Conference noted that the new situation prevailing in East-West relations could have a beneficial effect on the Third World, by reducing tensions in the various regions and lowering arms imports, thus lessening the economic dependence of the developing countries.

54. Apart from producing straight savings, the improvement of East-West relations has already fostered the beginning of economic co-operation between the two groups of States. Thus it was noted that, in addition to the transfer of funds to individual countries in Central and Eastern Europe, a new bank - the Bank for European Reconstruction and Development - has already been established with a capital of US$10 billion for assistance to those countries. This is an example of the actual "peace dividend". The Western countries' exertion for rapid transformation of the economies of Central and Eastern Europe is predicated on the concept that true peace cannot be based on the present glaring disparity between the two parts of Europe. What has not yet emerged is an effective reaction to the unacceptable coexistence of impressive affluence in the North with abject poverty in the Third World. No one can deny that the economic benefits of greatly increased East-West co-operation have already become apparent. The Third World, which was also affected by the Cold War, should share in these benefits.

55. The Conference recognized that the worsening of poverty and misery in the Third World does not foster disarmament since it always results in internal and external tensions which lead the Governments concerned to make use of arms to reinforce their authority. It is therefore necessary, over and above development aid, to improve the terms of trade between those countries and the developed countries, particularly by ensuring just and remunerative prices for commodities.

56. It was proposed that appreciable cuts in military expenditures should be made, reflecting the peaceful evolution of international relations. National budgets should be redistributed to give increased importance to programmes of economic and social relevance; it is particularly important to improve the quality of life of the poorer classes of all countries. It was further pointed out that investments in environmental protection are needed to secure sustainable development.

57. The Conference stressed that the UN target of 0.7 per cent of GNP for assistance to the developing countries should be attained within the next five years; the debt burden should be addressed through massive debt relief; restraint should be exercised in respect of arms transfers to the Third World. It further considered that adequate funding for UN peace-making and peace-keeping activities should be provided on a regular basis as a means of enhancing global security; funds should be allocated for the development of areas of the Third World which have been ravaged by economic problems.

C. RECOMMENDATIONS FOR PARLIAMENTARY ACTION

58. The Conference emphasized a certain number of measures that should be taken at the parliamentary level to promote disarmament:

(a) Rapid inclusion in national budgets of the sums necessary for disarmament negotiating activities and for mechanisms verifying compliance;

(b) Speedy ratification of arms limitations and disarmament treaties as soon as they have been agreed and signed;

(c) Prompt adaptation of national legislation to the stipulations of such treaties;

(d) Adoption of legislative measures to facilitate conversion of military industry, facilities and equipment to civilian ends;

(e) Channelling of resources released by disarmament to productive and social ends, including assistance to developing countries;

(f) Reduction of military expenditures by developing countries in order to channel the savings made to economic and social development;

(g) Active support for the important role of the UN in the field of disarmament;

(h) Financial support for UN peace-making and peace-keeping activities which enhance international security;

(i) Financial support for governmental and non-governmental research in the field of arms control and disarmament.

59. The Conference recommends that the following measures be taken within the Inter-Parliamentary Union:

(a) The Parliaments represented in the Inter-Parliamentary Union should take action, in reaffirmation of the principles set out in the resolution on "Peace and Development in the world" adopted by the 79th Inter-Parliamentary Conference, so that their respective Governments apply the redommendations contained in that resolution;

(b) The Parliaments represented in the Inter-Parliamentary Union should make use of all existing opportunities for "parliamentary diplomacy" by means of bilateral and multilateral contacts (such as visits and other exchanges, meetings of bilateral parliamentary commissions, workshops, etc.) in order to consolidate and further develop confidence and trust at the international level, thus promoting disarmament;

(c) IPU National Groups should ensure that the findings of the Conference are rapidly brought to the notice of their Parliaments in the most appropriate way and that they are likewise communicated to the Governments of their countries, as well as given broad publicity;

(d) The suggestion that a support group of IPU be set up to promote the initiative to make the Middle East a zone free of nuclear weapons and other weapons of mass destruction (paragraph 36) should be placed before the IPU Executive Committee;

(e) The National Groups should send the IPU Secretariat details of the follow-up activities undertaken and of developments in line with the recommendations of the Conference, and this information should be brought to the attention of the governing bodies of IPU.

ANNEX I

OBSERVATIONS MADE BY CERTAIN DELEGATIONS AT THE TIME OF THE ADOPTION OF THE CONCLUSIONS AND RECOMMENDATIONS

According to the decision taken by the Conference, this Annex reproduces the observations made by some delegations at the last plenary meeting

A. GENERAL CONSIDERATIONS

The Indonesian delegation considered that Governments should further strive for the objectives of general and complete disarmament under strict and effective international control. (paragraph 4)

B. CURRENT DISARMAMENT EFFORTS AND FURTHER SUGGESTED METHODS

I. Nuclear disarmament

The Indonesian delegation pointed out that both the NPT and the 1963 PTBT stipulated that the total elimination of nuclear weapons should be achieved as expeditiously as possible. (paragraph 6)

II. Non-proliferation

Mr. W. Allmand (Canada) considered that some States are actively pursuing the development of nuclear weapons and that every effort must be made to stop this proliferation and gain the adherence of these States to the NPT. In this respect, this goal would be approached if the nuclear-weapon States made greater progress on nuclear disarmament under Article VI of the NPT. (paragraph 9)

The Indonesian delegation observed that the IAEA safeguards system which had been in operation under the NPT, had proved to be effective to avoid the diversion of peaceful nuclear facilities to weapons purposes. Therefore, it was imperative that all States parties to the NPT fully implemented its provisions; this would ensure the adherence of all States to the Treaty, as well as place their nuclear facilities under the IAEA safeguards system. (paragraph 9)

The Tunisian delegation appealed to States to adhere to the NPT, abide by its provisions and place their nuclear facilities under IAEA control. (paragraph 9)

The Indonesian delegation called attention to the improper implementation of preambular paragraphs 3 and 4, as well as Article VI of the NPT, which had led to an unabated nuclear arms race. This, consequently, posed a serious threat to security as well as a danger to the existence of mankind. (paragraph 11)

III. Chemical disarmament

The Tunisian delegation underlined the link between nuclear and chemical weapons and advocated their total destruction throughout the world. (paragraph 12)

Concerning the banning of chemical weapons, the Iraqi delegation considered that the security requirements against any regional nuclear threats or dangers in zones where some States remain outside the NPT, must be dealt with in the first place so as to remove the need for the protagonists to have chemical weapons. (paragraph 13)

The delegation of the Libyan Arab Jamahiriya underlined the importance of linking nuclear weapons and chemical weapons, so as to ensure their simultaneous elimination. (paragraph 13)

The Iraqi delegation objected to the statement that "chemical weapons have been resorted to several times in recent years, have indiscriminately increased the suffering of both combatants and civilians, and that this has been condemned by the UN Security Council". (paragraph 14)

The Indonesian delegation felt that the attitude demonstrated by one of the super powers to retain 2 per cent of its chemical weapons stocks would strongly impede the establishment of a convention that was universally adhered to. (paragraph 16)

The delegation of the Islamic Republic of Iran considered that the number of countries known to possess, or suspected of possessing or striving for chemical-weapon capability, was uncertain and should not be specified. (paragraph 15)

IV. Conventional disarmament

In relation to the continuation of the Vienna talks between the Warsaw Treaty and NATO Member States, the United Arab Emirates delegation called for the halting of the supply of advanced technology in the armament or military fields to the Middle East and other regions of conflict. (paragraph 20)

V. Confidence- and security-building measures

The delegations of Jordan and the United Arab Emirates stated that an end of military occupation and of violations of human, civil and national rights was a prerequisite for confidence and security building. In addition, the Jordanian delegation considered that suitable machinery should be established to put an end to armed conflicts in a peaceful and just manner, with a view to easing tension and promoting disarmament. (paragraph 27)

VI. Regional disarmament and security arrangements

The Iranian delegation expressed the view that regional disarmament agreements should be respected by powers outside the region. (paragraph 30)

The Algerian delegation observed that, taking into account the nuclear capability of one of the countries in the Middle East region, it was important for all countries concerned to become parties to the NPT and to the nuclear safeguards régime. (paragraph 35)

The delegation of the Libyan Arab Jamahiriya expressed the view that the Mediterranean should become a sea of peace and co-operation, through the withdrawal of foreign navies from the area. (paragraph 35)

In the view of Mr. W. Allmand (Canada), the threat of the massive destructive power of nuclear weapons on submarines and other naval vessels should be give greater attention in disarmament negotiations. (paragraph 38)

The Irish delegation felt that prior notification of movements of nuclear vessels and vessels carrying nuclear arms through coastal and near coastal waters is of particular importance. (paragraph 38)

The Indonesian delegation observed that the establishment of nuclear-free zones, including one in Southeast Asia, should be encouraged. (paragraph 40)

The Zambian delegation considered that sanctions against South Africa were still needed to achieve the total elimination of apartheid, the more so as it believed together with the Algerian delegation, that the nuclear presence in that region constituted a new security threat. (paragraph 40)

ANNEX II

RESOLUTION OF THANKS

The Inter-Parliamentary Conference on Disarmament,

Having met in Bonn from 21 to 25 May 1990, at the invitation of the National Group of the Federal Republic of Germany,

1. Exresses its gratitude to the Bundestag, Government and people of the Federal Republic of Germany for their warm welcome and the excellent working conditions provided for the Conference;

2. Express special gratitude and appreciation to the Chancellor of the Federal Republic of Germany, Mr. Helmut Kohl, and the Vice-Chancellor and Minister of Foreign Affairs of the Federal Republic of Germany, Mr. Hans-Dietrich Genscher, for honouring the Conference with their presence and for their thought-provoking statements;

3. Sincerely thanks the Guest Speakers and the Keynote Speakers for their outstanding contribution to the success of the Conference.

CONFERENCE ON DISARMAMENT

CD/1024
CD/CW/WP.313
31 July 1990

ENGLISH
Original: SPANISH

PERU

New article of a convention on chemical weapons relating to the environment

ARTICLE No. ...

1. Nothing provided for in the present convention shall be done to the detriment of the ecological integrity of the environment.

2. The States Parties undertake to adopt any measures that may be necessary so that, in implementing the convention, one of the priorities shall be the preservation and decontamination of the environment.

3. Without prejudice to the appropriate national measures adopted, each State Party shall, in the process of destroying its stockpiles of chemical weapons, inform the Organization, within a period of less than 48 hours, of any incident which may impair or threaten to impair, either directly or indirectly, the ecological integrity of the environment. The Organization shall immediately circulate such information to the States Parties. It shall also adopt the necessary measures in co-operation with the State concerned and taking into account the provisions of article X.

4. The States Parties undertake to establish an assistance and environmental protection fund for the promotion and implementation in developing countries of prevention and environmental decontamination programmes in the industrial and sanitation sectors. The management of the fund shall be the responsibility of the Organization.

GE.90-62327/7159A

CONFERENCE ON DISARMAMENT

CD/1025
CD/CW/WP.314
31 July 1990

ENGLISH
Original: SPANISH

PERU

PROPOSAL BY PERU FOR THE INCLUSION IN THE CHEMICAL WEAPONS CONVENTION OF AN ARTICLE ON "DURATION"

"This Convention shall be permanent in character and shall continue in force indefinitely. The obligations flowing from it shall nevertheless cease for States Parties not possessing chemical weapons if, 90 days after the conclusion of the period of destruction provided for in article (...), the Organization is not in a position to declare that all the States Parties have fully carried out their obligations specified in article I of this Convention."

GE.90-62348/7166A

CONFERENCE ON DISARMAMENT

CD/1026
CD/CW/WP.315
3 August 1990

Original: ENGLISH

FEDERAL REPUBLIC OF GERMANY

CW Verification Workshop Munster
14./15. June 1990

1. On 14. and 15. June 1990 the Federal Republic of Germany hosted a Workshop in Munster, Lower Saxony, devoted to CW verification instruments. Representatives of all member and observer states of the Conference on Disarmament had been invited. The purpose of this Workshop was to demonstrate already available instruments which can be used for on-site inspections under a CW Convention. The instruments shown had already been successfully applied in trial challenge inspections as well as in a trial ad hoc check conducted by the Federal Republic of Germany (cf CD/975 of 9 March 1990, CD/983 of 5 April 1990, CD/950 of 17 August 1989).

During our trial challenge inspections the inspection team was faced with the task of verifying effectively and at the same time in the least intrusive manner possible whether there was any indication of a treaty violation. In this regard the non-destructive examination of munitions posed a particular problem. However it proved possible with the help of present state of the art equipment to effectively verify whether examined munitions had a chemical filling. By using such instruments and techniques, singly and in combination, as

- Wall Thickness Meter (cf. Annex 1)
- Electronic Stethoscope (cf. Annex 2)

- Radiography (cf. Annex 3)
  - Mobile X-Ray Equipment (cf. Annex 4)
  - Mobile Gamma-Ray-Projector (cf. Annex 5)
- Neutron Activation Analysis (cf. Annex 6)

it was possible to rule out any liquid chemical charges and to distinguish chemical from high explosive ammunition. The application of the aforementioned instruments and testing techniques made it possible to safeguard sensitive information as well as to avoid a costly destruction of munitions. Also, modern ammunitions can be investigated without sensitive electronic sensors being affected or damaged.

In our trial challenge inspections and also in particular in our trial ad hoc check we applied mass spectrometry, the most universal, high-powered process for analysing organic chemicals. A mobile mass spectrometer developed by the German armed forces was tested. This instrument, which is capable of carrying out analyses directly and swiftly on the spot, proved to be an invaluable means at the disposal of the inspection team. Programmed for the detection of chemical warfare agents through selected ion monitoring it can be used effectively to screen different kinds of samples for the presence of relevant substances without the need to fully analyse the samples in question. In this way an effective protection of confidential data is provided for. The mobile mass spectrometer renders ad hoc verification measures, geared to the sole purpose of verifying the presence or absence of chemicals listed in the schedules of the Annex on chemicals (cf. CD/961 of 1 February 1990) feasible and meaningful. The mobile mass spectrometer is further developed with the view to reduce its weight and size to make it portable. In addition software dedicated to non-intrusive on-site inspections is also being developed (cf. Annex 7).

The CW Verification Workshop also provided for an opportunity to demonstrate the SNAL system, an earlier version of which has already been presented in the Conference on Disarmament (cf.

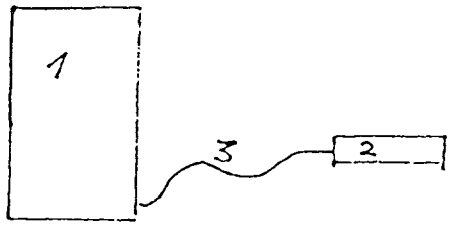
CD/CW/WP.204 of 19 July 1988). This chemical process monitoring system based on automated micro-sampling on magnetic tape and retrospective on-site evaluation is a useful instrument for continuous monitoring in particular in the field of non-production verification (Art. VI of the Rolling Text). The latest version of the SNAL system has just been tested in a facility of a German chemical company.

Following our trial inspections we have come to the conclusion that the inspection methods and instruments demonstrated during the workshop can significantly contribute to ensuring the verifiability of a future CW Convention. With their help it is possible to dispel with adequate certainty any suspicion that chemical weapons are being produced or stockpiled, without sensitive information having to be disclosed. This conclusion should in turn provide an important pre-requisite for the acceptance of the envisaged verification system of the CW Convention and in particular challenge inspections, the key element of the verification system.

2. The Workshop in Munster provided also for an opportunity to visit the incineration plant of the Federal Armed Forces Defence Science Agency for NBC Protection. This plant is used for the environmentally safe destruction of old obsolete chemical weapons from World Wars I and II. The planned second incineration plant with rotary kiln will have the capability needed for the clean-up of contaminated soil. A brief introduction to the historical background, the removal concept for found ammunition and the function of the incineration plant is provided in Annex 9.

ANNEX 1

Instrument: Wall thickness meter



1. Wall thickness meter
2. Probe
3. Adapter cable

Technical data:

Power supply	5 NiCd cells or 5 dry cells
Operating time	at least 12 h
Weight	app. 400 gramms inc. battery
Measurement range	0,6mm to app. 300mm
Measurement accuracy	+/- 0,1mm
Test materials	all materials with sound velocities between 10m/s to 9990m/s
Probe	normal beam probes and special probes

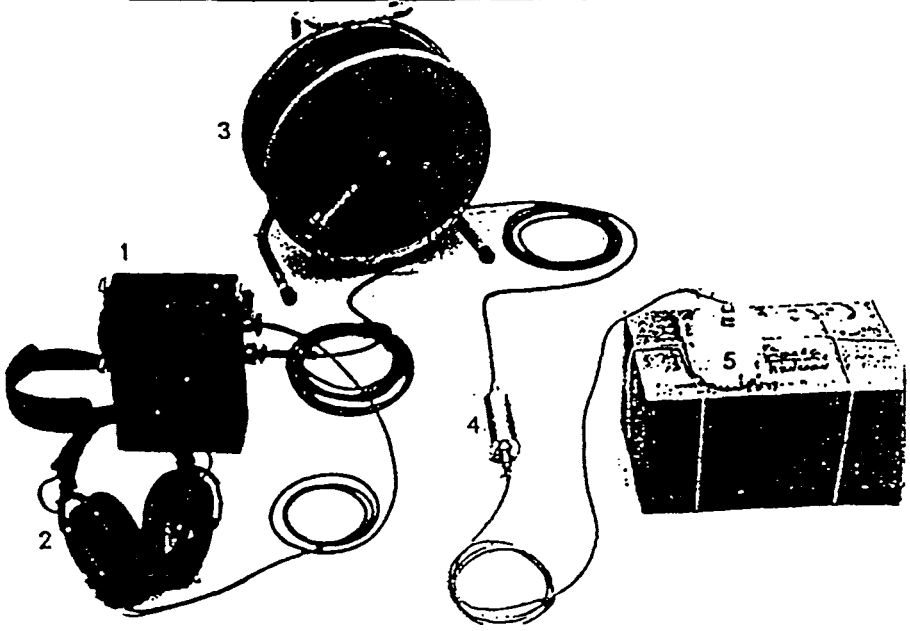
Application as verification instrument:

The digital wall thickness meter is to be used for the nondestrusive measurement of the thickness of containers, ammunition etc. The exact thickness is a prerequisit for the exposure time by using X-ray equipment. Advantages: Easy operation by only one control for the zero check and precise input feeding for the sound velocity constants. Operational comfort due to a handy shape and light weight.

Need for further development as verification instrument:

none

Instrument: Electronic Stethoscope



1. Main amplifier with control elements
2. Headset in military standard
3. Cable reel with shielded cable appr. 60 - 80 m
4. Pre-amplifier
5. Piezo element in special housing

Technical data:

Voltage	12 V via rechargeable NiCdbattery
Continous operation	> 8h
Physiologic limit of audibility	variable
Adjustable filters	F(1) = 2,5-5,796 kHz
	F(2) = 5,74-8,66 kHz
Temperature range	-25 Grad C - + 60 Grad C
Amplification	> 5 x 10

Application as verification instrument:

The electronic stethoscope was developed and designed for military and civil EOD/IED-purposes. The principle involved is the amplification of sound waves emanating from liquid substances in artillery shells, rockets or other containers. These sound waves are picked up by a bimorphic sensor, amplified and relayed

to the operator's headset via a cable. Via a normal tape recorder the hearing results can be stored and are suitable for training purposes. Advantages: Highest sensitivity, extreme high amplification, individual aural perception, adjustable filters, robust design,easy to handle.

Need for further development as verification instrument:

audio data base for training and evaluation

ANNEX 3

The use of radiography for CW verification under a CW convention

Radiography is a non-destructive testing technique whereby a beam of X or gamma rays is transmitted through a specimen. The image obtained is recorded on photographic material. By far the main use is for examining welded steel sections.

In the field of passenger safety, radiographic equipment has for years been employed at civilian airports to check luggage and other containers.

In connection with the elimination of old and obsolete chemical ammunition from World War I and II, radiography is used to identify warfare agents, thus reducing to a minimum any hazards when dismantling the ammunition.

Radiography can also be used effectively for verification purposes under a future CW convention and for checking filling apparatus. With its aid the following information can be obtained on the ammunition or technical installations to be inspected:

- identification of the internal technical structure of ammunition;

- identification of characteristics of ammunition (bombs, grenades, mines, hand grenades, rifle grenades, rockets, other missiles with thick or thin walls, bulk containers, bomblets, etc.);

- identification of the level in reaction vessels or in connecting lines of non-transparent apparatus.

Note: Since the maximum film focusing distance of the X-ray unit is 80 cm, this is simultaneously the maximum diameter of the item to be examined. When using a gammamat, the wall thicknesses and maximum diameter of the item to be examined may be considerably larger. For

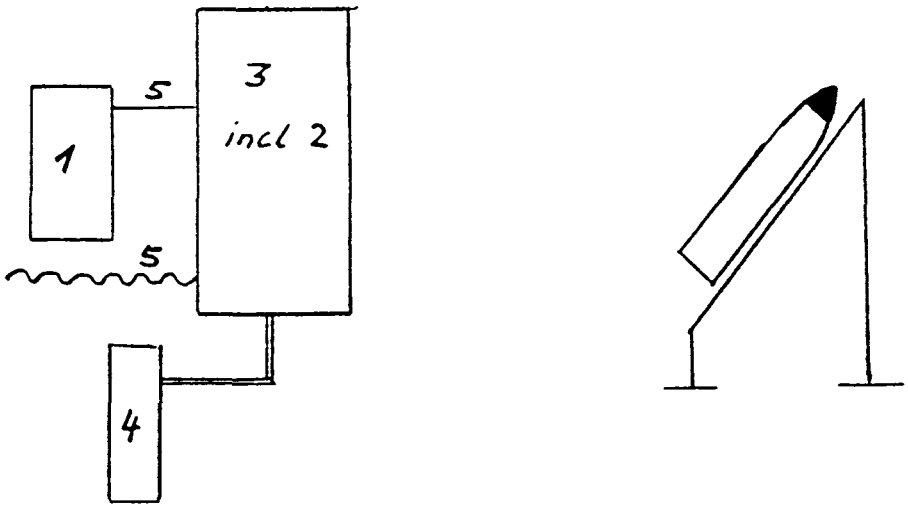
items with very thin walls, it may be sufficient to use an X-ray pulse/flash unit.

Safety rule:

It must be borne in mind that electronic triggers sensitive to high-energy radiation may have to be covered with a lead mask. The same applies to sensitive photocell gyrostatic pilots on guided missiles.

ANNEX 4

Instrument: X-Ray Equipment



Basic components: 1.control module
2.high voltage generator
3.X-ray tubehousing
4.oil cooling pump
5.connecting cables

Technical data:

Connected load:	190 to 250 V; 50/60 Hz;7 kVA
Power input:	maximum 4.2 kW,continous operation
Output voltage:	50 to 320 kV,steplessly adjustible
Output current:	maximum 25 mA,depending on the type of X-ray tube,firmly set

Application as verification instrument:

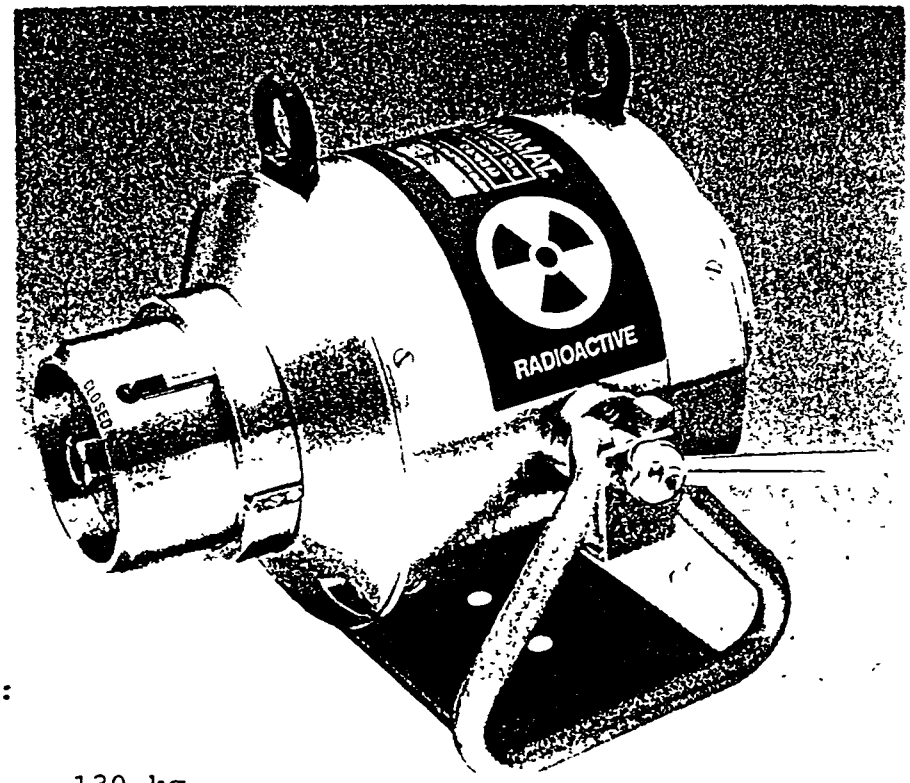
Application as verification instrument:

The mobile X-ray equipment is fully stabilized with an extremely high radiation power. This commercial equipment can be used for radiographic inspection of modern and old ammunition. It is well suited for the recognition of the interior technical structure of every kind of ammunition and the discrimination of liquid or solid charges.

Need for further development as verification instrument:

- further reduction in size
- mobile power generator for **worldwide** use

Instrument: Gamma-Ray-Projector for CO-60



Technical data:

Weight: 130 kg
max. load. Co-60: 30 Ci

Application as verification instrument:

The mobile gamma ray projector has a straight source channel and an eccentric shutter. This design of the shielding and use of uranium as a shielding material permit a maximum loading with Co-sources at low weight. The doserate on the surface is below 200 mR/h at maximum load. This commercial gamma ray projector can be used for the nondestructive analysis of the interior technical structure of every kind of ammunition and the discrimination of liquid or solid charges.

Need for further development as verification instrument:

- a comparative gamma-ray-projector for iridium-192 is available. It has a max. load Ir-192 of 40 Ci and weighs only 12,3 kg.

Verification Method: Neutron Activation Analysis
- Nondestructive, Noninvasive -

1. Principle: Irradiation by fast (energetic) or thermal neutrons results in the emission of τ-rays. The energy of the τ-rays is characteristic for the emitting nuclei. In this way information on typical chemical components of a sample can be collected.

The gamma rays can be measured either directly during the irradiation (in beam) or after irradiation (off beam).

2. Basic considerations: Elements which are characteristic for chemical agents and which are rather rare in other weapons are: Phosphorus, Fluorine (nerve agents), Chlorine and Arsenic. Strong evidence of those elements must be considered as an indication of chemical agents.

3. Equipment needed:

- Neutron source
  -- Neutron generator utilizing (d, t) reaction or
  -- Neutron fission source like Cf-252

- Gamma ray spectrometer, including a multichannel analyzer for the identification of the characteristic gamma-rays

- Positioning and transportation devices (fast transport)

- Evaluation and analyzing unit (PC)

4. Limitation of the method

- No information on chemical structure

- In some rare cases interfering reactions are possible (nonunique identification)

- Steel cases of chemical rounds cause γ-ray background.

5. Necessary future developments

- Weight, dimensions and power consumption of neutron generators should be minimized such that the system is easy to move and easy to be installed unter field conditions. Ruggedness and reliability must be improved.

- Radiation shielding and protection measures must comply with health physics international standards.

All goals under # 5 seem to be achievable within three to four years.

ANNEX 7

The mobile mass spectrometer as a verification instrument

The most universal, high-powered process for analysing organic chemicals, particularly chemical warfare agents, is mass spectrometry. Within the scope of verifying the non-production or use of chemical warfare agents, these substances must be detected in chemical plants or in the field. If such analyses are conducted in the laboratory, however, the samples to be analysed first have to be brought there. This takes time, during which samples remain unidentified, can alter or be confused, and it is practically impossible to determine the origins of the substances by means of targeted searches on the basis of suspicion.

For this reason a mobile mass spectrometer has been developed by the German armed forces which is capable of carrying out analyses directly and swiftly not in the laboratory but from an armoured vehicle in the field, thus enabling immediate responses. In the area of verification, such inspection teams can be used to conduct analyses of a specified depth and scope in chemical production plants. The results of these inspections are obtained directly on analysis and can be made known immediately.

Through this measuring system it is possible to detect evaporable organic chemicals which do not decompose at the temperature of 220°C required for analysis, by examining their mass spectra. Every substance has a characteristic mass spectrum which serves as a fingerprint enabling it to be identified. The data bank linked to the equipment therefore has a library of 50,000 spectra which can be automatically compared with the measured spectra. In addition to identification, conclusions can also be drawn about the quantity of a given substance by analysing signal intensity.

An accurate analysis requires accurate samples. Samples can be taken directly from the air around the plant or emitted from it, from surfaces, fittings, the floor or from the product flow. Special devices for taking samples are available.

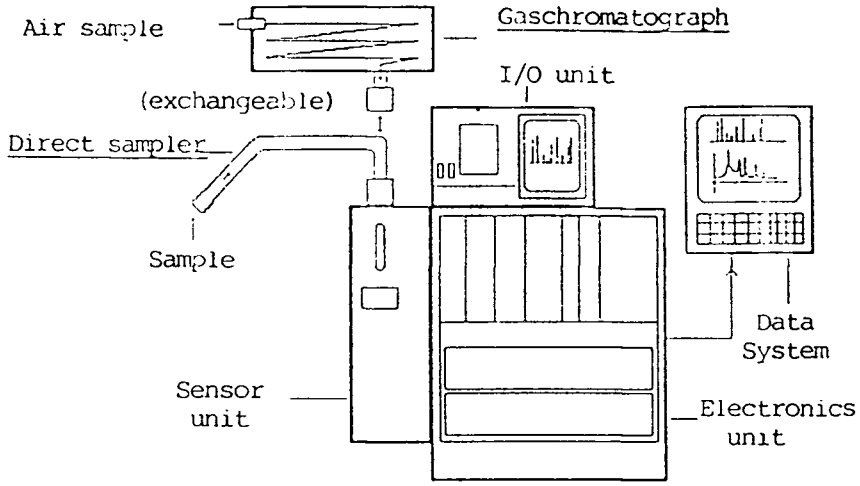
The analysis procedure, which depends on the sampling technique used, may be adapted to the task in hand. If a single technical product available in sample form is to be analysed, this can be achieved within one minute by means of mass spectrometry alone. However, if complex mixtures of various substances are to be analysed, these must first be divided into their individual components by means of gas chromatography, before they can be identified through the mass spectrometry process. This type of analysis takes around 5 to 20 minutes and reveals levels amounting to parts per billion as regards substances in the air; in the case of samples taken from surfaces or products, mere nanogramme levels are necessary.

Inspectors experienced in this analysis technique can obtain precise results by applying standardized sampling and analysis procedures to specific tasks.

The questions to be solved by the teams of inspectors must be discussed. The software for the measuring system can be adapted to these tasks; for example, all identified substances can be listed after automatic evaluation, or searches can be conducted for specific substances only, with a view to detecting and recording only their presence or absence.

The existing GC MS MM1 mobile system is installed in vehicles, for example, minibuses, jeeps, for use in the field. This is a relatively heavy piece of equipment which has been specially designed for use in tanks. In principle, however, it can be used as a verification instrument. At the moment this device is being developed further and reduced in size so that it can be used for taking environmental measurements. It will weigh about 40 kg and will thus be simple to transport. When the need for these devices in the verification process has been established, a special optimized measuring system can be developed for use by the inspection teams on this basis.

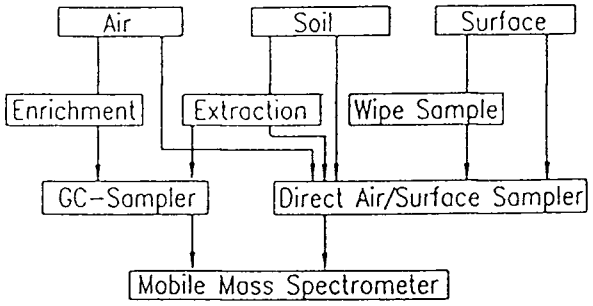
THE MOBILE MASS SPECTROMETER SYSTEM MM1



SPECIFICATIONS

- Quadrupole mass spectrometer (mass range 1-400 u), rugged (meets military specifications), easy to operate.
- Adjustable to specific inspection requirements.
- Detection and identification of organic chemicals, including CW agents and other scheduled chemicals, pesticides, etc. in selected ion monitoring (SIM) mode or by scanning of series of mass spectra.
- Various probes available for sampling of vapour, dust, aqueous solutions and surfaces of solid materials, directly or after enrichment and clean-up.
- Detection limits: 1-10 ng absolute; 50 ppb in air (full spectra from 100 ppb of sarin after 2 minute enrichment on Tenax); 10 ng/cm2 from non-absorptive surfaces.
- Data system with variable analytical procedures; spectra library.
- Total weight app. 200 kg, power consumption 600 W; MIL-specified electronics.

APPLICATIONS



- Variety of procedures selectable by inspection team.
- Gas chromatographic (GC) separation of components of complex mixtures.
- Fast selective detection, negative verification and semiquantification at appropriate intrusion levels.
- Immediate results on-the-spot.

FURTHER DEVELOPMENT

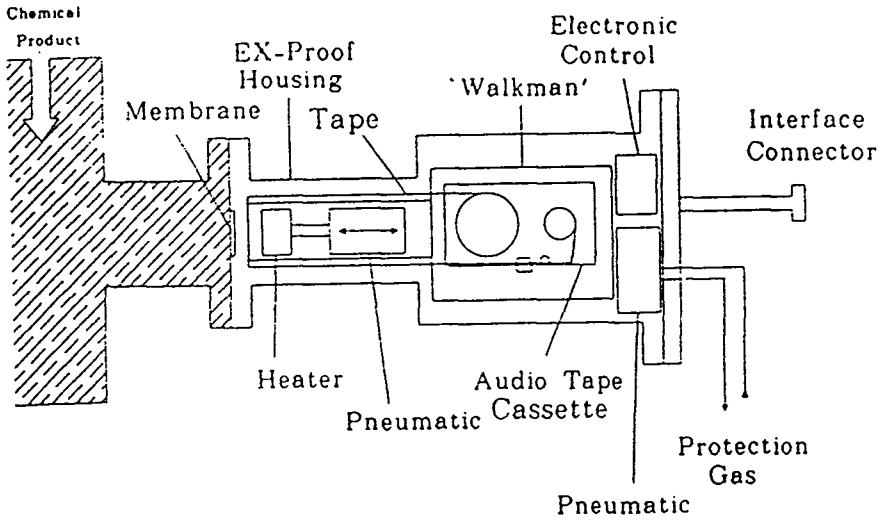
- Reduction of weight and size (40 kg, 50x50x40 cm)
- Standardization of sampling procedures
- Development of software dedicated to non-intrusive on-site inspections.

CHEMICAL PROCESS MONITORING BY AUTOMATED MICRO-SAMPLING ON MAGNETIC TAPE AND RETROSPECTIVE ON-SITE EVALUATION

APPROACH

- Storage of microgram amounts of samples from a chemical process along with relevant data (e.g. date/time, flow rate, temperature) on a magnetic tape cassette, at randomized or programmed time intervals.

- Retrospective analytical evaluation of samples on-site, at appropriate minimized intrusion level, for absence of undeclared or presence of declared scheduled organic chemicals during routine inspections.



Tape Sampler

SAMPLING MECHANISM

Storage ("writing") of samples is performed by short contact of a heater stamp with the magnetic tape, allowing the tape to be in contact with the chemical diffusing through a membrane into the tape material (the polymer turning into a rubbery state). Removal of the heater causes the tape to cool down instantly (the polymer turning into a glassy state), thus preserving ("freezing") the sample.

EVALUATION

Evaluation ("reading") of samples requires the sample to be thermodesorbed from the tape by a heater-interface prior to introduction into the analytical instrument.
Preferably the samples are analyzed in a flexible way using a mobile mass spectrometer (MM1) in the selected ion monitoring mode or through confirmatory scanning of limited mass ranges.
Optionally, other analytical methods could be used in certain cases.

CAPACITY

A standard audio tape cassette (90 m) has a capacity of more than 2000 samples.

STORAGE TIME

Depending on physical and chemical properties (volatility, thermostability) of the sampled compound, a storage time of several days for freon, 19 months for sulfur mustard and 28 months for thiodiglycol and dimethyl methylphosphonate has been observed without significant sample losses.

APPLICATION

Typical fields of application are non-production verification and monitoring of CW destruction.

FURTHER DEVELOPMENT AND TESTING

A recent two-week test run of a miniaturized tape sampler system installed in a commercial chemical production plant is currently being evaluated.
Following this evaluation, an advanced model will be developed and tested to ascertain long-term reliability, tamper-resistance and fullfilment of safety requirements, and to determine and minimize maintenance requirements.
Also, testing is necessary to assure proper placement of the sampling system in the process monitored to be effective in terms of verification.
The system can be made fully available by the time the CW Convention enters into force.

(Reference: "SNAL"-System, CD/CW/WP.204, 19 July 1988)

Incineration Plant for Toxic Waste of the Federal Armed Forces Defence Science Agency for NBC Protection* in Munster

Introduction

The Federal Republic of Germany does not possess chemical weapons. However, the Munster area as a former CW-production and testing ground - as well as some other areas in the Federal Republic - is still contaminated with old chemical agents dating from World Wars I and II.

The removal concept for found ammunition includes search, demilitarization and destruction of the chemical agent contents through incineration at temperatures of 1000-1200 °C. Flue gas from combustion is scrubbed and emissions are continuously monitored. The Munster incineration plant is in full operation since 1980. As its destruction capacity is limited to approx. 70 t a year, it is planned to build an additional destruction facility on the basis of a rotary kiln.

1. HISTORY

In World War I a part of the present Training Area Munster-North was used for production and field testing of chemical agents. After the war, on October 24, 1919 by a powerful explosion all buildings, 1000 t of warfare agents, 1 million chemical shells and 40 tank waggons with chemical warfare (CW) agents were distributed on this area.

In World War II the expanded area Munster-North was used again for filling and field testing of CW munition. Additionally there was some production activity, too, in a pilot plant for nerve agents (tabun, sarin).

During the War failure batches of the war gas production, particularly mustard gas which was adjusted intentionally to a high viscosity and called "Zähllost", were buried in the ground. Unfortunately no records about such actions were left after 1945.

After 1948 the area was started to be made free of danger by the Explosive Ordnance Disposal (EOD) Command Lower-Saxony. This was carried out for the most part only on the surface of the ground until in 1956 the Training Area was taken over by the Federal Armed Forces. Now systematical scouring of the area began.

2. REMOVAL CONCEPT FOR FOUND AMMUNITION

The technical steps for an ultimate elimination of the dangers by chemical duds and contaminations in the ground which are still being faced in the Munster area are the following:

1. Searching and discovering,
2. Removal and transport,
3. Storage,
4. Demilitarization of the CW ammunition and
5. Destruction of the chemical agent contents.

* Wehrwissenschaftliche Dienststelle der Bundeswehr für ABC-Schutz (WWDBw ABC-Schutz)

The steps 1. to 4. are in the responsibility of the Munster Training Area Command, which has available a demilitarization plant with a team of EOD experts. It is their task to separate fuzes and explosives from the chemical ammunition. The chemical agents, waste produced during demilitarization and empty shells are filled into polyethylene barrels and taken into storage up to incineration. The Federal Armed Forces Defence Science Agency for NBC Protection is responsible for step 5: the environmentally acceptable incineration of the chemical agents and final disposal of the burned residues.

3. FUNCTION OF THE INCINERATION PLANT (see functional diagram)

3.1 Incineration of chemical agents

The incineration plant of WWDBw ABC-Schutz, planned since 1975 and taken in full operation since 1980 is being operated as a batch-type double chamber furnace. This installation is unique in its function and was primarily designed to manage the viscous mustard gas problem. It is the only incinerator for thermal destruction of chemical agents in Western Europe.

The daily destruction rate during two overlapping working shifts, resulting in a total processing time of 12 hrs, amounts to 350 kg mustard gas or about 70 tons a year.

Before its incineration the initial material will be analyzed to determine problematic components, mainly arising from the presence of arsenicals. Based on the analytical results suitable batches of toxic waste material are put together and provisions for a most effective waste water and effluent air treatment are possible.

The opened polyethylene containers are placed on one of the charging waggons which are covered with high-temperature proof stones. At first the waggon is pulled through a gas lock into the evaporation chamber. Here, at a temperature of 300°C and in an inert gas atmosphere (N_2+CO_2+H_2O) the chemical agent vapours are released during 10 to 12 hours and introduced through an insulated duct into the main incineration chamber.

In this chamber equipped with highly fire-proof and chemical resistant brick walls mustard gas, for example, is oxidized at a temperature of 1000° to 1200°C within a reaction time of 2 seconds to the components sulfur dioxide (SO_2), hydrogen chloride (HCl), which still imply an environmental burden, plus carbon dioxide and water.

Then the charging waggon with inevaporable organic chemical remnants and metal parts is displaced into the burn-out chamber. Particularly metal parts, e.g. shells are annealed in this chamber in air at 1000°C over 12 to 18 hrs. The effluent air from this chamber is conducted through the main incineration chamber for final combustion of toxic components.

Charging area and displacement room are adjusted to an underpressure (0.5 to 1.0 mbars) against atmosphere to prevent any egress of toxic compound to the exterior.

...

3.2 FLUE GAS SCRUBBING

Flue gas from chemical agent incineration at first is cooled down to 80°C by injection of water into the cooling (quench) tower. By passing two washing towers (scrubbers) arranged one after the other the noxious gases SO_2 and HCl are eliminated from the flue gas with additional water. By simultaneous injection of sodium hydroxide (NaOH) a fixed pH profile can be achieved. After passage of a waste water neutralizer the highly toxic blister agent mustard has been transformed into such harmless salts like sodium sulfate and sodium chloride which can be released unobjectionably into the municipal waste water sewer.

The scrubbed flue gas leaves the incineration plant through a 30 m high stack, not without further aerosol elimination in an aerosol separator.

Sampling probes and analyzers for continuous monitoring the emissions with reference to the noxious components SO_2 and HCl as well as hydrocarbons (as a total) and dust (including arsenic trioxide) are attached to the stack. The indicated values are transmitted to recorders installed in the switchboard panel of the operation control center.
The recorded values are far below the legally allowed limits of exhaust air emission.

3.3 PRECIPITATION OF ARSENIC COMPOUNDS

Arsenicals found in the war gas mixtures are requiring additional operational steps:

All washing waters and collected aerosols with arsenical compounds in it have to be jointly subjected to a subsequent oxidation and arsenic precipitation.

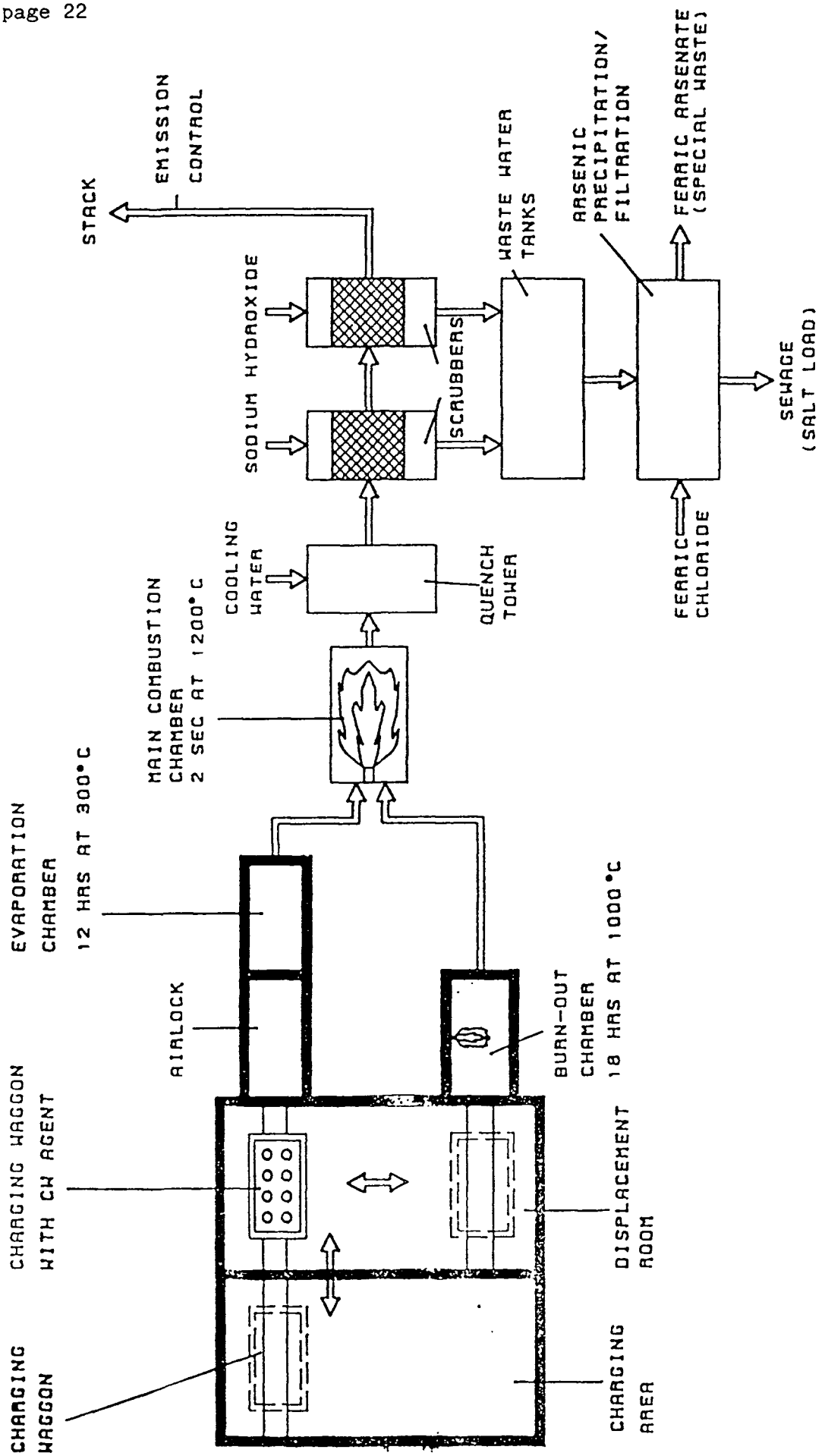
The mineralized arsenic (III)-compounds are oxidized to sodium arsenate by reaction with potassium permanganate. Addition of ferric chloride leads to an effective flocculation and dragging effect of the originating ferric hydroxide, accompanied with precipitation of ferric arsenate. This compound is being dehydrated by a filtration step and can be deposited in an old salt mine.
The filtration waters finally can be disposed of into the sewer.

4. OUTLOOK

More war gas remnants are still lying in the ground of the Training Aera Munster-North and on other sites of various States of the Federal Republic of Germany.

Mostly these chemical agents and their decomposition products are mixed with soil, sand or other solid materials. Thermal destruction of the toxic ingredients of solid masses cannot be achieved economically in the existing muffle-type furnace chambers because of the lack of poking devices. Only very thin layers of earth can be handled to obtain a complete burn-out.

Therefore it is planned to build an additional destruction facility as a second incineration line on the basis of a rotary kiln.



FUNCTIONAL DIAGRAM OF INCINERATION PLANT

CONFERENCE ON DISARMAMENT

CD/1027

6 August 1990
Original: ENGLISH

REPORT OF THE AD HOC COMMITTEE ON RADIOLOGICAL WEAPONS

I. INTRODUCTION

1. In accordance with the decision taken by the Conference on Disarmament at its 532nd plenary meeting held on 6 February 1990, as contained in document CD/965, the Ad Hoc Committee on Radiological Weapons was re-established, for the duration of the 1990 session, with a view to reaching agreement on a convention prohibiting the development, production, stockpiling and use of radiological weapons. The Conference further decided that the Ad Hoc Committee would report to it on the progress of its work before the conclusion of its 1990 session.

II. ORGANIZATION OF WORK AND DOCUMENTATION

2. At that same plenary meeting on 6 February 1990, the Conference on Disarmament appointed Ambassador Istvan Varga of Hungary as Chairman of the Ad Hoc Committee. Mr. Michael Cassandra of the United Nations Department for Disarmament Affairs served as Secretary of the Ad Hoc Committee.

3. The Ad Hoc Committee held four meetings from 1 March to 3 August 1990. In addition, the Chairman held a number of informal consultations with delegations.

4. At their request, the representatives of the following 21 States not members of the Conference on Disarmament were invited to participate in the work of the Ad Hoc Committee: Austria, Denmark, Finland, Greece, Iraq, Israel, Kuwait, Malaysia, New Zealand, Norway, Portugal, Qatar, Senegal, Spain, Syria, Switzerland, Turkey, United Arab Emirates, Uruguay, Viet Nam and Zimbabwe.

5. In addition to various resolutions adopted by the General Assembly on the subject at its previous sessions, the Ad Hoc Committee had before it resolutions 44/116A, R and T adopted by the General Assembly at its forty-fourth session entrusting specific responsibilities to the Conference on Disarmament on this subject.

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6. The following working papers were presented to the Ad Hoc Committee:

CD/RW/WP.87/Rev.2 dated 19 March 1990 entitled "Programme of Work for the first part of the 1990 session"

CD/RW/WP.88/Rev.1 dated 18 June 1990 entitled "Programme of work for the second part of the 1990 session"

CD/RW/WP.89 dated 31 July 1990 entitled "Report of Contact Group A"

CD/RW/WP.90 dated 31 July 1990 entitled "Report of Contact Group B"

III. WORK DURING THE 1990 SESSION

7. At its 1st meeting on 1 March 1990, the Chairman suggested that the Ad Hoc Committee continue the same method of work adopted during the 1987, 1988 and 1989 sessions: that is, that Contact Group A continue to consider the prohibition of radiological weapons in the "traditional" sense and that Contact Group B continue to consider issues relevant to the prohibition of attacks against nuclear facilities. */ He also recommended that the work of the two groups should be pursued along the lines recommended in the 1989 report of the Ad Hoc Committee (CD/946), that is, to draw upon the two annexes contained in that report as a basis for its work. The Chairman suggested that the main objective of the work in 1990 be to seek solutions for outstanding key issues in both tracks. To that end, he pointed most importantly to the need for a resolution of the issues related to scope in both tracks as well as to the need for refinement of the provisions dealing with verification and compliance. He suggested that both Contact Groups record the results of their work in an up-dated version of their respective texts annexed to last year's Ad Hoc Committee report. The Ad Hoc Committee decided to follow the recommendations of the Chairman as regards its method of work.

8. At the same meeting, the Ad Hoc Committee appointed Mr. Helmut Herzbruch of the Federal Republic of Germany to co-ordinate the work of Contact Group A and Mr. Hassan G. Mashhadi of the Islamic Republic of Iran to co-ordinate the work of Contact Group B.

9. The work of the Ad Hoc Committee was carried out in the Contact Groups as established above, except for the consideration and adoption of this report. On the basis of the work conducted within the Contact Groups, the two Co-ordinators presented to the Ad Hoc Committee, at its 4th meeting on 3 August 1989, their respective reports (CD/RW/WP.89 and 90), which are reproduced in Annexes I and II to this report, reflecting the current state of consideration of the issues before the Ad Hoc Committee. It is understood that the contents of the Annexes are not binding on any delegation.

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*/ One delegation did not take part in the work on the prohibition of attacks against nuclear facilities.

IV. CONCLUSIONS AND RECOMMENDATIONS

10. The work conducted by the Ad Hoc Committee during its 1990 session was useful in contributing further to the clarification of different approaches which continue to exist with regard to both the important subjects under consideration. It is recommended that the Conference on Disarmament re-establish the Ad Hoc Committee on Radiological Weapons at the beginning of its 1991 session and that the Ad Hoc Committee draw upon the Annexes to this report as a basis for its future work.

ANNEX I

Report of Contact Group A

1. In accordance with the decision taken by the Ad Hoc Committee on Radiological Weapons at its first meeting, on 1 March 1990, Contact Group A was re-established to continue consideration of the issues relevant to the prohibition of radiological weapons.

2. Contact Group A held eight meetings from 8 March to 30 July 1990. In addition, the Co-ordinator held a number of informal consultations with delegations.

3. According to the guidelines set out during the first meeting of the Ad Hoc Committee, Contact Group A used as a basis for its substantive work the Co-ordinator's record as contained in the Report of the Ad Hoc Committee to the Conference on Disarmament in 1989 (CD/946, Annex I, Attachment). In addition, several informal working papers were put forward by delegations and by the Chair. The Contact Group reviewed the possible elements for a convention on the prohibition of radiological weapons. In the course of that review, numerous proposals were made to develop these elements.

4. As a result, the Contact Group was able to eliminate most footnotes as well as to merge different alternatives into common language for those elements dealing with scope and peaceful uses; new provisions were introduced for other main elements. Further, a preambular section and a new element on verification and compliance were developed and added. Nevertheless, footnotes and brackets in the Co-ordinator's record indicate that not all problems could be solved during the 1990 negotiating period.

5. The Co-ordinator's record, entitled "Draft Articles for a Convention on the Prohibition of Radiological Weapons", is attached to the report and reflects the current stage of the Contact Group's consideration of the question.

6. The Co-ordinator's record is not binding upon any delegation and does not preclude any delegation from introducing proposals to the text as a whole or the elements thereof at a later stage. It is recommended that it be appended to the Ad Hoc Committee's report to the Conference on Disarmament, as a basis for future work.

Attachment

DRAFT ARTICLES FOR A CONVENTION ON THE PROHIBITION OF RADIOLOGICAL WEAPONS

PREAMBLE

The States Parties to this Convention, hereinafter referred to as the "Parties to the Convention",

desiring to contribute to the realization of the purposes and principles of the Charter of the United Nations,

determined to act with a view to achieving progress towards general and complete disarmament under strict and effective international control, including the prohibition and elimination of all types of weapons of mass destruction as well as the development of new types of such weapons as radiological weapons,

.....

bearing in mind that the prohibition of radiological weapons is a step in the process towards general and complete disarmament,

further bearing in mind longlasting effects of radioactive contamination on living creatures as well as on the environment,

Have agreed as follows:

I. SCOPE

Paragraph 1

Each Party to the Convention undertakes to prohibit radiological weapons and hence never under any circumstances

(a) to disseminate deliberately any radioactive material, including radioactive waste, for the purpose of causing injury, death, damage or destruction by means of the radiation produced directly or indirectly by the decay of such material,

(b) to develop, produce, stockpile, otherwise acquire, possess or transfer any device specifically designed for the dissemination of radioactive material prohibited under (a) of this paragraph.

Paragraph 2

Each Party to the Convention undertakes to take any measures it considers necessary in accordance with its constitutional procedures and its international obligations anywhere under its jurisdiction or control to

(a) prohibit and prevent any activity which would constitute a violation of the obligations undertaken by the Parties to the Convention,

(b) prohibit the diversion and prevent the loss of radioactive material which could be used for purposes prohibited by this Convention.

Paragraph 3

Each Party to the Convention undertakes not to assist, encourage or induce anyone to engage in activities prohibited by the provisions of the Convention.

[II. DEFINITIONS

For the purposes of this Convention the term "radiological weapon" means:

(i) any device specifically designed for the dissemination of radioactive material to cause [as its primary effect] injury, death, damage or destruction by means of the decay of such material,

(ii) any radioactive material specifically designed and prepared for employment, by its dissemination, to cause injury, death, damage or destruction by the decay of such material,

(iii) any other radioactive material if used for employment by its dissemination to cause injury, death, damage or destruction by the decay of such material.]

III. PEACEFUL USES

Paragraph 1

Nothing in this Convention should be interpreted as affecting in any way

(a) the full exercise of the inalienable rights of all Parties to the Convention, without discrimination, to develop, acquire and use nuclear technology, equipment and materials for the peaceful use of nuclear energy and all peaceful applications of their nuclear programmes for economic and social development in accordance with their national priorities, needs and interests, bearing in mind the need to prevent the proliferation of nuclear weapons in all its forms. International co-operation in the peaceful uses of nuclear energy should be conducted under agreed and appropriate international safeguards applied on a non-discriminatory basis,

(b) the undertakings of Parties to the Convention to contribute to the fullest possible extent to international cooperation and assistance to ensure the development and effective implementation of adequate measures of protection for all States against the harmful effects of radiation.

Paragraph 2

Nothing in this Convention shall be interpreted as requiring or permitting a Party to the Convention to take measures which could affect the programmes of other States for peaceful uses of nuclear energy or technology for their economic or social development.

IV. OTHER MAIN ELEMENTS

Paragraph 1

The provisions of this Convention shall not apply to nuclear explosive devices or to radioactive material produced by them 1/.

Paragraph 2

Nothing in this Convention shall be interpreted as in any way legitimizing the development and the use of nuclear weapons or detracting from the obligations of States to refrain from the use or threat of use of such weapons 1/, 2/.

Paragraph 3

Parties to the Convention undertake to pursue urgently negotiations for the cessation of the nuclear arms race, the conclusion of effective measures to prevent the use or threat of use of nuclear weapons and the achievement of nuclear disarmanent. 2/, 3/.

Paragraph 4

Nothing in this Convention shall be interpreted as in any way limiting or detracting from rules of international law, including

(a) the Charter of the United Nations,

(b) law applicable to armed conflicts,

(c) obligations assumed by Parties to the Convention under other international agreements.

1/ Objections were raised against the need for this paragraph.

2/ A view was expressed that this subject might be better dealt with in the preambular part.

3/ Some delegations were of the view that such an undertaking was outside the purview of this Convention.

Paragraph 5

The implementation of the obligations under this Convention shall be periodically reviewed as provided for in ...

Paragraph 6 1/

Each Party to the Convention in a position to do so [undertakes to] [may] provide or support technical and humanitarian assistance, in accordance with the provisions of the Charter of the United Nations, to any Party to the Convention which so requests, as a result of a violation of the Convention or the use of radiological weapons by States not being Parties to the Convention,

[(a) if the [Security Council] [Depositary] decides that such Party has been harmed or is likely to be harmed or

(b) on the basis of independent bilateral or multilateral agreements.]

Paragraph 7

The Secretary-General of the United Nations shall be the Depositary of this Convention.

V. VERIFICATION AND COMPLIANCE

Paragraph 1

Parties to the Convention shall exchange to the fullest possible extent, bilaterally or multilaterally, information necessary to provide assurance of fulfilment of their obligations under the Convention.

Paragraph 2

Parties to the Convention undertake to consult one another and to co-operate in solving any problems which may be raised in relation to the objectives of, or in the application of, the provisions of the Convention.

Consultation and co-operation pursuant to this paragraph may also be undertaken through appropriate international procedures within the framework of the United Nations and in accordance with its Charter. These international procedures may include the services of appropriate international organizations, as well as of a Committee of Experts. For these purposes the Depositary shall, within one month of the receipt of a request from any State Party to the Convention, convene a Committee of Experts.

1/ Views were expressed that the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency should be further considered in this context.

Paragraph 3

Each Party to the Convention which has reasons to believe that any other Party to the Convention is acting in breach of the obligations deriving from the provisions of the Convention may lodge a complaint with the Depositary. Such a complaint shall include all relevant information as well as all possible evidence supporting its validity. In order to evaluate such information, the Depositary may convene the Committee of Experts.

The Depositary, assisted by the Committee of Experts, shall [to the extent possible] conduct an investigation of the alleged facts, whenever the evaluation of the information provided to him indicates that such an investigation is warranted.

The Committee shall transmit to the Depositary a summary of its findings of fact, incorporating all views and information presented to the Committee during its proceedings. The Depositary shall distribute the summary to all Parties to the Convention and shall indicate his own conclusions and suggestions for possible action [including that of bringing the matter to the attention of the Security Council.] In case of urgency, the Depositary may request the Committee to submit its report within 10 days.

Paragraph 4

Each Party to the Convention undertakes to co-operate to the fullest possible extent with the Committee of Experts, in accordance with the provisions of the Charter of the United Nations.

Paragraph 5

The functions and rules of procedure of the Committee of Experts mentioned in the above Paragraphs 2, 3, and 4 are set out in the Annex, which constitutes an integral part of the Convention.

Paragraph 6

The provisions of Paragraph 3 of this section shall not be interpreted as affecting the rights and duties of Parties under the Charter of the United Nations, including bringing to the attention of the Security Council concerns about compliance with this Convention.

ANNEX

1. The Committee of Experts shall undertake to make appropriate findings of fact and provide expert views relevant to any problem raised pursuant to the Convention by the Party requesting the convening of the Committee. It may be requested by the Depositary to carry out investigations in case of complaints lodged by a Party to the Convention.

2. The work of the Committee of Experts shall be organized in such a way as to permit it to perform the functions set forth in Paragraph 1 of the Annex. In the process of such [fact finding] [investigations] every effort should be made to apply appropriate methods and procedures which are non-discriminatory and which do not unduly interfere with the internal affairs of other States or jeopardize their economic and social development.

3. The Depositary shall compile and maintain a list of qualified experts whose services may be available for such [missions] [investigations] on the basis of the proposals which had been made to him by Parties to the Convention. The Depository shall appoint members of the Committee of Experts from that list with due regard to ensuring appropriate geographical balance and to the character of the question involved.

4. The Depositary or his representative shall serve as the Chairman of the Committee.

5. Each expert may be assisted at meetings by one or more advisers.

6. Each expert shall have the right, through the Chairman, to request from States, and from international organizations, such information and assistance as the expert considers desirable for the accomplishment of the Committee's work. Each Party undertakes not to use deliberate concealment measures which impede verification of compliance with the Convention.

ANNEX II

Report of Contact Group B

1. In accordance with the decision taken by the Ad hoc Committee on Radiological Weapons at its 1st meeting on 1 March 1990, Contact Group B was re-established to continue consideration of the issues relevant to the prohibition of attacks against nuclear facilities.

2. Contact Group B held seven meetings from 15 March to 30 July 1990. In addition, the Co-ordinator held a number of informal consultations with delegations.

3. According to guidelines set out during the 1st meeting of the Ad hoc Committee, Contact Group B used as a basis for its substantive work the Co-ordinator's record as contained in the Report of the Ad hoc Committee to the Conference on Disarmament in 1989 (CD/946, Annex II, Attachment). The Contact Group reviewed the possible elements relevant to the prohibition of attacks against nuclear facilities contained therein.

4. The amended Co-ordinator's record is attached to the report and reflects the current stage of the Contact Group's consideration of the question.

5. The Co-ordinator's record is not binding upon any delegation and its main purpose is to facilitate future consideration. It is recommended that it be appended to the Ad hoc Committee's report to the Conference on Disarmament, as a basis for future work.

Attachment

POSSIBLE ELEMENTS RELEVANT TO THE PROHIBITION OF ATTACKS AGAINST NUCLEAR FACILITIES 1/ 2/

SCOPE

Paragraph 1

First alternative

Each State Party undertakes never under any circumstances to attack nuclear facilities covered by this Treaty.

Second alternative

Each State Party undertakes never under any circumstances to attack or to threaten to attack any nuclear facility.

Third alternative 3/

Each State Party undertakes never under any circumstances to release and disseminate radioactive substances by attacking nuclear facilities covered by this Treaty.

Paragraph 2

Each State Party undertakes not in any way to assist, encourage or induce any person, State, group of States, or international organization to act in contravention of this Treaty.

1/ This record does not prejudice the eventual positions of delegations relating to the question of "linkage", or the positions of delegations on the question of the need of having additional legal protection for nuclear facilities. As to the latter, a view was expressed that additional discussion on existing international agreements pertaining to the question is needed.

2/ One delegation stated that, apart from the fact that the elements listed were controversial, the third alternative under Scope, paragraph 1 of the Definitions and the sections on Criteria and Special Marking were not essential to the elaboration of a convention. The section on Special Marking could have been recast within the section on Register. That was not, however, the case of the other elements mentioned, particularly the section on Criteria, which, in its opinion, seemed incompatible with the rule of jus cogens in article 2, paragraph 4, of the Charter of the United Nations.

3/ Some delegations stated that the third alternative of Scope based on the criterion of mass destruction read in conjunction with the first alternative of paragraph 2 of Definitions, paragraph 1 of Criteria, the first alternative of paragraph 1, paragraph 2, the first alternative of paragraph 3, and paragraphs 4 to 6 of Register as well as Special Marking in Paragraph 1 under Other Main Elements constitute one complete and consistent set of elements to be included in a draft Treaty.

DEFINITIONS

Paragraph 1

For the purposes of this Treaty, the term "attack" means any act by a State which is designed to cause or causes, directly or indirectly:

(i) any damage to, or the destruction of, a nuclear facility; or

(ii) any interference, interruption, impediment, stoppage or breakdown in the operation of a nuclear facility; or

(iii) any injury to, or the death of, any of the personnel of a nuclear facility.

Paragraph 2

First alternative

For the purpose of this Treaty, the term "nuclear facilities" means: 1/

(i) Nuclear reactors;

(ii) Intermediate spent fuel storages;

(iii) Reprocessing plants;

(iv) Waste deposits, including temporary waste storages;

(v) Installations for production or use of important and intensive sources of gamma radiation; 2/

which are included in a Register maintained by the Depositary.

Second alternative

A nuclear facility means a nuclear reactor or any other facility for the production, handling, treatment, processing or storage of nuclear fuel or other nuclear material.

1/ A suggestion was made to add two further categories after "(iii) Reprocessing plants;"

(iv) Nuclear fuel processing plants;

(v) Uranium enrichment plants.

2/ A view was expressed that this provision should be further refined.

CRITERIA

Paragraph 1

The nuclear facilities mentioned in paragraph 2 of Definitions shall meet the following specifications: 1/

(i) They shall be stationary on land; 2/ 3/

(ii) Nuclear reactors; designed for a thermal power which could exceed 1 [10] Megawatt, shall have reached their first criticality and shall not have been decommissioned;

(iii) Intermediate spent fuel storages; designed for storing radioactive material exceeding 10^{17} [10^{18}] Bq;

(iv) Reprocessing plants; designed for containing radioactive material exceeding 10^{17} [10^{18}] Bq;

(v) Waste deposits: containing radioactive material exceeding 10^{17} [10^{18}] Bq;

(vi) Installations for production or use of intensive sources of gamma radiation: designed to contain radioactive material whose gamma-radiation-dissipated power is equal to or greater than 6×10^{16} [10^{17}] Bq x Mev.

Paragraph 2

Additional specification suggested to the above specifications:

Nuclear facilities mentioned in paragraph 2 of Definitions which are under the safeguards of the International Atomic Energy Agency are covered by the provision of this Treaty.

1/ Views were expressed that nuclear facilities mentioned in paragraph 2 of Definitions shall be used for peaceful purposes and subject to IAEA safeguards.

2/ Views were expressed that nuclear facilities stationed in territorial waters and the exclusive economic zones should also be considered.

3/ Views were expressed that such nuclear facilities should not belong to weapons systems.

REGISTER

Paragraph 1

First alternative

The Depositary shall maintain a Register of nuclear facilities covered by this Treaty and shall transmit certified copies thereof to each State Party to the Treaty.

Second alternative

The Depositary shall maintain a Register of nuclear facilities covered by this Treaty and shall transmit certified copies thereof to each State Party to the Treaty. The register shall be updated at regular intervals.

Paragraph 2

State Parties requesting that nuclear facilities under their jurisdiction be included in the Register shall for each such facility communicate to the Depositary the following written information:

(a) Identification of the type of nuclear facility;

(b) Detailed specifications in accordance with Paragraph 1 of Criteria of this Treaty;

(c) Details on the exact geographical location of the nuclear facility.

Paragraph 3 1/

Upon receipt of a request for an inclusion in the Register, the Depositary shall without delay initiate procedures to confirm that the information contained in the request is correct:

(a) Through, to the extent possible, documentation from the IAEA; and/or

(b) Through other means, including a mission to the facility, when necessary.

For the purpose of carrying out the procedures in paragraph 3 (a) above the Depositary may, as it deems necessary, enter into agreement with the IAEA.

For the purpose of carrying out the procedures in paragraph 3 (b) above the Depositary shall, with the co-operation of States Party to the Treaty, compile and maintain a list of qualified experts, whose services could be made available to undertake such missions.

1/ A view was expressed that this provision calls for further discussion.

Paragraph 4

First alternative

The Depositary shall include the facility in the Register as well as the information required by paragraph 2 of this section, as soon as the information given in the request has been substantiated, and shall immediately notify States Party to the Treaty of aforesaid inclusion.

Second alternative

The Depositary shall include the facility in the Register as well as the information required by paragraph 2 of this section and shall immediately notify States Party to the Treaty of aforesaid inclusion.

Paragraph 5

A State Party shall inform the Depositary, within ...days/months, of any change in the information it had provided for inclusion in the Register. Upon the receipt of such a change, the Depositary shall act, mutatis mutandi, in accordance with the procedures outlined in paragraphs 3 and 4 of this section.

Paragraph 6 1/

The costs for implementing these procedures shall be borne by the requesting State.

VERIFICATION AND COMPLIANCE

Paragraph 1

First alternative

A State Party may lodge a complaint with the Depositary in case it believes that any other State Party acted in breach of obligations deriving from this Treaty. Such complaint shall include all relevant information and all possible evidence supporting the validity of the complaint. This complaint procedure should not exclude others than through the Depositary.

Second alternative

A State Party may lodge a complaint with the Depositary in case it believes that a nuclear facility on its territory has been attacked or is under threat of attack by any other State Party in breach of obligations deriving from the provisions of the Treaty. Such a complaint shall be accompanied by all possible evidence and other relevant information supporting the validity of the complaint.

1/ Views were expressed that this provision calls for further discussion.

Paragraph 2

First alternative

Within ... days of the receipt of a complaint from any State Party the Depositary shall initiate an investigation to ascertain facts relevant to the complaint. Such an investigation may include a fact-finding mission to or at the site of the nuclear facility concerned and to any other site as may be appropriate. The fact-finding mission shall submit its findings to the Depositary within ... days.

Second alternative

Within ... days of the receipt of a complaint from any State Party concerning an attack on a nuclear facility, the Depositary shall initiate an investigation of the alleged attack, including arrangements for a fact-finding mission on or at the site of the nuclear facility involved to ascertain the facts. The fact-finding mission shall submit the summary of its findings of fact to the Depositary at the earliest possible date.

Paragraph 3

For purposes of carrying out a fact-finding mission the Depositary shall maintain a list of qualified experts, selected on as wide a geographical basis as possible, whose services may be available to undertake such missions.

Paragraph 4

States Parties undertake to co-operate in carrying out the investigation which the Depositary may initiate on a complaint received from any State Party. The Depositary shall inform the States Parties of the results of the investigation.

Paragraph 5

First alternative

The Depositary shall, upon request of a State Party, convene the Conference of States Parties to consider the report on the investigation as well as possible courses of action.

Second alternative

The Depositary shall immediately convene the Conference of States Parties to consider the report on the investigation and to adopt such measures as may be appropriate.

Paragraph 6

First alternative

The continuing application of IAEA safeguards at a nuclear facility will form an essential part of the arrangements to verify that the facility is a peaceful nuclear facility within the meaning of the Treaty. 1/ 2/

Second alternative

The determination that a facility is and remains a peaceful nuclear facility within the meaning of the Treaty shall be made by the application of IAEA safeguards. 1/ 2/

Third alternative

The application of IAEA safeguards to a nuclear facility shall be of no relevance to the verification of compliance with obligations assumed by States Parties to this Treaty.

OTHER MAIN ELEMENTS

Paragraph 1

A State Party may mark its nuclear facilities included in the Register with Special Marking.

Paragraph 2 3/

States Parties undertake to provide or support assistance to any State Party harmed as a result of the violation of the Treaty.

Paragraph 3

Provisions of this Treaty are without prejudice to the obligations of State Parties undertaken in other international instruments relevant to the subject of this Treaty.

Paragraph 4

The Secretary-General shall be designated as Depositary of this Treaty.

1/ It was stated that the application of IAEA safeguards was irrelevant to the objectives of this Treaty and that if anyway addressed, the issue belonged under the provisions for inclusion in the Register.

2/ The view was expressed that the application of IAEA safeguards could not verify that a nuclear facility was a peaceful one but rather that nuclear material remained in peaceful use.

3/ A view was expressed that the obligation of States Parties to provide assistance was limited to the radiological damage caused by an attack.

CONFERENCE ON DISARMAMENT

CD/1028*
9 August 1990

ORIGINAL: English

REPORT OF THE AD HOC COMMITTEE ON EFFECTIVE INTERNATIONAL ARRANGEMENTS TO ASSURE NON-NUCLEAR-WEAPON STATES AGAINST THE USE OR THREAT OF USE OF NUCLEAR WEAPONS

I. Introduction

1. At its 532nd plenary meeting on 6 February 1990 the Conference on Disarmament decided to re-establish for the duration of its 1990 session, an ad hoc committee to continue to negotiate with a view to reaching agreement on effective international arrangements to assure non-nuclear-weapon States against the use or threat of use of nuclear weapons. It further decided that the Ad Hoc Committee would report to the Conference on the progress of its work before the conclusion of the 1990 session (CD/964).

II. Organization of work and documents

2. At its 532nd plenary meeting on 6 February 1990, the Conference on Disarmament appointed Ambassador Andrea Negrotto Cambiaso of Italy as Chairman of the Ad Hoc Committee. Mr. V. Bogomolov, Political Affairs Officer, United Nations Department for Disarmament Affairs, served as Secretary of the Ad Hoc Committee.

3. The Ad Hoc Committee held 5 formal and informal meetings between 13 March and 2 August 1990.

4. At their request, the Conference on Disarmament decided to invite the representatives of the following States not members of the Conference to participate in the meetings of the Ad Hoc Committee during the 1990 session: Austria, Bangladesh, Democratic People's Republic of Korea, Finland, Greece, Iraq, Malaysia, New Zealand, Norway, Oman, Portugal, Republic of Korea, Spain, Switzerland, Syrian Arab Republic, Tunisia, United Arab Emirates, Uruguay, Viet Nam and Zimbabwe.

5. The following new document was submitted to the Conference in connection with the item during the 1990 session: CD/967 dated 14 February 1990 submitted by Nigeria entitled "The Text of a proposed agreement on the Prohibition of the Use or Threat of Use of Nuclear Weapons against Non-nuclear States Parties to the Treaty on the Non-Proliferation of Nuclear Weapons".

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*Re-issued for technical reasons.

1601P GE.90-62460

III. Substantive Work

6. Immediately after the re-establishment of the Ad Hoc Committee and his appointment and between the formal meetings, the Chairman carried out numerous informal consultations with the delegations and group co-ordinators. He attempted to find a possible constructive idea for the solution of the issue of negative security assurances, which has eluded the Conference for 11 years.

7. It proved difficult at this stage to identify common ground likely to lead to the desired solution. However there emerged a general belief that current political developments could favour the creation of a context more conducive to progress in the work of the Ad Hoc Committee.

8. In the general exchange of views it was pointed out by the Group of 21 that the question of negative security assurances had been raised and pursued by most non-nuclear-weapon States in various forms and at different international gatherings since the mid-1960s. The subject has been under negotiation in the Conference on Disarmament since the late 1970s but its initial promise has petered out and it has been stagnating for the last few years. The Group reiterated its belief that the most effective guarantee against the use or threat of use of nuclear weapons was nuclear disarmament and the prohibition of nuclear weapons. It considered that since nuclear weapons are weapons of mass destruction, the non-nuclear-weapon States should be given unconditional and legally binding assurances on a non-discriminatory basis against the use or threat of use of nuclear weapons. In its view, the non-nuclear-weapon States have voluntarily renounced the nuclear option in the expectation that the States possessing nuclear weapons would follow suit. This has not happened and neither have they received comprehensive legally binding assurances from the nuclear weapon States against the use or threat of use of such weapons. It was therefore necessary that the concerned nuclear weapon States should respond in a positive manner to the repeated calls of the non-nuclear-weapon States for negative security assurances which were necessary for achieving a universal non-proliferation régime in all its aspects.

9. The Group of 21 felt that there was agreement amongst the nigh totality of the Member States of the United Nations States to the idea of an international convention to reach agreement on effective international arrangements to assure non-nuclear-weapon States against the use or threat of use of nuclear weapons. This has been borne out by what had been embodied in successive resolutions of the United Nations General Assembly. The Group

expressed an opinion that these resolutions reaffirmed the urgent need to reach an agreement on effective international arrangements to assure non-nuclear-weapon States against the use or threat of use of nuclear weapons; appealed to all States, especially the nuclear weapon States, to demonstrate the political will to reach an agreement on a common formula that could be included in an international instrument of a legally binding character and recommended that the CD should actively continue negotiations on this subject, including the consideration of any other proposals designed to secure the objective before it.

10. The same Group was of the view that these resolutions should form the starting point of the Committee's negotiations and that the general consensus on the common formula approach should not be undermined and efforts should be made to resume the search for an agreeable solution from that point.

11. The same Group felt there was a general agreement that in order to get the process moving, a review of positions was required not by the Group of 21 nuclear weapon have-nots but by nuclear weapon States who should realize the necessity of responding positively to the legitimate concerns of the non-nuclear weapon States. This necessity has been brought into sharper focus in the context of the statement by the two major nuclear weapon States that "nuclear war cannot be won and must never be fought" and of the recent evolutions of doctrines relating to nuclear weapons.

12. The Group of 21 expected some forward movement in this area of vital interest to them in accordance with the recommendations of the UNGA resolutions, particularly at a time when so many positive developments are visible in other areas of disarmament.

13. One State which does not possess nuclear weapons expressed its dismay at the lack of progress in the work of the Ad Hoc Committee given the widely recognized existence of an improved international atmosphere. This delegation stated that the international setting against which the unilateral assurances had been made several years ago were diametrically opposed to the present climate of co-operation. In this regard it made reference to recent pronouncements by both military alliances that indicate that there exists, at that level, the willingness to no longer consider the counterpart as an enemy, in spite of the continuing existence of nuclear arsenals on each side. In view of this, according to the delegation of this State, the elaboration and conclusion of unqualified assurances for the benefit of those States who do

not possess nuclear weapons should be the natural corollary of the above-mentioned climate of co-operation and easing of tensions at the international level.

14. A number of delegations, including the delegation of a State possessing nuclear weapons, confirmed their conviction that nuclear disarmament and the complete elimination of nuclear weapons represent the most effective and promising guarantee against the use or threat of use of nuclear weapons. They underlined that States not possessing nuclear weapons and not having them on their territory, are fully entitled to reliable international legal guarantees for their security, i.e., guarantees that nuclear weapons will not be used against them and they referred to the unilateral statements of two States possessing nuclear weapons - that they would not be the first to use nuclear weapons. Expressing readiness to participate actively, together with the other participants in the negotiations, in the search for solutions based on a common formula and agreeing with the approach of the delegations that give their preference to a multilateral international document of a binding character as compared to unilateral statements, these delegations expressed the view that it was necessary to consider similar or intermediate measures that would contribute to the creation of sound, clear-cut and genuine guarantees for the non-nuclear-weapon States based on a balance of interests of all States concerned. Such intermediate measures, according to them, could include, for instance, the prohibition of the use of nuclear weapons against all States - including those that have no such weapons; the creation of nuclear weapon-free zones as an effective means of ensuring the necessary prerequisites for nuclear-weapon States to assume obligations not to use nuclear weapons against States belonging to such zones. The same delegations expressed the hope that all States possessing nuclear weapons, as well as other States, will show the necessary flexibility and will find a mutually-acceptable solution to the problem of guaranteeing the non-nuclear weapon States against the use or threat of use of nuclear weapons.

15. A number of delegations, including three nuclear-weapon States, recalled their comprehensive views set forth previously in the Ad Hoc Committee. They welcomed the high level of interest of the international community in the question of assurances for non-nuclear-weapon States against the use or threat of use of nuclear weapons and in this context noted the continued willingness of all to search for further improvements to the existing situation. They noted, however, that negative security assurances touch upon the fundamental

security of all States and that, consequently, decisions in this area cannot be taken lightly. Given the wide range of security concerns faced by States and the variety of measures available to confront them, the search for a single solution has eluded the Committee so far. Nonetheless, these delegations pointed out their readiness to continue that search although they did not accept the premise that without a single common formula nothing had been achieved. In this regard, they recalled that all five nuclear-weapon States had given solemn assurances about the non-use of nuclear weapons against non-nuclear-weapon States. They observed that most non-nuclear weapon States, in practice, should find themselves covered by all five negative security assurances, even though the different concerns of the nuclear-weapon States had obliged them to word their assurances differently, and to vary the qualifications they had applied. While some of those delegations expressed particular sympathy for the view of Members of the Committee who are parties to the Treaty on the Non-Proliferation of Nuclear Weapons that their own renunciation of nuclear weapons called for a response in an equally binding form, they pointed out that one of the difficulties in coming to a single common formula for negative security assurances is that the same assurances would be offered to all States, including those who refused to give a binding form to their non-proliferation undertakings. These States reiterated that the existing assurances, whilst not enshrined in a treaty or convention, nevertheless were solemnly given and are not to be considered as having no weight; they stand as firm, credible and reliable commitments. One of those three nuclear weapon States at a plenary meeting reiterated its oft publicly stated commitment not to use nuclear weapons against any non-nuclear-weapon State, party to the NPT or any comparable internationally binding commitment not to acquire nuclear explosive devices, except in the case of an attack on this State, its territories or armed forces, or its allies, by such a State allied to a nuclear-weapon State or associated with a nuclear-weapon State in carrying out or sustaining the attack.

16. Another of those nuclear weapon States recalled that its unilateral declaration of negative security assurance was based on the principles of its constant defence policy and of the Charter of the United Nations. It considered that a legally-binding commitment in an international instrument should be mutual, derive from the principle of non-use of force except for self-defence and take account of the real military situations of States.

17. One nuclear-weapon State considered it entirely reasonable and legitimate for the non-nuclear-weapon States, who were committed not to possess nuclear weapons in various ways, to demand that nuclear-weapon States undertake not to use or threaten to use nuclear weapons against them. It also expressed its hope to expedite the search for a common formula which would meet the needs of security of the non-nuclear-weapon States in this regard, and its support of the conclusion of an international convention which could genuinely prevent the use or threat of use of nuclear weapons against non-nuclear-weapon States and nuclear-weapon-free zones. It stated that it would welcome any constructive initiative agreeable to non-nuclear-weapon States. This same State was of the view that the most effective security guarantee for non-nuclear-weapon States against the use or threat of use of nuclear weapons was the complete prohibition and total elimination of nuclear weapons. Pending the achievement of this goal, this State believed that all nuclear-weapon States should undertake not to use or threaten to use nuclear weapons against non-nuclear-weapon States and nuclear-weapon-free zones under any circumstances. The same State reiterated its commitment that at no time and under no circumstances would it be the first to use nuclear weapons and that it would not use or threaten to use nuclear weapons against non-nuclear-weapon States.

18. Discussions on the conclusions that could be drawn from the work of the Committee this session of the possibilities of reaching agreement on a common formula to guarantee non-nuclear-weapon States against the use or threat of use of nuclear weapons had again proven inconclusive. Some delegations underlined the importance of making progress on these issues, in the light of the forthcoming Fourth Review Conference of the States parties to the Treaty on the Non-Proliferation of Nuclear Weapons.

IV. Conclusions and recommendations

19. The Ad Hoc Committee reaffirmed that non-nuclear-weapon States should be effectively assured by the nuclear-weapon States against the use or threat of use of nuclear weapons pending effective measures of nuclear disarmament. Work on the substance of the effective arrangements and discussion on various aspects and elements of a solution, together with the series of informal consultations by the Chairman revealed that specific difficulties relating to differing perceptions of security interests of nuclear-weapon States and non-nuclear-weapon States persisted and that the complex nature of the issues

involved continued to prevent agreement on a "common formula". In the course of the year many positive political changes were underway which were expected to have a bearing on the search for possible solutions. At the same time, the discussion underlined that all delegations supported and reaffirmed their readiness to continue the search for a common approach on the substance of negative security assurances and, in particular, on such a "common formula".

20. Against the aforementioned background the Ad Hoc Committee recommends to the Conference on Disarmament that ways and means should continue to be pursued in the light of the on-going and future developments to overcome the difficulties encountered in its work in carrying out negotiations on the question of effective international arrangements to assure non-nuclear-weapon States against the use or threat of use of nuclear weapons. Accordingly, it was generally agreed that the Ad Hoc Committee should be re-established at the beginning of the 1991 session.

CONFERENCE ON DISARMAMENT

CD/1029
CD/CW/WP.318
8 August 1990

ENGLISH
Original: FRENCH

FRANCE

REPORT ON A TRIAL CHALLENGE INSPECTION

1. INTRODUCTION

France considers that challenge inspection (or inspection on request), anywhere, at any time, without right of refusal, constitutes the keystone of the future convention on the prohibition of chemical weapons.

The legitimate concern for security that is felt by any sovereign State has led the French Government to consider how this triple obligation could be applied in practice on its territory, in all cases.

As has been clearly shown by the trials carried out by several countries, and in particular by the United Kingdom, understanding and development of the relevant parts of the convention can be greatly facilitated by the lessons to be drawn from trial inspections.

In this spirit, France carried out, on 6 and 7 June 1990, an initial trial challenge inspection exercise at a military facility that is not particularly sensitive in character. It is therefore planned shortly to carry out further inspections of this type at facilities that are vital to national security.

The conduct of this trial inspection and the first comments that may be made on the procedure followed are presented in this document.

2. OBJECTIVES

The objectives of this first exercise were:

- to evaluate the security implications of challenge inspections for a military facility;

- to identify means of protecting legitimate national security interests, in particular sensitive information unrelated to chemical weapons, while at the same time demonstrating respect for the convention;

- to draw the necessary lessons for improvement of the provisions of the convention relating to this type of inspection from the standpoint of each party concerned: the international Organization and the Inspectorate, the challenging State and the challenged State;

- to develop national arrangements for fulfilment of the obligations arising from the convention while facilitating the work of the various teams during an inspection of this type.

3. DESCRIPTION OF THE FACILITY

The inspection took place at an army ammunition depot having an area of 80 hectares. It includes one sector with administration and accommodation buildings and another sector with 100 ammunition stores and a multipurpose workshop. The depot has several road and railway access points. It is entirely enclosed by security fencing.

4. COMPOSITION OF THE TEAMS

The representation of the various parties was as follows:

(a) The inspection team consisted of:

- one team leader;

- one "sensitive point" specialist;

- one ammunition specialist;

- one chemist/expert in chemical warfare agents;

- one specialist in the inspections to be carried out under the future treaty on conventional forces in Europe (CFE).

In addition, there was a technical team composed of:

- a chemist specialized in the taking of samples and the detection of chemical weapons;

- an assistant for the sampling;

- two gamma radiography equipment operators.

(b) The challenged State had appointed two members of the national authority, in this instance:

- a representative of the Ministry of Foreign Affairs;

- a member of the French delegation at Geneva.

(c) An observer for the challenging State.

(d) A team of escorts appointed by the facility.

(e) Observers for various ministries and other bodies.

5. PREPARATION FOR THE INSPECTION

The exercise was conducted on the basis of the relevant provisions of the rolling text (CD/961 of 1 February 1990), including the Protocol on Inspection Procedures, taking into account the results of the trial inspections carried out by other countries.

It was assumed that the national authority was given 12 hours notice of the inspection. The notification indicated the point of entry, the time of arrival, the list of inspectors, and the name of the observer for the challenging State. The exact location of the site to be inspected and the reason for the inspection, namely suspected storage of chemical weapons, were deemed to have been notified at the point of entry.

The team of inspectors had been assembled several days beforehand to receive specific instructions concerning the rolling text and the conduct of challenge inspections. At that time each member of the team was given a guide outlining the rights and duties of inspectors.

The depot's commanding officer had previously been informed of the provisions of the rolling text and had been requested to take the necessary arrangements to select and train the escorting personnel and to draw up special instructions for all the personnel of the facility.

6. CONDUCT OF THE INSPECTION

The duration of the exercise was nine hours, spread over three half-days.

6.1 BRIEFING

The team of inspectors was met at the site by representatives of the national authority and the director of the facility. At the start of the initial meeting, the head of the team of inspectors indicated the terms of reference of the inspection.

The director then gave an introduction to the facility, which was described in a dossier given to the inspectors, and outlined the security rules to be observed during the visit to the area and to the ammunition stores.

The inspectors then asked a number of questions. Some of these were considered, either by the director of the facility or by the representative of the national authority, to be unrelated to the purpose of the inspection and were therefore not answered.

6.2 THE INSPECTION PLAN

The inspection plan, prepared by the inspection team without the presence of the observer, was then submitted, for any necessary amendments, to the director of the facility and the representatives of the national authority. The plan was modified, as required, during the course of the inspection, with the agreement of all the parties.

6.3 VISITS TO THE SECTORS

The site was not secured and the access points were assumed to be supervised by appropriate means. The teams then made a complete tour of the site by coach and this first visual inspection enabled them to note external signs of possible interest for the subsequent inspection.

For the first part of the inspection the team of inspectors was divided into two subteams:

- One subteam visited the administrative sector, where it was allowed access to the records. It then visited the accommodation sector (living quarters, infirmary, first aid facilities, etc.).

- The other subteam checked the 10 storage warehouses, basing its choice either on the external appearance of the buildings or on the type of ammunition stored. Specialized workshops, the motor vehicle workshop and various sheds were then also visited.

During the second part of the inspection, the entire team remained together and carried out further visits of the stores.

The inspectors had "polaroid"-type cameras. Photographs were taken, at the request of the inspectors, either by a member of the facility's personnel or by a member of the national authority. On each occasion, two photographs were taken, one for the inspectors and the other for the facility.

Only the escorting team carried radio equipment, which was needed for communication between the various groups.

Throughout the inspection, the inspectors addressed questions to the escorting personnel appointed by the director of the facility at the initial meeting. The representative of the national authority intervened, where necessary, during these discussions.

The observer for the challenging State accompanied the inspection team (or the subteam visiting the stores) throughout the visit. However, he was not allowed to enter certain stores or to take notes.

6.4 SAMPLING AND ANALYSES

(a) At the request of the inspectors, several types of ammunition were transferred to a specialized workshop for the packing to be opened and for visual observation of the characteristics of the contents.

(b) The sampling team had at its disposal the following:

- two field devices for detection of chemical weapons

- a sampling kit composed of three items:

  * a case with equipment for taking samples of liquids, gases and solids;

* a case for the transport of samples to analysis laboratories while maintaining them at a temperature below 0°C;

* a "power" case containing thermal welding equipment and transformers for converting any source of electrical energy to 12 volts. Connection of this case with the transport case increases the range of the latter.

(c) The following samplings and analyses were carried out by means of this equipment:

- Air samples were taken with a "Tenax" tube in several buildings and TCT-GCMS analyses were carried out;

- Water samples were taken from a pond and from a tank and extracts were analysed by gas chromatography with NPD and FID detectors;

- A decontaminant solution was analysed by the MS and NMR methods and by potentiometry.

All the analyses were carried out in a laboratory outside the site.

(d) One piece of ammunition was examined by gamma radiography, but a rather long exposure (one to one and a half hours) was needed, with a radiological security radius of 150 metres.

6.5 CONCLUSIONS OF THE INSPECTION

The inspection team considered that the inspection procedures followed were adequate to detect with great certainty the presence of chemical weapons on such a site.

The team prepared a brief report which mentioned the various verifications carried out and indicated that the investigations had not led to detection of the presence of chemical weapons on the site.

7. COMMENTS AND PROPOSALS

7.1 ANNOUNCEMENT OF INSPECTION

Although the shortness of the period between notification of the inspection to the inspected State and the arrival of the inspection team at the site is one of the factors that determines the effectiveness of the inspection, the challenged State must be allowed a minimum amount of time to make all the necessary arrangements for taking charge of the inspectors at the point of entry and preparing for their reception at the site.

7.2 THE INSPECTION PLAN

After the inspection plan (which must be fairly flexible) has been prepared by the inspection team (possibly in the presence of the observer, see para. 7.5 below), it is important that it should be discussed with the director of the facility and the representative of the national authority, so that any necessary adjustments may be made and the transport and communications arrangements may be well co-ordinated.

In particular, whether because of the large number of buildings on the site or in order to protect confidential information, it is useful to draw up a system providing for access to a limited number of buildings only, that will be dissuasive for the purposes of the site inspected and reasonable in terms of the duration and cost of the inspection. The system of selective or random access proposed by the United Kingdom (CD/1012 of 11 July 1990) meets these two requirements.

7.3 SECURING THE SITE

Sites that may be subjected to a challenge inspection will in most cases probably be fence-enclosed facilities. Even where this is the case, it seems difficult to secure the site completely, unless there is a large number of inspectors and assistants or there are appropriate sealing devices, which will probably be very costly.

The question therefore arises whether securing the site at the start of the inspection is necessary. In the case of this trial inspection, considerable quantities of ammunition, which could have been chemical weapon ammunition, might, within a 12-hour period, have been moved out by rail. The same applies to compromising records. It is conceivable that a country having to conceal a prohibited activity would take the necessary measures to evacuate the site on time.

In order to detect a prohibited activity, therefore, it is preferable to rely on the difficulty of cleaning up a chemical storage site and on the evaluation of secondary characteristics of the facility that may be linked with an earlier presence of chemical weapons.

7.4 ON-SITE TRANSPORT AND COMMUNICATIONS

The logistical problems must not be underestimated. Separation of the inspection team into two subteams and allowing the sampling team and perhaps the team responsible for non-destructive analyses to operate independently make it necessary to have considerable transport and communications facilities, as well as sufficient escort personnel. It would seem preferable to set up a central co-ordination post with communication links to the vehicles, to the escorting personnel and, if necessary, to the inspectors - although the latter should in fact have their own means of communication. It is also necessary to provide for the movement of ammunition either within a warehouse or to a specialized workshop.

The obligations of the challenged State in the matter of transport, communications and provision of premises and specialized equipment must be clearly established in order to avoid any delays or controversy.

7.5 THE OBSERVER

The presence of the observer is necessary as a confidence-building measure, but his activities must be clearly and specifically defined and delimited in the inspection procedures.

The observer may be present during the briefing on the site by the director of the facility. He should not attend the question-and-answer session following the briefing, since any refusal of the director to answer a

question might provide him with information. However, he should participate in the drawing-up of the inspection plan or be informed by the chief of the inspection team concerning the proposed inspection plan and any later modification of it. He should also be entitled to make suggestions which the head of the team will be free to accept or reject.

It is recommended that a representative of the national authority and a member of the escorting team should remain continuously with the observer, possibly using a separate vehicle. The observer should have access only to the premises and places authorized by the representative of the national authority.

The observer's only interlocutors should be the head of the inspection team and the representative of the national authority.

7.6 RESTRICTIONS ON ACCESS

Only ordinary measures restricting access were evaluated during this exercise, e.g. denial of access to the detailed stock inventory, removal of notices and of certain exposed items, locking-up of documents and use of non-destructive methods for examining ammunition.

All these ordinary measures must be reviewed for each type of facility likely to be subjected to a challenge inspection.

8. CONCLUSIONS

From this first exploratory trial of a challenge inspection the first lessons can be drawn regarding the validity of this type of inspection in the case considered and the constraints it imposes on the inspected State.

For the type of facility chosen, the inspection methods followed would make it possible to confirm with great certainty the non-presence of chemical munitions. It will be necessary, however, to develop and test mobile equipment for analysing samples and equipment for non-destructive testing.

It will be necessary accurately to define the role and the rights of the observer.

The State party must take appropriate measures in order to meet the requirements of security at each facility liable to be inspected. The cost of these measures is still difficult to evaluate but it is certainly not negligible.

It will be necessary to carry out other trials of this type, particularly at highly sensitive facilities.

CONFERENCE ON DISARMAMENT

CD/1030/Rev.1
CD/CW/WP.319/Rev.1
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Original: ENGLISH

CANADA

REPORT ON A NATIONAL TRIAL INSPECTION

INTRODUCTION

In 1988, the Ad Hoc Committee on Chemical Weapons at the Conference on Disarmament encouraged a programme of national trial inspections in support of the negotiations in Geneva. In November 1989, the first Canadian trial inspection was carried out at a simulated single small-scale facility at the Defence Research Establishment, Suffield, reported as CD/987. As a continuation of its national effort, a second Canadian trial inspection was carried out at a pharmaceutical facility. This inspection involved consumption of a chemical which, for the purposes of the inspection, was designated as a Schedule 2 chemical.

Routine verification of the consumption of a declared Schedule 2 chemical will require information concerning the arrival of such chemicals at the facility, their storage, their reaction or other processing and their final disposal, either through conversion or removal from the facility through sales, etc. A facility agreement, once negotiated, will define the parameters of "arrival" and "disposal" of declared Schedule 2 chemicals. Inspectors will be guided in their activities by this agreement. The basis for the provision of information by the facility will be established in the Chemical Weapons Convention (CWC), particularly in relation to the details of the required declarations.

Information "beyond the walls" of the facility will not necessarily be available to inspectors - information, that is, concerning suppliers to, or clients of, the facility, on the basis that such information:

(a) goes beyond that relevant to the routine inspection of Schedule 2 declarations produced or consumed at that facility; and

(b) may compromise confidential business transactions, to the detriment of the company's legitimate commercial interests.

INSPECTION AIMS

The purpose of the Canadian trial inspection was:

(a) to involve a commercial facility in the national trial program by examining the value of using an audit trail to verify compliance;

(b) to assess the impact of an audit trail inspection on confidential business information; and

(c) to investigate the use of quality control procedures and equipment as they might be required and available in support of such inspections.

INSPECTION TYPE

The trial inspection was carried out in a multipurpose pharmaceutical site at the MERCK FROSST CANADA INC. facilities in Pointe Claire, Quebec. The inspection followed the procedures associated with a routine inspection for verification of annual declarations of Schedule 2 chemicals.

INSPECTION TEAM

The inspection team was composed of a team leader and four inspectors. It included an industrial chemist, two analytical chemists an organic chemist and an experienced pharmaceutical auditor. There were also a number of observers from government departments as well as one from the Netherlands Ministry of Foreign Affairs. Two of the observers represented the National Authority.

ADVANCE ACTIVITIES

Planning for the trial involved the visit of a smaller group to the facility in advance to define the purpose of the inspection and make arrangements. Emphasis was placed on examination of the audit trail for consumption of a simulated Schedule 2 chemical and on the use of the Quality Control Laboratory in the facility. A partial Inspection Agreement was drawn up following the requirements for a

routine inspection to verify the annual declaration of a Schedule 2 chemical. The chemical selected as a pseudo Schedule 2 chemical for purposes of the trial inspection was methyl-p-hydroxybenzoate (common name: methyl paraben). Methyl paraben is consumed at the facility by compounding it into an intermediate product and 10 pharmaceutical products. All pharmaceutical products contained a low percentage of the chemical (less than 5 %) which was considered to remove it from further concern.

In the absence of a full negotiated facility agreement, the company provided information on a voluntary basis about manufacturing methods and types of products manufactured at the facility. A flow chart described the path of the chemical through the facility, from receiving to eventual release for sale. Floor plans were provided to show the areas relevant to the consumption of the Schedule 2 chemical for routine verification purposes. An organizational chart was also provided in advance, showing the names and responsibilities of company officers.

The site was a facility where a variety of mixtures of chemicals could be prepared and this was clearly documented in the plans received. Access was provided to the Receiving, Quarantine, Chemical Dispensing and Liquid Preparation (Manufacturing) areas and to the Quality Assurance Laboratory.

OPENING CONFERENCE

An opening conference was held to inform all participants of final details of the trial and to carry out last minute exchanges of information. All members of the inspection team (including observers) were required by the company to sign a non-disclosure agreement prior to the opening discussion. The company also required that inspectors and observers adhere to the code of Good Manufacturing Practice (GMP) (safety, clothing, etc.), as established in the Standard Operating Procedures of the company and the GMP Guidance of the Health Protection Branch of Health and Welfare Canada. The purpose and timing of the visit was communicated to company personnel only one day before the event to give the inspection a "short notice" character.

INITIAL TOUR

Immediately after the opening conference, the team received a tour of those parts of the facility relevant to the inspection. Except for flammable solvents, which were stored in the open, all other relevant chemicals were stored in the warehouse building and were available for inspection

as necessary. Due to the lack of the necessary safety provisions, it was clearly evident that volatile Schedule 1 chemicals could neither be produced nor stored in the facility.

After the general tour, the team was split into two groups: one to carry out a more detailed physical inspection of the facility, to examine quality control procedures, and to carry out sampling and analysis; the other to carry out the audit of records concerning the receipt and consumption of methyl paraben.

INSPECTION OF FACILITIES

The facility was found to be a typical pharmaceutical formulation plant. Quality Control and Quality Assurance (QC/QA) analysis was carried out in accordance with United States Pharmacopeia (USP) procedures and internal company protocols. Most final products containing methyl paraben were not routinely analyzed for their methyl paraben content. Control of the content was normally carried out by the careful weighing of the material that was added to formulations or by volumetric measuring of stock solutions.

Samples of every batch of each product made during the past 10 years were retained in storage for legal purposes. A small preparation laboratory was found to use reaction vessels up to 22 L in size and had a walk-in fume cupboard. This area was judged by the inspectors as unsuitable for the preparation of Schedule 1 chemicals.

The main analytical laboratory was equipped with UV spectrophotometers, a variety of high-pressure liquid chromatography units with photodiode array detectors, gas chromatographs, dissolution testers, an atomic absorption spectrometer, a small electron microscope, equipment for performing moisture content determinations and other general laboratory equipment. An infrared spectrophotometer was available, but was not seen during the inspection due to reconstruction underway in that part of the laboratory. Neither nuclear magnetic resonance spectroscopy nor mass spectroscopy was available on site. Facility representatives indicated that these techniques could be employed by arrangement with a nearby research laboratory.

Inspection of the liquids area revealed the presence of a number of reactors (2400, 2300 and 1200 litres) and mixing tanks. A close inspection of this equipment confirmed that volatile Schedule 1 chemicals could not be produced with them. However, it appeared feasible to prepare solid toxic chemicals as well as precursors in the area. There appeared to be a capability to handle allergenic and other physiologically active materials in separate rooms reserved

for such preparations, and some safety equipment was available there. However, only very simple chemical processes could be carried out.

AUDIT ACTIVITIES

The records made available to the inspection team included: raw materials (quantity received); manufacturing records (registers); and sales. The team was not denied access to any records and few attempts were made by the company to black out information. The audit followed methyl paraben from Receiving/Quarantine through compounding, packaging and sales in terms of "total in. total out", while, one end product and the intermediate product were followed in detail.

Confidence in the audit was strengthened by the observation that records were filed independently by receiving, manufacturing, QA/QC and accounting; records were cross-referenced by date, raw material number, batch and lot numbers; and records were initialed by the personnel responsible for each stage of the manufacturing process.

The audit accurately described the operations of the facility and even disclosed some discrepancies which prompted further investigations. However, all differences were explained and were described as being typical of GMP in this industry. The amount of methyl paraben consumed was found to be in acceptable agreement with the raw material audit. Thus, the audit was able to verify the consumption of the pseudo Schedule 2 chemical, methyl paraben.

SAMPLE ANALYSIS

Two samples of end products were taken for analysis. The samples were suggested by the audit team to correspond with their detailed studies. They were analyzed using high-pressure liquid chromatography by facility staff under continuous observation by inspectors skilled in analytical techniques.

The analysis showed the presence of the declared chemical, although some discrepancies in concentration were observed. These losses could be due to a number of factors, including hydrolysis of methyl paraben to p-hydroxy benzoic acid during storage or to the fact that the matrix of the sample was different from that of the analytical protocol. In fact, a poorly retained peak (possibly due to p-hydroxy benzoic acid) was observed in the chromatogram.

The quality of the analytical support provided by the company was excellent. Methods and equipment were quickly

supplied, and the technical support was judged to be of a high standard.

CLOSING CONFERENCE

A closing conference was held, at which the inspection team leader presented a draft inspection report to company representatives who had participated in the exercise.

GENERAL CONCLUSIONS

In accordance with the aims of the practice trial inspection, as set out in the mandate, it was concluded that:

(a) an audit trail can be used to follow a chemical through the established control system governing the chemical's use in the facility;

(b) an audit trail inspection can be carried out without compromising the confidentiality of the facility's commercial interests; and

(c) QC/QA procedures complemented the audit trail within the facility and provided confidence in the conclusions reached by the inspection team on the basis of the audit.

The cooperative attitude of company personnel tended to suggest that the inspection team was regarded as a national team, despite the international dimension lent to it by the presence of a foreign observer. A fully international inspection team might anticipate more hesitation on the part of staff due to uncertainty as to how to react to requests for certain information. This would be particularly true when staff were reacting to requests in an inspection with very short notice. Regular repetition of such inspections should soon overcome many of these difficulties.

SPECIFIC CONCLUSIONS

From an examination of the materials accountancy system and the equipment observed at the facility, the inspecting team concluded that the facility did not produce any Schedule 1 chemicals. The team concluded, however, that in principle it could produce solid physiologically active compounds, although this would require the exercise of additional and extraordinary care before such production could take place. The ability to produce and/or consume liquid toxic compounds was ruled out due to the absence of

suitable containment facilities and the lack of the safety precautions necessary for handling such materials.

The quality control system used by the facility for the simulated compound under investigation is mainly based on weights. This system was found by the inspectors to adequately support the records used in the audit trail of the simulated Schedule 2 chemical.

The company inspected was very generous in its willingness to provide information on request and it made no distinction among members of the team in terms of restrictions. "Blanking out" of information on records and other documents did not prevent the inspectors from concluding that the information received was sound and adequate to the objectives of the inspection. Some information extraneous to that required by the inspectors' mandate was inadvertently acquired by the inspectors, but company representatives suggested that more care would have been exercised if the inspection team had been an international one.

Some minor discrepancies were found between physical and book inventories, and in other areas. These, however, were judged by the inspectors to be normal to the processes used at the facility.

Two working days were involved in the trial inspection, including draft report preparation. It was concluded that more time would be required to carry out a full audit investigation than was available during this trial inspection. More than two of the products should have been followed in the detailed audit. Similarly, more time would be required to carry out a complete quantitative sample analysis.

In order to properly verify mass balances, analyses of chemicals at the various stages, including raw material and intermediate and finished products, carried out on a sound statistical basis, would be required.

RECOMMENDATIONS

At a declared facility inspected on a regular basis, information pertinent to "audit trail" investigations should be made available to inspectors in a way that separates commercial details (i.e., names of suppliers and clients; prices; chemical processes, etc...) from those essential for routine verification (i.e., dates of delivery of Schedule 2 chemicals; amounts received; quantities shipped out; shipping dates; etc...).

The concept of "bar coding" may hold some potential in preserving confidentiality and should be considered. Information regarding commercial details would be held, in coded form, between the company and the National Authority. Inspectors would not have access to this information as part of their audit trail investigation. However, should problems or discrepancies arise in the course of the investigation which the inspectors believe can be resolved only through further information concerning the "supplier route" or the destination of the chemical product upon transfer from the facility, the National Authority could decide to provide this information from the bar codes. The National Authority would reach a decision based on its own assessments of the reasonableness of the request as well as on the requirement generally for the state party to demonstrate compliance.

Another means of preserving business confidentiality which should be considered could be to require a routinely inspected facility to provide the relevant information in the form of a "spread sheet" or "flow chart" as part of its inventory and reporting obligations. In it, information relevant to the audit trail investigations would be detailed, but would be kept free of commercial details. Should uncertainties remain during the inspection concerning the accuracy of the data on the "spread sheets", a more detailed look into the original records could be requested. Such a request would then be on a specific, selected basis, not a wide-ranging one. This would prevent the company from having to delete details of commercial transactions from all original records, in anticipation that inspectors could request them on a non-specific basis.

The time required to perform a complete audit trail inspection of a modern pharmaceutical facility of the size and type examined in this trial could be between 3 and 5 days.

Experts required for this type of inspection should include an analytical chemist, a QA/QC chemist, an audit system expert and a chemical engineer/production chemist.

The facility should be required to include in its initial declaration the analytical chemical facilities that could be put at the disposal of the inspectors. This would help in planning inspections. The use of such facilities would normally be negotiated in the initial visit, however any subsequent equipment changes would be noted in annual declarations.

In the "rolling text" (CD/961) routine verification of Schedule 2 chemicals has tended to concentrate on the production of such chemicals at declared facilities. This exercise focussed on the consumption and compounding of a Schedule 2 chemical at a multipurpose pharmaceutical

facility. Further work should be done on the routine verification of consumption and compounding of scheduled chemicals at similar kinds of facilities.

CONFERENCE ON DISARMAMENT

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CD/CW/WP.320
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ENGLISH
Original: CHINESE

CHINA

Fundamental position and propositions
on challenge inspection

I

The Chinese delegation has all along participated constructively in the work of the Conference on Disarmament and the Ad hoc Committee on Chemical Weapons, one of its subsidiary bodies. On the issue of challenge inspection, it has elucidated its consistent position and put forward positive and concrete suggestions on various occasions. For instance, in his important speech at the plenary meeting of the CD on 27 February 1990, the Chinese Foreign Minister expounded China's principled position on this issue, and on 12 April 1990, at the 551st plenary meeting of the CD, the head of the Chinese delegation further elaborated China's position and suggestions on issues concerning the ongoing negotiation on the convention on chemical weapons. During the 1990 session of the Conference, the Chinese delegation took part in a serious manner in some of the private and open-ended consultations and discussions conducted by the Chairman of the Ad hoc Committee on Chemical Weapons, Ambassador Hyltenius of Sweden, both bilaterally and in a multilateral form. The Chinese delegation has also put forward constructive suggestions and written amendments concerning the Chairman's drafts for consultations on article IX. The Chinese delegation finds it necessary to reiterate its principled position and suggestions, in the hope that they will be seriously considered and objectively reflected.

The Chinese delegation would like to reaffirm its desire to engage in constructive consultations and co-operation with the Chairman of the Ad hoc Committee and all other delegations.

II

It has been China's consistent position to work energetically towards the early conclusion of a convention on the complete prohibition and thorough destruction of all chemical weapons.

It is imperative to ensure the universality, authority and long-term effectiveness of the future convention, so as to enhance world peace and security and contribute to the sound development of international relations.

As one of the measures to ensure its effectiveness, the future convention should establish an effective, reasonable and practicable verification régime, which includes appropriate challenge inspections.

Established to serve the fundamental objective of the future convention, i.e. the complete prohibition and thorough destruction of all chemical weapons, the verification régime, including challenge inspection, should strictly safeguard the purposes and objective of the convention and conform to its scope and provisions both in letter and spirit.

All States parties should be on an equal footing. They undertake the same obligations and should enjoy the same rights. There should be balance between their rights and obligations. This is entirely applicable to the relationship between the requesting and the requested States parties.

The correct and responsible use of the right to challenge inspection can enhance the authority and effectiveness of the future convention. But equally important is the prevention of the possible abuse of this right, so that the objective of the future convention will not be compromised. Therefore, it is necessary, on the one hand, to use challenge inspection as a means of discovering non-compliance with the convention, and on the other, oppose any abuse of challenge inspection and establish appropriate procedures and adopt effective measures to preclude such a possibility.

The actual implementation of challenge inspection is a sensitive act of multilateral international relations. Therefore, the Organization should be given the leading role in the whole process of conducting challenge inspection, which should be in conformity with the commonly recognized norms of international law, including the Charter of the United Nations.

The importance of resolutions of the United Nations General Assembly on verification issues should be stressed. In particular, the fundamental principles on verification contained in the Final Document of SSOD-I and the principles on verification unanimously adopted by the 1988 session of UNDC and endorsed by the forty-third session of the General Assembly should be the guideline and yardstick to be abided by in the formulation of provisions on verification, including challenge inspection.

III

On the basis of these principles, the Chinese delegation reiterates its suggestion, i.e. the provisions of principal, relevant articles and the operational procedures of challenge inspection in the future convention should contain the following elements:

(1) In strict conformity with the purposes and objective of the future convention, challenge inspections should be conducted in any facility, location or installation relevant to compliance with, and the implementation of the convention;

(2) The State party requesting a challenge inspection has the obligation, pursuant to the relevant provisions of the future convention, to provide the Organization, in the request, with convincing reasons for requesting such an inspection and evidence specifying, as precisely as possible, the site to be inspected and the matter to be clarified, including

the nature and degree of suspected non-compliance, and the specific provisions about which doubts about compliance have arisen;

(3) The above-mentioned verification principles adopted by UNDC and endorsed by the General Assembly should be implemented. It is specified in these principles that requests for inspections "should be used only for the purposes of the determination of compliance, care being taken to avoid abuses" and that verification arrangements "should avoid unduly interfering with the internal affairs of States parties or other States, or jeopardizing their economic, technological and social development";

(4) The Organization (e.g., the Technical Secretariat), upon receiving a request for challenge inspection that conforms to the requirements, should immediately communicate the request to the Executive Council, the States members of the Executive Council and the requested State;

(5) The Organization (e.g., the Executive Council) should consider the request for challenge inspection and decide whether the inspection should be carried out. In case of an affirmative decision, it shall elaborate a mandate for the conduct of the inspection;

(6) Such an inspection as is decided upon by the Organization should be carried out by a team of international inspectors, which should not include nationals of the requesting and requested States, in accordance with the prescribed mandate, which the inspection team has no right to modify. Subject to the consent of the requested State party and the inspection team, the requesting State party may send an observer or observers to the inspection site to observe the inspection activities in an appropriate way;

(7) The requested State party has the right and is under the obligation to demonstrate compliance. It also has the right to launch appeals concerning the abuse of the right to challenge inspection, and to provide relevant evidence;

(8) Upon receiving the inspection report submitted by the inspection team, the Executive Council should consider it without delay and decide on whether any non-compliance with the convention or abuse of the right to challenge inspection has occurred and consider and take appropriate actions, including necessary sanctions, to deal with and redress the situation. Decisions of the Executive Council should be immediately notified to the inspected State party, the challenging State party and all States members of the Executive Council and, if necessary, to the Conference of States Parties and the Security Council of the United Nations.

CONFERENCE ON DISARMAMENT

CD/1032

10 August 1990
Original: English

PROGRESS REPORT TO THE CONFERENCE ON DISARMAMENT ON THE THIRTIETH SESSION OF THE AD HOC GROUP OF SCIENTIFIC EXPERTS TO CONSIDER INTERNATIONAL CO-OPERATIVE MEASURES TO DETECT AND IDENTIFY SEISMIC EVENTS

1. The Ad Hoc Group of Scientific Experts to Consider International Co-operative Measures to Detect and Identify Seismic Events, initially established in pursuance of the decision taken by the Conference of the Committee on Disarmament on 22 July 1976, held its thirtieth formal session from 30 July-9 August 1990, in the Palais des Nations, Geneva, under the Chairmanship of Dr. Ola Dahlman of Sweden. This was the twenty-second session of the Group convened under its new mandate by the decision of the Committee on Disarmament at its 48th meeting on 7 August 1979.

2. The Ad Hoc Group continues to be open to all member States of the Conference on Disarmament, as well as upon request to non-member States. Accordingly, scientific experts and representatives of the following member States of the Conference on Disarmament participated in the session: Australia, Belgium, Canada, China, Czech and Slovak Federal Republic, Egypt, German Democratic Republic, Germany, Federal Republic of, Hungary, Iran (Islamic Republic of), Italy, Japan, Kenya, Netherlands, Pakistan, Romania, Sweden, Union of Soviet Socialist Republics, United Kingdom of Great Britain and Northern Ireland and the United States of America.

3. At their request and on the basis of previous invitations by the Conference on Disarmament, scientific experts and representatives from the following non-member States of the Conference on Disarmament participated in the session: Austria, Denmark, Finland, New Zealand, Norway, Spain and Switzerland.

4. Two representatives of the World Meteorological Organization (WMO) also attended the session.

5. Under the current mandate of the Ad Hoc Group, information on national investigations related to the work of the Group has been presented by experts from Australia, Austria, Belgium, Bulgaria, Canada, China, People's Republic of, Czech and Slovak Federal Republic, Denmark, Egypt, Finland, German Democratic Republic, Germany, Federal Republic of, Hungary, India, Indonesia, Iran (Islamic Republic of), Italy, Japan, Kenya, Netherlands, New Zealand, Norway, Pakistan, Peru, Poland, Romania, Spain, Sweden, Switzerland, Union of Soviet Socialist Republics, United Kingdom of Great Britain and Northern Ireland and United States of America.

6. The Ad Hoc Group reviewed the results of experimental activities during Phase 2 of its Second Technical Test (GSETT-2). The Group noted that 25 countries participated in the 19-27 June trial test, which was undertaken as part of a gradual build-up to the envisaged full-scale testing of the system. For the test period, National Data Centers (NDCs) were operated in each of the 25 participating countries, 4 experimental International Data Centers (EIDCs) were operated, and modern international communications links were utilized. Compared to the previous test conducted during January-March 1990, the June test showed improvements in the functioning of all parts of the system. However, the Group noted that there is still a need for further improvements before full-scale testing can be conducted for an extended time period.

7. The participation of 25 countries in the June test represents an increase from the 21 countries which took part in the previous test. The Group noted with satisfaction that a number of additional countries have expressed their intention to take part in future GSETT-2 activities, and are making preparations in this regard. Still, the Group considers even broader participation to be essential, in order to meet the objectives of GSETT-2.

The Group reconfirmed that the main focus of attention in GSETT-2 will be on the exchange of seismic waveform segments (Level II data) and the analysis of those data at EIDCs. Nevertheless, the Group considers that seismic parameter data (Level I data) are also important, and that countries which at present are able to provide seismic parameter data only should also be encouraged to participate.

8. Those countries which participated made considerable progress in extracting seismic data according to the agreed procedures. However, for some countries further development and testing needs to be done in order to improve the procedures at the NDCs and to establish reliable communication between their NDCs and the EIDCs.

9. At the EIDCs, valuable experience was gained during the June test. The Group noted in particular that the seismological quality of the Final Event Bulletins was improved compared to previous tests, but that it is still not satisfactory in all regards.

10. The Ad Hoc Group reviewed results from a meeting of EIDC coordinators held in the United States on 3-8 June, 1990, and agreed to modify the instructions for EIDC procedures in light of the recommendations from that meeting. In particular, the EIDCs will in the future make more extensive use of analysis results obtained at the NDCs, and also place greater emphasis upon processing of seismic waveforms.

11. As suggested by the Ad Hoc Group during its twenty-ninth session, and subsequently approved by the Conference on Disarmament, the Co-ordinator of GSETT-2, Mr. Peter Basham of Canada represented the Group at the meeting 21-28 May 1990 of the WMO Commission for Basic Systems' Working Group on the GTS and provided this Working Group with the requirements for GTS circuits to be tested in GSETT-2. Bilateral arrangements will need to be made in order to ensure reliable communication for those countries which will be using the WMO/GTS during GSETT-2. The Ad Hoc Group will inform the WMO about its time schedule for future testing activities.

12. The Ad Hoc Group also conducted initial discussions on evaluation criteria for GSETT-2, based upon draft guidelines worked out by a specially appointed study group.

13. In the light of the experience accumulated so far the Group revised its preliminary plans and instructions for GSETT-2, and agreed to proceed in accordance with the schedule annexed to this progress report.

14. During the time period until the Group's next session, GSETT-2 will continue with a number of activities, gradually building up to the envisaged full-scale testing of the proposed system concepts:

- New NDCs will be established by countries planning to join the GSETT-2, and communication arrangements between these NDCs and EIDCs will be made.

- New procedures will be worked out and tested regarding processing of Level I and II data at EIDCs.

- Experimental exchange of data for the purpose of testing the communication facilities will be carried out during the period 15 October - 2 November 1990.

15. The Group also discussed the schedule for the full-scale test (Phase 3) of GSETT-2. Phase 3 will be carried out in two parts. The first part will take place from 26 November - 9 December 1990, and will involve exchange of data from all participating stations for 7 consecutive data days and processing of these data at the four EIDCs. The main phase of GSETT-2, involving continuous full-scale testing over an extended period of time, will be conducted during the first half of 1991.

16. The Ad Hoc Group suggests that its next session, subject to approval by the Conference on Disarmament, should be convened from 11-22 February 1991.

Annex

Schedule of Remaining GSETT-2 Activities

August 1990 until end of Phase 3

- EIDC facilities remain open for development and testing of NDC-EIDC and inter-EIDC communications links and establishment of correct message formatting by NDCs.

- NDCs conduct practical tests to establish appropriate NDC-EIDC connections.

15 October - 2 November 1990

- Experimental exchange of data for the purpose of testing the message formats and communication facilities according to instructions provided in CRP/190/Rev.4.

26 November - 9 December 1990

- Preparatory test for full-scale experiment - all procedures will be tested for the seven consecutive data days 26 November - 2 December.

11-22 February 1991

- Thirty-first GSE session in Geneva to evaluate progress and plan the Phase 3 full-scale experiment.

1 April-26 May 1991 (tentative)

- Phase 3 full-scale experiment for 56 consecutive data days.

July/August 1991

Phase 4:

- Thirty-second GSE session in Geneva to evaluate GSETT-2 and prepare a report to the CD.

Evaluation:

- Comments and suggestions to the draft questionnaires distributed by the study group on evaluation should be returned to the convenor, Dr. Hans-Peter Harjes of the Federal Republic of Germany before 30 September 1990.

- Revised questionnaires will be distributed and are to be filled out by participants, on a voluntary basis, during the 26 November - 9 December test.

- Completed questionnaires should be returned to the convenor before 31 December 1990.