

**Preparatory Commission for the
Comprehensive Nuclear Test-Ban
Treaty Organization**

CTBT/PC/I/10/Rev.2
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Geneva, 3-11 March 1997
Agenda item 12

ESTABLISHMENT OF THE NECESSARY SUBSIDIARY BODIES

Revised draft decision

Working Group B

The Preparatory Commission

- (a) Establishes Working Group B to assist the Preparatory Commission in the examination of verification and authorizes it to establish expert groups as required;
- (b) Appoints ... to chair the Working Group;
- (c) Decides that Working Group B should use the attached Work Programme as the basis for its work.

**Draft Work Programme on Verification: Working Group B (WG B)
and Provisional Technical Secretariat (PTS)**

CTBTO Prepcom Friend of the Chair on Verification

The Work Programme presented in this paper is based on the tasks for WG B and the PTS outlined in Prepcom Document CTBT/MSS/L.1, in particular paragraphs 8 (c), 12, 13, 14 and 15 and Annex I.

The verification work will be carried out both within WG B and the PTS. WG B is to support the Prepcom by making recommendations on goals and tasks for the build-up of the system over time, and by making assessments of the cost implications and defining requirements and technical specifications where needed. WG B should further assist the Prepcom in monitoring the progress in the PTS. The PTS is to execute the tasks given to it by the Prepcom. It will carry out the practical work of establishing and operating the provisional verification system.

The Work Programmes for 1997 and beyond will naturally start from the verification facilities available today. Thanks to work conducted by a large number of countries within the frame of the CD and its GSE, important resources are available in the form of a prototype IDC and global experimental sensor networks. Subject to fulfilling the specifications of the stations to be established by the Prepcom, the degree of completeness of these networks varies, depending on the technology concerned. It ranges from being 64 per cent complete for the IMS primary seismic network to 2 per cent for the infrasound network. The auxiliary seismic network is 32 per cent complete; the hydroacoustic network is 27 per cent complete; and the radionuclide network is 15 per cent complete.

The Work Programme proposed for 1997 in this plan will provide for the establishment of a verification regime capable of meeting the verification requirements for entry into force of the CTBT. The bulk of the work for 1997 will consist in developing specifications and recommendations to be adopted by the Prepcom, and will be carried out in WG B. The PTS will be in its initial build-up phase during 1997.

During 1997 WG B should develop technical specifications and requirements, plans, policies, guidelines, procedures and documentation on a number of issues related to the IMS, the IDC, Communications and OSI. WG B should also support WG A in developing model agreements or arrangements with countries hosting IMS facilities. WG B proposals on these issues should provide a basis for subsequent Prepcom decisions.

WG B is authorized to establish expert groups and other subsidiary bodies as it deems necessary and to arrange meetings with such subsidiary bodies within the budget allocated to WG B.

Basic to the work of the Prepcom, WG B and the PTS is the availability of well-trained personnel from around the world. Because such human resources are not readily available, there is an imminent need to initiate within the Prepcom a comprehensive training programme in the various verification technologies. WG B should develop and implement a training programme which

would prepare people for assignment to the PTS in Vienna as well as for working at national facilities. A training plan should be presented at the second Prepcom meeting and an international training programme should be implemented during 1997.

WG B should present to the second Prepcom meeting a proposal on how to provide expert and integrated technical advice on monitoring, data communications and analysis issues, and for technical supervision of the IMS and the IDC implementation.

The Prepcom should, at its second session, assume responsibility for GSETT-3 and other ongoing technical tests. WG B should develop a plan for the Prepcom to take on such responsibility, with the understanding that these activities continue to be funded by host countries on a voluntary basis. The Prepcom should recommend that States continue to operate their facilities for this prototype seismic system and other technical tests to allow for the uninterrupted operation and development of the evolving IMS, including the prototype IDC, as well as the continued evaluation and calibration. WG B should take appropriate steps to provisionally co-ordinate those tests until the second Prepcom meeting.

WG B should develop proposals for a Work Programme with associated cost estimates for the verification work to be conducted by WG B and the PTS for 1998. An initial proposal is to be presented at the third Prepcom meeting.

The PTS will be in an initial build-up phase during 1997 and its work programme therefore will be limited. It should include the gradual hiring of professionals within the verification field and arranging the infrastructure in the VIC, especially for the IDC. The PTS should support WG B in arranging meetings, implementing training programmes and in the conduct of surveys of existing stations and sites for new stations. The PTS should further start concluding agreements or arrangements for IMS facilities. It should also procure and install initial IDC hardware, acquire and install IDC software, and initiate procurement and installation of IMS station equipment.

Annex I presents an indicative list of tasks that WG B should carry out during 1997 and a provisional timetable. This list should be reviewed at forthcoming Prepcom meetings. Annex II presents WG B and expert work organization and scheduling.

Annex I**TASKS AND TIMETABLE FOR WORKING GROUP B FOR 1997**

This Annex gives an indicative list of the tasks that the WG B should carry out during 1997 and a provisional timetable. The suggested number of Prepcom meetings in 1997 is without prejudice to decisions to be taken by the Prepcom. WG B should present material and proposals at the Prepcom meetings indicated. This list should be reviewed at forthcoming Prepcom meetings.

Second Prepcom meeting:

- Establish an initial plan for the progressive commissioning of the International Data Centre (IDC) and the International Monitoring System (IMS) and for the implementation of related responsibilities
 - Establish a comprehensive training programme for the IDC and consider a comprehensive training programme for the IMS
 - Develop a proposal on how to provide expert and integrated technical advice on monitoring, data communications and analysis and for technical supervision of the IMS and the IDC implementation
 - Develop a plan for the Prepcom to take responsibility for GSETT-3 and other ongoing tests
 - Develop data authentication requirements
- For IDC*
- Develop and review an overall hardware procurement plan and review first order of equipment
 - Develop an outline for the operational manual for the IDC
 - Develop initial IDC concept of operations document
- For IMS*
- Support Working Group A in developing model agreements or arrangements to be concluded by the PTS in order to make site surveys, take an inventory of existing stations and install new stations as IMS facilities
 - Develop station specifications
 - Develop plans for taking an inventory of existing stations, including their quality and specifications, in order to assess the amount and cost of upgrade necessary
 - Initiate work on a proposal on which 40 out of the 80 radionuclide stations will have noble gas capability
 - Develop an outline for the operational manual for each IMS technology

For Comm - Review communications requirements and identify potential options for global communications infrastructure establishment

For OSI - Establish initial proposals for guidelines and procedures for the conduct of an OSI and for OSI infrastructure to support the OSI regime

Third Prepcom meeting

- Develop an initial proposal for a Work Programme with associated cost estimates for verification work by WG B and the PTS for 1998
- Implement a training programme for the IDC and, as available, for the IMS
- Review PTS staff plan for verification for 1998

For IDC - Prepare an Evaluation Report on the prototype IDC analysis procedures, data processing capabilities, software and software documentation

- Develop draft IDC operational manual

For IMS - Propose policies for procurement and installation of station equipment

- Develop draft IMS operational manuals
- Develop plans for implementing the station network and for commissioning/certifying stations
- Provide advice on station configuration to fit the local environment for infrasound and hydroacoustic stations

For Comm - Develop a draft general plan for global communication infrastructure establishment

For OSI - Establish more refined proposals for guidelines and procedures for the conduct of an OSI and for OSI infrastructure to support the OSI regime

- Establish initial requirements for procurement of OSI equipment and for logistics

Fourth Prepcom meeting

- Review the status of the initial plan for the progressive commissioning of the International Data Centre (IDC) and the International Monitoring System (IMS) and for the implementation of related responsibilities

- Develop a final proposal for a Work Programme for verification work by WG B and the PTS for 1998
- For IDC* - Review draft IDC operational manual
- For IMS* - Develop proposals on the roles and tasks of radionuclide analysis laboratories
- Review draft operational manuals for each of the IMS technologies
- For Comm* - Complete plan for global communications infrastructure establishment
- For OSI* - Propose guidelines and procedures for the conduct of an OSI and for the OSI infrastructure
- Review requirements for the procurement of equipment and take appropriate decisions

Annex II

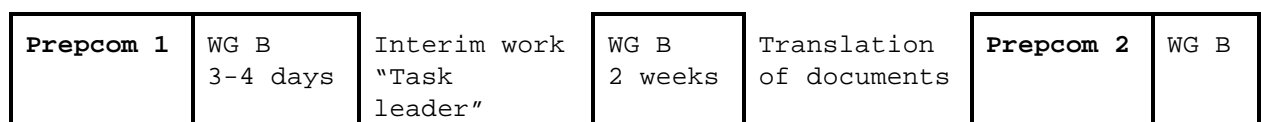
WG B AND EXPERT WORK ORGANIZATION AND SCHEDULING

The work of WG B and the expert work on verification should be organized in a cost-effective and fully transparent way that would allow the active participation of all States. Work should be concentrated in limited time intervals, where possible in direct connection with Prepcom sessions, and modern communication techniques should be utilized to make it possible for experts to participate also from their home facilities using fax and E-mail. Arrangements for facilitating such input will be developed in the near future. The organization of the work and the schedule suggested below is an attempt to meet those concerns.

The suggested organization of the WG B work is based on two basic ideas:

- The work should be task-oriented and expert work should be specifically directed towards the tasks given by the Prepcom. This would provide more focused work, actively involving a larger number of people, and would also provide larger flexibility than more or less permanent expert groups.
- The meetings of WG B and the expert meetings should be integrated and concentrated in limited time periods. This would facilitate work that is highly dependent on experts coming from capitals and would in general be more cost-effective and transparent.

These ideas could be realized in the following work cycle covering the period between the first and the second Prepcom sessions. The integrated WG B and expert meetings take place as illustrated below, with a short session immediately following Prepcom 1 meeting and another, more extensive, session in the period between Prepcom 1 and Prepcom 2 meetings, tentatively scheduled for 7-18 April 1997.



The method of work can be illustrated as follows:

- (1) The WG B session immediately following the Prepcom 1 session
 - Review and analyse the work programme given to WG B by the Prepcom and identify the concrete tasks to be carried out until the next Prepcom
 - Appoint a "Task leader" for each individual task to be responsible for conducting expert discussions and for providing a draft report on the actual issue

- Conduct initial discussion within WG B, and, if necessary, in expert meetings, to define the direction of work during the interim period until the next WG B meeting
- (2) Interim period between WG B meetings
- "Task leader" works in an open and transparent process with experts from States Signatories through available means of communications to develop a draft report
- (3) WG B session between Prepcom 1 and 2 sessions
- Review draft reports from "Task leaders"
 - Conduct expert meeting and consultations, as needed, on individual tasks, under the guidance of the "Task leader"
 - Prepare recommendations to the Prepcom based on the reports presented

The method of work described in (1)-(3) above will, in principle, remain the same during subsequent meetings. However, the scheduling of WG B sessions should be reconsidered in view of the experience gained after Prepcom 2, with an ambition to further concentrate the meetings around the Prepcoms. The Prepcom should evaluate progress in WG B and the expert meetings, with modification of the meeting schedule as appropriate.

For planning purposes, the total number of WG B meetings for 1997 will be 23. The number of expert meetings depends on the actual tasks. A tentative estimate gives the need for 70 expert meetings in 1997, distributed with 30 during the WG B sessions between the 1st and 2nd Prepcom and 20 each during the WG B sessions between the 2nd and 3rd and the 3rd and 4th Prepcom. This assumes, without prejudice to decisions to be taken by the Prepcom, that there will be four Prepcom sessions in 1997.
