

Annual Report 2004



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ARTICLE I of the Treaty

Basic Obligations

1. Each State Party undertakes not to carry out any nuclear weapon test explosion or any other nuclear explosion, and to prohibit and prevent any such nuclear explosion at any place under its jurisdiction or control.
2. Each State Party undertakes, furthermore, to refrain from causing, encouraging, or in any way participating in the carrying out of any nuclear weapon test explosion or any other nuclear explosion.

This report serves as the first of the Executive Secretary's written reports to the Twenty-Fourth Session of the Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization. It gives an account as of 31 December 2004 of the activities undertaken by the Provisional Technical Secretariat of the Commission during 2004 in implementation of the seven Major Programmes.



Foreword by the Executive Secretary

It is a great pleasure for me to submit herewith the annual report of the Provisional Technical Secretariat (PTS) of the Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization for 2004, which shows further substantial progress in all aspects of establishing the Treaty verification regime and preparing for the entry into force of the Treaty.

During 2004, considerable resources were dedicated to activities associated with operation and maintenance (O&M) of the entire Treaty monitoring system. These activities included the preparatory phase (phase I) of the first progressive system-wide performance test (SPT1), which was carried out to test and assess the tools and methods to be used in the 2005 performance testing phase (phase II). The O&M workshop in October in Baden, Austria, attracted the highest number of participants of all workshops organized by the PTS so far and generated useful discussions on station O&M, sustainability and development, system performance and training. The PTS has been dealing with increasing O&M related workloads by focusing on coordination of efforts throughout the organization.

Significant advances were made in the establishment of the International Monitoring System (IMS), which consists of a worldwide network of 321 seismic, hydro-acoustic, infrasound and radionuclide stations and 16 radionuclide laboratories. During 2004, a further 40 stations and 1 radionuclide laboratory were certified as meeting the technical requirements of the Commission. This means that at the end of the year there were 119 stations and 5 laboratories certified. Moreover, an additional 86 stations have been installed and thus 64% of the network is installed and essentially meets the specifications of the Commission. States hosting these facilities continued their valuable cooperation with the Commission. At present, appropriate legal arrangements are in place for 324 facilities in 82 countries.

The International Data Centre (IDC) in Vienna received, analysed, reported on and archived the waveform and radionuclide data from a growing number of IMS stations. On the part of States Signatories, around 85 National Data Centres had been established by the end of 2004 and a total of 668 users from these States Signatories had been authorized to access IMS data and IDC products. In addition, the development of processing software for all verification technologies proceeded as planned and preparations began for the relocation of the computer centre. The coverage of the Global Communications Infrastructure continued to expand throughout 2004, with 29 new very small aperture satellite terminals (VSATs) installed.

FOREWORD BY
THE EXECUTIVE SECRETARY

During the year, there was also encouraging progress in on-site inspection (OSI) related activities. In 2004, the PTS began implementing the recommendations made by an external evaluation team in the previous year, including the development of an OSI strategic plan, so that the build-up of the OSI regime could be accelerated to catch up with other parts of the verification system.

Activities in 2004 to support the verification regime as well as to promote the understanding of the Treaty, such as training courses and workshops, were held around the world with the participation of more than 95 States. I am grateful to Australia, Austria, Finland, Indonesia, Italy, Japan, the Russian Federation, Senegal, Slovakia, South Africa, Tunisia, the United Kingdom and Venezuela (Bolivarian Republic of) for successfully hosting these events.

While the purpose of the verification regime is to ensure compliance with the Treaty, the verification technologies are also useful for civil and scientific purposes. As a result of the tragic devastation caused by the tsunami in the Indian Ocean in December 2004, scientific and disaster alert communities are expressing greater interest in IMS data and IDC products, which could be of significant value for a variety of studies and disaster alert purposes, and would benefit not only individual States but also humankind as a whole. The Commission has been considering possible ways to support disaster alert activities. During the year, an experts' discussion on civil and scientific applications of CTBT verification technologies, organized by the Governments of Germany and Japan, was held in Berlin and was attended by experts from 10 States Signatories. The PTS would be pleased to continue to support endeavours of this nature.

In the course of 2004, more signatures and ratifications of the Treaty were achieved. As of 31 March 2005, the CTBT had 175 signatures and 120 ratifications. Thus the Treaty is moving closer to attaining the status of universality. Recently States decided to convene the next Conference on Facilitating the Entry into Force of the Comprehensive Nuclear-Test-Ban Treaty (Article XIV conference) from 22 to 24 September this year in New York. I hope that entry into force of the CTBT will be promoted further on the occasion of the conference. The PTS, for its part, will continue to advance in its work with strong determination in 2005.

Wolfgang Hoffmann
Executive Secretary

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

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Directors of the Provisional Technical Secretariat



Mr Gerardo Suárez
International Monitoring
System Division



Mr Lassina Zerbo
International Data Centre
Division



Mr Boris Kvak
On-Site Inspection Division

Directors of the Provisional Technical Secretariat



Mr Pierce S. Corden
Division of Administration



Mr Ziping Gu
Legal and External Relations
Division

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