Statement of the Executive Secretary of the Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization to the 46th Regular Session of the IAEA General Conference Vienna, 16-20 September 2002

Mr. President, Excellencies, Ladies and Gentlemen,

I would like to present you with recent developments regarding the Comprehensive Nuclear-Test-Ban Treaty (CTBT).

- 1. Since its adoption by the United Nations General Assembly in September 1996 the Treaty has reached a universal status, with 165 Signatories. Ninety-four States have deposited their instruments of ratification with the UN Secretary-General, including 31 of the 44 States whose ratification is required for the Treaty to enter into force.
- 2. Now, in the fifth year of its lively and challenging existence, the Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization and its Provisional Technical Secretariat (PTS), based in Vienna, are continuing actively in preparing the effective implementation of the CTBT.
- 3. As a primary obligation "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." The ban includes all environments and does not set a threshold for testing. The Treaty's primary objective is "to contribute effectively to the prevention of the proliferation of nuclear weapons in all its aspects" and "to the process of nuclear disarmament". About 100 States are accredited to the Commission.
- 4. The CTBT provides for the establishment of a unique global verification regime that consists of an International Monitoring System (IMS), a consultation and clarification process, on-site inspections (OSIs) and confidence building measures (CBMs). Data from IMS stations around the globe are processed and analysed by the International Data Centre (IDC) in Vienna. All IMS data and IDC products are made available to Member States, who have the final responsibility for analysing the data.
- 5. The programme budgets approved by the Commission since 1997 for establishing the IMS include the costs of the site surveys, the purchase of equipment, installation, final certification, and operation and maintenance of the facilities. The installation of the monitoring network is proceeding at a steady pace and is planned for completion by 2007.
- 6. As of today, site surveys of over 280 stations have been completed –equivalent to 87% of all the sites. Altogether 135 stations in all technologies have been completed or substantially meet specifications. Additionally, 104 stations are under construction or under contract negotiation.

- 7. The IDC supports the verification responsibilities of Member States by providing products and services necessary for effective global monitoring through the establishment and testing of facilities that will receive, collect, process, analyze, report on, and archive data received from IMS stations. The IDC work on the design, implementation and management of information security is progressing.
- 8. Testing of the IDC applications software continues under near operational conditions. Reviewed Event Bulletins (REBs) are issued, as scheduled. At present, about 70 stations are contributing to the REB production, including 33 sending data over our Global Communication Infrastructure (GCI).
- 9. Under the IDC calibration programme, aimed at improving event locations by applying the best available regional travel time information, contracts awarded to scientific organizations dealing with calibration for Eurasia and Australia are now in their second phase. They are providing new information on well located calibration events and are contributing to improvements of the regional travel time curves. The number of ground truth events available at the IDC exceeds 400 and further work is needed.
- 10. States Signatories have expressed their interest in acquiring their own copies of the 'Virtual Gamma Spectroscopy Laboratory (VGSL)' tool. An effort has been launched to study cosmic-ray effects in spectra, and a major project to review the IDC nuclide library has begun. Data requirements for noble gas monitoring were developed and presented at the January workshop in Tahiti, and testing of data from the prototype noble gas stations is ongoing. A process has started aiming at significantly improving software for beta-gamma noble gas measurements and other developments, and enhancements of the radionuclide monitoring software are already under way. Software integration work has continued in the areas of software development, maintenance and configuration management.
- 11. The atmospheric transport area has developed strongly. A four-layer concept has been formulated with the underlying idea that all computer intensive parts are done outside, at renowned meteorological centres, and at the IDC. Then fairly simple post-processing routines will create the products of interest to States, at the IDC or at the NDCs. For the first module dealing with continuous meteorological data feed, there has been substantial progress towards an agreement with the European Centre for Medium-Range Weather Forecasts. The cooperation agreement with the World Meteorological Organization has been a useful vehicle for this as well as for the preparations for the GCI workshop in Vienna in October, which will deal with how the PTS will get independent analyses from worldwide meteorological centres in cases in which more than one relevant Level-5 radionuclide has been detected.
- 12. As of 15 July 2002, 54 secure signatory accounts (one per requesting State Signatory) have been established, while the number of users authorized to access IMS data and IDC products and receive technical support from the IDC has increased to 396. The information technology (IT) strategy for the PTS is in the final stages of development.
- 13. The Global Communications Infrastructure transfers IMS data to the IDC and disseminates these data and IDC products to States Signatories. The PTS operates the GCI as a worldwide, closed and secure satellite communications network. Once it is fully operational, the GCI network is expected to carry daily some 11 gigabytes of data. The programme of very small aperture

terminal (VSAT) installations has continued. As of today, more than 110 VSATs, out of the planned total of 234, have been installed. Secure internet connections are also used as an alternative to VSAT connections.

- 14. The elaboration of the draft OSI Operational Manual in 2002 remains a priority task. The PTS will continue to provide, upon request, all necessary support to the elaboration process. The Eighth OSI Workshop was held in Vienna from 24 to 28 June 2002, and concentrated on the draft Manual elaboration, noble gases measurements and the results of a field experiment in Slovakia. Thirty-five experts from 17 States Signatories participated in the workshop. The planning of the 2002 OSI field experiment in Kazakhstan is now at an advanced stage.
- 15. Today, the PTS has about 270 staff members from 69 countries, of whom about 170 are in the Professional category. The representation of women in Professional positions is 46, which corresponds to 26.9%. An ad hoc steering group on human resources is working on a number of matters of importance to our Staff. Given the importance of the security and safety of PTS staff on duty travel, a comprehensive contract for emergency medical assistance and medical evacuation of staff in the field has been concluded. The PTS continues to cooperate with other VIC based international organizations on the provision and management of joint services at the VIC.
- 16. Tens of bilateral visits have been undertaken in the course of 2002 to discuss Treaty implementation and support with the relevant authorities in states members of the CTBT. Further, efforts have been made to promote cooperation and facilitate participation in exchanges related to technologies used in the verification of the Treaty. The PTS has continued to play the role of a clearing house, maintaining interaction with States Signatories on their potential needs and capabilities in Treaty technologies, so as to enable the timely establishment and operation of the verification system.
- 17. In cooperation with the Government of the United Kingdom, the PTS organized a Senior Experts' Discussion on Civil and Scientific Applications of CTBT Verification Technologies in London in May 2002. A follow-up discussion to this is to take place in October 2002. With the support of the Government of Kenya, the Workshop on CTBTO International Cooperation and National Implementation for States from East and Southern Africa was held in Nairobi in June 2002. Preparatory work has continued, in cooperation with the Government of Jamaica, for the Workshop on CTBTO International Cooperation and National Implementation for Caribbean States scheduled to take place in Jamaica in December 2002.
- 18. The Governments of Norway and the Netherlands have offered further voluntary contributions for 2002 in support for developing countries, and France offered a technical training programme for IMS station operators for one African State. Consultations on possible voluntary contributions by Japan and Finland to assist developing countries in strengthening their capacity building in verification related technologies are under way.

Thank you