

STATEMENT OF THE EXECUTIVE SECRETARY, MR TIBOR TÓTH

On the occasion of the VERTIC seminar in New York on 9 October 2006

The Provisional Technical Secretariat of the CTBTO Preparatory Commission was mandated to establish an International Monitoring System consisting of 321 monitoring stations in four technologies. Seismic, infrasound and hydroacoustic stations are registering energy propagated through the earth, through the atmosphere and through the oceans. The radionuclide technology allows to filter radioactive particles and the noble gas stations will in addition also register minute quantities of noble gases present in the atmosphere. The geographic distribution of the stations allows for global coverage of the system and, if I may add, to some rather difficult locations to build and operate these stations. It is the combination of these four technologies that should ultimately allow Member States of the CTBT to make an informed judgment about events registered by our system.

As of today 72% of the station-network has been installed and over half of the stations have been certified which means that they meet the stringent specifications of the Preparatory Commission.

The data registered at our stations around the globe is sent to the International Data Centre in Vienna via satellite communication in near real time. Here the data are processed, redistributed to national data centres and archived. According to the CTBT the International Data Centre is supporting member states in the analysis of the data, providing raw and processed data. Our products which are made available to all member states are based on automated as well as human analysis. This should facilitate the task of finding the proverbial needle in the haystack. To give you an idea about the size of the haystack, the quantities of data currently processed by our system you should realize that terabytes of data are transmitted to the IDC and redistributed per year. Roughly 20.000 events are registered annually. After entry into force of the treaty, Member States with

the assistance of the CTBTO should be able to identify and locate that one event among the 20.000 mostly natural occurrences which might be a clandestine nuclear explosion.

Once such a suspicious event is identified and located there will be the possibility to dispatch an On-Site Inspection that would have the right to inspect a fairly small area of 1000 square kilometers and look for indications of a nuclear explosion. The on-site inspection regime poses not only a large number of logistical and political challenges but also of technological ones that I hope will be the subject of further discussions with the scientific community.

The verification regime of the CTBT has several unique features which are worth mentioning. Firstly, it is a global regime that allows for no white spots on the map. Every corner of the globe is covered by it and an event even the remotest areas of our planet would be registered by our stations. Sometimes I even get the feeling that the more remote and the more isolated an area, the higher the likelihood that we still need to build a station there.

Secondly, due too the stringent specifications of the stations, we receive consistent data from the stations in near real time and with extraordinarily high reliability. This puts our network apart from other existing networks which operate under less strict rules of reliability.

Thirdly, the CTBT verification regime is a truly democratic and participatory system. The data and products of the CTBTO PrepCom are made available to every Signatory State, regardless of size or wealth or technological prowess, making sure that transparency is not limited to the few states who possess the necessary technical and financial resources. The credibility of our verification system does not only reside in its technical performance but also in the open and equal access of all Signatory States.

Fourthly, to realize the open and democratic nature of the regime the Preparatory Commission is engaged in a wide range of training and capacity building activities that

will allow all State Signatories to fully realize the benefits of the Treaty and the manifold potential civil and scientific applications of the verification technologies. In the exhibition you will find a display of our most recent initiative in this field, an e-learning programme, financed through voluntary contributions by the Netherlands, the Czech Republic and the European Union.

The CTBTO PrepCom and the activities of the secretariat are dependent on the assistance and cooperation of many actors. First and foremost the Signatory States whose technical, political and financial support for the organization are vital. With 176 signatures and 135 ratifications the CTBT enjoys near universal support. I would like to use this opportunity to thank all Signatory States for what they are doing in support of the Treaty and its verification system through their delegates, their experts, their political and financial commitment to our common cause.