

**Address by the Executive Secretary
of the Preparatory Commission for the
Comprehensive Nuclear-Test-Ban Treaty Organization**

**Thematic Debate of the First Committee of the General Assembly
(New York, 17 October 2007)**

Mr. Chairman,

1. At the very outset, allow me to congratulate you on your election and to wish you a successful and fruitful First Committee.
2. I am pleased to report to the First Committee on the activities of the Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO).
3. Last month, the Fifth Conference on Facilitating the Entry Into Force of the CTBT took place in Vienna. It was attended by representatives of more than 100 ratifiers and States signatories of the Treaty. The Conference adopted a Final Declaration by consensus. This in itself is, as you are well aware here in the First Committee, a rare commodity in multilateral disarmament and non-proliferation environment of today. The declaration calls on those States that had not done so to sign and ratify the Treaty without delay. Particular emphasis is given to those 10 states listed in Annex 2 whose ratification is necessary for its entry into force. The Conference and its Final Declaration were again proof of the international community's strong commitment to establishing a universal and internationally and effectively verifiable CTBT as a major instrument in the field of nuclear disarmament and non-proliferation. Since September 2005 20 more States have signed or ratified the Treaty. This brings the total numbers to 177 signatories and 140 ratifiers.
4. My speech to the First Committee last year took place on 9 October, the day of the nuclear weapon test proclaimed by the Democratic People's Republic of Korea (DPRK). I had to rush back to Vienna. In hindsight, I can say that this date turned out to be the most defining moment event for the Preparatory Commission in recent years.

5. The DPRK test was an imposed performance test for our organization and its nascent verification regime, our technical capabilities and procedures. The yield of the explosion was low and, at the time, we had only less than 180 of the International Monitoring System's 321 stations in operation. Nevertheless, the event was well recorded by our system. Within 20 minutes, 22 seismic stations from all over the globe – as far away as La Paz in Bolivia - recorded and located the event. Within 2 hours, States Signatories received data with the exact time and location of the explosion. The event location was done with the precision that would be required for a possible on-site-inspection after entry in force of the Treaty. Two weeks later, a radionuclide station in Canada – 7500 kilometers away – picked up key traces of radioactive noble gases.
6. The monitoring system lived up to its name by functioning as a *System*, in a holistic and synergistic way. The different technologies worked together in an integrated way. The key role of the radionuclide and noble gas technologies was particularly highlighted. Moreover, the relevance of on-site-inspection, which would provide the ultimate verification regarding the nature of an event, was also underscored. In short, the Preparatory Commission was able to prove the value of the significant investment into the build-up of the verification system. The event in the DPRK thus constituted a validation of the CTBT verification system. This bodes well for the verifiability of the CTBT once the system is complete and the Treaty is in force.
7. Since last year, the Preparatory Commission certainly has not remained idle. Despite a difficult financial situation for the Commission, we expect 71% of stations to be certified by the end of the year, meaning that they meet our stringent technical requirements. This represents an increase 20 % in the last year alone. The number of noble gas stations increased by 70 % during the last 12 months. The network of hydroacoustic stations is now virtually completed. Very recently, China has begun to transmit initial data from a radionuclide station to Vienna. This is a very significant development. It means that for the first time stations from all five NPT nuclear weapons states are contributing data to the International Data Centre.
8. In March 2007, we inaugurated a new state of the art Operations Centre. It watches over every step in the movement of verification data: their generation at the monitoring station, their transmission to Vienna, their processing at the IDC and, finally, their distribution. Essential

improvements have been made in International Data Center processing methods and software in all four technologies. The achievements were particularly significant for data analysis of radionuclide particulates and noble gas as well as for atmospheric transport modeling.

9. There are also important challenges ahead of us. Many of the remaining stations to be installed and certified are also the most difficult ones, posing considerable technical, financial and political challenges. Moreover, the build up of noble gas stations, so critical in the light of the DPRK event, needs to be accelerated. We have to learn by the time of the Entry into Force how to keep that dynamically growing monitoring system up and running. At the same time, the highest standards of data availability and timeliness need to be maintained. Further improvements in processing methods and software in different technologies are required. Station operations must be kept cost-efficient. Another challenging key event for the Preparatory Commission will be the first ever integrated on-site inspection field exercise. It is to be conducted in the autumn of next year. It will be an important step towards operational readiness and the capability to carry out an on-site-inspection after entry into force of the Treaty.

Mr. Chairman,

10. While the announced North Korean nuclear test was deeply regrettable, it also refocused the attention of the international community on the relevance of the CTBT. It underscored clearly how much the international community supports the CTBT as a key disarmament and non-proliferation instrument.
11. The way the CTBT monitoring system generates data and products is truly multilateral. 89 countries from North and South, East and West are hosting the facilities of the monitoring system and receive all data and products in near real time. No country could build and deploy such a system alone. The Treaty is thus an example of democratic and transparent verification. I should like to mention in particular the increase of interest in the benefits of the system, especially by less developed countries. Since 2005 there has been a 20 % increase in users in national institutions, the overall number reaching 840. The benefits provided for by the system also include a variety of potential and important civil and scientific applications. Most notable in this context is our contribution to tsunami warning organizations. As the provider of the fastest data - seismic and

hydroacoustic – our system enhances the ability of tsunami warning centers to issue timely and reliable tsunami alerts.

Mr. Chairman,

12. Nuclear energy production and nuclear capacity is projected to increase significantly in the decades to come. More and more states will embark upon the road of wanting to master different segments of the nuclear fuel cycle for their energy needs. We may be moving in a direction where the important delineation between nuclear energy for peaceful or for weapons purposes will be more a political and legal issue rather than technological challenge. Legal and other barriers intended to prevent the misuse of nuclear energy “upstream” of the fuel cycle are facing increasing difficulties. This is due to the fact that the clear differentiation between permitted civilian and prohibited activities is such a complex challenge. A nuclear test provides the final and irreversible proof as to the intentions of a state. The CTBT provides, thus, this last and clearly visible barrier between the peaceful legitimate use and the misuse of nuclear energy. A multilateral, credible and effective nuclear disarmament and non-proliferation system will therefore become even more important in the future than it already is today. I am convinced that a CTBT in force is a logical and necessary element of this system, if today’s and future nuclear non-proliferation challenges are to be addressed credibly.

Thank you