

## **Background information: Integrated Field Exercise 2008**

1 July 2008

### **CTBT builds global alarm system to detect nuclear explosions**

The Comprehensive Nuclear-Test-Ban Treaty (CTBT) bans all nuclear explosions. The Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO) is mandated to build a global alarm system that will monitor States' compliance with the CTBT. Once fully established, this system, the CTBT verification regime, will provide the tools needed to monitor the entire planet for the detection of nuclear explosions.

### **On-site inspections – the ultimate verification measure**

On-site inspections are an essential component of the CTBT's verification regime, along with the International Monitoring System (IMS) whose 337 facilities send monitoring data for analysis to the International Data Centre in Vienna, Austria. Should the findings indicate that a nuclear explosion may have been carried out in violation of the Treaty, a Member State may request an on-site inspection.

During such an inspection, a team of expert inspectors gather facts to clarify whether or not a Treaty violation has indeed taken place and to identify the possible violator. The findings will give States the means to come to an informed decision on the matter. On-site inspections are thus the final verification measure under the CTBT. They can be invoked once the Treaty has entered into force.

### **Testing procedures and equipment**

For the on-site inspection regime to be operational after the Treaty's entry into force, all procedures and methods developed for on-site inspections have to be applied on an experimental basis and equipment has to be tested. A series of so-called directed exercises have examined key aspects of the on-site inspection regime over the past couple of years.

### **First integrated field exercise**

In September 2008, the CTBTO will simulate an entire on-site inspection for the first time. The Integrated Field Exercise 2008 or IFE08 will last over five weeks and will include an initial phase of one week in Vienna and a full month of field activities in Kazakhstan. It will be the first time that major elements of an on-site inspection are tested in an integrated manner. Experts at the CTBTO will assess the functionality of the OSI regime and identify any shortcomings that need to be addressed.

### **Kazakhstan's continued commitment to nuclear non-proliferation**

Hosting this important milestone event reiterates the commitment of Kazakhstan to nuclear non-proliferation and disarmament. It follows naturally upon the historically important contributions by Kazakhstan in preventing the spread and use of nuclear weapons. When Kazakhstan became independent in 1991, it renounced the vast stockpile of nuclear weapons which was part of the legacy of the Soviet Union, and became a non-nuclear weapon State under the Treaty on Non-proliferation of Nuclear Weapons. It also made the decision to close down Semipalatinsk that had been the site of over 450 nuclear tests conducted by the Soviet Union since 1949. More recently, Kazakhstan has, together with the other four countries in Central Asia, pursued the establishment of the Central Asian Nuclear Weapon Free Zone.

**Strong support for CTBTO**

Kazakhstan signed the CTBT on 30 September 1996, only six days after the Treaty was opened for signature, and ratified it on 14 May 2002. Kazakhstan hosts five IMS monitoring stations: one primary seismic, three auxiliary seismic and one infrasound station, all of which have already been certified. Kazakhstan's exceptionally supportive role towards the establishment of the CTBT verification regime is further demonstrated by the fact that IFE08 is the fourth on-site inspection to have been conducted there.