The application of all four technologies enables an accurate time and an estimate of the location of the event to be provided after some hours, followed by the nuclear test "fingerprinting" after some days.

The Treaty specifically makes each State Party responsible for cooperating with the CTBT Organization (CTBTO) and with other State Parties to improve the verification regime, and to examine the verification potential of additional monitoring technologies.

On-Site Inspections

Any State Party to the Treaty will have the right to request an OSI on the territory of another State Party, to establish whether a suspect event is a nuclear explosion. A country may base its request on evidence from the IMS, or on evidence it has collected itself using methods, which can include satellite imagery.

Censuring Violators

If it is determined by the CTBTO that a citizen of a State Party has violated the Treaty, the Organization will expect the National Authority of the State Party to pursue criminal charges against the violator. If the violator is the State Party itself, then the CTBTO shall inform all State Parties of the violation. Censure can follow and the matter can be referred to the United Nations Security Council, which would then decide how to respond most appropriately. The CTBTO itself does not have any sanction capabilities of its own.

Canada's Contribution to the CTBT Regime

Currently, Canada is putting in place 15 monitoring stations (3 primary and 6 auxiliary seismic, 4 radionuclide, 1 hydroacoustic and 1 infrasound) and a radionuclide laboratory as our portion of the IMS. The monitoring facilities in seismic, hydroacoustic and infrasound technologies are managed by the Geological Survey of Canada (GSC) of Natural Resources Canada and the GSC will also operate the National Data Centre to collect all information in Canada. Radionuclide technology falls under the purview of Health Canada, in conjunction with Environment Canada. The Canadian National Authority of the CTBT, chaired by the Department of Foreign Affairs and International Trade, and including all relevant federal departments, has the overall responsibility to implement the Treaty in Canada and to serve as Canada's focal point for liaison with the Comprehensive Nuclear-Test-Ban Treaty Organization located in Vienna, and with other State Parties. It is hoped that the installation of our monitoring stations, laboratories and the National Data Centre will be completed before the Treaty enters into force.