The adoption of the Comprehensive Nuclear-Test-Ban Treaty (CTBT) in September 1996 has been described as a major achievement on the part of the international community in moving towards global nuclear non-proliferation and disarmament. The Treaty’s total prohibition of any nuclear test explosion will contribute to ending the development of ever more technologically advanced nuclear weapons, and will also arrest the proliferation of these weapons and prevent further environmental damage caused by testing.

The success of the Treaty depends on its universality and its verifiability. Substantial progress has been achieved in both areas. As Nobuyasu Abe, the Under-Secretary-General for Disarmament Affairs of the United Nations has pointed out in a recent speech: “Commitments on paper can be quite meaningful, but commitments backed by credible verification measures bring us closer to what I would call ‘real progress’ in nuclear arms control.”

As of 2 July 2004, the CTBT has been signed by a total of 172 States and ratified by 115. The ratifiers include 32 of the 44 States whose ratification is required for the Treaty’s entry into force. In order to set up as quickly as possible an international system capable of monitoring Treaty compliance, the international community took an innovative step in establishing by resolution the Preparatory Commission for the CTBTO. The main activity of the Commission and its Provisional Technical Secretariat (PTS) has been the build-up of the verification regime which must be operational when the Treaty enters into force.

The International Monitoring System (IMS), with its 321 stations and 16 radionuclide laboratories, is the first global network to monitor the earth for evidence of a nuclear explosion. Over the past seven years, the PTS experts had to overcome considerable engineering challenges to establish these facilities. Many are located in extremely remote areas of the globe, far from settlements and infrastructure. However, more than 50% of the monitoring stations are now operational, constituting already at this stage a significant deterrent to any clandestine testing. Good progress in establishing the IMS network was made possible to a large degree by the Member States which host IMS facilities. A complex legal framework regulates the conditions under which IMS stations are established and under which they operate.

This issue of CTBTO Spectrum focuses on the legal aspects of building the verification regime. It sets out to examine the essential role played by facility agreements and other legal arrangements in placing the provisional operation and maintenance of the IMS on a secure legal foundation. An interview with Palitha Kohona, Chief of the Treaty Section of the Office of Legal Affairs at the United Nations in New York, a special feature article by Anthony Aust, former Legal Counsellor of the United Kingdom Foreign Office, and the cover story by Peter Hulbroj, PTS Legal Advisor, give further insights into the unique legal status of the Preparatory Commission and its verification regime. As usual, this issue provides also an overview of the Commission’s work over the past six months, including an update on the latest session of the Preparatory Commission. It also reports on the latest developments in verification science and on the potential civil and scientific applications of the CTBT verification technologies.