

**STATUS OF THE SEISMIC NETWORKS
OF THE INTERNATIONAL MONITORING SYSTEM,
COMPREHENSIVE NUCLEAR-TEST-BAN TREATY**

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ABSTRACT

The Comprehensive-Nuclear-Test Ban Treaty calls for the establishment of two seismic networks as part of the International Monitoring System (IMS): a primary network of 50 stations (30 arrays and 20 three-component stations), and an auxiliary network of 120 stations (113 three-component stations and 7 arrays). This abstract gives an overview of the progress achieved during the first three years of work by the Provisional Technical Secretariat.

By the end of 1999, site surveys will be completed for about 90% of the primary network. At that time, about 50% of the primary seismic network will substantially meet the minimum requirements for seismic stations established by the Preparatory Commission. This early completion rate is partially due to incorporation into the IMS of many stations from GSETT-3 that required only minor upgrading. By the end of 2000, site surveys for the primary network should be finished and the network at nearly 70% completion, with emphasis on the completion of 8 new arrays in Eurasia.

A recent assessment of the operational status of the auxiliary network found that 32% of auxiliary stations substantially meet the minimum requirements, 56% require either a new seismometer or digital acquisition system (or both), and 12% require new station construction and installation. Work is underway at many auxiliary stations but at a lower investment level than for the primary network.

Aside from the principal task of station installation and upgrading, other areas of effort involve incorporation of authentication, instrument testing, station certification, monitoring station performance, training host country operators, and defining procedures for the operational phase of the IMS.

Key Words: primary seismic stations, auxiliary seismic stations