

Annex 1

TESTING AN EXPERIMENTAL INTERNATIONAL
SEISMIC MONITORING SYSTEM (GSETT-3)

1. Objectives

An important goal of the Group of Scientific Experts (GSE) is to develop scientific and technical concepts for an International Seismic Monitoring System (ISMS) and to test these concepts in practical operation.

Following the successful conduct of GSETT-2, and with experience gained from that test, the original concept for an ISMS has been revised. This revision has also taken into account emerging new technologies, some of which were tested during GSETT-2.

The GSE is now planning the development, testing and evaluation of an experimental ISMS. The experimental system should be able to evolve and adapt to support future CD requirements for monitoring a nuclear test ban. It will further provide a practical basis upon which to furnish the CD with the timely technical information required for its deliberations on monitoring and verification.

2. Overall concept and design

This section gives a general overview of the concept and design of the ISMS as envisaged by the GSE. During GSETT-3, the GSE intends to test an experimental ISMS that matches as closely as possible these design concepts.

The essential features of ISMS are to:

- Ensure prompt and convenient provision of reliable data to all participating States for their national verification purposes;
- Provide a cost-efficient service to all participating States;
- Provide rapid acquisition and processing of data from a global network of stations at a central processing facility;
- Provide as much automation as possible in the collection, processing and distribution of data;
- Provide a permanent archive of all data collected or generated by the system;
- Provide data security and quality control;
- Provide an architecture which will permit modifications and improvements as they are judged desirable.