

K32(I78)

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Proposal Abstract K32(I78)

1. Arms Control Problem:

Nuclear weapons - comprehensive test ban

2. Verification Type:

- (a) Seismic sensors - international network
- (b) International exchange of information

3. Source:

Ad Hoc Group of Scientific Experts. "Report to the CCD of the Ad Hoc Group of Scientific Experts to consider international cooperative measures to detect and identify seismic events". CCD/558, 14 March 1978.

4. Summary:*

The report is based on a consensus of the experts of the CCD working group. It describes how seismological science can be applied in a cooperative international effort to verify a CTB treaty. The cooperative international effort would have three elements:

- (1) a systematic improvement of the observations reported from a network of more than fifty seismological observatories around the globe.
- (2) an international exchanges of these data over the Global Telecommunications System of the World Meteorological Organization, and
- (3) processing of the data at special international data centres for the use of participant states.

After an introductory chapter, the report gives a brief historical review of earlier studies relevant to the detection and identification of seismic events, though no attempt is made to assess the results of these studies.

The next chapter discusses procedures for extracting and reporting data from individual stations. The recommended procedures include the following:

- (1) Data are to be reported in standard form at two levels:
 - (a) Level 1: Routine reporting, with minimum delay, of basic parameters of detected seismic signals;
 - (b) Level 2: Data transmitted in response to requests for additional information, mainly waveforms for events of particular interest.

* The following abstract is based mainly on the summary given at beginning of the report (pp. iii-x).