

Overview of the Group of Scientific Experts (GSE) for the CTBT

Ralph Alewine

Background

- Mandates from CCD 1976/79: Trilateral CTBT (1977-1980)
- Provided a report to internationalize trilateral arrangements
- New open-ended Mandate from CD in February 1980
- Several years of little progress
- Technical Tests: GSETT1, 2, 3
- GSETT3 started in 1994: Network ops evolved to the IMS
- Technical work focused under the direct auspices of the CD in CTBT negotiations
- GSE disbanded when CTBT signed in 1996

1980 Mandate

- Develop detailed instructions for an experimental test of a global system of co-operatives measures to detect and identify seismic events
- Further develop the scientific and technical aspects of the global system
- Cooperation in the review and analysis of national investigations, including (but not limited to):
 - Communications
 - Procedures to obtain desired data at stations
 - Data handling and analysis procedures
 - Methods for rapid exchange of waveform data

Organization of Work

- Participation open to experts from any country represented in the CD: Routinely, about 25 countries participated
- Officers: Chairman, Scientific Secretary, Representative from CD Secretariat
- Formal two-week meetings 2 times per year: Summary report on each session: Report to CD by Chairman after each meeting
- All work supported by national funding
- Detailed reports on specialized topics describing how a global system could be set up and operated
- Nationally-sponsored workshops
- Personnel exchanges
- Demonstrations to the CD

Accomplishments

- Provided the basic design for the International Monitoring System (Radionuclide and Infrasound component added by CD)
- Provided a prototype International Data Center and initial communications network
- Encouraged and coordinated national R&D efforts
- Educated technical experts and diplomats
- Provided hands-on experience on which to base treaty text on verification
- Provided an experienced cadre of experts available to staff an international CTBT Organization

GSE and Policy

- The GSE was never a “Policy Driver”, but rather a “Policy Enabler” when a political decision was taken to engage in the CTBT
- Ola Dahlman: “The GSE work on nuclear test detection is an example of technical work on verification that went on for many years with out any political negotiations, or even an agreement to contemplate such negotiations”

Relevant Points Future GSEs

- Restrict to scientific and technical work
- Adopt an organizational structure with a respected leader
- Open-ended technical mandates allow creative work
- Avoid time restrictions to the overall existence of the group
- Provide adequate national funding: encourage other national funding
- Testing provides a common experience
- Make the effort to educate policy-makers on the results