CD/1010 page 2

the work of the Group of Scientific Experts, Mr. Vollebaek said that a global seismological network would constitute an essential element of a verification system for a nuclear test ban. In the opinion of the Norwegian Government such a network should be equipped with instrumentation of high standards and should incorporate recent technological advances with respect to computer and data communication technology. In this regard, Mr. Vollebaek made special reference to the advanced small-aperture arrays NORESS and ARCESS installed in Norway in recent years, and said that arrays of this type could form important contributions to a global seismic network as proposed by the GSE.

The State Secretary of Foreign Affairs stressed that the research at NORSAR is one of Norway's efforts to find solutions to outstanding verification issues relevant to a nuclear test ban. Considerable importance is attached to maintaining NORSAR as a research facility open to scientists from all countries, some of whom have conducted research at NORSAR for periods up to two years. Mr. Vollebaek also confirmed that the Norwegian Government will make the seismological facilities in Norway available as contributing observatories within a global network.

The NORSAR Director, Dr. Frode Ringdal, gave an introductory presentation of the Norwegian seismological verification program. At the NORSAR Data Processing Center, the participants were given a demonstration which included:

- Presentation of the Norwegian arrays
- Detection of earthquakes and underground nuclear explosions
- Seismic signal analysis using regional array data
- International exchange of seismic data, with emphasis on the GSETT-2 experiment undertaken by the Group of Scientific Experts.

The participants also surveyed the field installations of the Norwegian Regional Seismic Array System (NORESS), which is a small-aperture seismic array, incorporating the most recent technological and scientific advances in seismic array design, instrumentation and data processing. A sister array (ARCESS) is located in the arctic region of Finnmark, Northern Norway. In light of the potential of such arrays to provide a much improved monitoring capability for a future comprehensive nuclear test ban treaty. Norway, has proposed to the Conference on Disarmament (CD/714) that the NORESS/ARCESS concept should form the basis for seismic stations within the global network envisaged by the GSE.

The briefings and demonstrations were followed by a three-day scientific symposium, the purpose of which was to assess the state-of-the-art of research on regional seismic arrays and associated topics. In particular, the symposium focused upon research results using NORESS and ARCESS. A special session was devoted to summarizing the experience and discussing further plans for the ongoing international GSE experiment (GSETT-2).

In an annex to this paper, we give a brief review of some of the results presented during the scientific symposium.