

PROGRESS ON THE ESTABLISHMENT OF THE CTBT IMS INFRASOUND NETWORK

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ABSTRACT

The Comprehensive Nuclear-Test-Ban Treaty Organization has now been in operation for a period of three years. During this time, considerable progress has been made on the establishment of the IMS Infrasound Monitoring Network. This network consists of 60 array stations, none of which existed when the Treaty was opened for signature in September 1996. The network is designed to detect and locate all atmospheric nuclear explosions at any point on the globe with yields of 1 kt or more.

As of today, 60% of the site surveys has been completed and 10% of the stations in the network are sending data to the IDC in Vienna. By the end of 2000 it is expected that 70% of the site surveys will be finished and about 18% of the infrasound global network will be operation. Programs for site surveys and site preparation are in progress at Antarctic stations and preparations for the certification of a number of stations are underway. Infrasound stations will be certified after it has been demonstrated during a period of testing and evaluation that the station substantially meets PrepCom approved technical specifications and the stations operational performance is in accord with the requirements for an IMS monitoring station.

This presentation will be primarily concerned with an overview of progress to date on the establishment of the global infrasound network. In addition, this presentation will focus on the intrinsic difficulties that the IMS is faced with in the establishment of the infrasound network. This will be illustrated by examples from site surveys and station installations that have recently been completed.

Key Words: infrasound stations, International Monitoring System