

representatives of certain countries in the recent session of the ENDC and documents tabled at that meeting which are included in the ENDC's report indicate that while some progress has been made in the detection and identification of underground nuclear explosions by seismic methods, there still remain a number of events which cannot be identified by remote seismic observations alone and which could be suspected as possible violations of a test ban unless they could be eliminated by some supplementary means.

In the opinion of the Canadian delegation it would be disastrous if there should be an agreement to stop underground testing relying on the good faith of participants alone and events should come about which would cause a breakdown in the agreement. What would happen if a suspicious event should occur in a certain country A, an event which seemed to have all the earmarks of a nuclear explosion, and this fact was registered in the seismic apparatus of another country B. If country A denied there had been a nuclear explosion and would give no concrete proof there had been none, country B might declare that it was no longer bound by the treaty. This lead might be followed by other countries with the danger that the whole arrangement would break down. This in turn might bring into question the treaty to stop testing in the other three environments and undo what has been accomplished so far.

Having established that there are substantial problems both scientific and political to be overcome before a completely effective system of detecting and identifying underground tests can be established, the Canadian view is that we should start to do something concrete now to overcome them. It is also our view that the smaller nations could and should play a part in the process and it is because of this that we have noted with interest the suggestion of Sweden and others for international cooperation looking to further progress towards effective verification. The Canadian delegation believes that progress towards acceptable and effective arrangements for verifying a comprehensive test ban treaty can be made first, through increased exchange of seismic data about underground events between countries interested in making a contribution to the solution of this problem. One object of such exchanges would be to develop criteria by which to establish precisely what kinds of data are significant in relation to the detection of underground nuclear explosions. Another purpose would be to arrive at some workable method of exchanging significant data, that is to evolve some agreed standard format in which data could be exchanged between authorities of different