

During the spring part of this year's session of the Conference important new contributions were made. I should like to recall inter alia the statement by the Soviet Union on some aspects of verification, the documents submitted by delegations, notably of the Federal Republic of Germany, United Kingdom, China, the Netherlands, Yugoslavia, as well as the draft convention presented by the delegation of the United States in April. The proposals made by you, Mr. President, in your capacity as Chairman of the Ad Hoc Committee on Chemical Weapons, and by the Chairman of the three Working Groups equally deserve appreciation.

One of the most difficult problems in negotiations on banning chemical weapons has been verification. Many delegations have focussed on this crucial question in their contributions. Finland on her part has endeavoured to contribute to the advancement of the negotiations by initiating in 1973 a project on technical aspects of verification. Our work has concentrated on the creation of an analytical capacity for verification on chemical warfare agents. The goal of the work has been to develop procedures which could be internationally applied when a comprehensive treaty is concluded. Our purpose has been to accumulate knowledge on and develop modern analytical procedures with the potential of providing technical means for verification. We hope such work could contribute to the progress of the negotiations in the Conference on Disarmament or at least be useful once a treaty has been concluded.

Starting in 1973 from a general review of suitable methods and techniques, the work of the Finnish project advanced towards a more systematic phase comprising development and application of selected technical procedures, establishment of a data bank and building up of reference and standard compound collections. During its ten years of existence, the Finnish project has developed detailed procedures for systematic identification of nerve agents, their precursors and degradation products as well as of potential non-phosphorus agents. Methods of sampling and the trace analysis of nerve agents from environmental samples have been elaborated. The results of the work have been published and submitted in seven working documents to the Conference on Disarmament, beginning in 1977. The list of these documents appears at the beginning of document CD/505.

The document now submitted by the Finnish delegation aims at being simultaneously a summary of previous work and a concise description of the present state of the methodology of the Finnish project. The objective of the report is to evaluate the potential of existing technical means for verification tasks requiring chemical expertise. The report is not meant to be a proposal for future verification procedures, but an evaluation of the technical means of handling possible verification tasks, presented for the purpose of advancing discussion. Furthermore, the report is not a collection of detailed analysis of procedures but a general description of the application of different technical means to selected verification tasks. The purpose is to provide a picture of all the analytical methods needed for the completion of each of the tasks. In order to meet a wide range of verification tasks a number of analytical methods have been developed and described.

Chapter 2 of document CD/505 discusses the possible verification tasks which might be required in the future Convention, in the context of destruction of stocks of chemical weapons, prohibition of production and development and verification of alleged use of chemical weapons. In chapter 3 the different verification ranges — on-site, near-site and off-site — are discussed. Chapter 4 presents a summary of the technical means for verification of chemical agents which can be utilized by both national and international organizations to collect information on compliance with the Convention. Automatic monitoring, sample collection and methods for analysis in two types of