1. Functions of laboratories under the Convention

In this section, a description is given of the various analytical and other technical tasks which have to be carried out in laboratories under the CW Convention. Three types of laboratories are being considered: the Laboratory of the Technical Secretariat, Accredited Laboratories and National Laboratories.

1.1 Verification analysis

During inspections the inspection team will utilize agreed instrumentation for performing chemical analyses on site. In many cases it is envisaged that this instrumentation will be sufficient to fulfill the main purpose of the inspection (e.g. verification of the declarations concerning the storages of CW and of production in the chemical industry). In some other cases this instrumentation is from the outset regarded only as a tool for selection of the best samples, which will later on be analysed in fully equipped off-site laboratories (e.g. in cases of alleged use and challenge inspections). During all inspections the inspectors may, however, encounter situations when the available instrumentation is not sufficient to give a clear proof of compliance, and further chemical analysis in off-site laboratories is needed. This is especially obvious in situations when the on-site analyses would indicate a possibility of non-compliance with the Convention.

The transport of samples for analysis to off-site laboratories must thus be possible. The draft Convention (CD/1046) furthermore requires in cases of off-site analyses independent results from at least two laboratories. If their results are not in agreement, a third laboratory should be called in.
Thus the minimum number of laboratories performing verification analysis is three. In order to secure prompt results, a network of laboratories in different parts of the world would provide a better basis for this task.

The analytical work that these off-site laboratories would be required to do can be summarized as follows:

- Unambiguous identification of scheduled compounds
- Structure elucidation of possible novel agents
- Semiquantification