

B. Specific requirements of the analytical instruments

The specific requirements depend on the analytical tasks and on the concentrations of compounds in the samples. It was felt that there is no need to make a detailed study of the general or specific requirements for following reasons:

- at present the available analytical instrumentation offers to the inspectors a variety of options with which all the analytical tasks can be fulfilled,
- the instruments are being developed at a rapid pace which will automatically lead to enhanced performance, ease of operation and smaller size (portability/transportability).

Often the most important aspect is not the instrument itself but the combination of instruments available and the ways they are used. This emphasizes the importance of agreed standard operating procedures.

The standard operating procedures must be based on interlaboratory comparison tests. These tests can also be used by the Technical Secretariat for the selection of designated laboratories which will be entrusted to perform off-site analyses and other tasks given by the Technical Secretariat and under its supervision and quality control.

Sensitivity is necessary when non-production (Schedule 1), undeclared activities, or alleged use, are being investigated. Environmental samples require often high sensitivity. In these cases it is important to use the most sensitive techniques. Of these MS/MS, HRMS with specific ionization modes and GC-MI-FTIR can be used only in off-site laboratories.

Sensitivity is less important in the verification of declared activities since there is normally sufficient quantities of the compound available. Universal detectors in GC and HPLC suffice and all spectrometric techniques including NMR are applicable.

Reliability is always important. But again, specific requirements differ depending on the task, whether the task is to verify declared or undeclared activity.