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## **THE REPUBLIC OF FINLAND**

### **THE DESIGNATED LABORATORIES OF THE OPCW CURRENT SITUATION AND FUTURE ROLE**

The Chemical Weapons Convention (hereinafter “the Convention”) defines the guidelines for chemical analysis of samples taken during inspections in Part II E of its Annex on Verification and Implementation (hereinafter “the Verification Annex”).

In the conduct of inspections, both on-site analysis and analysis in highly qualified laboratories are foreseen. Therefore a global network of designated laboratories is necessary for fulfilling the possible analytical tasks resulting from the inspections and other needs for the implementation of the Convention. The First Session of the Conference of the States Parties established the conditions under which laboratories in States Parties may seek designation for the analysis of authentic samples. The Director-General designates the laboratories that fulfil the agreed criteria.

The first designations were made in November 1998 by the Director-General. Currently, there are fifteen designated laboratories in fourteen countries.

The designation process is based on semi-annual official OPCW proficiency tests. Each laboratory willing to join the family of designated laboratories must participate in these proficiency tests successfully three times before the designation is granted. A false positive result in a test leads to test failure and suspension of designation. The designated laboratories must participate in at least one test each year and prove their continuing competence. Another prerequisite for a designated laboratory is national accreditation by an internationally recognised accreditation body.

There are a large variety of analytical methods required to analyse all Convention-related chemicals in various matrices. The designated laboratories are all differently equipped, and therefore their analytical capabilities also differ. These differences underlie the need to certify the designated laboratories to perform different types of analyses, as stated in the Verification Annex.

Until now, no samples taken during inspections have been sent to designated laboratories for analysis. However, the designated laboratories must maintain high analytical capacity by ensuring that they are equipped with modern and often expensive instrumentation capable of fulfilling the analytical challenges needed for unambiguous analytical results for samples collected in inspections. Similar challenges are usually not present in the routine daily work



of most analytical laboratories. Currently, the full analytical competence of a designated laboratory is tested once a year in official OPCW proficiency tests. However delicate an issue may be from a political viewpoint, sampling during inspections should be encouraged whenever ambiguities are detected. When on-site analysis cannot resolve the ambiguities, they should be resolved by chemical analysis of the samples by designated laboratories in order to ensure the transparency of verification.

The OPCW could also use the designated laboratories by coordinating and contracting its possible analytical Convention-related research projects with them whenever the OPCW Laboratory in Rijswijk does not have the resources to carry out the tasks. The OPCW should also keep the designated laboratories informed of the non-confidential aspects of its ongoing research activities. At the request of the OPCW, the laboratories on their part should keep it informed of their relevant scientific publications, of their expertise and instrumentation, and of the type and size of projects they would be able to carry out. The designated laboratories should also follow relevant scientific and technological developments in chemistry and provide the OPCW with updates on those which are pertinent to the Convention.

One way to use the skills and capacity of the designated laboratories could be their active participation in supplying analytical data to the OPCW Central Analytical Database (OCAD), possibly on the basis of contracts between the laboratories and the OPCW, as has been the case in the past. Currently, the development of the OCAD takes place on a voluntary basis, and only some of the designated laboratories have taken it upon themselves to provide analytical data actively.

Another area where designated laboratories could have more input in the implementation of the Convention is international cooperation and assistance in technological development in accordance with Article XI of the Convention. The laboratories should be encouraged to arrange bilateral or multilateral cooperation and training for chemists and laboratories of developing countries. Finland has been offering for developing countries this kind of training since 1990 by arranging annually two four-month training courses focusing on methods for analysing chemicals related to the Convention.

A concrete step in providing this assistance of designated laboratories to laboratories aiming for designation will be taken in September 2003 in Finland, during the one-week workshop on sample preparation and analytical issues organised by the OPCW and some State Parties having a designated laboratory. This first workshop could be a starting point for a series of seminars and workshops arranged on an annual basis for laboratories seeking designation.