

## PROJECT QUADRUPOL: DEVELOPMENT OF A BENCHMARKING MODEL FOR FORENSIC LABORATORIES

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**ABSTRACT:** The Quadrupol project aims at a performance analysis of four participating laboratories. Based on background information gathered a set of performance indicators will be calculated.

**KEY WORDS:** Benchmarking; Management; Efficiency.

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In Europe, tens of governmental forensic laboratories are routinely performing tens of thousands of casework investigations in the various fields of forensic science every year. In most cases these laboratories belong to police organisations or are public sector laboratories co-operating closely with law enforcement authorities. Throughout Europe governments are aiming at a more efficient public sector. At the same time private enterprises are entering the forensic science market. This development is making cutting costs by compromising quality a tempting alternative for forensic laboratories. Quality of forensic investigations should thus be considered with great care, both in scientific and judicial terms.

European Union co-operation in the area of justice and home affairs (JHA; “third pillar”) is increasing. The freedom of movement of persons, services, goods and capital within the EU and the abolition of border control on persons in the Schengen Agreement countries calls for harmonised techniques to be used for investigation and control purposes. This is also reflected, for example, in the fact that exchange of best practices and cooperation between national crime prevention authorities is given as one of the issues where actions are needed within the EU.\* The national forensic laboratories, as an integral part of the legal system, should be competent but still efficient in terms of productivity and costs.

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\* see e.g. Scoreboard to Review Progress on the Creation of “Freedom, Security and Justice” in the European Union. Commission of the European Communities COM(2000)167, Brussels, March 24th, 2000.

The search for increased efficiency and effectiveness in forensic science is not a scientific or judicial issue but rather an issue of great managerial and strategic interest. It can easily be foreseen that a careful analysis of key figures in various forensic laboratories will indicate differences between laboratories, and an analysis of these differences will again enable the forensic laboratories to learn from each other and provide a platform for continuous production of comparison data, a model for benchmarking forensic science laboratories and thus a tool for improvements in the field.

The Quadrupol project aims at a performance analysis of four participating laboratories. This analysis covers laboratory activities on casework, i.e. investigations performed in connection with individual investigations of crime, but also secondary support activities of the laboratories such as: research and development, education and training, various support services, crime scene investigations, participation in international co-operation, quality assurance activities etc.

At the first stage of the project thorough background information packages are gathered from each participating laboratory. This information will concentrate on numeric key figures (KF) on casework, R & D, automation, processes, instrumentation etc. will need to be developed. For description purposes background data (population, crime rate etc. of each country) is collected as well.

Based on background information gathered a set of performance indicators will be calculated. It deserves to be noted that there is no common definition within the forensic laboratory community for even the most basic performance indicators such as case, investigation or analysis.

The following four national forensic laboratories participate in the project:

- Keskusrikospoliisi, rikostekninen laboratorio (National Bureau of Investigation Crime Laboratory), Vantaa, Finland;
- Netherlands Forensic Institute, Rijswijk, the Netherlands;
- Instytut Ekspertyz Sądowych (Institute of Forensic Research), Cracow, Poland;
- Statens Kriminaltekniska Laboratorium (National Forensic Laboratory), Linköping, Sweden.

The time scope for the project is 1 year (January 1 to December 31, 2002).

The co-operative part of the work is done in four three-day project meetings. These will be held in each of the four laboratories in turn, so as to give the project group members an opportunity to learn from the monitoring and control techniques of each laboratory on site.

The four laboratories are all members of the European Network of Forensic Science Institutes (ENFSI). The results and conclusions will be presented at the 2003 ENFSI Annual Meeting. The benchmarking model cre-

ated will be distributed to the ENFSI members and left freely available for benchmarking forensic laboratories in the future.

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