

The STEMMD project is executed by the EC Joint Research Centre (JRC) with active support from other ITEP Participants (Belgium and the United Kingdom) and the GICHD. The objectives of the STEMMD project are:

- Identify new commercially available metal detectors that are suitable for demining,
- Test those detectors using new metal detector standard. (CWA 14747 - 2003),
- Train people to conduct field tests, and
- Provide the demining community with reliable performance data for tested detectors.

Laboratory trials are ongoing and the first of the three planned regional tests has been carried out in Laos during October – November 2004. The latter field trials were performed on a priority basis because of a request by UNMAS to assist UXO Lao in selecting detectors for procurement.

The trial in Laos was designed to be without bias, using statistically significant data. The trial personnel had no conflict of interest and the trial methodology had been proven/validated (see ITEP Project 2.1.1.2., Reliability Model for Test and Evaluation of Metal Detectors). The threat was defined by UXO Lao and the trial environment was realistic.

The trial statistics:

- Each type of detector was subjected to 48 runs,
- Each detector had 4 different operators,
- 2 Target types at 4 depths,
- Approximately 34 targets per lane,
- Trials conducted in 3 different soils (3 different location sin Laos), and
- Determination of target locations and detections made with Total Station Survey Equipment (Approximately 20,000 points surveyed).

The trial results will provide:

- Probability of Detection (Pd) for each detector in different soil conditions.
- The depth of detection for each detector against threat targets.
- Comments on detector performance and characteristics based on three weeks of intensive use.

The report on the Laos trials will be available by the end of December 2004. Preparations for the next regional trials in Mozambique and Croatia are also underway.