H114 An Electronic Data Management Tool for the Search for Missing Persons and Forensic Human Identification: The ICRC AM/PM DB

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Attendees will gain awareness of a new software application to manage data related to the search of missing persons and forensic human identifi- cation. They will understand the main functions of this software and the impact its implementation can have on efforts to recover and identify the remains of victims of armed conflict.

This presentation will impact the forensic community by presenting a new software application which aims to facilitate and help standardize forensic investigations into the whereabouts of those missing as a result of armed conflict or internal violence.

Efficient management of data is essential for the quality of any forensic investigation; data standardization and centralization are especially important in larger operations which involve a variety of different actors. Experience has shown that in the absence of a readily available and universally applicable system, organisations working in the search for missing persons are often faced with the need for developing their own forms and tools, with limited capacity to take into account the experience accumulated elsewhere, and often with neither the time nor means to develop actually functional tools. Many existing systems are either not freely available and/or not designed to deal with often extensive but unspecific data managed in investigations into the fate of missing persons especially in conflict related and less developed contexts.

Thus, responding to a need identified by experts during the consultative process that was part of the ICRCs major initiative on Missing Persons launched in 2002, the ICRC committed itself to produce a set of data management tools to support forensic practitioners and others involved in the investigations into the whereabouts of missing persons.

These tools are based on the concrete recommendations developed through a number of different workshops and studies, involving academic institutions, experts and representatives of governmental, intergovernmental and non-governmental organizations from around the world. They are based on the accumulated experience of those working in the search of missing persons and identification of human remains over the last decades.

This set of tools consists of Standard Reporting Forms on AMD and PMD to give guidance and serve as a means for standardizing and maxi- mizing the quality of the data collection process, and of a software appli- cation for the management and analysis of the collected data, to support archiving, standardization, reporting, searching, analysis and matching of data.

This tool was designed to be multilingual, flexible and configurable but user-friendly at the same time, with a strong and easy to use search engine and good provisions for data security.

The AM/PM DB comprises modules on:
- ante-mortem data, including detailed circumstances of disappearance which may lead to the discovery and identification of remains;
- recovery/field data, including data on preliminary investigations and detailed archaeological information;
- postmortem examinations, including pathology, anthropology and odontology;
- hypotheses of identity and the identification process;
- events related to disappearances or findings of human remains. Each module can manage multiple original interviews, witness state-

ments or postmortem examinations respectively and their consolidated infor- mation. All main entities have sections for tracking of artefacts, any kinds of documents and samples. Personal roles and contact information can be managed contextually. Furthermore, the system provides a detailed operational journal and chain of custody form.

Some special software functions are: built in methods and formulas for automatic calculations of anthropological estimations on sex, age, stature, laterality and ancestry; an automatic calculation for the MNI of commingled remains; the possibility for reassociating bones or body parts while preserving the original information; and an automated matching function, which matches all Missing Persons and Human Remains under investigation in a given context according to a number of selectable criteria designed to help reaching and then tracking hypotheses of identity, especially in opera- tions with a large number of cases.

The tool works in a network or as a standalone system with an automatic synchronization function and is compatible with other IT tools such as the Interpol DVI and GIS software. Distribution is free.

The global challenge of investigations into the whereabouts of the missing is a humanitarian priority, which requires special tools and methods for optimizing the applicability and use of existing local and international investigative capacity. Responding to this need with this tool, the ICRC hopes to contribute to its pledge to support the forensic identification of missing persons.

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