The Information Management System for Mine Action (IMSMA)

Mine Clearance & Related Technologies SC

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In this short update I would like to remind you of the background to the Information Management System for Mine Action, to inform you of where we are today and to say a little about where we are going. IMSMA, together with the International Standards for Mine Action, is, I believe, one of the most positive outputs we can give to programme managers and to the donor community at large and we are actively supporting the deployment of both as soon as possible.

Introduction / Background:

- As part of its mandate, the UN Mine Action Service is tasked with developing policy relevant to mine action, and coordinating a comprehensive information management system. The Information Management System for Mine Action (IMSMA), developed by the Geneva International Centre for Humanitarian Demining in cooperation with ETHZ of Zurich, will enhance the UN's strategic management capacities, and provide a pool of information available for analysis and review by the international community.

- IMSMA is an information system that supports the entire mine action process, at the strategic and the tactical level. Some of the "value added" of IMSMA includes: (1) integrated planning and tasking; (2) visual representation of all aspects of mine action activities; and (3) a vast pool of statistics and advanced geographical analyses.

- An Information Management System capability is needed at two different levels; Field operations require a system for gathering and evaluating data at the country level; and at a strategic level, a decision support system is needed. IMSMA can accommodate both these requirements.

- Development of the first component, the Field Module, was initiated in the fall of 1998, and focused on the immediate need to provide Information Technology support to humanitarian demining operations around the world. It was defined and developed for use at the country level, allowing the Mine Action Center working in the field to record, evaluate and visualise information in a comprehensive but easy-to-use system.

- The system is exceptionally flexible, combining database and Geographic Information System capabilities with standard software packages. It is capable of processing and displaying the full spectrum of information required in support of mine action activities, including, for example: (1) All data gathered during the three levels of survey activity; (2) The ability to process data relating to the impact of mine contamination; (3) Mine awareness and victim assistance-related data.

Specific reports can then be created by the user to illustrate selected facets of information.

- With regard to the Global Module, development principles were presented to the United Nations in the summer of 1999, when it was agreed that priority should be given to the provision of improved capabilities for decision-making.

- The Global Module is designed to fulfill the information needs of the UN Headquarters by offering a worldwide data evaluation and mapping capability. It will consist of both a Processing and Dissemination capability.

- Information is made available to the IMSMA Global Module from a variety of sources, which will allow the United Nations to develop and maintain a much more comprehensive view on multiple aspects of mine action.

Current Situation:

- The Field Module was field tested in North West Somalia in late 1998 and was successfully used for the first time in Kosovo, where it was used by all of the major bodies involved in mine action activities. At that time, such international collaboration in the field using standardised information-gathering techniques was unprecedented.

- The Field Module has since been deployed to and used in Yemen, Chad, Eritrea and Ethiopia, Azerbaijan, Lebanon, Nicaragua and Thailand. At the same time, efforts continue to spread the effective use of IMSMA into countries that currently have their own information system, by offering the retrofitting of existing data into the IMSMA structure.

- The future intention will be to complete the deployment of IMSMA to ten additional countries in 2001. We are looking at Sierra Leone, Mozambique, Cambodia, the Democratic Republic of the Congo, Northern Caucasus (Russia), Namibia, Zimbabwe, Georgia (UNOMIG), Cyprus (UNFICYP), and the Golan Heights (UNDOF). With the GICHD being responsible for the installation of, and training on, IMSMA, UNMAS will be responsible for coordinating the process, setting priorities, raising funds and ensuring that the hard and soft ware is available. UNMAS is also responsible for ensuring the mine awareness and victim assistance requirements are properly covered in the IMSMA field module.

- The IMSMA Global Module development is still ongoing. It will include an Information Processing Module to enable analysis of data and an Information Dissemination Module to facilitate the sharing of collected records.

- Ultimately, this global capability will combine to establish a network, linking other external and UN databases and forming a comprehensive system upon which effective strategic planning and management of mine action activities will be based.

Observations / Concluding Remarks:

- It is important to realise that one of the most important advantages of IMSMA is that it can easily be customized to meet the specific requirements of the various users. One system can never meet the needs of all the Mine Action Centres in the world, and that fact has been taken into consideration during the development of IMSMA.

- No software system can do everything - there remains a requirement for sound and experienced judgment to be exercised by all personnel involved in the decision-making support process that IMSMA facilitates.

- As such, there is a clear requirement for the development of a coherent and comprehensive policy in relation to the mine action information management process, and the manner in which systems, inputs, and outputs are developed, employed and utilised.

- It is equally apparent that the deployment of an information management system such as IMSMA requires that we develop new patterns of organizational and interagency coordination. Up until now, we have focused on the technical aspects of IMSMA, while paying insufficient attention to the organizational and human adjustments necessary before the users of IMSMA can take full advantage of the system's potential. UNMAS and the Geneva Centre fully appreciate this requirement.

- Working in full consultation with the Geneva Centre, the IMSMA development teams have provided excellent support and close assistance to several UN Mine Action Centres. On an ongoing basis, lessons learned by IMSMA operators in the field are passed along, which have then been successfully incorporated in forthcoming versions of the system.

- Database and information management is a complicated business and producing a system that meets the needs of a user base as diverse as the mine action community is extremely difficult. We are fortunate that IMSMA provides a very well designed information management foundation, which is also easily modified to meet special individual requirements and work in parallel with existing databases.

- The UN Mine Action Service will continue to work with all relevant partners to ensure that the IMSMA system remains the premiere information management system available to the mine action community.