

IMSMA for Operations: Real-World Examples

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In order to support ongoing field operations, an information management section working at a mine action centre must be able to produce a wide range of products. At this point in time, the IMSMA system is able to provide products that can assist operations in terms of planning and monitoring, as well as in the creation of a historical archive of work conducted. IMSMA is a service-oriented information-providing database. It is capable of centralizing all available information on mine action activities and of generating a variety of products on a needs basis.

Depending upon the way each institution chooses to integrate information management into field operation activities, IMSMA is either used directly by operations staff or products created by an IT department using IMSMA are passed on to the different operations units requiring the specific information.

The following document provides an overview of how IMSMA is being used by different programmes, in relation to operational activities. The different steps cited below are ordered in a sequence related to specific objectives. It should be noted that a mine action programme plans, manages and monitors ongoing operations in parallel.

Pre-operative steps: consolidation of information

Before a given operation commences, all relevant information concerning the relevant country and conflict must be available. The process of gathering this information can be initiated long before operations start, and includes monitoring an ongoing conflict in order to make all potentially relevant information available to interested parties as soon as it is possible to start operations on the ground.

The following are some examples of the types of products that can be created during this phase of information management:

- **Maps**
 - Digitalization (scanning)
 - Ortho-rectification (imagery)
 - Geo-referencing
- **Gazetteer and location data**
 - Merge of data sources
 - Creation of national coding system
- **Conflict/hazard information**
 - Digitalization of historical data
 - *Conflict areas*
 - *Accident information*
 - Digitalization of actual conflict data
 - *Conflict areas*
 - *Occupancy of territory*
 - *Activity of armed forces*

In Colombia, the institution charged with the mine action database is currently processing conflict- and mine-related information. This process is being carried out despite the impossibility of conducting operations on the ground at present owing to the ongoing conflict. The information will be crucial for the planning of future operations. Colombia presents a good example of a country in which IMSMA is actively being used in pre-operative steps of the information management cycle.

Initial operative work: planning

The first issue operations sections need to resolve when they are ready to start working involves verifying the location of at-risk populations. Once this information is known, it is important to decide where to go – including how to get there and how to evacuate. Here, the ability of operations sections to carry out appropriate planning is dependent on the provision of reliable information by the IT section.

Throughout Latin America, the different mine action centres that are currently conducting operational planning produce some or all of the products listed below:

- **Maps**
 - Hazard maps
 - Satellite imagery for navigation
 - Access roads, evacuation routes
- **Reports**
 - Village registries
 - Contact lists
- **Planning support**
 - Calculating impact of mines
 - Calculating proximity of inhabitants to hazardous areas

In Nicaragua, the IMSMA system is often used to calculate the proximity of settlements to mined areas. The resulting indicator is used to estimate the impact of mines and to establish operational priorities. This is one example of how IMSMA can be useful during the planning phase of the information management cycle.

Established operations: monitoring of activities

Once operations are decided upon, there is a need to establish effective monitoring of ongoing work. In addition to maintaining registries of who is doing what and where, operations must be able to plan processes in advance in order to optimize the allocation of resources. Information on operations that are ongoing and visits by quality assurance teams are an important part not only of assuring the quality of the work carried out, but also of monitoring the use of resources, which in turn can assist in the formulation of future operational plans. As long as monitoring data is recorded within IMSMA, necessary reports and the creation of maps are supported dynamically.

The following list shows some processes managed by IMSMA systems worldwide:

- **Tasking Operation**
 - Monitoring
 - *Who is doing what, where and when?*
 - *What is the status of operations?*
 - Planning
 - *What are the future objectives?*
 - *What resources are needed in the future?*
 - *What resources are allocated to what objective?*
 - Answering Questions
 - *Reports*
 - *Maps*

In the Chilean programme, where IMSMA is used as a tool to assist in planning, monitoring and controlling ongoing and future operations, a series of the questions outlined above is answered by resorting to IMSMA products while using a decentralized tasking system. This is a function available within the IMSMA system.

Post-operative steps

In order for an operation to be completed in compliance with national and international requirements, permanent archives need to be created. During the post-operative phase, all information collected during operations is reviewed and – if this is not already the case – digitized. The required submission of annual reports by state parties to the Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction is based upon consolidated information collected from, among other sources, the IMSMA database.

In the Latin American case, all mine action programmes conduct a post-operative review of all information collected in relation to completed activities, which allows them to use the database as a data source for the aforementioned annual reports.