



## **LIS Advisory 06 – Retrofit Surveys**

### **Purpose**

This advisory outlines the options for conducting an LIS in countries with established mine action programmes, with special reference to existing institutional arrangements and inclusion of pre-existing data into the LIS format.

### **Terminology**

Retrofit Survey: A modified LIS where existing data from other sources are used.

### **Attachments**

None

### **Editing**

Original documents were written 00 12 07

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## Procedures for Conducting Landmine Impact Surveys In Countries with Established Mine Action Programs

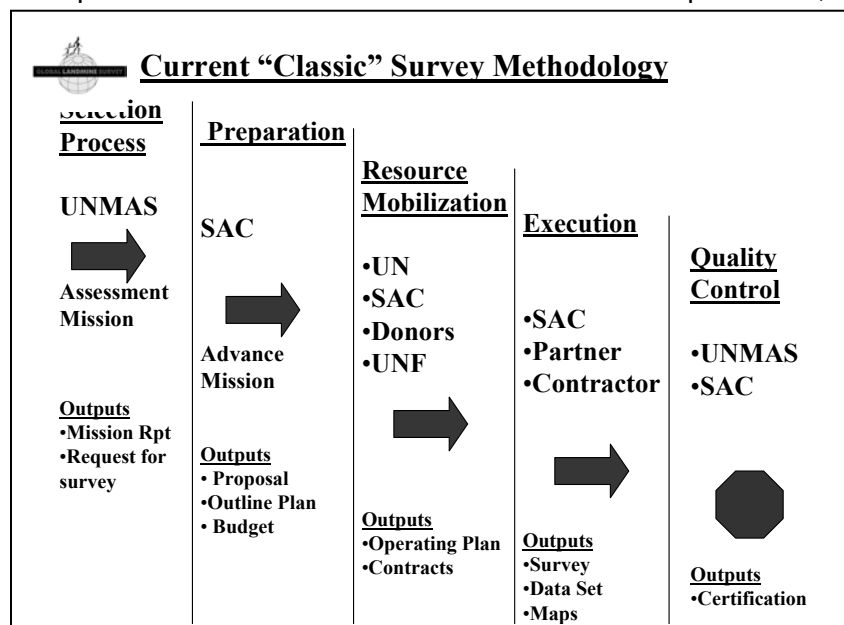
**I Purpose:** This document outlines the procedures required to conduct a Landmine Impact Survey in a country with a long standing mine action programme. For purposes of simplicity, such surveys will be referred to as retrofit surveys.

**II Summary:** Many of the world’s most severely mine-affected countries have well established and long-running mine action programs. The presence of these programs, however, does not preclude the need to conduct a survey of the impacts caused by contamination. Indeed, the sheer scale of contamination in countries like Angola, Afghanistan and Cambodia makes a strong and compelling case that ongoing programs could benefit greatly from the more reliable social and economic impact information that a landmine impact survey would provide.

Traditional methodologies for conducting a ‘classic’ survey are based upon the assumption that little or no systematic data has been collected on contaminated areas. In a well-established programme, this is not the case. Ongoing programs will normally have one or more databases containing a wide array of information. Unfortunately, this information is often maintained by different organisations within the same country and in formats that are not compatible with each other, or with existing SAC survey instruments. The challenge in conducting a retrofit survey is to develop methods for using existing information and data without compromising the quality of the survey.

In addition to challenges of data collection and assessment, any survey that takes place in a country with a long established mine action programme will have to give careful consideration to existing institutional arrangements and perceptions.

**III Differences from Current Methods:** This chart outlines the five general processes that take place when a normal LIS is conducted. As represented, a UN assessment and selection



activity takes place to determine the need and utility for conducting a survey. SAC follows this activity with an Advance Survey Mission to determine if the execution of a survey is feasible. If there is a clear need, demonstrated utility and a feasible means for executing a survey, then the existing community level survey instrument and field protocols will be followed.

**Expanded Preparation:** Preparation for conducting a retrofit survey requires not

only all the planning information associated with developing a normal LIS but an extensive data collection and analysis effort as well. Accordingly, during the preparation phase more attention must be focused on gaining awareness of, and access to, all relevant data sources. This will require that Advance Survey Missions be broader in scope and longer in duration

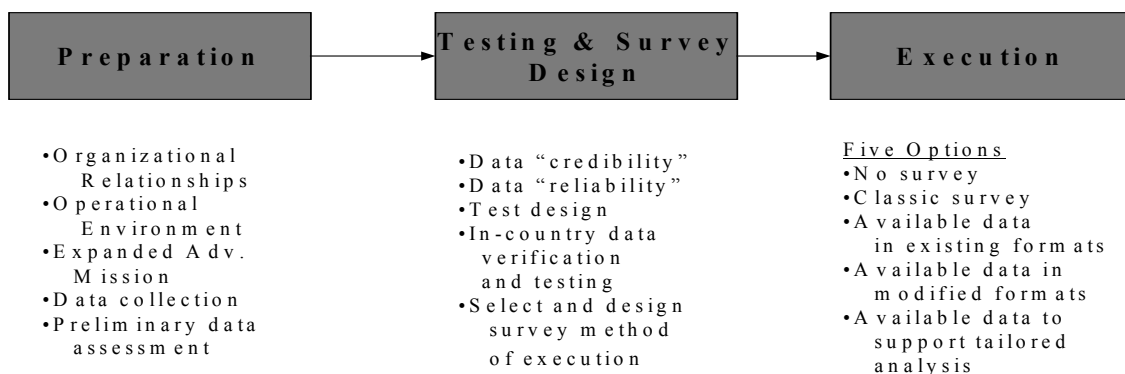
**Testing and Survey Design:** Although a preliminary assessment of collected data will take place during the Advance Survey Mission, a full analysis must determine if the data is both compatible with existing survey protocols and the Information Management System for Mine Action (IMSMA) database, and that it is sufficiently reliable. To answer these questions requires the creation of an additional phase devoted to testing and survey design. In this phase, the data is analysed and, if required, an in-country testing procedure will be put in place to ascertain the reliability of collected data.

**More Methods for Execution:** Similarly, with the aim of gaining the greatest advantage from existing data, the possible methods for executing a retrofit survey expand dramatically, depending upon the results of the testing and survey design process.

- 1 Migrate and/or convert collected data to existing survey instrument formats using IMSMA. Some additional survey work may be required to gather information in geographic areas, or on subjects not included in existing data.
- 2 Migrate and/or convert existing data to survey instrument formats using a modified version of IMSMA. Some additional survey work may be required to gather information in geographic areas, or on subjects not included in existing data.
- 3 Existing data is used to support some form of social-economic impact analysis, not necessarily fully compatible with existing survey instruments or IMSMA, but valuable as a planning support tool.

**IV Retrofit Survey Processes:** The conduct of a Retrofit Survey will involve making substantive changes to the preparation and execution activities found in current surveys, while introducing a new activity referred to as 'Testing and Survey Design'. The other phases of a survey will require only slight modifications during a Retrofit Survey.

## “ R e t r o f i t ” S u r v e y P r o c e s s e s



**Preparation:** Essential to the success of a Retrofit Survey is gaining a full awareness of the operational conditions, organizational relationships and data sources that exist in the country to be surveyed.

Due consideration must be given to the perceptions, procedures, mandates, and outputs of all stakeholders involved in mine action in the country to be surveyed. The cooperation and support of these stakeholders is important to the success of the survey, and special efforts should be made in three areas.

- 1 First, it should be recognized that these organizations will have a pre-existing set of perceptions regarding how mine affected communities function, and the corresponding benefits of certain types of mine action. The survey should guard against trying to redefine these perceptions, and instead seek to understand them as they are often reflected in how current data is utilised.
- 2 Some level of defensiveness can be expected from at least some of the existing organisations that are involved in mine action. In order to reduce the effects of this defensiveness, efforts must be undertaken to educate all stakeholders regarding the role, actions and benefits of a landmine impact survey. It may also be necessary to seek strong local allies in the form of implementing partners and/or donor supporters.
- 3 Any survey must be able to clearly demonstrate that it will provide some form of ‘added-value’ beyond current information management practices if the support and cooperation of other stakeholders is to be obtained.

Although the assessment and cultivation of pre-conditions for success is an important component of preparing for a retrofit survey, these activities can only be verified and reinforced through the fielding of an Advance Survey Mission. Like the Advance Survey Missions undertaken for “classic” surveys, the Advance Survey Mission for a retrofit survey will begin by confirming the need and utility of the survey, as well as assessing the feasibility for conducting a full survey. Additionally, the Advance Survey Mission for a retrofit survey will also collect and review all existing mine action data sets, as well as closely related data sets maintained by organizations outside the framework of traditional mine action. During the Advance Survey Mission preliminary checks will be made to determine if collected data sets are compatible with SAC survey instruments and the IMSMA database. This initial compatibility check guide efforts at obtaining the most comprehensive collection of data possible.

With broadened terms of reference, and the challenge of discovering and collecting as much compatible data as possible, a Retrofit Survey Advance Mission may require additional time and staff. Such missions can be expected to involve two or three staff members, one of whom should be familiar with issues related to information management, and an additional 1-3 weeks of time spent assessing data, either in-country or at SAC in Washington, DC. Costs for Advance Survey Missions may run from \$10,000 to \$75,000.

PREPARATION PHASE, RETROFIT SURVEY	
<u>Activities</u>	<u>Outputs/Decisions</u>
Assess operational environment and conditions	
Anticipate “defensive” response on the part of in-country stakeholders and prepare positive message of role, content and value for survey	Articulate a clear vision of how any survey results would be used and the value that they would generate.

Cultivate stakeholder and donor support group	Possible LOI on role, mission and framework for the conduct of a survey.
Conduct Expanded Advance Survey Mission <ul style="list-style-type: none"> <li>• Need, feasibility, utility</li> <li>• Data collection</li> <li>• Initial data compatibility check</li> </ul>	<ul style="list-style-type: none"> <li>• Advance Survey Mission report</li> <li>• Data sets</li> <li>• Any current decision support products</li> </ul>
Review of mission outputs	Determine if conducting the survey is possible and a decision to continue or stop.

**V Testing and Survey Design:** The extensive information gained during the preparation phase will require thorough analysis, and perhaps testing to verify usefulness to the survey and to support the development of an effective survey design.

Ideally, all efforts should be made to make greatest use of existing data, and to reduce overall project costs by minimising either the scale and / or the scope of any survey activities. To do this collected data must be thoroughly reviewed to determine if it is compatible with existing SAC survey instruments and the IMSMA database. Once this assessment of compatibility is made, an assessment must be conducted regarding the data's reliability. Sometimes, a test for reliability will involve a return to the country in question for the physical sampling and verification of key data.

Ideally, collected data would be both fully compatible and completely reliable so that it may easily be migrated into the existing IMSMA database. This will preclude the need for any type of physical survey action, and will dramatically reduce overall project costs. Realistically, though, this will probably never be the case. Instead a survey procedure will have to be designed that makes the greatest possible use of existing data and which probably involves a modification to the survey instrument and/or to the type of products delivered by the survey.

As this process is not part of the “classic” survey methodology, it will involve additional costs in specific technical survey areas.

TESTING AND SURVEY DESIGN, RETROFIT SURVEY	
<u>Activities</u>	<u>Outputs/Decisions</u>
Complete assessment of data compatibility	
Assessment of data reliability	
Design testing procedure if required	
Conduct an in-country sample to verify data	Testing results analyzed and published
Develop Survey Design, select method of execution.	Project document, budget and operational plan

**VI Survey Execution:** The manner in which a survey is finally executed will depend upon each country's specific operational conditions, as well as the results of the analysis performed during the Preparation and Testing and Survey Design processes.

One possible output is that sufficient justification for a survey may NOT exist and efforts should be discontinued. This may become apparent immediately after the Advance Survey Mission when pre-conditions as well as need, utility, and feasibility are assessed. The decision not to conduct a survey may also be taken if an effective, value-enhancing survey design can not be developed.

Consequently, in addition to not performing any survey at all, there are four possible frameworks for executing a retrofit survey:

- 1 Perhaps the most desirable method of execution would be to migrate and / or convert a significant portion of existing collected data to the survey instrument format supported by an unmodified version of the IMSMA database. Some additional survey work may be required to fill in areas not adequately covered by the available data. This method of execution could take place rapidly at a comparatively low cost with a majority of the work being executed by a limited number of trained staff supported by a small survey team.
- 2 If some portion of the data is useable, but some gaps or inconsistencies do exist between collected data and current survey instruments, it may be necessary to modify the instruments and IMSMA to take into account these differences. Again, some additional survey work may be required to gather information in geographic areas, or regarding subjects not included in existing data. Additional efforts will be required to modify the survey instrument and IMSMA. These modifications must be done in a manner that ensures the integrity and universality of the survey.
- 3 If the data available and the operational conditions within a country do not allow the use of existing instruments and tools, but still provide very useful information regarding the social-economic impacts of landmines and UXO, then a country specific impact analysis may be conducted. SAC experience in Kosovo suggests that such a tailored approach can provide clear value at a relatively low cost, while enhancing the effectiveness of ongoing mine action operations. If this option is selected, SAC may publicise very clearly and early that the products delivered will be different from those provided in the other surveys.
- 4 Finally, conditions and data content may warrant the execution of a complete normal LIS where existing data is treated as 'expert opinion' to inform the conduct of a full, community based survey.