



LIS Operational Protocol P10 – Certification Procedures

1.0 Purpose

1.1 The purpose of this protocol is to outline the procedures to be followed by the LIS Quality Assurance Monitor and LIS Certification Committee when providing Quality Assurance and Certification for an Impact Survey.

2.0 Rationale/Background

2.1 A completed LIS provides data for improved planning and prioritisation of mine action programmes. The data also provide a baseline against which to measure progress and inform policy-makers on the most effective allocation of resources to combat the problem. Through this process, the impact of the problem can be categorized and mapped, permitting policy-makers to focus efforts in the most affected areas. The surveys enable mine action specialists to target interventions for mine risk education, marking, technical surveys, clearance and victim assistance. In order to provide an assurance that individual LIS are conducted in accordance with the methodology developed by the SWG, the UN has developed LIS Certification Procedures. At the successful conclusion of the certification process, the LIS Certification Committee will certify the LIS.

3.0 Overview

3.1 Certification of a LIS provides national authorities, implementing partners, donors, and other stakeholders with confidence that a survey has been conducted in accordance with the Operational Protocols of the SWG. Consequently, it provides an assurance that information derived from the LIS – information that will subsequently be used to make critical programme decisions – is as reliable and accurate as possible.

3.2 Certification involves the examination of the entire LIS process to ensure that the process results in a quality product. This is done by asking two generic questions:

- Is the implementing organisation satisfactorily prepared to implement the survey?
- Does the organisation conduct the survey correctly over the course of the project?

3.3 To answer the first question, the certification process must determine whether the methodology, skill level, quality of instruction, and operational plan used in each LIS is

satisfactory. As members of the SWG, the Committee members already endorse the methodology and the process used, however the Committee must be sure that the operational plan developed for a survey in a particular country is consistent with this methodology. This is done through the employment of a Quality Assurance Monitor (QAM) who examines the process at key periods throughout the survey. The Committee must also satisfy itself that the skill level and training of the individual survey team members – national and international alike – will allow them to implement this plan, thus confirming that the surveying organisation is prepared to meet the necessary output – i.e. a successful LIS.

3.4 Once the preparedness of the surveying organisation has been confirmed, the second question is answered by monitoring the conduct of the LIS process and the controls on it. The QAM helps to ensure that the survey is conducted in accordance with the LIS Operational Protocols, and that internal management practices are applied and effective.

3.5 By ensuring that the organisation has the capability to carry out an effective LIS, and that it conducts operations in accordance with the LIS Operational Protocols throughout the duration of the project, the Committee can be confident that the survey has been completed to an acceptable standard and that it will result in a quality product. These procedures detail the steps to be taken to ensure that this occurs.

4.0 Responsibilities

4.1 The national authorities are responsible for providing a letter to the chair of the Certification Committee which:

- a) accepts the final report of the LIS with comments, if appropriate,
- b) requests certification of the LIS and
- c) confirms that the LIS is being used for operational planning and is being used or will be used for strategic planning

4.2 UNMAS is responsible for:

- a) constituting and chairing the LIS Certification Committee, which considers all mine action socio-economic impact surveys put forward for certification against specific criteria;
- b) acting as the secretary for the Committee and conveying all minutes, letters of certification or other relevant correspondence as required;
- c) employing a QAM to monitor the activities of a surveying organisation on its behalf; and
- d) reporting to the SWG on certification issues.

- 4.3 The LIS Certification Committee is responsible for:
- a) assessing the preparedness of an organisation to implement a LIS in a given context;
 - b) assessing the ongoing ability of an organisation to conduct a LIS;
 - c) through the QAM, raising concerns with a surveying organisation over its adherence to the LIS Operational Protocols; and
 - d) certifying those LIS that meet the criteria laid down in this document.
- 4.4 The organisation undertaking the survey is responsible for:
- a) applying management practices and operational procedures consistent with the LIS Operational Protocols;
 - b) maintaining and making available documentation, reports, records and other data on survey activities to the QAM; and
 - c) providing the QAM with all possible assistance including access to all sites and facilities which need to be visited as part of the monitoring requirement.
- 4.5 The QAM is responsible for:
- a) objectively and without prejudice monitoring a LIS for conformity with the LIS Operational Protocols in accordance with the criteria laid down in this document;
 - b) reporting the findings of all QA inspections to the UN LIS Certification Committee according to the agreed schedule;
 - c) providing advice and assistance to the surveying organisation as necessary to help ensure an accurate and reliable product; and
 - d) advising the surveying organisation of any issues raised by the UN LIS Certification Committee.

5.0 Definitions

5.1 LIS Certification Committee: a committee that is comprised of representatives from UNMAS, UNDP, UNICEF, GICHD and a non-implementing NGO member of the SWG, and whose role is to review LIS and decide whether they are eligible for certification.

5.2 Quality Assurance Monitor: an independent person engaged by UNMAS to provide information to the Certification Committee on the conduct of a LIS, to enable the Committee to decide whether or not a survey has been carried out to an acceptable standard, in accordance with SWG Operational Protocols.

6.0 Instructions

6.1 LIS Operational Protocols

6.1.1 The LIS Operational Protocols were developed by the SWG and are, in effect, the de-facto standards for the conduct of LIS. They were developed according to best practice in mine action, social science and statistical analysis and provide the detail of how a LIS should be conducted. The nine LIS Operational Protocols are as follows:

- Advance Survey Mission.
- Preliminary Opinion Collection.
- Minimum Data Requirements.
- Field Organisation.
- Guidelines for Interviewers in the Community Visit.
- Visual Inspection.
- False Negative Sampling.
- Impact Scoring and Community Classification.
- Data Analysis

6.1.2 The protocols are the prime reference for the implementing organization and the QAM, and provide the basis on which certification takes place.

6.2 Quality Assurance Monitor

6.2.1 The primary function of the Quality Assurance Monitor (QAM) is to provide information to the Certification Committee on the conduct of a LIS to enable the Committee to decide whether a survey has been carried out to an acceptable standard. The QAM assesses the LIS against specific certification criteria established within this protocol. The QAM advises the surveying organisation of any areas of non-conformance with the LIS Operational Protocols to enable these areas to be addressed before they become a certification issue. The QAM works closely with the Survey Team Leader, assisting him as required to produce an accurate and reliable product.

6.2.2 The QAM's aim is to ensure that the LIS Operational Protocols are applied as completely as possible within the prevailing local conditions. The QAM takes a systematic approach to observing and recording the progress of survey operations according to the attached certification criteria as well as providing an objective, external opinion on the general conduct of the survey at each stage.

6.2.3 While most LIS can be sufficiently monitored through three or four well timed QAM interventions lasting from 4-6 weeks each, the exact number, timing and duration of QAM interventions are determined in consultation with the implementing organization based on the requirements of each survey. At the end of each intervention, the QAM reviews his findings with the Survey Team Leader who has the opportunity to provide

feedback and ultimately written comment on the QAM's findings and conclusions. Once the process of review and feedback is complete, the QAM report will be distributed to Certification Committee members and can be shared with the National Authority and UN agencies and mine action NGOs. The rationale for these steps is to create an atmosphere of exchange between the Survey Team Leader and the QAM, which is essential to effective monitoring. Based on the cumulative review of capacity and conduct of the LIS implementer as contained in each QAM report, the Certification Committee determines the ultimate certification at a meeting to be convened once the final report has been reviewed by the National Authority and its position on the report clear stated.

6.3 LIS Certification Committee

6.3.1 The role of the LIS Certification Committee is to monitor the progress of all LIS through the deployment of a QAM and endorse those surveys conducted in accordance with the SWG LIS Operational Protocols and that meet the certification criteria. The Committee is chaired by the Director of UNMAS and includes representatives from UNDP, UNICEF, the Geneva International Centre for Humanitarian Demining (GICHD) and a non-implementing member of the SWG. UNMAS also serves as the Secretary for the Committee. The Committee receives quality assurance reports from QAMs after each intervention advising it of a survey's progress and its conformity with the LIS Operational Protocols. The Committee, in turn, advises the surveying organisation of any concerns it may have regarding non-conformance with the LIS Operational Protocols that are not resolved between the QAM and the Survey Team at the project level. In this way, any anomalies in a survey can be corrected before an act or omission takes it on a course that may ultimately preclude it from being certified.

6.3.2 If the Certification Committee decides that a LIS should be certified, the Chair of the Committee will write to the National Authorities and the surveying organisation informing them that the survey has been certified. The letter may contain comments that the Committee wishes to transmit in explanation of its decision. If the Committee decides that a LIS cannot be certified, the Chair will write to the surveying organisation specifying areas where improvements are required. If these improvements are not made, the Chair will write to the National Authorities explaining why the LIS cannot be certified.

6.4 Quality Assurance Stages

6.4.1 QA should be conducted in four stages. Stage 1 activities encompass the following:

- Advance Survey Mission.
- Operational plan and country-specific methodology.
- Development of the survey instrument including impact score criteria and weights.
- Recruitment of international and national staff.
- Training of survey staff.

- Pre-test of the survey instrument.

6.4.2 QA Stage 2 activities encompass the following:

- Preliminary Opinion Collection.
- Pilot Survey.
- Initial strategic planning activities.

6.4.3 QA Stage 3 activities encompass the following:

- Data collection.
- False Negative Sampling.
- Information transfer.

6.4.4 QA Stage 4 activities encompass the following:

- Data analysis.
- Information handover.
- Strategic planning activities.

6.5 Certification Criteria

6.5.1 Certification shall be based on the following criteria.

- Organisational Preparedness; and
- Operational Conduct.

6.5.2 Organisational Preparedness The surveying organisation will be assessed as to whether they are sufficiently prepared to implement a LIS in accordance with the Operational Protocols in the country in question. They will be assessed according to specific criteria relating to the following issues and activities:

- The Advance Survey Mission.
- The feasibility of the initial operational plan.
- Staff recruitment.
- Staff training.
- Development of the survey instrument.

6.5.3 Operational Conduct The surveying organisation will be assessed on its ability to implement survey operations in accordance with the LIS Operational Protocols and the initial operational plan. They will be assessed according to specific criteria relating to the following issues and activities:

- Impact scoring and community classification.
- Minimum data requirements.

- Field Organisation.
- Preliminary Opinion Collection (National and Local).
- Community interviews.
- Visual inspection.
- False negative sampling.
- Strategic planning activities.
- General survey issues.

7.0 Materials

8.0 Attachments

8.1 The detailed information requirements and certification criteria are described in the LIS Certification Criteria attached at Annexes A – D:

Annex A	Certification Criteria, Quality Assurance Stage 1: Organisational Preparedness
Annex B	Certification Criteria, Quality Assurance Stage 2: Implementation – Preliminary Opinion Collection
Annex C	Certification Criteria, Quality Assurance Stage 3: Implementation – Data Collection
Annex D	Certification Criteria, Quality Assurance Stage 4: Data Analysis and Handover

Certification Criteria, Quality Assurance Stage 1:

Organisational Preparedness

1. Information requirements

The aim of the first stage of the QA process is to determine whether the organisation implementing the LIS is satisfactorily prepared to carry out the project. This will involve determining whether the organisation has satisfactory methods, materials, equipment, human resources, and processes to conduct the work. Stage 1 shall address the following LIS activities and related issues:

- a. Advance Survey Mission.
- b. Operational plan and country-specific methodology.
- c. Development of the survey instrument including impact score criteria and weights.
- d. Recruitment of international and national staff.
- e. Training of survey staff.
- f. Pre-test of the survey instrument.

2. Time Frame

Stage 1 QA assessment shall commence at the ASM phase and concludes after the survey instrument has been pre-tested. The in-country QA inspection shall encompass the *Training of survey staff* component of the LIS, and should also include the *Pre-test of the survey instrument* if this is feasible. The precise duration of the in-country QA inspection shall be determined by UNMAS but is expected to last 3 – 4 weeks.¹

3. Report Format

The Stage 1 QA Report shall take the following format:

1. Basic data

- a. Country, office address and contact information
- b. International Team Members
- c. Start date of survey
- d. QAM details and Inspection Mission dates.

2. Preparedness Issues

- a. Conduct of Advance Survey Mission.
- b. International and National Staff Recruitment Processes

¹ The duration will depend on a number of factors, including the number of staff to be trained and the amount of pre-testing required.

- c. Training of Staff.
- d. Feasibility of Initial Operational Plan and country-Specific Methodology.
- e. Survey Instrument Development, including impact criteria and weights.
- f. Pre-test of the Survey Instrument.

3. Additional Observations

- a. Progress against timeline.
- b. Relationship with key stakeholders.
- c. Vehicle and equipment suitability and serviceability.
- d. Any other relevant issues.

4. Certification Criteria

1. Advance Survey Mission

Item	General Requirements	Detailed Requirements	Reference	Critical / Important / Less important
01.01	Were clear terms of reference developed for the ASM?	a. SAC responsibility.	1.3.0	Important
01.02	Was a draft country LIS plan developed by the ASM Team Leader?	b. To include a project narrative, budget, and timeline.	1.3.0	Critical
01.03	Was an ASM report written by the ASM Team Leader?	c. Report should define issues and constraints.	1.3.0	Important
01.04	Who was employed on the ASM?	d. There shall be at least two people, one of whom should be a representative of the surveying organisation.	1.5.1	Less Important
01.05	Were they suitably qualified/experienced?	e. At least one team member shall have experience on a previous LIS.	1.5.1	Important
01.06	Did the ASM conduct appropriate and relevant institutional visits and briefings with key stakeholders?	f. National mine action authority. g. Relevant ministries and departments. h. UN, NGOs, International organisations.	1.5.2	Important
01.07	Did the ASM gather sufficient, appropriate information on the country and the operating environment?	i. Relevant ministries and departments. j. UN, NGOs, International organisations. k. Conflict history. l. Administrative boundaries.	1.5.3	Important

		<ul style="list-style-type: none"> m. Gazetteer and maps. n. Contaminated areas. o. Physical environment. p. Indicative costs. 		
01.08	Was the UN involved in the ASM and LIS planning process?	q. UNMAS at UNHQ and / or the UN Resident Coordinator in-country		Less important
01.09	Did the ASM result in an operational plan that was feasible, practical, affordable, and that was consistent with the LIS Operational Protocols?			Critical

2. Recruitment

Item	General Requirements	Detailed Requirements	Reference	Critical / Important / Less important
02.01	Did the survey team include staff with mine action and social science backgrounds and experience?			Important
02.02	Were specialist subject matter experts and consultants available and used to support international staff?			Important
02.03	Were international staff appropriately qualified for the positions held?	<ul style="list-style-type: none"> a. Survey experience b. Mine Action experience c. Previous LIS experience d. Specialist experience 		Critical
02.04	Were national staff appropriately qualified for the positions held?	<ul style="list-style-type: none"> e. Survey experience f. Mine Action experience g. Specialist experience 		Critical
02.05	Were national staff representative of all relevant segments of the country’s ethnic and language groups?			Important
02.06	Were positions advertised through a broad forum and did the advertisements adequately outline job and qualification requirements?			Less important
02.07	Was the salary level consistent with local levels?			Important
02.08	Were national staff selected in an open and transparent manner and based on qualifications, experience, and the operational needs of the project?			Important
02.09	Were survey groups structured appropriately?	<ul style="list-style-type: none"> h. 1 x field supervisor i. 1 x field editor j. 3 - 6 x two-person interview teams k. Drivers / support staff 	4.5.1	Important
02.10	Was there an appropriate gender balance in the survey organisation / teams?		5.5.2	Important

3. Training

Item	General Requirements	Detailed Requirements	Reference	Critical / Important / Less important
03.01	Was a training plan developed for all staff training?	a. Schedule b. Method of instruction and location c. Instructors d. Resources		Critical
03.02	Did the training plan address all of the key issues in the terms of reference for the positions to be filled?			Critical
03.03	Was the knowledge and experience of the instructors appropriate for the lessons taught?			Critical
03.04	Was the training clear and effective, conducted in a suitable location, and delivered in an appropriate language?			Critical
03.05	Was learning regularly confirmed through tests and examinations?			Important
03.06	Was a final examination with practical exercises conducted?			Important
03.07	Were supervisors and field editors provided additional instruction on their roles and responsibilities?			Critical
03.08	Were all staff provided with instruction on mine risk and awareness, and how to operate safely in a mine contaminated environment?			Important
03.09	Were all staff provided with basic safety and security training?	e. Radio procedures f. Driving g. Security		Important
03.10	Were all staff provided with training on the certification process and components thereof?			Less important
03.11	Were all staff – international and national – provided with training on local customs and cultures?			Less important

4. Impact Scoring and Community Classification

Item	General Requirements	Detailed Requirements	Reference	Critical / Important / Less important
04.01	Was the scoring system approved by the appropriate national authority?	a. National Mine Action Authority	8.3.1	Critical
04.02	Were the blockage variables selected both appropriate and accurate?	b. From 10 options in IMSMA and 5 user-defined.	8.5.1	Critical
04.03	Were weights for “recent victims”, “presence of mines”, and “presence of UXO” left unchanged?		8.5.1	Important
04.04	Were the weights for “mine awareness” and “old victims” left at “0”?	c. No longer scored	8.5.1	Important
04.05	Were the weights accorded to the socio-economic blockage variables appropriate?	d. 3 = extreme impact e. 2 = serious impact f. 1 = light impact g. Must not total more than “10”	8.5.1	Important
04.06	Was a country-specific scoring sheet developed, explained and distributed?		8.5.1	Important
04.07	Were communities scored appropriately and consistently?	h. Score of 1 – 5 = Low impact i. 6 – 10 = Medium impact j. 11+ = High impact	8.5.2	Important

5. Minimum Data Requirements

Item	General Requirements	Detailed Requirements	Reference	Critical / Important / Less important
05.01	Was the national mine action authority consulted in detail regarding the most relevant socio-economic blockage indicators for landmine impact in the country?	a. National authorities have the final say on the most relevant blockage indicators. These shall conform to the weights budget.	3.5.1	Critical
05.02	Were all specific minimum information requirements met in the design of the survey instrument?	b. Community level data. c. Suspected Hazard Area data. d. Recent victim data.	3.5.2	Critical
05.03	Was a survey pre-test conducted in order to test the applicability, feasibility, relevance and ease of execution of the questionnaire?		3.5.2	Important
05.04	Was the questionnaire modified according to the findings of the pre-test?	e. SAC shall agree the final version of the questionnaire. f. Questionnaire data output shall be compatible with the relevant query trains.	3.5.2	Important

6. General

Item	General Requirements	Detailed Requirements	Reference	Critical / Important / Less important
06.01	Were all facilities used by the survey adequate and appropriate?			Less important
06.02	Was the operational plan regularly revised and updated to reflect changes / developments on the ground?	a. Changes to be notified to Certification Committee.		Important
06.03	Were vehicles and equipment serviceable, suitable, and available?			Important
06.04	Did LIS senior staff adequately monitor field activities?			Critical

Certification Criteria, Quality Assurance Stage 2: Implementation – Preliminary Opinion Collection

1. Information requirements

The aim of Stages 2, 3, and 4 of the QA process is to determine whether the organisation implementing the LIS continues to conduct the project in accordance with the LIS Operational Protocols. This will involve monitoring the LIS process and the controls on it, such as internal quality assurance and other management activities.

Stage 2 shall address the following LIS activities and related issues:

- a. Preliminary Opinion Collection.
- b. Pilot Survey.
- c. Strategic planning / implementation measures.

2. Time Frame

The Stage 2 QA assessment shall commence at the POC phase and conclude after the Pilot Survey(s) has/have been conducted. The in-country QA inspection shall encompass the *Preliminary Opinion Collection* and *Pilot Survey* components of the LIS. The precise duration of the in-country QA inspection shall be determined by UNMAS but is expected to last approximately 4 weeks.

3. Report Format

The Stage 2 QA Report shall take the following format:

1. Basic data

- a. Any changes to initial data.
- b. QAM details and Inspection Mission dates.

2. Operational Conduct Issues

- a. Field Organisation.
- b. Preliminary Opinion collection.
- c. Pilot Survey.
- d. Strategic planning / implementation measures.

3. Additional Observations

- a. Progress against timeline.
- b. Vehicle and equipment suitability and serviceability.
- c. Any other relevant issues.

4. Certification Criteria

1. Preliminary Opinion Collection

Item	General Requirements	Detailed Requirements	Reference	Critical / Important / Less important
01.01	Was POC conducted at the national level?	<ul style="list-style-type: none"> a. Government departments. b. Hospitals. c. NGOs. d. International organisations. e. Military 	2.5.1	Important
01.02	Were all provinces identified as contaminated visited?	f. A variety of informants shall be visited and consulted separately.	2.5.1	Critical
01.03	Were all districts identified as contaminated visited?	g. A variety of informants shall be visited and consulted separately.	2.5.1	Critical
01.04	Was a list of specific, suspected communities gathered at the district and sub-district level?	<ul style="list-style-type: none"> h. A variety of informants shall be visited and consulted separately. i. Suspected communities should be listed by name and location. 	2.5.1	Critical
01.05	Was a complete and current gazetteer identified?	j. Maps showing corresponding administrative boundaries should be acquired as well.	2.5.2	Important
01.06	If no gazetteer was available, what efforts went into the creation of a new gazetteer?		2.5.2	Less important
01.07	Did the survey meet with all relevant organisations during POC at each administrative level?	<ul style="list-style-type: none"> k. Security agencies l. Medical and social organisations. m. Development agencies. n. Traditional leaders (e.g. tribal chiefs). o. Mine clearance organisations. p. Heads of local and provincial governments. 	2.5.2	Critical

Item	General Requirements	Detailed Requirements	Reference	Critical / Important / Less important
01.08	Was a common guideline developed for POC?		2.5.2	Important
01.09	Was a standard form sent to relevant organisations and individuals in order to standardise the information gathered?		2.5.2	Important
01.10	Was a master map / gazetteer of communities created from POC and updated as the survey progressed?	q. Updated weekly if possible	2.5.2	Critical

2 General

Item	General Requirements	Detailed Requirements	Reference	Critical / Important / Less important
02.01	Were all facilities used by the survey adequate and appropriate?			Less Important
02.02	Was the operational plan regularly revised and updated to reflect changes / developments on the ground?	a. Changes to be notified to Certification Committee.		Important
02.03	Did LIS senior staff adequately monitor field activities?			Critical
02.04	Was a Pilot Survey conducted to test the survey mechanism and processes?	b. Feedback will be used to further modify the questionnaire, amend operational plans, and to develop or confirm FNS procedures.		Critical
02.05	Were vehicles and equipment serviceable, suitable, and available?			Important
02.06	Were any additional country-specific questions developed as a result of the Pilot Survey?			Important

Certification Criteria, Quality Assurance Stage 3: **Implementation – Data Collection**

1. Information requirements

The aim of Stages 2, 3, and 4 of the QA process is to determine whether the organisation implementing the LIS continues to conduct the project in accordance with the LIS Operational Protocols. This will involve monitoring the LIS process and the controls on it, such as internal quality assurance and other management activities.

Stage 3 shall address the following LIS activities and related issues:

- a. Data Collection.
- b. False Negative Sampling.
- c. Information Transfer.

2. Time Frame

The Stage 3 QA assessment shall encompass the Data Collection phase in its entirety including the *Community Interview*, *Visual Inspection*, *False Negative Sampling*, and *Information Transfer* components of the LIS process, and any re-surveying of selected communities agreed with the implementing organisation. The precise duration of the in-country QA inspection shall be determined by UNMAS but is expected to last from 4 – 8 weeks².

3. Report Format

The Stage 3 QA Report shall take the following format:

1. Basic data

- a. Any changes to initial data.
- b. QAM details and Inspection Mission dates.

2. Operational Conduct Issues

- a. Data collection and community interviews.
- b. Visual inspection.
- c. False Negative Sampling.
- d. Information transfer.
- e. Internal QA.
- f. Resurvey sampling results.
- g. Strategic planning / implementation measures.

² The duration of the inspection(s) will be dependant on the scope and duration of the LIS itself. The QAM may be required to conduct two separate visits during Stage 3 for longer surveys.

3. Additional Observations

- d. Progress against timeline.
- e. Vehicle and equipment suitability and serviceability.
- f. Any other relevant issues.

4. Certification Criteria

1. Field management activities

Item	General Requirements	Detailed Requirements	Reference	Critical / Important / Less important
01.01	Did field supervisors carry out their tasks as detailed in P04-5.2?	<ul style="list-style-type: none"> a. Gain requisite authorisations. b. Conduct POC at district level. c. Admin and logistic support to survey teams. d. Make appropriate security arrangements. e. Transfer information and materials safely. f. Conduct initial visits to suspected communities to arrange interviews based on list of affected communities and FNS. g. Have knowledge of all teams location and activities each day. h. Sample and re-interview some surveys. i. Score communities and draw corresponding district maps 	4.5.2	Important
01.02	Did field supervisors document reasons for not arranging a visit?	<ul style="list-style-type: none"> j. This shall be approved by team leader. 	4.5.2	Important
01.03	Did field supervisors check edited survey sheets?	<ul style="list-style-type: none"> k. Notes on problems or suggestions should be attached. 	4.5.2	Important

01.04	Did field editors carry out their tasks as detailed in P04-5.3?	<ul style="list-style-type: none"> l. Send new geographic information to SAC country headquarters. m. Check each questionnaire for accuracy, consistency, readability, and clarity. n. Check all GPS readings against maps. o. Monitor visits to suspected communities. p. Identify and report areas not visited. q. Complete survey and interviewer team progress reports. r. Conduct training as necessary. s. Manage and archive all questionnaires. 	4.5.3	Critical
01.05	Were regular planning meetings conducted?		4.5.4	Important
01.06	Were community locator codes distributed and used?		4.5.4	Important

2. Community Interviews

Item	General Requirements	Detailed Requirements	Reference	Critical / Important / Less important
02.01	Were community interviews conducted in accordance with P05-5.0?	a. Conduct group discussion with key informants drawing community maps of SHAs in the process. b. Visually inspect SHAs identified by the community when safe to do so. c. Meet with other people/groups if the interview group is not representative of the community. d. Check information from the main group interview and other meetings. e. Meet with the community representative who shall certify the interview took place.	5.5.1	Critical
02.02	Were interviewer’s reports checked by the Field Editor and Field Supervisor?		5.5.1	Important
02.03	Did a sufficient number of community representatives attend the community interviews?	f. Should be a minimum of 6 men and women representing a cross-section of the community.	5.5.2	Important
02.04	Were separate interviews conducted for women if required for cultural reasons?		5.5.2	Important
02.05	Were interviews prepared in advance and conducted in an appropriate location?		5.5.2	Important
02.06	Did interviewers gather general and background information prior to or after the interview?		5.5.2	Important
02.07	Were meeting attendance sheets completed for each community?		5.5.2	Important

Item	General Requirements	Detailed Requirements	Reference	Critical / Important / Less important
02.08	Was a community map created showing all relevant landmarks and points of reference?	<ul style="list-style-type: none"> g. The interviewers should help the community draw the map. h. All SHAs and their locations should be identified and plotted on the map during this process. i. Interviewers should record all relevant detail in the SHA summary table. 	5.5.3	Critical
02.09	Did interviewers gather all relevant information during the community interview process?	<ul style="list-style-type: none"> j. General extent of the area. k. When community was established. l. Current population and any changes since mines were laid. m. Information on the return of IDPs. n. Level of military activity in the area during the conflict. o. Estimated number of casualties. p. General feeling about the threat. 	5.5.3	Critical
02.10	Were the SHA Modules completed correctly?	<ul style="list-style-type: none"> q. One module for each SHA. r. Geographical description of the area with a specific recognisable landmark. s. Estimate size of the area. t. Vegetation in area. u. Mine marking used. v. Types of mines/UXO. w. Blockages as previously defined. 	5.5.4	Critical
02.11	Were the individual victim modules completed correctly?	<ul style="list-style-type: none"> x. One module for each recent victim (within 24mths). y. Linked to SHA module. z. Personal details. aa. Nature of the accident and when it occurred. 	5.5.5	Critical

Item	General Requirements	Detailed Requirements	Reference	Critical / Important / Less important
02.12	Did the community rank SHAs according to their own opinions and feelings of impact?		5.5.6	Important
02.13	Were any other possible mine-affected communities identified in the area that had not already been identified in POC?		5.5.6	Important
02.14	If so, were these followed up?	bb. POC reliability may also need re-examining.	5.5.6	Critical
02.15	Was a community reference point located and recorded?	cc. GPS	5.5.7	Important
02.16	Were all sectors of the community represented?	dd. Supplementary interviews may be required.	5.5.8	Important
02.17	Did the interviewers check for inconsistencies and differences in group interviews and clarify these?		5.5.9, 5.5.11	Important
02.18	Were communities re-surveyed to confirm original findings?	ee. 3% of surveyed communities is a guideline. ff. Resurvey should include teams under each survey supervisor, and should be conducted in all provinces/regions within the geographic scope of the LIS area.		Important

3. Visual Inspection

Item	General Requirements	Detailed Requirements	Reference	Critical / Important / Less important
03.01	Were all survey team members familiar with the requirements for conducting safe and efficient visual inspections?	a. Map reading b. Use of GPS c. ID of mined areas d. Assessing safe areas	6.5.1	Critical
03.02	Were safe visual inspection areas chosen?		6.5.1	Important
03.03	If visual inspections were not conducted, were the reasons valid?	e. Safety f. Distance	6.5.2	Important
03.04	Were appropriate local guides used?		6.5.3	Important
03.05	Were correct visual inspection procedures used?	g. Sketch map drawn h. Distance and bearing taken i. Relevant landmarks marked and recorded j. GPS reading taken at viewing point. k. Photo taken	6.5.4	Critical

4. False Negative Sampling

Item	General Requirements	Detailed Requirements	Reference	Critical / Important / Less important
04.01	Was an appropriate sampling frame available / developed?	a. Gazetteer b. List of suspected communities	7.5.1	Critical
04.02	Were the statistical parameters appropriate?		7.5.1	Important
04.03	Was the scope of sampling appropriate, statistically valid, and in accordance with Protocol 7?			Critical
04.04	Was the selection of non-suspected communities based on random geographical distribution?		7.5.2	Important
04.05	Did the field supervisor develop an effective schedule for visiting the non-suspected communities?		7.5.3	Important
04.06	Was the system for recording false negative communities robust?		7.5.2	Important
04.07	Were interviews conducted appropriately?	c. Three key informants.	7.5.3	Important
04.08	Were all false negative communities visited by a full survey team?		7.5.3	Critical

5. General

Item	General Requirements	Detailed Requirements	Reference	Critical / Important / Less important
05.01	Was the operational plan regularly revised and updated to reflect changes / developments on the ground?	a. Changes to be notified to Certification Committee.		Important
05.02	Were the appropriate national authorities intimately involved in the LIS process?			Critical
05.03	Were vehicles and equipment serviceable, suitable, and available?			Important
05.04	Did LIS senior staff adequately monitor field activities?			Critical

Certification Criteria, Quality Assurance Stage 4: **Implementation – Data Analysis and Handover**

1. Information requirements

The aim of Stages 2, 3, and 4 of the QA process is to determine whether the organisation implementing the LIS continues to conduct the project in accordance with the LIS Operational Protocols. This will involve monitoring the LIS process and the controls on it, such as internal quality assurance and other management activities.

Stage 4 shall address the following LIS activities and related issues:

- a. Data Analysis.
- b. Information Handover.
- c. Strategic Planning Activities.

2. Time Frame

The Stage 4 QA assessment shall commence at the *Data Analysis* phase and conclude after the *Information Handover* phase. The precise duration of the in-country QA inspection shall be determined by UNMAS but shall take place at a time that allows for both of these phases to be observed. It is expected that the in-country QA inspection will have a duration of 2 – 3 weeks.

3. Report Format

The Stage 3 QA Report shall take the following format:

1. Basic data

- a. Any changes to initial data.
- b. QAM details and Inspection Mission dates.

2. Operational Conduct Issues

- a. Data analysis.
- b. Information handover.
- c. Final report.
- d. Strategic planning / implementation measures.

3. Additional Observations

- a. Progress against timeline and budgetary implications.
- b. Any other relevant issues.

4. Certification Criteria

1. Data Analysis

Item	General Requirements	Detailed Requirements	Reference	Critical / Important / Less important
01.01	Was data able to be converted from IMSMA into Master Tables and did all appropriate people understand the process?		9.5.1	Critical
01.02	Was this process tested and modified if necessary?		9.5.1	Important
01.03	Was data export successful?		9.5.1	Critical
01.04	Were the appropriate basic descriptive statistical tests conducted on the Master Tables?		9.5.2	Important
01.05	Were field staff appropriately trained in data monitoring procedures?		9.5.2	Important
01.06	Was advanced analysis of data appropriate and statistically valid?		9.5.2	Critical

2. General

Item	General Requirements	Detailed Requirements	Reference	Critical / Important / Less important
02.01	Were the appropriate national authorities intimately involved in the LIS process and did they take ownership of the survey at an early stage?			Critical
02.02	Was the operational plan regularly revised and updated to reflect changes / developments on the ground?	a. Changes to be notified to Certification Committee.		Important
02.03	Did LIS senior staff adequately monitor field activities?			Critical
02.04	Were host government authorities provided with a thorough briefing reviewing the conduct of the LIS and its preliminary findings?			Critical
02.05	Did the host government make comment on the LIS and were these comments included in / appended to the final report?	b. Letter from National Authority to be received within two weeks of draft final report.		Critical
02.06	Did the surveying organisation conduct briefings of the preliminary findings with key stakeholders?			Important
02.07	Did the surveying organisation produce a Final LIS report detailing the findings of the LIS and the national authority's comments?			Critical
02.08	Were the appropriate national authorities provided with all relevant information?	c. The complete IMSMA database, complete with data subsets. d. Complete maps of all mine-affected districts/ provinces in hard copy and electronic formats. e. Other relevant documentation.		Critical
02.09	Did the relevant national authority use the LIS data for strategic or operational planning purposes, or were they planning to do so?			Critical