

Quality Management Systems in Mine Action Programs

The United Nations Mine Action Service in the Democratic Republic of the Congo (DRC) is in the process of implementing a new quality management system (QMS) for mine action in DRC. The QMS was implemented in July 2013 and its progress continues to be carefully monitored each quarter.

by Pascal Simon and Stefan De Coninck [UNMAS-DRC]

The United Nations Mine Action Service (UNMAS) in the Democratic Republic of the Congo (DRC), established national standards and quality assurance (QA) and quality control (QC) policies for mine action and implemented a quality management system (QMS) in May 2011 based on the International Mine Action Standards (IMAS) guidelines. Key quality processes, such as accreditation, monitoring and post-clearance inspection, follow the IMAS guidelines.

However, the implementation of the QMS at the grass roots level was not uniform. The reasons were obvious: Many inconsistencies in applying QMS could be attributed to a dynamic program with frequent changes in personnel, whose backgrounds and experiences varied, and changes in the locations of teams as they moved for different clearance operations. To address these challenges, UNMAS-DRC decided to examine the QMS rather than the personnel implementing the system.

After review, UNMAS-DRC found that one of the core reasons for noncompliance with QMS was the perception that the system was an “add on” to operational work. Staff did not find a link between the increase of quality management (QM) and the strengthening of operational procedures.

As a result, UNMAS-DRC sought to integrate QMS into daily operations so that it would no longer be perceived as a separate task. This required an objective means of measuring compliance with the system. UNMAS-DRC chose to implement a balanced scorecard (BSC) system, which had been successfully implemented in other UNMAS programs, such as in Afghanistan. In the BSC system, each office or organization receives a weekly score based on the accuracy and timeliness of their reports and on external and internal QA requirements. In addition to measuring compliance of mine action organizations, the BSC measures compliance of UNMAS-DRC regional operational offices.

To help implement the BSC system, UNMAS-DRC requested the assistance of the Swiss Armed Forces’ Explosive Ordnance Disposal (EOD) Centre, which provided a QM adviser. Together, the Swiss QM adviser and UNMAS established a QM board consisting of UNMAS operations and program section representatives to ensure agreement on all proposed actions and changes.

Objectives

The starting point for any QMS is the senior management’s policy on QA and QC. The previous UNMAS-DRC QM policy did not take into account changes in goals for the DRC program, which are now guided by the recently adopted national mine action strategy and national legislation. In 2002, the DRC government signed the *Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-personnel Mines and on Their Destruction* (Anti-personnel Mine Ban Convention or APMBC). In 2008, a national focal point structure was created within the Ministry of Interior to handle mine action in DRC. Parliament passed mine action legislation in June 2011. A key component of these developments, which needed to be included in the new QMS, was the aim to transition capacity for the planning, tasking and coordination of all mine action activities in DRC from UNMAS to the *Centre Congolais de Lutte Antimines* (Congolese Centre for Mine Action or CCLAM).

After reviewing the previous QM policy drafted in 2010, the QM board approved a QM policy in January 2013 with three main objectives for the mine action program:

1. Ensure that UNMAS-DRC activities maintain a consistent level of quality, meet all legal requirements and comply with United Nations Office for Project Services (UNOPS) policies and international standards related to mine action, such as IMAS and the *International Ammunition Technical Guidelines*.



Figure 1. U.N. mine action activities in the DRC (2.3 million sq km [888,035 sq mi]) are managed by five regional offices and coordinated by the UNMAS-DRC headquarters in Kinshasa.

All figures courtesy of UNMACC.

2. Provide the confidence and assurance that mine action organizations adhere to standards in accordance with IMAS, national standards and their own standard operating procedures (SOP) throughout the conduct of operations for which they are accredited.¹
3. Secure a well-documented, effective and efficient QMS for all mine action activities in DRC, which can be implemented by national authorities.

Concurrently, an analysis was conducted in regional UNMAS-DRC offices (see Figure 1) to identify deficiencies and regional distinctions. The analysis was based on a survey questionnaire and informal talks between QA staff, the quality manager and the quality advisor over a two-month period. The result of the analysis led to five specific measures, which would be needed to meet the objectives of the QM policy:

1. Internal structures, processes and competencies need to be clarified and defined in standard working procedures (SWP) to create a uniform understanding of the functions and responsibilities of regional operational offices and to ensure that the application of QMS in daily operations is not dependent on the experience of individuals.²

2. All steps of the land release methodology in DRC must be subject to QM processes, and methodology must correspond with the latest international guidelines on land release.
3. A review and streamlining of accreditation, monitoring and post-clearance inspection processes is required to simplify and adapt the processes to the logistical constraints of working within DRC without compromising the integrity of the system.
4. An objective monitoring and evaluation tool must be developed and implemented to build on the continuous improvements of the system and its applications.
5. National standards are to be reviewed where relevant.

SOP and SWP

QM success relies on SOPs that unambiguously define each task, process and person's position within the program. The QMS must be used to link SOPs with relevant documentation and forms. For example, to issue a task, a task data sheet and task order must be generated and a task dossier opened. The SWP flow chart for opening a task dossier displays the step-by-step process and links each sub-procedure, document and form to the relevant step in the process. This is the backbone of the revised system. All SOPs are easily represented in a pictorial format through flow charts rather than through a set of written instructions and procedures, making them simple and helpful.

SWPs, together with the terms of reference for each position, also offer clear performance indicators that could be used to monitor and evaluate compliance by personnel as well as the effectiveness of the system.

Priority was given to developing and implementing SWPs at the operational level, specifically at UNMAS-DRC's five regional operational offices. Using a combined planning matrix based on the type of task, resource availability and access, SWPs for regional operational offices include the integrated planning of operations and QM, combining the monitoring of operations through both external and internal QA visits.

QA field visits are a shared responsibility for UNMAS and implementing partners. The visits are divided into multiple parts: Team leaders and site supervisors conduct self-assessments to evaluate the areas for which they were responsible, implementing partners' QM officers conduct internal assessments and UNMAS regional operational offices conduct external assessments. The records of the assessments as well as corrective and preventive actions are managed by UNMAS through mandatory weekly and monthly reporting and the inspection of site documentation. The reports are reviewed

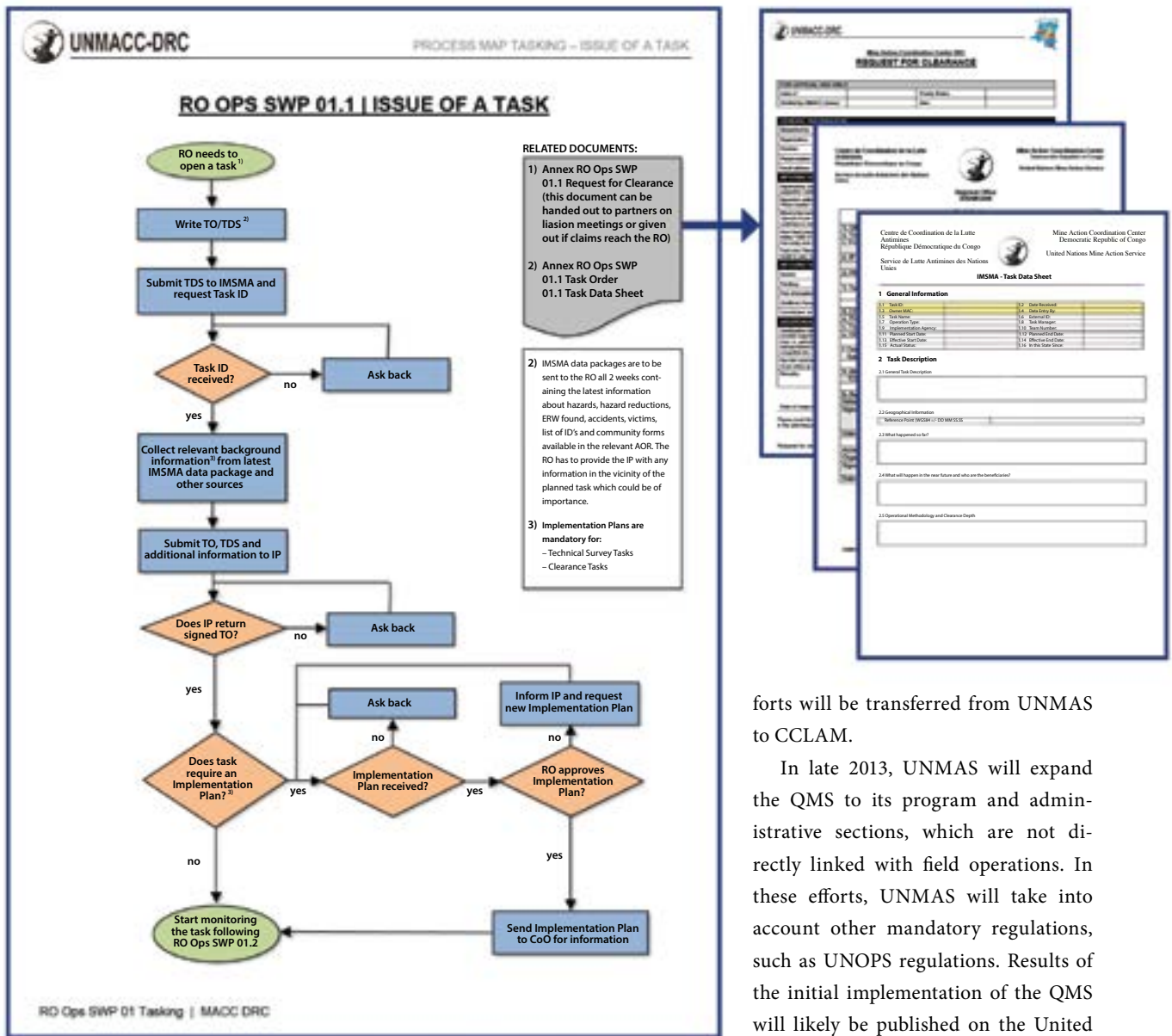


Figure 2. One example of a SWP for regional UNMAS-DRC offices. The process for issuing a task is shown in a digital flow chart and linked with the needed templates.

by the regional offices for completeness and correctness before being forwarded to UNMAS-DRC headquarters in Kinshasa (the base of the BSC system).

Regardless of the work conducted (survey, clearance, demolition or risk education), the increase in site-level quality assessments results in increased confidence. This is especially true for post-clearance inspections, which reduce the amount of land that must be sampled.

In July 2013, all UNMAS-DRC regional offices were issued the QMS, QA staff underwent training, and all SWPs were explained. Currently (August 2013–February 2014), six staff members from CCLAM are working in three regional offices and are undergoing training to learn the QMS and to build their capacity in managing the tasking, coordination and monitoring of mine action activities. Eventually, the responsibility for the QMS and other mine action ef-

forts will be transferred from UNMAS to CCLAM.

In late 2013, UNMAS will expand the QMS to its program and administrative sections, which are not directly linked with field operations. In these efforts, UNMAS will take into account other mandatory regulations, such as UNOPS regulations. Results of the initial implementation of the QMS will likely be published on the United Nations Mine Action Coordination Centre's (UNMACC) website and in UNMACC monthly updates, once adequate data is collected.

The Circle

Continuous improvement inherently means change. To ensure positive change, quality must be measured. QM is therefore heavily reliant on an objective, adequate monitoring and evaluation tool, such as the BSC system. The UNMAS program intends to use this method to examine the performance of the organizations it coordinates as well as to monitor its own performance and

adherence to QMS. Both UNMAS-DRC and the different UNMAS sections' performance are reviewed quarterly, and root-cause analysis is conducted to identify necessary corrective actions that will improve performance or the QMS itself.

Thanks to the contribution from the EOD Centre of the Swiss Armed Forces, the end result of the development of a QM policy is a commitment of all stakeholders (CCLAM, EOD Centre of the Swiss Armed Forces, UNMAS and national and international mine action partners in the DRC) to the continuous improvement concept, making the QMS in mine action an asset rather than a burden. ©

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News Brief

Typhoon Haiyan Leaves Ordnance Contamination in its Wake

On 8 November 2013, Typhoon Haiyan, a category 5 super typhoon, landed in the Philippines causing widespread destruction. According to the U.S. Agency for International Development, 16 million people have been affected, with 6,155 confirmed deaths and 4.1 million people displaced.¹

During the typhoon, a military armory was destroyed near Tacloban, one of the cities most affected by Typhoon Haiyan. With 273.6-kmh (170-mph) winds and 4.572-m (15-foot) wave surges, Typhoon Haiyan scattered explosive remnants of war (ERW) throughout the surrounding area.^{2,3}

The Philippines does not have an official ERW clearance program, and various government agencies, including the Armed Forces of the Philippines and local police, handle clearance operations.⁴

Natural disasters can spread ERW and landmine contamination while exacerbating the difficulties of current humanitarian clearance efforts. Mines relocated by floodwaters are particularly dangerous. Deminers are trained to clear land-



A young resident of Tacloban City walks through debris left behind by Typhoon Haiyan.

Photo courtesy of U.N./Evan Schneider.

mines placed upright; however, floodwaters can cause landmines to sink into the mud in any position.⁵

The Philippine army is attempting to keep people away from contaminated areas, but locating the ordnance is difficult because many of the explosives, ordnance and grenades are covered by mud.⁶ ©

~ Brenna Feigleson, CISR Staff

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