UNMAS Physical Security and Stockpile Management Pilot Programme

MINE ACTION AND ARMED VIOLENCE REDUCTION

Côte d’Ivoire

CASE STUDY | SEPTEMBER 2012
The Geneva International Centre for Humanitarian Demining (GICHD), an international expert organisation legally based in Switzerland as a non-profit foundation, works for the elimination of mines, explosive remnants of war and other explosive hazards, such as unsafe munitions stockpiles. The GICHD provides advice and capacity development support, undertakes applied research, disseminates knowledge and best practices and develops standards. In cooperation with its partners, the GICHD’s work enables national and local authorities in affected countries to effectively and efficiently plan, coordinate, implement, monitor and evaluate safe mine action programmes, as well as to implement the Anti-Personnel Mine Ban Convention, the Convention on Cluster Munitions and other relevant instruments of international law. The GICHD follows the humanitarian principles of humanity, impartiality, neutrality and independence.
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INTRODUCTION

The United Nations Mine Action Service (UNMAS) first started working in Côte d’Ivoire (CdI) in May 2011, following a request from the Disarmament, Demobilisation and Re-integration (DDR) division of the UN mission in CdI (UNOCI) to conduct a survey on suspected mine/ERW contamination. UNMAS subsequently contracted the mine/ERW operator HALO Trust, and HALO Trust visited several parts of the country where fighting was said to be the most intense. It confirmed that there was no evidence of mine contamination and that, apart from Abidjan, there was limited contamination of Unexploded Ordnance (UXO). However, it soon became clear that the proliferation of insecure or loosely secured weapons and ammunition was widespread. In many cases, weapons and ammunition in military, gendarmerie and police facilities were poorly secured and arms and ammunition stores had been broken into and looted. Storage conditions in armouries and depots were generally in violation of relevant regional and international standards on the safe storage and management of small arms and light weapons (SALW) and ammunition.

UNMAS then contracted HALO Trust to undertake a pilot armoury rehabilitation project from July-August 2011. This subsequently led to UNMAS’s pilot Physical Security and Stockpile Management (PSSM) programme to support the military, known as the Forces Républicaines de Côte d’Ivoire (FRCI), the Gendarmerie and the Police. This is the first large-scale PSSM programme that UNMAS has coordinated and it is also the first PSSM programme that HALO Trust has implemented in a country where it does not have a mine action programme. The purpose of this case study is to examine the main components of the pilot PSSM programme in Côte d’Ivoire, including the roles of UNMAS and HALO Trust, key lessons learnt and how the programme supports wider DDR, Security Sector Reform (SSR) and small arms control efforts in CdI.

CONTEXT

From 2002, Côte d’Ivoire was divided between the north, which was held by the rebels, and the south, controlled by ex-President Laurent Gbagbo’s forces. Armed forces on sides both committed widespread human rights violations. They operated with impunity, were corrupt, lacked resources and were not accountable. In February 2010, President Gbagbo dissolved the government and the Independent Electoral Commission in order to postpone national elections. This resulted in riots and deaths. Presidential elections were eventually held in November 2010, and Allasane Outtara was declared winner. Fighting subsequently broke out between Gbagbo’s and Outtara’s forces, and reached a crisis point in March 2011. Intense fighting took place in civilian areas such as Abidjan, which prompted a UN Security Council resolution mandating intervention to protect civilians, to which end UN and French forces were deployed.

Over the past 10 years of conflict and during the most recent conflict, armouries and ammunition storage depots were looted and damaged across the country. A significant amount of arms and ammunition is now in civilian and militia hands. According to the Small Arms Survey, the number of illicit arms in circulation increased considerably during the recent crisis, and a significant number of small arms are available for sale in illicit markets throughout CdI, including military and artisanal weapons.

The main security providers in CdI are the FRCI, the Gendarmerie and the Police. The Police are a civilian force under the Ministry of Interior and typically only operate in urban areas, while the Gendarmerie is a military body that falls under the Ministry of Defence, and which operate primarily in rural areas. In the past, each force had different types of weapons, however, this is no longer the case. The political crisis has led to an overall destabilisation of the security sector, which has weakened the capacity, discipline and professionalism of all forces and has contributed to the widespread lack of public confidence.
ROLE OF UNMAS

Following the recent crisis, the UN received reports that mines had been laid along the line of confidence, which had divided the north and south of the country, separating Allasane Outtara’s forces and those of Laurent Gbagbo, the former President. The Chief of the DDR division in UNOCI contacted UNMAS for assistance to confirm whether there was a mine/ERW contamination problem. UNMAS responded immediately and dispatched a technical advisor to CdI within days. UNMAS submitted a request to the Swedish Civil Contingencies Agency (MSB) for emergency Explosive Ordnance Disposal (EOD) and contracted HALO Trust to assist.

In Abidjan, the emergency EOD teams found significant UXO and Improvised Explosive Device (IED) contamination. No mines were found in Abidjan or the rest of the country. UNMAS put a team in place to respond to the contamination which comprised UNOCI, the Gendarmerie, MSB and FRCI. MSB trained a team of 100 from the FRCI and Gendarmerie in Battle Area Clearance (BAC) and initiated emergency BAC. Between April and November 2011, BAC resulted in the clearance of approximately 90 per cent of Abidjan. A rapid response system has been established.

The initial assessment highlighted a problem with unexploded and abandoned ordnance, and that arms and ammunition in FRCI, Gendarmerie and Police depots and armouries had been looted. UNOCI-DDR therefore asked UNMAS to put in place a team to deal with ammunition storage safety. Reporting to the DDR-SSR Division, a mine action programme was established under UN Security Council resolution S/RES/2000 (2011) to contribute to “protection and security” for the stabilisation and reconstruction of the country. The UN Security Council resolution also specifies that UNOCI’s mandate includes, among other things, the provision of support for SALW collection and disposal, registration, safe storage and civilian disarmament.

Among other activities, the UNMAS programme supports the development of national capacity to manage weapons and ammunition stockpiles in terms of:

1. rehabilitation and refurbishment of infrastructure (ready rooms, armouries and Ammunition Storage Areas)
2. ammunition stockpile management technical training
3. elaboration of national standards on ammunition stockpile management

More specifically, UNMAS’s responsibilities include:

- tasking and prioritising all activities
- liaising with the PSSM Technical Working Group
- producing a PSSM operational plan and coordinating implementation in association with the national authorities
- securing military and civilian authority to conduct all activities, including the destruction of mines, ERW and ammunition
- liaison with UNOCI DDR and SSR and other key stakeholders
- maintaining records on the status of PSSM activities in CdI
- maintaining records on all mines/ERW found and destroyed
Traditionally, UNMAS provides assistance through a peacekeeping mandate; however UNMAS can also provide support for a protection mandate via a request from the UN Humanitarian Coordinator. The National SALW Commission has endorsed UNMAS’ efforts to engage in PSSM and has emphasised that they fall within Côte d’Ivoire’s national obligations under the Economic Community of West African States (ECOWAS) SALW Convention.

The budget for the initial phase of the PSSM programme (2011/12) came through the UNOCI-DDR Division and consisted of USD 5 million. Funding from July 2012 to 2013 will increase to USD 7.3 million and comes from the UN assessed peacekeeping budget. The increase is due in part to the inclusion of a training component as well as additional UNMAS staff.

The UNMAS team currently consists of six international staff (Programme Manager, Deputy Programme Manager, Ammunition Management Officer, Programme Officer, PSSM Junior Specialist and Support Services Officer) and three national staff (Logistics, Administration, Driver).

UNMAS has attempted to establish a PSSM programme in the Democratic Republic of the Congo however, progress has been slow. Similar programmes are operating in Libya, Somalia and Congo-Brazzaville. UNMAS also has tentative plans to establish PSSM programmes in other parts of West Africa based on need and request for assistance from national authorities. UNMAS has conducted a regional desk study on PSSM programme opportunities in West Africa.

HALO TRUST’S PSSM PROGRAMME

The main objective of the UN mission in Côte d’Ivoire (CdI) is to support the stabilisation of the security situation, particularly in Abidjan and in the western part of the country along the border with Liberia. To support the achievement of this objective, UNMAS contracted HALO Trust to implement a PSSM programme to: reduce the threat posed by insecure weapons and ammunition in these areas; and develop the capacity of the security forces to manage and secure weapons and ammunition.

HALO Trust’s PSSM programme focuses on three main components:

> physical security of ammunition storage depots (and the establishment of a temporary ammunition storage area)
> support to the DDR process through technical support with the collection and destruction of arms and ammunition
> capacity development of national authorities (FRCI, Gendarmerie and Police) to safely manage their stockpiles of arms, ammunition and explosives

The anticipated results are as follows:

1. improved protection of civilians
2. safe handling and securing of insecure weapons and ammunitions obtained through DDR operations
3. enhanced national capacity to manage and secure weapons and ammunition in CdI
Initial phase
Between July-August 2011, UNMAS contracted HALO Trust on a pilot basis to:

> undertake a national assessment of the weapons and ammunition storage facilities in the country leading to a plan for their rehabilitation and future management\(^{16}\)

> assist in securing and safeguarding ammunition through the establishment of a temporary storage area where insecure or at-risk ammunition could be housed while a longer term solution was investigated

> improve weapons security through the provision of two armoury upgrades\(^{17}\)

> provide technical support to DDR through assistance at disarmament events and assessment of ammunition and weapons storage facilities

The purpose of the temporary storage area was to house at-risk ammunition\(^{18}\) and ammunition and arms received through voluntary disarmament initiatives while refurbishment work was taking place.

Assessments
Based on a request from UNMAS, HALO Trust undertook a wider survey of sites across the country, focusing primarily on the central and western regions. Although contracted to conduct an assessment of 30 storage facilities, HALO Trust managed to conduct 56 assessments between October 2011 and end of June 2012. HALO Trust writes up the findings of each assessment in a formal report which provides details on the situation and makes recommendations regarding the refurbishment work required. Based on the assessments, UNMAS has classified 21 as high priority tasks (six for the FRCI, nine for the Gendarmerie and six for the Police) which are planned for 2012-2013.
Assessments conducted by HALO Trust for each site are based on, among other things, the following questions:

> What is the desired outcome at the site (ammunition removal, armoury upgrade or ammunition storage facility upgrade)?
  > Is this practical/achievable?
  > Work required?
  > Safe store available?

> Ammunition storage criteria:
  > Is the ammunition suitable for storage?
  > Is the original packing intact?
  > Is the proposed storage quantity within the explosive limit of the building?
  > What is the distance to the nearest civilian inhabited building?
  > Is the store suitable for 1.1 material

> What activities are required:
  > Emergency Clearance
  > Major Construction
  > Use of earthmoving equipment
  > Vegetation cutting
  > Barricading
  > Lightning Protection
  > Rendering
  > Steel work
  > Security doors
  > Fencing
  > Lighting
  > General electrics
  > Other

Source: UNMAS | July 2012

Figure 1 | PSSM assessments

Box 1 | HALO Trust | Sample assessment questions for refurbishment work

Abidjan

Source: UNMAS | July 2012
The scale of the tasks that HALO Trust assessed varied from simple guard posts to more complicated ammunition storage facilities. According to HALO Trust, all 56 sites require significant improvement, and in some cases, one site may include several facilities.20 For example, the assessments indicated that in many cases:

> ammunition was being stored in buildings that were not originally designed as ammunition storage facilities and which do not meet international standards

> significant quantities of ammunition were housed in ad-hoc storage facilities, many of which were also being used for other purposes, eg housing staff

> there is little respect for Quantity Distances21 - for example, ammunition is stored close to inhabited buildings

> different types of ammunition are often stored together in violation of ammunition hazard classification codes

> some ammunition is in very poor condition and should be destroyed immediately

> there are no records of ammunition origin or life history22

HALO Trust highlighted the risk of an unplanned explosion in Côte d’Ivoire and advised UNMAS that the main problems with regards to ammunition management are as follows:

1. **What is being stored**: some of the ammunition has degraded to such a perilous state that it cannot be used and needs to be destroyed.

2. **How it is being stored** - Hazard classifications need to be respected so that the most sensitive items (fuses) are kept well away from mass explosives such that any incident is minimized,

3. **Where it is being stored** – wherever there is a mass explosion hazard a suitable exclusion zone must exist around with no housing, roads or items of infrastructure placed within it. Buildings that were at one point suitable for explosive storage have been rendered unfit by the proximity of new housing.”23

Based on the assessments, HALO Trust concluded that if ammunition management practices are not improved in CdI, an unplanned explosion on the scale of that recently witnessed in Congo-Brazzaville could be expected. HALO Trust advised UNMAS of the need to immediately remove and destroy the most degraded items to significantly improve the overall safety of the current storage conditions.

The assessment confirmed research undertaken in CdI by the Small Arms Survey in 2010 which found weak stockpile management practices, a lack of respect for basic security rules and facilities in poor condition.24

**Temporary ammunition storage area**

Given the crowded conditions in many ammunition storage facilities and the lack of controls, UNMAS contracted HALO Trust to establish a secure temporary storage area. HALO Trust selected the football grounds at the FRCI New Akouedo camp in Abidjan, given its relative isolation and good security. HALO Trust secured 10 shipping containers, and using principles of separation and segregation, the ammunition is housed according to generic and explosive classification. All containers have a list identifying the ammunition type and amount being stored and tracking the movement in and out of the containers. All ammunition that is obsolete and degraded will be destroyed once HALO Trust has identified a suitable central destruction site and has been given authorisation for destruction activities. Ammunition in good condition is returned to the original facilities by HALO Trust once refurbishment work is completed.
Current programme operations

Improving physical security
As a follow up to activities undertaken during the initial phase of PSSM support, HALO Trust completed 56 assessments of Police, Gendarmerie and FRCI facilities between October 2011 and end June 2012, as part of its contract with UNMAS. By the end of June, HALO Trust had completed refurbishments in 23 sites, and is working on 18 tasks that have been prioritised by the national authorities and UNMAS. This includes the refurbishment of larger FRCI ammunition storage depots in Old Akouedo (in Abidjan), Douala and Yamoussoukro.

Figure 2 | PSSM activities | Disbursement of funds effective July 2012 (per entity in USD)
Box 2 | Refurbishment work at Old Akouedo

Old Akouedo is an established military camp with a purpose built ammunition storage compound. The site is located in a civilian area, in close proximity to a hospital, schools and residential housing. A minor explosion took place in one of the ammunition stores in 2011 but fortunately only resulted in damage to the building, and no deaths or injuries; however it highlighted the poor storage conditions and the risk of an unplanned explosion. The FRCI store many types of ammunition there, including bulk explosives, and are aware that it is not suitable for the storage of Hazard Division 1.1 material. For these reasons, the refurbishment of the FRCI’s ammunition storage depot in Old Akouedo was prioritised by the FRCI.

Between 80-100 people will be employed to refurbish the site for a period of three months and at a cost of approximately USD 250,000. The task involves the refurbishment of 20 ammunition stores, six administrative buildings and several guard posts. HALO Trust will also erect a secure perimeter fence. Once completed, only small arms ammunition and limited quantities of hand grenades and other small (Hazard Division 1.2) items will be stored at Old Akouedo.25
HALO Trust has developed a detailed guide for the refurbishment work. The guide is to be used as a visual aid, and provides examples of the minimum standards expected during construction work at project sites. (See Section 4.2.4 on Quality Management for additional detail).

During the initial phase, HALO Trust used several smaller contractors to undertake the refurbishment work. However, given the number and increasing scale of the tasks that are planned, HALO Trust has employed an engineering consultancy firm to prepare the specifications for the various tasks required and manage the overall process of identifying suitable contractors to undertake the construction work. The sites have been divided into lots of work enabling several different construction firms to bid on specific lots. HALO Trust has recruited an expatriate chartered surveyor to manage the entire refurbishment process in association with the engineering consultancy firm, and to conduct Quality Assurance (QA)/Quality Control (QC) in order to ensure that the construction work is completed to a high standard. UNMAS’ Ammunition Management Chief conducts external QA/QC and checks the safety distances.

During the second half of 2012 and 2013, planned rehabilitation work includes:

- three national FRCI ammunition depots which involve a total of 46 ammunition stores
- six ammunition stores (four FRCI and two Gendarmerie)
- 10 armouries (eight FRCI and two Gendarmerie)
- 19 ready rooms (13 FRCI, three Gendarmerie and three Police)

Support for disarmament
In preparation for an eventual DDR programme, the DDR division of UNOCI and the National SALW Commission (ComNat-ALPC) organised several two-day events where civilians could voluntarily hand over weapons and ammunition. UNMAS and HALO Trust supported these events by deploying technically qualified staff to check weapons, inspect and identify ammunition prior to their registration by the UNOCI-DDR team, and advise on the temporary storage of arms and ammunition. HALO Trust also provided the DDR team with an ammunition recognition guide which includes all munitions types that HALO Trust had seen in CdI.
The embargo section from UNOCI’s DDR division is allowed full access to the temporary storage containers housing all arms and ammunition collected through voluntary civilian disarmament. They identify what goes into storage and check serial numbers, make, origin, etc. to screen for illicit weapons smuggled into CdoI in violation of the arms embargo (Security Council resolution 1572 (2004)). Thus far, they have identified more suspect ammunition than arms, and when they do find something that looks like it is in violation of the arms embargo, the UN embargo team set it aside.28

Given the country-wide looting of arms and ammunition from Police, Gendarmerie and FRCI storage depots across the country, lack of confidence in these key security providers and the low number of arms and ammunition returned through the civilian disarmament campaign to date (eg 1,500 SALW were handed in between October 2011 and April 2012), the amount of arms and ammunition still in civilian (and militia) hands is believed to be considerable.29

Figure 5 | Weapons and ammunition collection

While formal DDR has taken place on and off since 2004/5 in CdoI, a new DDR programme is being developed which will be implemented by the DDR division of UNOCI, in association with ComNat-ALPC. Approximately 24,000 of a total of 40,000 ex-combatants are projected to be demobilised in 2012/13. All arms and ammunition will be stored in temporary UNOCI storage facilities. At present, HALO Trust has six national staff that support the civilian disarmament process. Once the formal DDR process is operational, HALO Trust may recruit and train additional staff members.

Arms and Ammunition Destruction
When discussing arms and ammunition destruction, there are two categories in CdoI:

1 | government stocks of SALW and ammunition which are under the control of the government/Ministry of Defence

2 | those which have been voluntarily surrendered to the UNOCI peacekeeping mission through the voluntary civilian disarmament events organised by UNOCI and the National SALW Commission

Based on a request from UNMAS, HALO Trust has started to destroy some ammunition from government stocks, eg rockets; however this can only be done with the approval of the Ministry of Defence.
With regards to arms and ammunition surrendered to the UNOCI peacekeeping mission, what is not set aside by the UN embargo team will either be destroyed if obsolete, degraded or no longer serviceable. If serviceable, the arms and ammunition will remain in temporary storage until UNOCI authorities release them to the FRCI, Gendarmerie and Police. HALO Trust has authorisation to destroy unserviceable SALW only. In July 2012, HALO Trust destroyed 600 SALW as part of a two day event coordinated by UNMAS and the ComNat-ALPC. It was the first weapons destruction exercise since the 2011 post-election crisis.

HALO Trust has mobile hydraulic shears which it deploys to the site of the voluntary disarmament events to destroy SALW on site. HALO Trust uses an incinerator for the destruction of small arms ammunition and in situ destruction for the destruction of degraded and at risk ammunition. It is in the process of identifying a suitable central destruction site for large scale ammunition destruction.

Capacity development
Based on training needs assessments conducted by UNMAS, it is clear that armourers in the FRCI, Gendarmerie and Police lack capacity in the areas of SALW and ammunition identification, safe storage and management. In May 2012, UNMAS published a tender for the delivery of training and monitoring services in ammunition management and EOD. The private security company G4S was selected as the training provider and training commenced in the second half of 2012.

The ammunition management training, likely delivered as a Training of Trainers, will be for nominated personnel from the security forces (ie the FRCI, Gendarmerie, the Police and possibly also the Air Force, Navy, Customs and Water/Forestry department). It will consist of two Ammunition Management sessions:

1. 2012 Session will train 10 FRCI and five Gendarmerie officers
2. 2013 Session will train 10 FRCI and five Police officers

Each training session will consist of three modules:

1. The basics on ammunition management (three weeks)
2. Depot operation (eg Standard Operating Procedures for running a storage depot) (two weeks)
3. Inspection –to develop in-house QA/QC capacity (two weeks)

The EOD training will also involve two training sessions, one in 2012 and one in 2013, which will each train 12 FRCI and eight Gendarmerie officers in EOD Level 1 and 2. Upon completion of both sessions, five students from each session will be selected to undergo EOD Level 3 training.
Quality Management

Quality Assurance/Quality Control
Prior to May 2012, no formal external QA/QC of HALO Trust’s PSSM work was undertaken, apart from adhoc monitoring on the part of UNMAS personnel. UNMAS undertook periodic visits to check on HALO Trust’s work, and met with HALO Trust on a regular basis to get an update on their tasks. However, UNMAS recognises the need for QA/QC and has addressed this by recruiting a new Ammunition Management Chief who is responsible for developing a Quality Management policy and procedures for PSSM and conducting external QA/QC of HALO Trust’s PSSM work.

HALO Trust provides daily, weekly and monthly updates to UNMAS, as well as regular updates to the FRCI, Gendarmerie and the Police. The FRCI also visits HALO sites periodically.

Best practice guides
According to UNMAS, the establishment of a legal framework is essential to ensure the sustainability of any PSSM project. Based on the International Ammunition Technical Guidelines (IATG), HALO Trust and UNMAS have compiled best practice guidelines on Ammunition Stockpile Management in French. Their purpose is to provide a basis for the development of national standards for PSSM, and to act as a working guide for the design and management of ammunition storage facilities. This guide was presented and distributed to the national security forces during a PSSM technical working group meeting. In parallel, the ComNat-ALPC is developing a guide on Weapons Stockpile Management with the intention to consolidate both guides into one document, which will form the National Standards on Ammunition and Weapons Stockpile Management.
Specific chapters included in HALO Trust’s best practice guide include:

- Ammunition storage site selection criteria
- Storage of explosive ordnance by hazard division and compatibility groups
- Ammunition storage techniques
- Safety distances/Quantity distances
- Ammunition building construction criteria
- Storage of hazard division 1.1 – 1.6 items
- Layout of magazines within an ammunition storage facility
- Protective works: Barricades and traverses
- Ventilation
- Lightening protection
- Physical and non-physical security measures
- Prevention of fire and fire fighting within an ammunition compound
- Explosive licensing
- Security plan
- Ammunition proving and inspection
- Ammunition categorisation

The Quality Management framework used by UNMAS for the programme is based on the IATG. HALO Trust in CdI does not have a specific person who is responsible for Quality Management. Instead, all HALO Trust staff are responsible for ensuring quality.

HALO Trust has developed a guide for its construction and refurbishment work entitled “A Guide to the Minimum Generic Specifications that are to be used on HALO Project Sites”. The guide is intended as a visual aid for contractors and HALO Trust’s Construction Manager, and provides working examples of the minimum standards expected during construction work at HALO Trust project sites.

The guide specifies that HALO Trust’s construction work must meet the following criteria:

- **Durability** | all work must stand the test of time
- **Material selection** | materials should be good quality and long lasting but do not need to be of a high specification or top of the range
- **Finish quality** | all tasks should be completed to a good level of craftsmanship
- **Efficiency** | work should be completely efficiently and effectively, eg contractors should avoid the unnecessary removal of original materials
- **Completion** | When construction work is completed, they should be handed over in a clean, neat and clear state

The guide provides visual examples of rendering, block work walls, grill/mesh ceiling security, ventilation, window security, ammunition safes, armoured doors, issue doors, issue hatches, locks and unloading bays.
Information Management

At present, UNMAS and HALO Trust use Excel spreadsheets to record data for PSSM-related activities, eg SALW collection activities, armoury refurbishment plans. HALO Trust provides UNMAS with regular reports, and this information is shared and verified through the PSSM Working Group. UNMAS keeps track of operations using Excel-based weekly reports from HALO Trust. HALO Trust also uses Gantt charts to track progress for each task and to explain if they are ahead or behind schedule. HALO Trust has weekly coordination meetings with UNMAS to report on progress and discuss plans.

Following a mission to CdI in May 2012, GICHD is working with UNMAS and HALO Trust to pilot the use of IMSMAng for the PSSM programme. In July, GICHD delivered tailored training in Geneva on IMSMAng for UNMAS’s PSSM Junior Specialist, in order to facilitate the adaptation of IMSMAng for PSSM, and the provision of IMSMAng training for UNMAS and HALO Trust CdI staff.

HALO Trust capacity

HALO Trust’s team in CdI currently consists of four international and 14 national staff, six of whom have been trained in the identification and transportation of arms and ammunition, and will also be trained in EOD Level 3 as per IMAS to respond to spot EOD tasks. Throughout this project, HALO Trust has maintained at least one international staff member who is IMAS Level 4 qualified.

One of the four international staff members is a chartered surveyor who is responsible for managing the refurbishment of the larger FRCI ammunition depots planned in 2012. During the first phase of support, HALO Trust was able to function without a construction expert; however, given the scale of future tasks, they believe that specialist expertise is an advantage.

PSSM programmes require someone with ammunition management expertise, similar to the UK Ammunition Technical Officer (ATO) qualification. HALO Trust’s international staff are trained to a minimum of EOD Level 2 certification (which takes three weeks) – others continue with further courses to improve their EOD qualifications.

RESULTS

Between April 2011 and July 2012, the following outputs were achieved:

Assessments of weapons and ammunition storage areas 56
Rehabilitation work | ongoing 11
Rehabilitation work | completed tasks 30
Ammunition classified and temporarily stored 40 tons
Support to disarmament operations 42 operations
> Including the collection of 1,821 arms
316,865 munitions

National PSSM Working Group

The Government of CdI and the security forces recognise the risks posed by unsecured arms and ammunition and poor ammunition management practices, and the collaboration with UNMAS and HALO Trust has largely been positive. This is illustrated by the fact that a national PSSM Working Group has been established, which is chaired by the Head of the FRCI Logistics Division with ComNat-ALPC as the Secretariat. Meetings take place monthly. Core participants include the ComNat-ALPC (Chair), UNMAS (facilitator), HALO Trust, FRCI (Division Logistique and often the Air Force and Navy), Gendarmerie, the Police and representatives from the Water and Forestry authorities. The main objectives of the PSSM Working Group include:
exchanging good practice with regards to the:
> marking, inventory, registration and storage for arms and munitions
> physical security of arms and munition storage infrastructure (depots, armouries and security posts)
> arms and munitions stockpile management
> planning and providing activity updates
> informing and mobilising international partners

The UNMAS pilot project in Cdi is a good example of a successful partnership with national authorities, where UNMAS and HALO Trust work in close collaboration with the FRCI, the Gendarmerie, the Police, and representatives from the the Water and Forestry authorities to improve their capacity in PSSM. Within this working group, the security forces define their own priorities in terms of rehabilitation work, and provide input regarding their training needs. This enables UNMAS to take action and align its support with national priorities.

**Sustainability**

Ensuring there is mid and senior-level support within the security forces and the government as a whole for ammunition management practices that are in line with international standards is critical. The third year of UNMAS’s engagement will focus on putting in place a strategic framework to secure this support and ensure sustainability of the investments made thus far by UNMAS and HALO Trust.

The provision of capacity development is critical to sustainability and the security forces have all clearly articulated the need for training in ammunition management. Training is needed for armourers, senior military, Ministry of Defense, procurement officials and those responsible for personnel records. While senior level management needs to be targeted, UNMAS believes that change in ammunition management practice can also be driven from the bottom up if commanding officers are able to demonstrate results to senior management.
PSSM AND LINKS TO DDR, SSR AND SALW CONTROL

DDR
A formal DDR process has not yet commenced in CdI. DDR has been on the peace process agenda since the peace accords were signed back in 2003. While several attempts at DDR were initiated, they were subsequently aborted. The UN DDR division is in the process of identifying funding for a new DDR process. A national strategy on DDR has been drafted but has not yet been finalised.

At the strategic level, UNMAS has established and maintains regular contact with UNOCI DDR division and ComNat-ALPC. At operational level, HALO Trust teams will support disarmament activities in the same way that support has been provided to the voluntary civilian disarmament initiatives.

Security System Reform (SSR)
Similar to the DDR process, a formal SSR process has not yet begun. President Outtara is now the head of the Ministry of Defence and has placed a strong emphasis on the security of the country. The government has established an SSR Working Group which operates at three levels:
1. A Steering and Ministerial Committee led by the President
2. Scientific Committee (in charge of implementation)
3. Secretariat

The SSR Working Group plans to develop a national SSR strategy, undertake an assessment of the security sector and develop action plans for SSR and DDR, all during a 90-day period. The UN SSR division is advising the process and will ensure that PSSM activities are mainstreamed into wider SSR processes.36

SALW control
In accordance with the UN Programme of Action on SALW, West Africa has the ECOWAS Convention on SALW. Both contain specific provisions which obligate member states to define a strategy for stockpile management and security. CdI signed the ECOWAS Convention in 2008. CdI is currently the subject of a UN and European Union arms embargo since 2004. The embargo was extended in April 2012 for an additional year. However, restrictions have been lifted on the provision of training, advice and expertise related to security and military activities.37

Côte d’Ivoire’s National SALW Commission, ComNat-ALPC, was established in April 2009, to help the Government implement its obligations under the ECOWAS SALW convention, and coordinate efforts to stem the misuse and proliferation of SALW. A key objective of ComNat-ALPC’s National Action Plan against SALW for 2012-2014 is to strengthen the physical security of arms and munitions stockpiles and ammunition management capacity.38 Several of the anticipated outputs for this objective directly relate to the work that UNMAS and HALO Trust are undertaking in association with the FRCI, Gendarmerie and Police. For example:

> undertake an assessment of existing stockpiles and make recommendations to improve physical security
> establish a programme to construct, rehabilitate and equip armouries and munitions depots according to international standards
> undertake regular inspection of storage sites
> strengthen procedures for ammunition management
> train armourers in ammunition management
put in place inventory procedures, registration and systematic marking of arms and munitions

strengthen national capacity in the destruction of arms, munitions and explosives

destroy obsolete arms and munitions

LESSONS LEARNT
Lessons that UNMAS and HALO Trust have learnt from the programme thus far include the following:

In CdI, political approval is needed to access sites, identify needs, rehabilitate/construct storage areas, destroy arms/ammunition, etc. It is therefore essential to work in partnership with the security forces. HALO Trust has developed and maintained close contact with the FRCI, Gendarmerie and Police, particularly with Colonel Assamoua, Director of Logistics for the FRCI. Communication and coordination function well, which has facilitated HALO Trust’s operations. UNMAS (and UNOCI) have played a key role in facilitating and building these relationships.

Assuming you observe relevant technical construction standards, anyone can build or rehabilitate an armoury or storage depot. What is critical is the sustainability of this investment, and putting in place monitoring systems to ensure that capacity will exist for ammunition management. Rehabilitation work needs to be supported by training in order to build sustainable capacity on ammunition management.

UNMAS and HALO Trust entered CdI based on a request from UNOCI-DDR and established the programme under the UN mandate. In the absence of a UN PSSM-related presence and mandate, an official request and a detailed Memorandum of Understanding between the implementing agency and the national authorities are essential.

The recruitment of someone with construction/surveying experience has brought in additional expertise, which has proven invaluable given the scale of the construction and refurbishment tasks that HALO Trust is implementing in CdI. Similarly, contracting a large engineering consultancy firm to handle the major construction tasks has proved useful as it will manage the individual contractors, reducing HALO Trust’s contact with each individual contractor.

A good understanding of the scope and extent of the problem is vital and a prerequisite for the success of a PSSM programme. Decisions should be made when relevant data has been assessed.

When planning PSSM activities, take into account the legal framework of the country receiving assistance.

Involve national security actors at the earliest possible stage of the programme in order to create an environment conducive to collaboration. Working with national authorities is a precondition for ensuring PSSM programme success, sustainability and strategic support.

Technical capacity building needs to be supported by wider institutional reforms if it is to be sustainable. While technical training and the building up of competence can happen relatively quickly, establishing the right institutional and organisational environment does not.

The IATG provide relevant information for PSSM programmes in a relatively accessible format. Although knowledge of the IATG is not essential for a typical mine action programme, it is absolutely essential for PSSM work. The IATG cover in a comprehensive manner key topics such as ammunition and explosive storage principles, transportation regulation, explosive safety regulation, quantity distance calculations, etc, and lay out the standards and materials required for the construction of ammunition stores and barricades.
ENDNOTES

1 This case study was written by Sharmala Naidoo (GICHD) following a research mission to Côte d'Ivoire in May 2012.

2 Although mines have not been laid in CdI, mines have been found in some storage sites and HALO Trust will destroy these as and when they find them or when they are handed over to HALO Trust/UN.

3 The main UXO problem was located at the FRCI New Akouedo camp, east of Abidjan, where a major ammunition explosion had taken place. Source: HALO Trust.

4 Following the crisis, UNMAS, MSB, the ICRC, FRCI and HALO Trust worked together to train EOD teams and over an intensive eight month period, conducted Battle Area Clearance (BAC) to deal with UXO contamination in and around Abidjan. Approximately 90 per cent of the contamination has been cleared, and an EOD response cell within the Gendarmerie is in place to deal with spot tasks.

5 Such as the ECOWAS Convention on SALW and the International Ammunition Technical Guidelines.

6 For more information on the role of UNMAS in PSSM, please see the GICHD case study on the UNMAS rapid response project in Congo-Brazzaville.


10 UNMAS consulted its list of pre-qualified partners. All were preparing for operations in Libya, apart from HALO Trust which was available, and which had previous experience in stockpile management and supporting DDR programmes.

11 Civilians have been provided with an emergency phone number to call in case they see or come into contact with a UXO or AXO.

12 Security Council resolution 2000 (2011) on CdI states that UNOCI’s mandate includes: “Collection of weapons: To continue to assist the national authorities, including the National Commission to fight against the Proliferation and Illicit Traffic of Small Arms and Light Weapons, in collecting, registering, securing and disposing of weapons and in clearing explosive remnants of war, as appropriate, in accordance with resolution 1980 (2011); To support the Government in coordination with other partners to develop and implement community weapons collection programs, which should be linked to community violence reduction and reconciliation; To coordinate, with the Government in ensuring that the collected weapons are not disseminated or re-utilized outside a comprehensive national security strategy”; for the full text, see http://www.un.org/News/Press/docs/2011/sc10342.doc.htm


17 This typically involves the rehabilitation of infrastructure and storage equipment.

18 At risk ammunition refers to ammunition which may be degraded and at high risk of explosion.


23 HALO Trust/UNMAS. Ivory Coast Ammunition Management, 2011.


26 HALO Trust. A Guide to the Minimum Generic Specifications that are to be used on HALO Project Sites, 2012.
According to interviews with staff from UNMAS and HALO Trust.

UNMAS workplan, February 2012.

RTT News. “UN Destroys Hundreds of Small Arms and Light Weapons in Ivory Coast”, 13 July 2012.


HALO Trust. A Guide to the Minimum Generic Specifications that are to be used on HALO Project Sites, 2012.

UNMAS. Mine action Côte d’Ivoire (UNOCI), Monthly activity report, March 2012; Email from UNMAS, 16 July 2012.

PSSM Working Group Terms of Reference, Côte d’Ivoire. See Annex 5 for the Terms of Reference (in French).

Ely Dieng, Chief, SSR Division, UNOCI – Interview, 4 May 2012.

Stockholm International Peace Research Institute, UN arms embargo on Côte d’Ivoire, 3 May 2012.

ANNEX 1 | PEOPLE CONSULTED AND SITES VISITED

Charles Frisby | Programme Manager | UNMAS
Chris Pym | Programme Manager | HALO Trust CdI
Colonel Assamoua | Head of Logistics Division (and PSSM focal point) | FRCI
Désiré Adjoussou | Contrôleur Général de Police/Président | National SALW Commission
Ely Dieng | Chief | SSR Division | UNOCI
James Scott | Construction Manager | HALO Trust CdI
Yeyson Villamil | HALO Trust CdI
Leon Djokouehi | Secretary of Operation and Security Subcommittee | SALW Commission
Major Sam-bunny Chibwana | Senior Staff Officer | DDR | Sector Abidjan | UN
Marlene Dupouy | Junior PSSM Specialist | UNMAS
Nick Bray | Global EOD Officer | HALO Trust
Patrick M’bahia | Mine action and former PSSM focal point | Gendarmerie
Pierre Lemelin | Chief of Ammunition Management | UNMAS
Richard Boulter | Weapons and Ammunition Disposal | Desk Officer | HALO Trust
Sophie da Câmara Santa Clara Gomes | Chief | DDR Division | UNOCI
Yaya Silue | Logistics Assistant | UNMAS

PSSM sites visited in Abidjan:
National Police HQ, Plateau area
FRCI Battalion Commando Parachutist | Old Akouedo camp
Police Training School
FRCI Etablissement Général des Services | Zone 4
1st Infantry Battalion | new Akouedo FRCI camp
Gendarmerie Commandement Supérieur | OPS HQ
Gendarmerie Commandement Supérieur
Article 16 | Management and Security of Stockpiles
1. Member States shall take the necessary measures to ensure the safe and effective management, storage and security of their national stocks of small arms and light weapons;
2. To this effect, Member States shall establish effective standards and procedures for stockpile management, storage and security. These standards and procedures shall include:
   a) appropriate site;
   b) physical security measures of storage facilities;
   c) inventory management and record keeping;
   d) staff training;
   e) security during manufacture and transportation;
   f) sanctions in case of theft or loss.
3. Member States shall ensure that stockpiles of small arms and light weapons by manufacturers, dealers as well as individuals are securely stored in accordance with the appropriate standards and procedures;
4. Member States shall undertake to regularly review, in accordance with national laws and standards, the storage facilities and conditions of small arms and light weapons held by their armed and security forces and other authorised bodies in order to identify, for disposal, surplus and obsolete stocks;
5. The Executive Secretary shall ensure, in collaboration with Member States, that effective standards and procedures for stockpile management of weapons collected in the context of peace operations are duly observed.

Article 17 | Collection and Destruction of Small Arms and Light Weapons
1. Member States shall undertake to collect and/or destroy:
   a) the arms which are surplus to the national needs or have become obsolete;
   b) seized weapons;
   c) unmarked weapons;
   d) illicitly held weapons;
   e) arms collected in the implementation of peace accords or programmes for the voluntary handing in of weapons.
2. All weapons so collected must be registered and securely stored and/or destroyed.
3. Member States undertake to promote and/or carry out programme of voluntary handing in of weapons.
ANNEX 3 | MAP OF HALO TRUST REFURBISHMENT WORK IN CÔTE D’IVOIRE

**SEGUELA**
- 2 Projects for a total cost of US$ 62,041
  - 1 FRCI
  - 1 Gendarmerie

**VAVOUA**
- 2 Projects for a total cost of US$ 7,715
  - 1 FRCI
  - 1 Police

**ISSIA**
- 2 Projects for a total cost of US$ 9241
  - 1 FRCI
  - 1 Gendarmerie

**SOUBRE**
- 2 Projects for a total cost of US$ 5,974
  - 1 FRCI
  - 1 Police

**YAMOUSSOUKRO**
- 8 Projects for a total cost of US$ 311,537
  - 2 FRCI; 3 Police; 3 Gendarmerie

**BOUAFLÉ**
- 1 Project for FRCI
  - Total estimated cost of US$ 1,059,861

**DALOA**
- 8 Projects for a total cost of US$ 414,807
  - 2 FRCI; 5 Police; 1 Gendarmerie

**BOUKE**
- 1 Project for FRCI
  - Total estimated cost of US$ 1,059,861

**ISSIA**
- 2 Projects for a total cost of US$ 9241
  - 1 FRCI
  - 1 Police

**VAVOUA**
- 2 Projects for a total cost of US$ 7,715
  - 1 FRCI
  - 1 Police

**SOUBRE**
- 2 Projects for a total cost of US$ 5,974
  - 1 FRCI
  - 1 Police

**YAMOUSSOUKRO**
- 8 Projects for a total cost of US$ 311,537
  - 2 FRCI; 3 Police; 3 Gendarmerie

**BOUAFLÉ**
- 1 Project for FRCI
  - Total estimated cost of US$ 1,059,861

**DALOA**
- 8 Projects for a total cost of US$ 414,807
  - 2 FRCI; 5 Police; 1 Gendarmerie

**BOUKE**
- 1 Project for FRCI
  - Total estimated cost of US$ 1,059,861

**ISSIA**
- 2 Projects for a total cost of US$ 9241
  - 1 FRCI
  - 1 Police

**VAVOUA**
- 2 Projects for a total cost of US$ 7,715
  - 1 FRCI
  - 1 Police

**SOUBRE**
- 2 Projects for a total cost of US$ 5,974
  - 1 FRCI
  - 1 Police

**YAMOUSSOUKRO**
- 8 Projects for a total cost of US$ 311,537
  - 2 FRCI; 3 Police; 3 Gendarmerie

**ABIDJAN**
- 11 Refurbishment Work for a total cost of US$323,495
  - 5 FRCI, 2 Police, 3 Gendarmerie

**TOUMODI**
- 2 Projects for a total cost of US$9,090
  - 1 Police
  - 1 Gendarmerie

**BOUKE**
- 1 Project for Gendarmerie
  - Total cost: US$ 2,065
ANNEX 4 | DOCUMENTS CONSULTED

Commission Nationale de Lutte Contre la Prolifération et la Circulation Illicite des Armes Légères et de Petit Calibre | Plan d’actions national de lutte contre la prolifération et la circulation illicite des ALPC, 2012-2014

HALO Trust
> A Guide to the minimum generic specifications that are to be used on HALO project sites | 2012
> Final Report | Mine Action in Support of the Ivory Coast | 2011
> Old Akouedo Ammunition Stores Assessment | November 2011

Small Arms Survey
> Savannah de Tessières | Enquête nationale sur les armes légères et de petit calibre en Côte d’Ivoire | Les défis du contrôle des armes et de la lutte contre la violence armée avant la crise post-électorale | Small Arms Survey | April 2012

UNMAS
> Marlene Dupouy | Physical Security and Stockpile Management Assistance Programme Opportunities in West Africa: Combating Ineffective Stockpile Management in Ghana, Niger, Liberia, Guinea, Guinea Bissau, Mali, Burkina Faso and Mauritania | UNMAS | 2012
> Statement of Work | Explosive Remnants of War and Physical Security and Stockpile Management in Côte d’Ivoire | 2012
> Mine action Côte d’Ivoire (UNOCI) | Monthly activity report | March 2012
> UNOCI Mine Action Component Annual Workplan | 1 July 2012-30 June 2013, 17 February 2012
> UNMAS workplan | February 2012

**ANNEX 5 | PSSM WORKING GROUP TERMS OF REFERENCE**

<table>
<thead>
<tr>
<th>CONTEXTE/CADRE INSTITUTIONNEL</th>
<th>Réforme du Secteur de la Sécurité / Groupe de Travail sur la Sécurité Physique et la gestion des stocks d’Armes et de Munitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>PÉRIODICITÉ</td>
<td>2 fois par mois</td>
</tr>
<tr>
<td>LIEU</td>
<td>Tournant (FRCI, ONUCI, GEND...). Prochaine réunion au COMNATCI.</td>
</tr>
<tr>
<td>ORGANISATEUR</td>
<td>Lié au lieu</td>
</tr>
<tr>
<td>PRÉSIDENCE</td>
<td>Colonel Assamoua Guiezou (FRCI)</td>
</tr>
<tr>
<td>SECRÉTARIAT</td>
<td>Lieutenant Kone Drissa (FRCI)</td>
</tr>
<tr>
<td>FACILITATEUR</td>
<td>Monsieur Cipiere (UNMAS)</td>
</tr>
<tr>
<td>COMPOSITION</td>
<td>16 MEMBRES</td>
</tr>
<tr>
<td>a) Lieutenant Niangoran Comoé Nazaire de la DGEM (Ministère de la Défense);</td>
<td></td>
</tr>
<tr>
<td>b) Lieutenant Kouame Ahoue M. de la Police (Ministère de l’Intérieur);</td>
<td></td>
</tr>
<tr>
<td>c) Monsieur Kore Philippe (Commission Nationale de Lutte contre la Prolifération et la Circulation Illicite des Armes Légères et de Petit Calibre)</td>
<td></td>
</tr>
<tr>
<td>d) Etat-major FRCI; (Col Assamoua Guiezou – Cdt Kouadio Koffi Marc - LTN NIAMIEN - LTN KONE DRissa)</td>
<td></td>
</tr>
<tr>
<td>e) COMTER (CDT MOUHO JEAN CHRISTOPHE)</td>
<td></td>
</tr>
<tr>
<td>f) Gendarmerie; (CDT MBAHIA PATRICK)</td>
<td></td>
</tr>
<tr>
<td>g) PNUD; (Monsieur HERVE GONSOLIN)</td>
<td></td>
</tr>
<tr>
<td>h) UNMAS; (Monsieur CIPIERE)</td>
<td></td>
</tr>
<tr>
<td>i) Partenaires de Mise en Œuvre (HALO Trust, MSB)</td>
<td></td>
</tr>
<tr>
<td>j) (Joao Antunes de MSB, Boulter Richard et PYM Chris de HALO TRUST)</td>
<td></td>
</tr>
<tr>
<td>k) Douanes à désigner</td>
<td></td>
</tr>
<tr>
<td>l) Eaux et forêts (Colonel Mizan Zambe Bi Tah)</td>
<td></td>
</tr>
<tr>
<td>m) Officier Liaison LICORNE (Lcl Rolet Xavier)</td>
<td></td>
</tr>
<tr>
<td>n) Marine à désigner</td>
<td></td>
</tr>
<tr>
<td>o) Air à désigner</td>
<td></td>
</tr>
<tr>
<td>OBJECTIF</td>
<td>Constituer une plateforme d’échange sur les activités liées à la Sécurité Physique et à la Gestion des Stocks d’Armes et de Munitions afin d’uniformiser et mettre en œuvre les meilleures pratiques inhérentes à ces activités.</td>
</tr>
</tbody>
</table>
OBJECTIFS SPÉCIFIQUES

a) Echanger sur les meilleures pratiques relatives au marquage, inventaire, enregistrement et tenue de registres pour l’armement et les munitions;
b) Echanger sur les meilleures pratiques relatives à la sécurité physique des infrastructures de stockage d’armement et de munitions (dépôts, armureries et postes de sécurité);
c) Echanger sur les meilleures pratiques relatives à la gestion des stocks d’armes et munitions;
d) Planifier et rendre compte des activités du groupe de travail;
e) Informer et mobiliser les partenaires internationaux.

RÉSULTATS ATTENDUS

> Nettoyage et dépollution de 100% des sites dangereux en Côte d’Ivoire;
> Sécurisation selon standard minimum et pertinent de 100% des sites stockages d’armes, munitions et explosifs en Côte d’Ivoire ;
> Marquage de 100% des ALPC gouvernementales;
> Installation de capacités nationales de destruction des ALPC gouvernementales;
> Mise en place de registres informatisés des ALPC à la Police, à la Gendarmerie, à l’Etat Major Général (AIR – Terre – Mer) et au Ministère de la Défense;
> Révision de tous les cadres règlementaires relatifs à l’acquisition, gestion, utilisation, destruction des ALPC au niveau de chaque institution;
> Elaboration de modules de formations des personnels en matière de gestion des ALPC et mise en place d’un plan de remise à niveau;

Et de manière plus globale:
> Le respect intégral des éléments de la Convention de la CEDEAO sur le contrôle des ALPC.