## Facilitating PSSM Assistance in the Sahel and Beyond

**Introducing the PSSM Priorities Matrix** 

## Introduction

Legislative, material, technical, and financial. These are the words that states most commonly use to describe the types of assistance they would like to receive with respect to stockpile management. Indeed, in the national reports states submit under the UN Programme of Action on Small Arms (PoA), these terms often represent the full extent of the descriptions of the assistance they are seeking (UNGA, 2001). It is little wonder that potential donors are less than satisfied withor responsive to-such requests. Concurrently, however, prospective and current recipient states are frustrated with the lack of donor coordination and communication on physical security and stockpile management (PSSM) assistance.

These challenges are encountered globally. This Issue Brief narrows the focus to the Sahel and to PSSM assistance efforts, drawing on research conducted in three countries in the region-Burkina Faso, Mali, and Niger-between January and October 2016.1 Although not necessarily representative of other regions, the three countries do face numerous problems that are encountered more broadly. With a view to helping states address their PSSM assistance needs and related challenges, this Issue Brief introduces a dedicated tool developed by the Small Arms Survey: the PSSM Priorities Matrix.

The Brief begins with an overview of some of the PSSM challenges

Sahelian states are facing and the assistance efforts to overcome those challenges. It then looks at how mechanisms for requesting PSSM assistance are currently operating. Finally, the Brief explores how the PSSM Priorities Matrix can assist recipient states in identifying and communicating their PSSM assistance priorities.

## PSSM challenges in North Africa and the Sahel

The Small Arms Survey's research in North Africa and the Sahel shows that armed groups have obtained considerable materiel from poorly secured stockpiles of state militaries and security forces they are fighting as well as from arsenals of neighbouring states that have been seized and pillaged. The collapse of the Libyan state-which led to the looting of its massive weapons and ammunition stockpiles-and the diversion of armaments from active conflict zones in the region are two important factors that have contributed to the growth of non-state actors' arsenals (Schroeder, 2015; UNSC, 2012, paras. 14–18).<sup>2</sup> Weapons from Libyan stockpiles, for instance, have been seized or otherwise documented in at least nine countries and territories in the region since 2011.<sup>3</sup> In addition, the number of armed groups operating in Libya has ballooned alarmingly.

Many of these groups are pursuing economic opportunities by working

with or even coopting smuggling and trafficking networks; they take advantage of porous borders and 'ungoverned spaces' to gain control over traditional trans-Saharan smuggling routes to traffic weapons and ammunition to countries such as Chad, Libya, Mali, Niger, and Tunisia (Kartas and Arbia, 2015, p. 5).<sup>4</sup> This situation facilitates access to smuggled weapons by violent extremist groups such as al-Qaeda in the Islamic Maghreb, Ansar Dine, and al-Mourabitoun.

There is particular concern over the trafficking of man-portable air defence systems (MANPADS) and anti-tank guided weapons to these illicit markets.<sup>5</sup>

Poorly regulated stockpiles also result in unplanned explosions at munitions sites (UEMS). The Survey's global UEMS database documents more than 500 such explosions as having occurred over the past 30 years in more than 100 countries. Since many munitions sites are located in densely populated areas, such an incident can result in tens of deaths, hundreds of injuries, and the displacement of thousands of people. In North Africa and the Sahel, the Small Arms Survey has recorded 22 UEMS incidents. They have occurred in Burkina Faso (1), Chad (1), Egypt (3), Libya (10), Mali (1), Mauritania (2), and Sudan (4), and have claimed the lives of at least 144 people and injured 1,111 (Berman and Reina, 2014; Small Arms Survey, n.d.).

# PSSM assistance: how is it working in practice?

Donor governments have provided substantial assistance to improve recipient governments' PSSM practices6but often with limited impact. For example, governments have supplied marking machines to help governments account for their firearms, but Survey research shows that many recipients have not used the equipment they have received and been trained to use.7 At the same time, some recipients have complained that the number of available machines is not sufficient for their marking tasks, and that donors underestimate the need for additional marking machines and associated logistical and maintenance support.8

Donors, in turn, may be reluctant to provide additional assistance when there is evidence to suggest that some supplied machines were damaged or destroyed and that others were never used. Low marking totals, reflecting a lack of political commitment, or in some cases poor inter-agency coordination in the recipient government, may also spur donor disengagement.

Further, donor governments that have provided training on stockpile management observe that rotation and high staff turnover often mean the training is of limited long-term value; in some cases, persons are trained but lack the authority to make changes.9 Meanwhile, in-country personnel have noted that the position of stockpile manager (magasinier) comes with responsibilities—such as being answerable for missing items and non-functioning equipment-and health risks, but without any rewards or incentives attached; as a result, the specialization is rarely chosen (van de Vondervoort and Ashkenazi, 2015, pp. 11, 22).10 In Niger, some personnel stationed or appointed as 'trainers' lose some of the financial benefits of being deployed in the field.<sup>11</sup> These findings indicate that greater consideration should be given to keeping trained PSSM experts on board in the relevant positions, and to designing

appropriate reward and career development systems.

## How do states seek assistance?

National reports submitted under the PoA represent one way for potential recipients to engage potential donors regarding their PSSM assistance needs and plans. The UN Office for Disarmament Affairs (UNODA) has used national reporting under the PoA to help recipient governments develop more concrete proposals and thus 'match needs and resources' (UNODA, 2012). While this effort embodied in UNODA's Matching Needs and Resources 2012-2014-has contributed to greater transparency and dialogue, it falls short of fully exploiting the potential utility national reports represent for assisting governmentsboth donors and recipients-to implement PoA objectives.

The Survey has extensive experience analysing national reports, having reviewed more than 750 such documents submitted by more than 150 UN member states.<sup>12</sup> The analysis has covered information states provide on their stockpile management practices and compliance with the PoA requirements. Information supplied by states-including Sahelian states-on their stockpile management practices and assistance needs is, for the most part, not comprehensive, partly because the reporting template used to submit national reports does not request extensive information. An opportunity thus exists to elicit more information from states on their PSSM needs, with a view to facilitating the delivery of targeted assistance.

A more common means of requesting or obtaining PSSM assistance is via bilateral consultations between a recipient country and a donor government. Such requests are generally initiated by senior officials in the ministry of defence, interior, or foreign affairs, or other law enforcement authorities, who often start by contacting the embassy of the nation they intend to ask for assistance. Before they will even consider providing assistance, several national governments, NATO, the UN Development Programme, and the Organization for Security and Co-operation in Europe all require an official request from a state that is seeking assistance (King, 2011, p. 10). Sometimes donor governments approach and offer PSSM assistance directly to recipient countries as part of their own regional strategic interests or in fulfilment of a policy decision to dedicate funds to particular activities.

PSSM assistance programmes may also take place through agencies such as the Mines Advisory Group (MAG), the Bonn International Center for Conversion, the Halo Trust, Handicap International, and others that provide technical advice and assistance. In some instances, the military of a requesting state has directly contacted foreign embassies for support, without notifying the state's national small arms commission. In other cases, implementing agencies have approached donors directly and only then involved the recipient country, with little buy-in from the latter; this type of interaction causes significant delays since initial project ideas are not vetted locally in advance.13 Such programmes can be particularly unhelpful if the national commission is sidelined, as the initiative may be undertaken outside the national strategy and may thus be poorly coordinated.

## What do the donors say?

Some donors have observed that states in the Sahel and elsewhere often produce a 'wish list' or 'shopping list' of types of PSSM activities for which they would like support.<sup>14</sup> While they may describe these needs as 'technical', 'legal', or 'procedural', they do not provide sufficient detail for donors to assess or respond to the request, nor do they indicate the relative importance of the different needs (Parker and Greene, 2012).

Donors have also commented on the need to manage expectations. This includes ensuring that the recipient country understands the nature and scope of the assistance that is being offered or provided and appreciates that some input is required from the country itself (King, 2011, p. 78). Recipient countries should also be aware that donors may provide solutions that differ somewhat from the requested assistance (p. 92).

International actors and implementing partners note that countries typically ask for assistance depending on immediate needs and current situations, but that the overall strategy is often unclear.<sup>15</sup> Countries tend to see assistance as a series of projects rather than interlinked interventions within an overall vision. Moreover, there are very few evaluations of the impact of interventions that have been undertaken, an issue that concerns both donors and recipients.

#### What do the recipients say?

Some stakeholders in the Sahel have expressed frustration with the frequent and multiple PSSM assessments, poor coordination between international partners and the national commissions, and the perceived lack of practical follow-up and assistance. As a result of this 'mission fatigue', national entities involved in PSSM have been reluctant to meet with visiting experts.<sup>16</sup>

During field visits carried out by the Small Arms Survey in Niger, interviewees identified a need for a forum of exchange between national authorities, donors, and operational nongovernmental organizations, such that the national commission might be kept aware of all initiatives and be in a position to coordinate accordingly. They also expressed a desire for donors to inform them more systematically, and at an earlier stage, of the initiatives they fund, and to review progress in implementing PSSM activities in cooperation with relevant stakeholders.

## **The PSSM Priorities Matrix**

In an effort to help recipient states to identify their PSSM priorities and communicate those needs to potential donors, the Small Arms Survey has developed a tool called the 'PSSM Priorities Matrix' (see the Annexe).

#### What is the PSSM Priorities Matrix?

The Matrix is a tool designed to help states identify the PSSM problems they face and their possible solutions; categorize and rank the PSSM assistance activities they have identified; and provide an indication of:

- (a) what they have already done to address their PSSM concerns and areas in which external assistance is needed;
- (b) how their expressed needs, if met, fit into their national action plans or could help pave the way to developing one; and
- (c) what contributions they can and will make to supplement any assistance provided as a way to maximize the effectiveness of the intervention.

The Matrix helps states to identify and unpack their PSSM assistance needs and priorities by highlighting aspects such as the urgency associated with the problem and the affordability of the solution. What is more, it also allows donors to identify PSSM activities and projects that might be best suited to their project criteria. If, for instance, a recipient country identifies a PSSM problem as being easy to solve-in part because it already has the capacity (that is, qualified personnel) to undertake the requisite activities-but needs additional equipment to complete the task, a donor country that seeks to provide 'in-kind' contributions in the context of PSSM activities may wish to provide assistance.

#### Box 1 Instructions for filling out the PSSM Priorities Matrix

#### Step 1 Identify the PSSM problem that needs to be addressed.

Sample answer: Civilian dwellings have expanded over time around an ammunition storage facility, posing a threat to the inhabitants, who may suffer injury or loss of life in the event of an unplanned explosion.

#### Step 2 Identify the solution to the cited problem.

Sample answer: The storage facility should be relocated to a location that is at a safe distance<sup>17</sup> from the civilian population.

**Step 3** Assess the **urgency** of the problem on a scale from *low* (1) to *high* (5). Consider the risks associated with the problem and whether fixing it is a condition for solving other problems. If the problem is associated with few risks, the urgency is low (1); if many risks are associated with the problem and solving it is a pre-requisite for fixing other PSSM problems, or if lives are at stake, the urgency is high (5).

Sample answer: The problem is of high urgency (5) as the site is in a densely populated urban area and contains large amounts of ageing and unstable ammunition, raising the risk of an unplanned explosion.

**Step 4** Assess the **difficulty** of implementing a solution as either *difficult* (1) or *easy* (2). Consider what resources are required, whether the state or implementing agency has the resources needed to solve the problem, and whether external assistance is required. If in-country expertise and experience are limited, implementing the solution will be difficult (1); if in-country experience and expertise are widely available, the implementation will be easy (2).

Sample answer: Relocating the large amounts of unstable ammunition to another site would be difficult (1) due to the possibility that it may explode during transport.

**Step 5** Assess the **affordability** of implementing a solution as either *expensive* (1) or *affordable* (2). If additional financial resources are required, the implementation will be expensive (1); if it is possible to solve the problem by drawing from existing resources, the implementation will be affordable (2).

Sample answer: Moving the ammunition is likely to be expensive (1) as it will require specialized equipment and qualified personnel in view of the large quantity of unstable ammunition to be moved.

**Step 6** Assess the **speed** with which the solution can be implemented as either *slow* (1) or *quick* (2). Consider whether there is a short-term solution, or whether the solution will take a long time to implement. If significant progress towards addressing the problem cannot be achieved within a year, the implementation will be slow (1); if significant progress towards addressing the problem can be achieved within a year, it will be quick (2).

Sample answer: Implementation of the solution is likely to be slow (1) since it will take time to source the required equipment and personnel.

**Step 7** To arrive at the **priority score**, add the urgency score and the three feasibility scores. The maximum number of points is 11; the higher the score, the higher priority.

#### How does the Matrix work?

To complete the Matrix, a state simply needs to respond to the instructions presented in Box 1. Once a state has judged each identified PSSM problem and solution in accordance with the outlined steps, it will arrive at scores for urgency (1 to 5) and for feasibility (1 or 2 for each of the three criteria: difficulty, affordability, and speed). The urgency and feasibility scores are added together to yield the total 'priority score' out of 11 possible points; the higher this score, the higher the priority (see the Annexe).

The Matrix encourages users to categorize their PSSM assistance needs and priorities according to the elements of the standards and procedures UN member states have committed to establish for the management and security of their small arms stockpiles under the PoA, namely:

appropriate locations for stockpiles; physical security measures; control of access to stocks; inventory management and accounting control; staff training; security, accounting and control of small arms and light weapons held or transported by operational units or authorized personnel; and procedures and sanctions in the event of thefts or loss (UNGA, 2001, para. II.17).

#### How was the Matrix developed?

The Small Arms Survey pilot-tested a preliminary version of the PSSM Priorities Matrix in three countries in the Sahel: Burkina Faso, Mali, and Niger. Field researchers carried out an initial visit in each target country to conduct interviews with relevant stakeholders-including representatives of national commissions, ministries of defence and foreign affairs, national guard, gendarmerie, and national parks-to identify PSSM problems and challenges each country is facing. The researchers also took into account any PSSM assessments carried out by national or external experts.

A draft version of the PSSM Priorities Matrix was then prepared for each country,<sup>18</sup> based on the information obtained during the field visits and supplemented by desk-based research, which covered relevant reports and studies, such as target states' national reports on implementation of the PoA. The researchers then visited each country a second time to conduct a validation workshop, during which the relevant draft PSSM Priorities Matrix was presented and the corresponding research findings were validated.

Two of the countries involved took the opportunity to adjust the PSSM Priorities Matrix to reflect their respective situations. Burkina Faso, for one, unpacked the problem analysis component of the Matrix before analysing the solution; two additional columns were inserted to address the issues 'Why is there a problem?' and 'What strengths/opportunities exist to overcome the problem?'. In contrast, Niger separated the concept of 'urgency' from the 'feasibility' criteria in its draft Matrix, as the original did not differentiate between 'urgency' and the other criteria. In its view, if a PSSM problem is particularly urgent, it should be prioritized on that basis, which would trump other considerations. Ultimately, this distinction was retained in the final PSSM Priorities Matrix (see the Annexe).

#### Experience so far

The feedback obtained from in-country stakeholders regarding the PSSM Priorities Matrix was positive. Several commented that it helped them unpack their PSSM problems and look at them in a new and different way. The workshops held to discuss each draft Matrix also facilitated the sharing of experiences and common challenges among agencies in each country. In Mali, for example, consultations to complete the Matrix helped clarify some procedural aspects of PSSM measures within particular services and operational details of projects that are being implemented.

During the process of completing the Matrix in Burkina Faso, it became apparent through the exchange of ideas and experiences that the army had standards and procedures in place to manage its depots that could be used by other law enforcement and security forces, such as the gendarmerie, customs, and penitentiary services with similar structures. In this sense, the Matrix served as a useful tool to bring relevant national actors around the same table and to map out issues and actors that need to be involved in PSSM solutions.

Some of the benefits of the Priorities Matrix in diagnosing PSSM problems and priorities can be illustrated by comparing the usefulness of responses provided by Burkina Faso, Mali, and Niger in their matrices with the PSSMrelated answers they supplied in their national reports on PoA implementation. In Niger's 2012 national report, for instance, the question 'What type of assistance do you need?' elicited the answer 'technical and financial' (technique et financière). Similarly, in its 2016 national report, Burkina Faso replied to the same question with the words 'legislative, material and financial' (législative, matérielle et financière). Mali has not specified the type of assistance it requires in recent national reports, in part because it has not used the current version of the reporting template that specifically seeks PSSMrelated information.

Certainly the information derived from and compiled by in-country stakeholders for the purposes of completing the Matrix goes much further towards defining and framing specific assistance that the countries require with respect to stockpile management. If the countries were to include their completed PSSM Priorities Matrices in their next national reports, they would enhance the information available to donors that are in a position to provide assistance.

Further, a comparison of the top priorities identified in each country's Matrix with those listed in UNODA's *Matching Needs and Resources 2012–2014* document yields some instructive results. Having stated in the UNODA document that one of its objectives is to 'enhance physical stockpile security management', Mali identifies the following elements:

- Conduct survey on the current status of weapons storage facilities in each region;
- Renovate storage facilities;
- Establish Standing Operating Procedures (SOP) for stockpile management of small arms;
- Safely store collected weapons that are not surplus weapons in storage facilities owned by the Government (UNODA, 2012, p. 34).

The PSSM Priorities Matrix for Mali confirms that the country requires all these types of assistance, yet it also reveals that two of the identified problems have very high priority scores: a) 'Formal and common SOPs for PSSM are lacking' (10 points out of a maximum of 11), and b) 'Physical security measures are inadequate' (11 points). All of the other identified priority areas appear to result from the absence of a coherent and centralized system, underlining the need to clarify or establish PSSM SOPs as a priority measure.

Niger's responses in the Matrix and in the UNODA document also overlap; in both forms, the country identifies the need to establish SOPs for safe and secure stockpile management, for example. The process of completing the Matrix, which necessarily entails discussions between different stakeholders and agencies, led to a further conclusion regarding the establishment of a central register of lost state-held weapons, which was deemed both useful and feasible. Similarly, in Burkina Faso, discussions around the Matrix led to a deliberation over how to manage the safekeeping of seized weapons and their destruction following legal proceedings. The discussions also highlighted the need to consider safe

storage standards for civilian-held weapons, not just state holdings. In other words, this more comprehensive tool to assess priorities provides an opportunity to identify gaps that might be missed otherwise, especially since discussions tend to focus on more traditional PSSM activities, such as infrastructure upgrades.

The priorities identified in the Matrix provide a more coherent overview of a country's PSSM needs; they also point to the need for normative and coordination preconditions such as having PSSM SOPs in place and undertaking a nationwide PSSM assessment—that need to be established for operational work to take place. While PSSM was the thematic entry point, all three countries identified weapons marking, the development of a national registry, and institutional



An officer signs weapons in and out of an armoury in Burkina Faso. Source: Sean Sutton/MAG

capacity building as national priorities, highlighting the need for further action and assistance across a range of issues.

#### Next steps

The Small Arms Survey is developing guidelines and a training module to help states and other stakeholders use the PSSM Priorities Matrix. It also plans to disseminate the Matrix as widely as possible among those involved in PSSM work in the Sahel and beyond, including national small arms commissions and implementing agencies, in the hope that they will integrate it into their PSSM assessments, planning, and problem analysis. The Survey also intends to encourage states to use the Matrix to supplement their requests for assistance in their national reports on PoA implementation.

In terms of concrete developments and immediate achievements regarding the practical use of the Matrix, Burkina Faso is using the tool to develop a dedicated PSSM national action plan. The Small Arms Survey will work with MAG to facilitate the development of a draft action plan that Burkina Faso's national commission (Commission Nationale de Lutte contre la Prolifération des Armes Légères) will be able to submit to the prime minister's office for approval. In this context, the Matrix is serving as a tool to integrate identified PSSM needs into a national action plan and to facilitate dialogue between the implementing agency and national actors. It has also helped to foster cooperation among agencies (MAG and the Small Arms Survey) as well as among donors.

While funding for the development of the Matrix was provided by the United States,<sup>19</sup> the United Kingdom is supporting the development of Burkina Faso's PSSM national action plan based on the Matrix findings.<sup>20</sup> Such donor complementarity is welcome as it should be able to facilitate wider awareness and use of the Matrix, and to promote greater cooperation and coordination among donors and implementing agencies working on PSSM in the Sahel and beyond.

## Conclusion

Improvements in physical security and stockpile management practices among Sahelian states could help to curb the diversion of materiel into the hands of armed groups and minimize the number of unplanned explosions, thus saving lives, reducing injuries, and limiting displacement.

As this Issue Brief shows, PSSM assistance should be tailored to address specific weaknesses and challenges that recipient states identify as priorities. Moreover, to be effective and sustainable, the approach to stockpile management must entail capacity building over the long term, requiring greater and clearer commitments from recipient governments as well as donor governments and implementing partners.

As a first step, however, recipient governments need to be given the opportunity to articulate national priorities clearly and to explain how requested assistance fits into a coherent national strategy. To that end, governments that seek assistance to address their PSSM needs are encouraged to use the PSSM Priorities Matrix, in addition to their PoA national reports; in this way, governments will be able to formulate more carefully considered assistance requests and engage prospective donors more readily.

The PSSM Priorities Matrix is a small step towards better identification and prioritization of PSSM assistance needs by recipient states. The Matrix provides a tool for identifying PSSM problems, gaps, and bottlenecks, as well as opportunities and possible solutions. It can also be used to identify key actors-both national and international-that can usefully be engaged in these solutions. If used to its full extent, the PSSM Priorities Matrix has the potential to facilitate dialogue between recipient and donor states with respect to PSSM assistance and planning, and thus strengthen PSSM capacity over the long term.

## Notes

- The case studies were conducted in three of the five G<sub>5</sub> Sahel countries, the other two being Chad and Mauritania.
- 2 In some cases, armed groups were able to buy weapons with ransom money they obtained from foreign governments in exchange for hostages. See, for instance, Lacher (2012) and Weddady (2013). On the illicit proliferation of small arms in North Africa, see, for example, Schroeder (2015, p. 11); on the origin and proliferation of weapons in Mali, see Anders (2015, pp. 174–75).
- 3 See, for example, UN Panel of Experts reports, listed under specific embargoes or resolutions under the heading 'Sanctions', in UN (n.d.).
- 4 For an elaboration on the illicit circulation of ammunition with identical ammunition markings in Côte d'Ivoire, Liberia, and Niger, see Anders (2014).
- 5 For recent analyses of the proliferation of MANPADS in North Africa and the Sahel region, see Anders (2015), Rigual (2014), and Schroeder (2015).
- 6 The European Union dedicated EUR 6.6 million to improving stockpile management 'in Libya and its region' in a single project in 2013 (EU, 2013). The UN Mine Action Service reports funding 'Arms and Ammunition' projects worth more than USD 15 million in Libya, including stockpile management (UNMAS, 2013, p. 8).
- 7 See, for example, Bevan and King (2013).
- 8 Small Arms Survey interviews with stakeholders, Mali, August 2016.
- 9 Small Arms Survey interviews with stakeholders, Niger, January 2016.
- 10 Small Arms Survey interviews with stakeholders, Niger, January 2016, and Mali, August 2016.
- 11 Small Arms Survey interviews with stakeholders, Niger, January 2016.
- 12 See Parker and Rigual (2015) for the most recent assessment. For more in-depth studies the Survey has undertaken on PoA national reports, see Cattaneo and Parker (2008) and Parker and Green (2012).
- 13 Small Arms Survey interviews with stakeholders, Niger, January 2016.
- 14 Small Arms Survey interviews with a donor, location and date withheld.
- 15 Small Arms Survey interviews with stakeholders, Niger, January 2016.
- 16 Small Arms Survey interviews with stakeholders, Burkina Faso, October 2016, Niger, January 2016, and Mali, August 2016.
- 17 The International Ammunition Technical Guidelines include information on calculating the 'inhabited building distance' used to predict minimum separation distances between a potential explosion

site and a building inhabited by civilians (IATG, 2015, s. 6.2.2).

- 18 In the case of Burkina Faso, the national commission itself took the lead on completing the first draft of the Matrix, not the researchers.
- 19 US assistance is provided through the Office of Weapons Removal and Abatement in the Department of State's Bureau of Political-Military Affairs.
- 20 The UK provides assistance through its Foreign and Commonwealth Office.

## List of abbreviations

#### MAG

Mines Advisory Group

#### MANPADS

Man-portable air defence system

#### PoA

United Nations Programme of Action to Prevent, Combat and Eradicate the Illicit Trade in Small Arms and Light Weapons in All Its Aspects

#### PSSM

Physical security and stockpile management **SOP** 

Standing operating procedure

#### UEMS

Unplanned explosions at munitions sites

UNODA

United Nations Office for Disarmament Affairs

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#### Annexe Physical Security and Stockpile Management (PSSM) Priorities Matrix (with sample answers)

PSSM element	Problem	Solution	Solution criteria scores				Priority score
			Urgency	Feasibility			(highest priority =11 points)
			1: Low 2: Low/medium 3: Medium 4: Medium/high 5: High	Difficulty 1: Difficult 2: Easy	Affordability 1: Expensive 2: Affordable	Speed 1: Slow 2: Quick	(urgency plus feasibility scores)
Procedures and regulations							
Stockpile locations	Civilian dwellings have expanded over time around an ammunition storage facility, posing a threat to the inhabitants, who may suffer injury or loss of life in the event of an unplanned explosion.	The storage facility should be relocated to a location that is at a safe distance from the civilian population.	The problem is of high urgency (5) as the site is in a densely populated urban area and contains large amounts of ageing and unstable ammu- nition, raising the risk of an unplanned explosion.	Relocating the large amounts of unstable ammuni- tion to another site would be difficult (1) due to the possibility that it may explode during transport.	Moving the ammu- nition is likely to be expensive (1) as it will require spe- cialized equipment and qualified per- sonnel in view of the large quantity of unstable ammu- nition to be moved.	Implementation of the solution is likely to be slow (1) since it will take time to source the required equipment and personnel.	8
Physical security measures							
Control of access							
Inventory manage- ment (including record-keeping and marking)							
Staff training							
Security during transport							
Procedures and sanctions for theft or loss							
Surplus, including identification and disposal							

## About the Small Arms Survey

The Small Arms Survey is a global centre of excellence whose mandate is to generate impartial, evidence-based, and policy-relevant knowledge on all aspects of small arms and armed violence. It is the principal international source of expertise, information, and analysis on small arms and armed violence issues, and acts as a resource for governments, policy-makers, researchers, and civil society. It is located in Geneva, Switzerland, at the Graduate Institute of International and Development Studies.

The Survey has an international staff with expertise in security studies, political science, law, economics, development studies, sociology, and criminology, and collaborates with a network of researchers, partner institutions, nongovernmental organizations, and governments in more than 50 countries.

For more information, please visit: www.smallarmssurvey.org.

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