small arms survey

Research Notes MEASURES & PROGRAMMES

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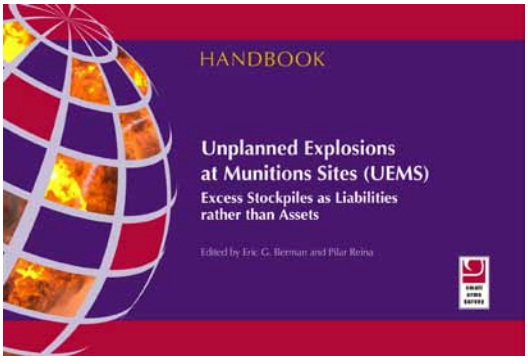
The UEMS Incident Reporting Template (IRT)

Unplanned explosions at munitions sites (UEMS) are a significant safety concern for governments and a major security challenge for the international community. The Small Arms Survey has documented more than 500 such incidents over the 35-year period from 1979 to 2013. Analysis of this data appears in the forthcoming Handbook—*Unplanned Explosions at Munitions Sites: Excess Stockpiles as Liabilities rather than Assets*—with many helpful tables, figures, maps, and annexes.[1] Explosions of this nature have occurred in 100 countries (see Map 1). They have resulted in thousands of deaths, tens of thousands of injuries, hundreds of thousands of people being displaced, tens of millions of dollars of clean-up costs, and possibly hundreds of millions of dollars spent on replacement stocks. Such resources could have been invested more productively. In some cases, the explosions have even resulted in the arrest and removal of government ministers, civilian officials, and military officers.

UEMS speak to a larger problem than the damage generated by a single conflagration. The incidents indicate a troubling mindset of many policy-makers toward appropriate levels of stocks and dangerous quantities of surplus. These events occur in large part because too many states view their stockpiles of munitions as assets rather than liabilities, regardless of the materiel's age or its storage conditions.

Identifying and destroying surplus stock should be an integral stage of life cycle of munitions management. When munitions are stored with no regard for their quantity, quality, or safe-keeping, oversight suffers. In such conditions, they lend themselves to possibly questionable transfers and unintentional or unauthorized diversion.



The Handbook serves three primary purposes. First, it strives to support best practice by explaining the scale and scope of the challenge that policy-makers face and to encourage states to manage their stockpiles effectively. Second, the study is intended to serve as a reference tool. For example, detailed profiles review 37 actors undertaking UEMS-related activities (see Figure 2). And third, the book serves as a training tool.

Incident Reporting Template

The UEMS Incident Reporting Template (IRT, see Figure 1) is provided to promote accurate record-keeping and the sharing of systematized data.

Better and more complete information on each UEMS incident is needed to improve prevention efforts. The analysis of global accident data offers two significant contributions potentially. First, increased awareness of the frequency of these events can serve to reduce the stigma associated with them and, consequently, should encourage authorities to improve their practices regarding their physical security and stockpile management (PSSM). Second, the analysis of global data can reveal trends or patterns in UEMS events which may improve the ability to identify those conditions that may increase their occurrence.

Over the past 35 years, the bulk of UEMS media coverage has failed to address several key issues, yet reports which are more investigative in nature are rarely released to the public. Media reports, the most prevalent source of information, may provide timely details about these events. Typically, the media focuses on casualties and damage to property or infrastructure and provides some initial observations and speculations on the causes of the event.

States are typically reluctant to release investigative reports. To justify this, for example, they may cite security concerns about releasing strategic information related to munitions holdings or legal/liability obstacles facing individuals or institutions as reasons to redact information.

Figure 1. **The UEMS Incident Reporting Template**

1. *When?* (When did the UEMS incident occur?)	
Date (yyyy/mm/dd)	/ /
Hour (hh:mm) [using 24-hour clock]	:
Weather conditions (e.g. temperature °C, light, wind, rain, lightning)	

2. *Where?* (Where did the UEMS incident occur?)
Country
City or town
Site/location name

3. *Who?* (Who owns or manages the site and the contents on it?)

3.1. Who owns or manages the site?		
Owner	☐ **state**	☐ **non-state**
		manager (if different)
Details (e.g. type)	☐ police ☐ military	☐ private company
	☐ foreign (e.g. peacekeeping force)	☐ armed group
	☐ other (e.g. state companies), specify:	☐ other (e.g. criminal gang), specify:

3.2. What type of facility housed the munitions?		
3.2.1. Status of storage site?	☐ permanent	☐ temporary
3.2.2. What types of activity took place there?	☐ storage	
	☐ processing	
	☐ loading/unloading	
3.2.3. What was the design of the storage facility?	☐ purpose-built storage	
	☐ non-purpose-built storage	
	☐ dump	
	☐ unknown	

3.3. What munitions were stored there?	Type of material or munitions		Quantity/measurement (total estimate, providing any data available)	
Comments (e.g. age, origin, type, and condition of munitions)	☐ aircraft	☐ armour and artillery	☐ quantity (in number)	
	☐ cluster	☐ explosives and pyrotechnics	☐ weight (in tonnes)	
	☐ mines	☐ naval	☐ value (indicate currency)	
	☐ SALW*	☐ unknown		

4. *Why?* (Why did the UEMS incident occur?)
(e.g. degradation of ammunition; poor storage or poor infrastructure; material being mishandled or dropped; external, environmental events (such as floods or fires); poor security; poor working conditions)

*Small arms and light weapons

5. *What?* (What happened as a result of the explosion?)

5.1 How large was the affected area?

Blast radius (km)

(distance of pressure expanding outwards from explosion)

Fragmentation radius (km)

(distance contaminated by munitions, explosives, weapons, and debris, posing a continuing risk)

5.2. Who was affected by the explosion?

Fatalities (total) ☐ yes ☐ no ☐ unknown

If yes, no. of facility fatalities

no. of civilian, non-staff fatalities

Injuries (total) ☐ yes ☐ no ☐ unknown

If yes, no. of facility staff injuries

no. of civilian, non-staff injuries

5.3. What infrastructure was damaged or destroyed in the explosion?

Type of infrastructure damaged
(selecting all that apply)

☐ schools ☐ housing ☐ health services
☐ transport hub ☐ other, specify:

Total cost of damages
(indicate currency)

Comments

5.4. What are the other consequences of a UEMS?

Government response
☐ safety investigation ☐ legal investigation

Compensation ☐ yes ☐ no ☐ n/a*
If yes, how many families received compensation?

Total cost of compensation
(indicate currency)

Political impact (e.g. senior officials being reprimanded, demoted, convicted, or jailed)

Other impacts (e.g. environmental, economic, social, or health)

6. *How?* (How did the state and international community respond?)

Was an emergency-plan response implemented?
☐ yes ☐ no ☐ n/a

Prior presence of EOD expertise on-site?**
☐ yes ☐ no ☐ unknown

Relocation of displaced people
☐ yes ☐ no ☐ n/a
If yes, how many?

Evacuated people ☐ yes ☐ no ☐ n/a

If yes, how many?

If yes, was displacement ☐ temporary or ☐ permanent?

UXO removal ☐ yes ☐ no ☐ n/a

Details (e.g. quantity or weight in tonnes)

Comments (e.g. names of actors assisting, including local, national, or international)

Reporting person, contact details

Name

Institution

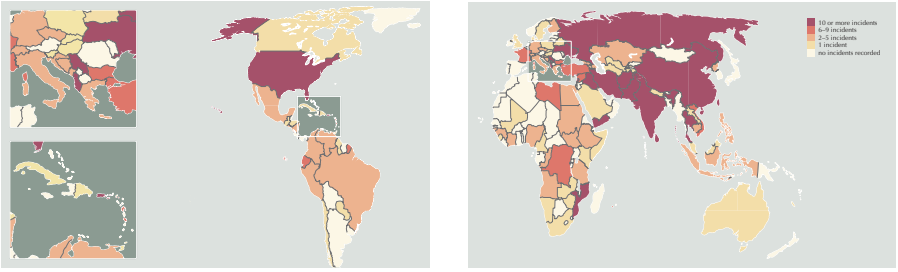
Mailing address

Phone

Email

*n/a = not applicable ** Explosive ordnance disposal

Map 1. **UEMS incidents by country, 1979–2013**



The IRT has been designed to standardize and encourage the collating of information on such events. Its standardized format should alleviate some of the concerns that states have and should sensitize reporters to additional features of interest pertaining to UEMS incidents.

The template enables non-specialists to report more thoroughly. As an added benefit, the standardized template enables authorities to submit comprehensive summaries of an incident, without necessarily releasing related investigative reports in their entirety.

Observations

The effects of unplanned explosions are numerous and often long-lasting. The media tends to focus on the immediate direct effects of such an incident, namely casualties incurred from the initial explosion. This focus on casualties is both understandable and a valuable indicator of UEMS' costs and why it is important to work toward preventing them. Only if we look at their longer-term socio-economic and politico-military effects, however, is it possible to understand the true costs of UEMS and why countering them should be prioritized on national, regional, and international agendas. To this end, the UEMS IRT is designed to help generate better data capturing and record keeping.

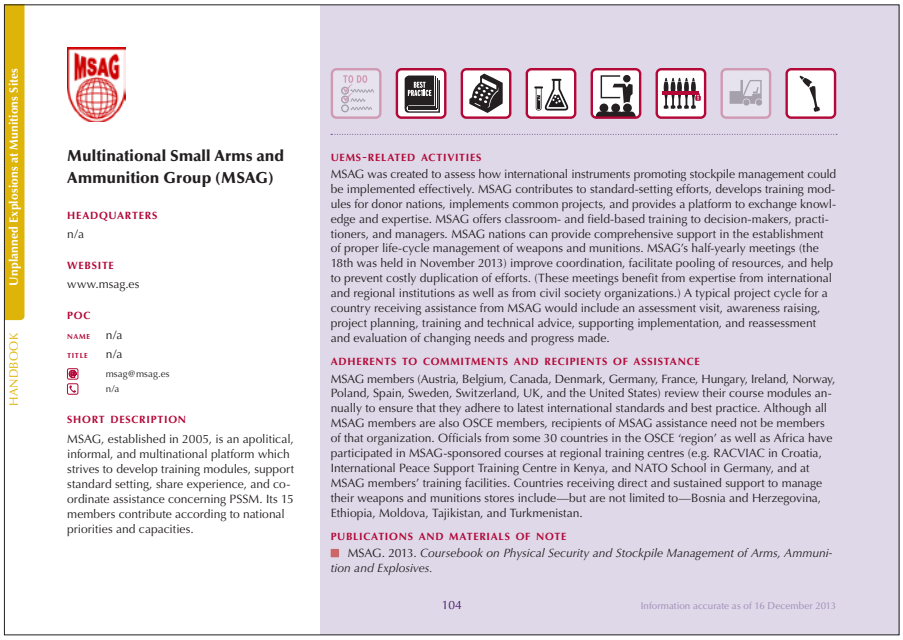
Notes

1 Research Note 6, 'Unplanned Explosions at Munitions Sites,' which is available in seven languages, provides a synopsis.

Sources

This Research Note is based on the forthcoming Small Arms Survey Handbook series volume *Unplanned Explosions at Munitions Sites (UEMS): Excess Stockpiles as Liabilities rather than Assets*, edited by Eric G. Berman and Pilar Reina.

Figure 2. **Sample profile: An actor undertaking or providing UEMS-related activities and services***



Unplanned Explosions at Munitions Sites

HANDBOOK

MSAG

Multinational Small Arms and Ammunition Group (MSAG)

HEADQUARTERS
n/a

WEBSITE
www.msag.es

POC
NAME n/a
TITLE n/a
msag@msag.es
n/a

SHORT DESCRIPTION
MSAG, established in 2005, is an apolitical, informal, and multinational platform which strives to develop training modules, support standard setting, share experience, and coordinate assistance concerning PSSM. Its 15 members contribute according to national priorities and capacities.

UEMS-RELATED ACTIVITIES
MSAG was created to assess how international instruments promoting stockpile management could be implemented effectively. MSAG contributes to standard-setting efforts, develops training modules for donor nations, implements common projects, and provides a platform to exchange knowledge and expertise. MSAG offers classroom- and field-based training to decision-makers, practitioners, and managers. MSAG nations can provide comprehensive support in the establishment of proper life-cycle management of weapons and munitions. MSAG's half-yearly meetings (the 18th was held in November 2013) improve coordination, facilitate pooling of resources, and help to prevent costly duplication of efforts. (These meetings benefit from expertise from international and regional institutions as well as from civil society organizations.) A typical project cycle for a country receiving assistance from MSAG would include an assessment visit, awareness raising, project planning, training and technical advice, supporting implementation, and reassessment and evaluation of changing needs and progress made.

ADHERENTS TO COMMITMENTS AND RECIPIENTS OF ASSISTANCE
MSAG members (Austria, Belgium, Canada, Denmark, Germany, France, Hungary, Ireland, Norway, Poland, Spain, Sweden, Switzerland, UK, and the United States) review their course modules annually to ensure that they adhere to latest international standards and best practice. Although all MSAG members are also OSCE members, recipients of MSAG assistance need not be members of that organization. Officials from some 30 countries in the OSCE 'region' as well as Africa have participated in MSAG-sponsored courses at regional training centres (e.g. RACVIAC in Croatia, International Peace Support Training Centre in Kenya, and NATO School in Germany, and at MSAG members' training facilities. Countries receiving direct and sustained support to manage their weapons and munitions stores include—but are not limited to—Bosnia and Herzegovina, Ethiopia, Moldova, Tajikistan, and Turkmenistan.

PUBLICATIONS AND MATERIALS OF NOTE
■ MSAG. 2013. *Coursebook on Physical Security and Stockpile Management of Arms, Ammunition and Explosives.*

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Information accurate as of 16 December 2013

* This profile, along with the 36 others in the Handbook, does not serve as an official position or document of the profiled actor.

About the Small Arms Survey

The Small Arms Survey serves as the principal international source of public information on all aspects of small arms and armed violence, and as a resource centre for governments, policy-makers, researchers, and activists. The Survey distributes its findings through Occasional Papers, Issue Briefs, Working Papers, Special Reports, Books, and its annual flagship publication, the *Small Arms Survey*.

The project has an international staff with expertise in security studies, political science, international public policy, law, economics, development studies, conflict resolution, sociology and criminology, and works closely with a worldwide network of researchers and partners.

The Small Arms Survey is a project of the Graduate Institute of International and Development Studies, Geneva. For more information see www.smallarmssurvey.org.

Credits

Authors: Eric G. Berman, Benjamin King, and Pilar Reina

Contact details

Small Arms Survey
47 Avenue Blanc
1202 Geneva, Switzerland
t +41 22 908 5777
f +41 22 732 2738
e info@smallarmssurvey.org
w www.smallarmssurvey.org

small arms survey

Office of Weapons Removal & Abatement
Bureau of Political-Military Affairs
U.S. Department of State

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