

Improvised Explosive Devices and the International Mine Action Standards by Rhodes, Ph.D. [from page 4]

1. An IED is defined as a ‘device placed or fabricated in an improvised manner incorporating explosive material, destructive, lethal, noxious, incendiary, pyrotechnic materials or chemicals designed to destroy, disfigure, distract or harass. They may incorporate military stores, but are normally devised from non-military components’ (IMAS 04.10 3.134: 2013 & IATG 01.40:2011). Those victim-operated devices laid as landmines are referred to in this paper as locally manufactured landmines or improvised landmines .
2. The phrase ‘Humanitarian Mine Action’ is redundant as Mine Action by definition is humanitarian. In this paper Mine Action is used where others may use the phrase Humanitarian Mine Action.
3. Excluding EO of a nuclear, biological, or chemical nature; see endnote 13.
4. Email correspondence with The Halo Trust. Statistics current to August 2017.
5. Email correspondence with MAG. Statistics current to August 2017.
6. Email correspondence with DAICMA. Statistics current to July 2017.
7. IMAS 01.10 Section 5.
8. IMAS 01.10 Section 6.2.
9. Mine action operators must therefore conduct risk assessments that include proper assessments of the conflict in question and of the actors involved. Such assessments will examine whether areas being targeted for clearance are permissive environments, where explosive devices are no longer in use for the parties to the conflict, or whether conflict is ‘active’ in a given area and therefore not appropriate for mine action operations.
10. <http://www.mineaction.org/improvised-explosive-device-lexicon>.
11. Understanding the Regional and Transnational Networks that Facilitate IED Use, AOAV, 2017.
12. For instance IMAS 09.11 concerns Battle Area Clearance ‘including UXO, AXO, booby traps and failed, or abandoned, IEDs left behind after hostilities have ceased.’
13. IMAS 04.10 and IATG definition: EO - all munitions containing explosives, nuclear fission or fusion materials and biological and chemical agents. This includes bombs and warheads; guided and ballistic missiles; artillery, mortar, rocket and small arms ammunition; all mines, torpedoes and depth charges; pyrotechnics; clusters and dispensers; cartridge and propellant actuated devices; electro-explosive devices; clandestine and improvised explosive devices (IEDs); and all similar or related items or components explosive in nature.
14. IMAS 04.10 anti-personnel landmine definition - ‘a mine designed to be exploded by the presence, proximity or contact of a person and that will incapacitate, injure or kill one or more persons’. The definition of an anti-personnel mine by virtue of its emphasis on the impact of the munition, as opposed to its construction, includes mines that have been constructed in an improvised manner. This is well documented in the negotiations for the treaty.
15. See extent of improvised devices from the operational statistics of one mine action operator, MAG: Figures 3 and 4.
16. Excluding EO of a nuclear, biological, or chemical nature; see endnote 10.

Quality Management and Standards for Humanitarian Improvised Explosive Device (HIED) Response Activities by Keeley [from page 9]

1. See the UNMAS mine action portal at <http://www.mineaction.org/issues>.
2. Assuming victim assistance is mainstreamed into health and disability sectors and supported by specialist organizations that may not be involved in the ‘field’ elements of mine action.
3. Based on NATO Allied Joint Doctrine for Countering – Improvised Explosive Devices, AJP-3.15 (A) March 2011, Para 0418.
4. Based on NATO Allied Joint Doctrine for Countering – Improvised Explosive Devices, AJP-3.15 (A) March 2011, Para 0419.
5. Based on International Mine Action Standards (IMAS) 04.10 2nd Edition Amdt 3, Para 3.168.
6. See the explanation of response time analysis in “Joint Evaluation of Mine Action in Cambodia for the Donor Working Group on Mine Action”, Griffin and Keeley, 2004.
7. “Indemnify.” The Free Dictionary. Accessed 13 September 2017. <http://bit.ly/2h1en9C>.

Crossing the Fence: Challenges of Operationalizing PSSM by Isikozlu, Krötz, and Trancart [from page 14]

1. Loughran, Chris. “Developing good practice for measuring the success, effectiveness and impact of PSSM”, Manchester: MAG, May 2016. Accessed 4 August 2017. <http://bit.ly/2weqsLy>.
2. Other agreements that are in force in the region include the *Nairobi Protocol for the Prevention, Control and Reduction of Small Arms and Light Weapons in the Great Lakes Region, the Horn of Africa, and Bordering States* (2004) and most recently, the *Kinshasa Convention* (2017).
3. “ECOWAS Convention on Small Arms and Light Weapons, Their Ammunition and Other Related Materials.” Article 24(1). Accessed 4 August 2017. <http://bit.ly/1wPPgSM>.
4. Van der Vondervoort, Luuk and Michael Ashkenazi. “Practices and approaches towards arms and ammunition management in Mali.” Unpublished report. Bonn: BICC, 2015.
5. Van der Vondervoort, Luuk. “‘Guns are for the Government’: An evaluation of a BICC advisory project on state-owned arms control in South Sudan.” BICC Working paper. Bonn: BICC, 2014.

Promoting Secure Stockpiles and Countering Diversion by Berman and King [from page 18]

1. Any list of partners supporting Small Arms Survey projects would include the Danish Demining Group, The HALO Trust, Handicap International, Mines Advisory Group, and the United Nations Mines Action Service. Additional partners appear elsewhere in this short article. This list is indicative and not exhaustive.
2. MSAG is an apolitical, informal, and multinational platform of a dozen or so like-minded governments that, to the extent possible, since 2005 have worked together to support each other’s efforts to improve stockpile management practices across the globe. See www.msag.es.
3. Berman, Eric G., and Pilar Reina. “Unplanned Explosions at Munitions Sites: Concerns and Consequences.” *The Journal of ERW and Mine Action*. 16.2 (2012): 4–9.
4. The PSSM Best Practice Cards are available in Albanian, Arabic, Bosnian-Croatian-Montenegrin-Serbian (BCMS—in the Latin alphabet), French, Portuguese, Russian, Spanish, and Swahili.
5. For example, over the past three years, the Survey has added eight incidents and deleted five during the period 1979–2013.
6. See <http://bit.ly/2lITGH8>.
7. The UEMS Database records 19 events as having occurred in the United States, which have resulted in four dead and two injured. By way of comparison, while casualty data for many incidents is incomplete (including for those in the United States), the average number of casualties recorded for the other 548 UEMS in the 100 other countries in the database comes to more than 50.
8. The RASR Initiative Steering Committee comprises the International Trust Fund (ITF) Enhancing Human Security, the North Atlantic Treaty Organization (NATO) Support and Procurement Agency (NSPA), the RACVIAC Centre for Security Cooperation, the South Eastern and Eastern Europe Clearing House for the Control of Small Arms and Light Weapons (SEESAC), and the Small Arms Survey. The nine participating states since 2009, when the Initiative was launched, include Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Macedonia, Montenegro, Romania, Serbia, and Slovenia. WRA provided funding from 2009 through 2015. The European Union is funding RASR for the 2017–2019 period. Moldova has been invited to contribute to the Initiative. For more information. See www.rasrinitiative.org.
9. Gobinet, Pierre, and Jovana Carapic. “Less Bang for the Buck: Stockpile Management in South-east Europe.” *Small Arms Survey 2015: Weapons and the World* (2015): 125–155.
10. Parker, Sarah. *Facilitating PSSM Assistance in the Sahel and Beyond: Introducing the PSSM Priorities Matrix*. Geneva: Small Arms Survey, 2016.
11. Berman, Eric G., Mihaela Racovita and Matt Schroeder. *Making a Tough Job More Difficult: Loss of Arms and Ammunition in Peace Operations*. Geneva: Small Arms Survey, 2017.

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1. “Unplanned Explosions at Munition Sites.” Small Arms Survey. 13 September 2016. <http://bit.ly/1konVpr>. Accessed 5 October 2017.

Strengthening Security in Mali With Weapons and Ammunition Management by Dupouy [from page 23]

1. “Security Council Extends Mandate of Mission in Mali, Unanimously Adopting Resolution 2364 (2017).” United Nations. 29 June 2017. <http://bit.ly/2xiGxEl>. Accessed 5 October 2017.
2. S/RES/2370 (2017) adopted on 2nd August 2017, on “Threats to international peace and security caused by terrorist acts - Preventing terrorists from acquiring weapons.”

Clearing Landmines and Building Peace in Colombia by Finson and Diffidenti [from page 25]

1. "Colombia: Casualties and Victim Assistance." *Landmine and Cluster Munition Monitor*. Last modified 9 November 2016. <http://bit.ly/2xOgnpn>.

Humanitarian Mine Action and IEDs by McInally and Risser [from page 30]

1. "Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on Their Destruction Article 2: Paragraphs 1 and 2." The Anti-Personnel Mine Ban Convention, 1997. Accessed 6 October 2017. <http://bit.ly/2kHbzfo>.
2. "The Protocol on Prohibitions or Restrictions on the Use of Mines, Booby-Traps and Other Devices Article 2: Paragraphs 1 and 3." Protocol II, Convention on Certain Conventional Weapons, 1996 United Nations. Accessed 6 October 2017. <http://bit.ly/2fRGa8G>.
3. "Guide for the application of International Mine Action Standards (IMAS)." Accessed 6 October 2017. <http://bit.ly/2wC0xxa>.

Recovering The Past: A Photographic Documentary Exploring Post-Conflict Reconciliation by Alderman [from page 35]

1. Smith, Patsy Adam. *The Anzacs*. Sydney: Penguin Australia, 2012, page 470.
2. Australian War Memorial. "Third Battle of Ypres." Australian Divisions participated in the battles of Menin Road, Polygon Wood, Broodseinde, Poelkapelle and The First Battle of Passchendaele. Accessed 7 September 2017. <http://bit.ly/2eKh8aV>.
3. Bickel, Lennard. *In Search of Frank Hurley*. Macmillan, 1980, page 61.

Preparing for the Future: How the SDGs Impact Mine Action by Ursign Hofmann and Olaf Juergensen [from page 42]

1. "A/RES/70/1 - Transforming our world: the 2030 Agenda for Sustainable Development." United Nations. 2015. Accessed 9 October 2017. <http://bit.ly/1Y3D3sN>.
2. Hofmann, Ursign and Olaf Juergensen. "Leaving No One Behind: Mine Action and the Sustainable Development Goals." Geneva International Centre for Humanitarian Demining. Accessed 9 October 2017. <http://bit.ly/2yA8jfV>.
3. Nilsson, Måns, Dave Griggs, and Martin Visbeck. "Map the interactions between Sustainable Development Goals." *Nature* 534 (2016): 320–322.
4. "Pathfinders for Peaceful, Just and Inclusive Societies." New York University Center on International Cooperation. Accessed 9 October 2017. <http://bit.ly/2xs9dKV>.
5. Le Blanc, David. "Towards integration at last? The sustainable development goals as a network of targets." DESA Working Paper No. 141.
6. Nedergaard, Mikkel. "Outcome Monitoring in Humanitarian Mine Action." *The Journal of ERW and Mine Action* 18.1 (2014): 7–9
7. "Efficiency, Effectiveness and Impact in Mine Action." MAG (Mines Advisory Group). Accessed 9 October 2017. <http://bit.ly/2ybVVld>.
8. "Statement on Outcome Monitoring in Mine Action." Danish Demining Group. Accessed 9 October 2017. <http://bit.ly/2g6iotp>.
9. In 2016, HALO, MAG, and NPA took an interesting parallel step by standardizing beneficiary definitions that could inform a possible standardization of indicators.
10. "A Guide to Mine Action." Geneva International Centre for Humanitarian Demining. Last modified 28 October 2016. <http://bit.ly/2kzQk2Y>.
11. "Landmine Monitor 2016." *Landmine and Cluster Munition Monitor*. Accessed 9 October 2017. <http://bit.ly/2kctcGY>.
12. "A/RES/69/313 - Addis Ababa Action Agenda of the Third International Conference on Financing for Development (Addis Ababa Action Agenda)." United Nations. Accessed 9 October 2017. <http://bit.ly/1V7LEvE>.

Using Small Unmanned Aircraft (SUA) in HMA by Smith [from page 46]

1. National database IMSMA for Gray Area managed by iMMAP.
2. Unmanned Aviation Services. Resource Group, United Kingdom, email: mark.jones@resourcegroup.co.uk. Accessed 25 October 2017. <http://bit.ly/2i3An0t>.
3. Global Drone Regulations Database. Accessed 25 October 2017. <http://bit.ly/2zOwowy>.
4. The acronym UAV is widely used but the word **vehicle** implies transportation of some kind; not all SUA have the capacity to transport a payload. In Britain at the time of writing, SUA is defined as covering any unmanned aircraft up to 7 kg (15.4 lbs) in take-off weight, whatever its design purpose.
5. The term **drone** is avoided because it has unhelpful associations in some contexts.
6. International Civil Aviation Organisation (ICAO), Convention on International Civil Aviation (Chicago Convention). Accessed 25 October 2017. <http://bit.ly/2zfTegw>.
7. Standing Operating Procedures for the use of Small Unmanned Aircraft (SUA) in Humanitarian Mine Action. Accessed 25 October 2017. <http://bit.ly/2h9dSYd>.
8. These pictures are published in the 2017 document *Islamic State's Multi-role-IEDs* at <http://bit.ly/2zP5pRD>. Permission to use these pictures was granted by Damien Spleeters, Head of Regional Operations, Conflict Armament Research (spleeters@conflictarm.com).
9. Schiebel Camcopter is an early development with Humanitarian Mine Action Research & Development funds from U.S. Army CECOM NVESD in 1999.
10. The author was seconded to the Libyan Mine Action Centre (LMAC) by Norwegian People's Aid to serve as Chief Technical Advisor in 2012 when Google Earth images were widely used by many INGOs in country.
11. Contact Ed Rowe at edrowe2006@yahoo.co.uk for more detailed information about this use. Ed is currently with the Norwegian Peoples' Aid program in Vietnam.
12. John Fardoulis is a specialist in using unmanned aerial systems (UAS) to map hazardous environments, currently working as a researcher at the University of Bristol, United Kingdom.

Refining Explosive Safety Outreach by Carton and Grindstaff [from page 49]

1. "3Rs Explosives Safety Education." DoD Environment, Safety and Occupational Health Network and Information Exchange. Accessed 16 August 2017. 3rs.mil.

The Challenge of Long-term Risk Management in Mine Action by White [from page 56]

1. "Protocol on Explosive Remnants of War (Protocol V), Article 2: Explosive remnants of war definition." The United Nations Office at Geneva. Accessed 13 October 2017. <http://bit.ly/2gh9aKO>. "Glossary of mine action terms, definitions, and abbreviations. 3.100 Explosive Remnants of War (ERW)." International Mine Action Standards Amendment 04.10. Accessed 13 October 2017. <http://bit.ly/2xDfS5a>.
2. Slovic, P., Weber E.U. "Perception of Risk Posed by Extreme Events." Working Paper for Center for Decision Sciences (CSD), Colombia University (2002). Accessed 12 September 2017. <http://bit.ly/2xLRgnf>.
3. "Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and Their Destruction." AP Mine Ban Convention. Accessed 13 October 2017. <http://bit.ly/2g8EpUp>. "Syria." Action on Armed Violence (2016). Accessed 19 May 2017. <http://bit.ly/2rm7Yt2>. "The Convention of Cluster Munitions." Implementation Support Unit of the Convention on Cluster Munitions (ISU-CCM). Accessed 25 September 2017. <http://bit.ly/1KfLtv>.
4. "Management of Residual Explosive Remnants of War (MORE)." Geneva International Centre for Humanitarian Demining. Accessed 16 October 2017. <http://bit.ly/2kSrhbz>.
5. "Glossary of mine action terms, definitions, and abbreviations." International Mine Action Standards 04.10. Accessed 13 October 2017. <http://bit.ly/2xh0ciV>.
6. "International Mine Action Standards (IMAS), Minutes of IMAS Review Board Meeting: Held 15 February 2016." Geneva International Centre for Humanitarian Demining (GICHD). Accessed 13 October 2017. <http://bit.ly/2wSedEn>.
7. "Stage 3 Accessing risk." Charities and risk management CC26. Charity Commission for England and Wales. (February 2017). Accessed 13 October 2017. <http://bit.ly/1uZy0ie>.
8. "Impact and Likelihood heat map." Charities and Risk management CC26. Charity Commission for England and Wales. (February 2017). Accessed 13 October 2017. <http://bit.ly/1uZy0ie>.
9. Stone, K., Murray A., Cooke S., Foran J., Gooderham L. *Unexploded ordnance (UXO): A Guide for the construction industry (C681)*. CIRIA, 2009.
10. "Management of Residual Explosive Remnants of War (MORE)." Geneva International Centre Humanitarian Demining (GICHD). 2015. Accessed 17 September 2017. <http://bit.ly/2i94BT6>.
11. "Glossary of mine action terms, definitions, and abbreviations: 3.249: residual risk." International Mine Action Standards Amendment 04.10. Accessed 13 October 2017. <http://bit.ly/2xDfS5a>.

Black Adder Disruptors by Smith and Bagley [from page 61]

1. PCM ERW Risk Management & MAT Kosovo. www.pcm-erw.com, email: info@pcm-erw.com.
2. POLIEX, www.poliex.me.