AN INITIAL STUDY INTO
MINE ACTION AND
IMPROVISED EXPLOSIVE DEVICES
Need and purpose of the study

- Increasing humanitarian imperative:
  - Iraq, Syria, Colombia

- Current humanitarian response increasing

- Significant areas of uncertainty
  - Operators
  - Authorities
  - Donors

- Requirement to review Standards
Explosive Hazards that threaten civilians

Explosive Remnants of War (ERW)

(IMPROVISED AP LANDMINES)

(IMAS)

AVM

AP

Landmines

UXO

AXO

Sub munitions

Unstable and poorly managed Ammunition Stores

IATG

IEDs

Active

Active

© GICHD
C-IED / IEDD Operations

**C-IED** is an activity for a nation’s security forces. It seeks to identify:

- Whose funding IED production
- Tracking where components came from,
- Who made the IED, who planted it etc.
- And neutralising the devices

**IEDD** concerns neutralising the device only
What does an IED consist of?

- Arming Switch (Optional)
- Power source
- Firing Switch
- Initiator onto Main Charge
Time delay IEDs

Projected IEDs

Command IEDs

Suicide (belts or VB-IED)
Victim activated (Improvised Mines)

95% of devices found to date by NGO and commercial operators in Iraq

Single Pressure Plate Activated Mine
Figure 7. Improvised devices by type, as cleared by MAG in northern Iraq to October 2016 (image credit: GICHD).

Figure 8. Improvised devices by type, as cleared by MAG in north eastern Syria to October 2016 (image credit: GICHD).
Operating Envelope

- **Level of campaign**
  - Active
  - Non-Active

- **Complexity of initiation mechanism**
  - Low
  - High

- **Groups**
  - HUMANITARIAN MINE ACTION AGENCIES
  - SPECIALISED COMPANIES
  - STATE MILITARY AND POLICE FORCES
RCIED with mobile phone attached; active/recent conflict zone

Several years later
RCIED has aged
Explosives non-functional
Mobile phone non-functional

Conflict over
RCIED remains functional

Contextual complexity

Technical complexity
Contextual complexity

Western Mosul
February 2017

Antioquia Colombia 2017
(10 year old)

Western Mosul 2020?
Key points from the Study

• Limitations of IED/IEDD language and terminology

• Stakeholder uncertainty exists across many aspects of the topic

• Humanitarian IEDD mostly involves the application of the same underlying management systems and principles as in traditional HMA

• The IED environment is less forgiving

• Need to better define competence and equipment requirements for IEDD
Key principles

Improvised devices show more variations than industrial manufactured weapons.

Different designs are employed in different areas and change over time.

- Information Management of the highest order is essential
- Risk Management - constantly, using data and results of analysis, across all aspects of operations
### Summary of proposed/possible adjustments to IMAS to reflect relevance/applicability to IEDs and IEDD

<table>
<thead>
<tr>
<th>IMAS</th>
<th>Topic</th>
<th>Adjustments</th>
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<tbody>
<tr>
<td>01.10</td>
<td>H Guide for the application of IMAS</td>
<td>IMAS to be reviewed in its entirety by the RB</td>
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<tr>
<td>02.10</td>
<td>H Guide for the establishment of a mine action programme</td>
<td><strong>Main body</strong>&lt;br&gt;4.1 note possibility of improvised, artisanal and locally manufactured landmines&lt;br&gt;5.1 GMAA – should include improvised aspects where relevant&lt;br&gt;5.3 increased planning demand when wholly or partly improvised weapons are present&lt;br&gt;5.5 Personnel – reflect technical nature of mines/ERW that may be encountered, including IEDs where applicable&lt;br&gt;5.5.1 Training – demands of IEDs, CM/SM, etc.&lt;br&gt;6.3 MAC – potentially expanded stakeholder group members etc.)&lt;br&gt;8. possible need for training aids&lt;br&gt;11.2 MAC responsibilities – accreditation implications of different Annex D&lt;br&gt;4.4 a new brief subsection for IEDs and IEDD&lt;br&gt;4.4.2 highlight essential function of IM when dealing with IED&lt;br&gt;4.6. emphasise the use of incoming data to drive continual improvement in environment</td>
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<tr>
<td>03.10</td>
<td>M Guide to the procurement of mine action equipment</td>
<td>Consider minor edits to:&lt;br&gt;17.1 mention of IEDs and specific technical challenges&lt;br&gt;18.1 User community aspects of IEDD&lt;br&gt;18.4 Military – functions relating to IEDD&lt;br&gt;Annex B – additional input on technology for IEDD&lt;br&gt;Also consider:&lt;br&gt;New subsection on ‘rapid changes in the operating environment’, such as those associated with IEDs and IEDD&lt;br&gt;Addressing funding and the importance of addressing real needs rather than ‘nice to have’&lt;br&gt;Revising the introduction (which is out of date in tone and content generally) and reflect procurement implications of action against different weapon types, including those partly or wholly improvised</td>
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<tr>
<td>03.20</td>
<td>L The procurement process</td>
<td>Could consider adjusting the section on project management to reflect application of the procurement process when speed is of the essence and when responding to fast evolving threats</td>
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<tr>
<td>03.30</td>
<td>L Guide to the research of</td>
<td>Analysis of constraining factors – inclusion of IEDs where applicable</td>
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