



# **Pressure to clear : clearance in protracted conflict environments IRAQ**

**Directorate of Mine Action(DMA)  
Ministry of Health and Environment  
Republic of Iraq**

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- IEDs Direct Impact on IDPs and Returnees.
- IEDs Clearance by Mechanical Assets.
- Mechanisms of IEDs.



## IEDs Impact on IDPs & Returnees in Iraq

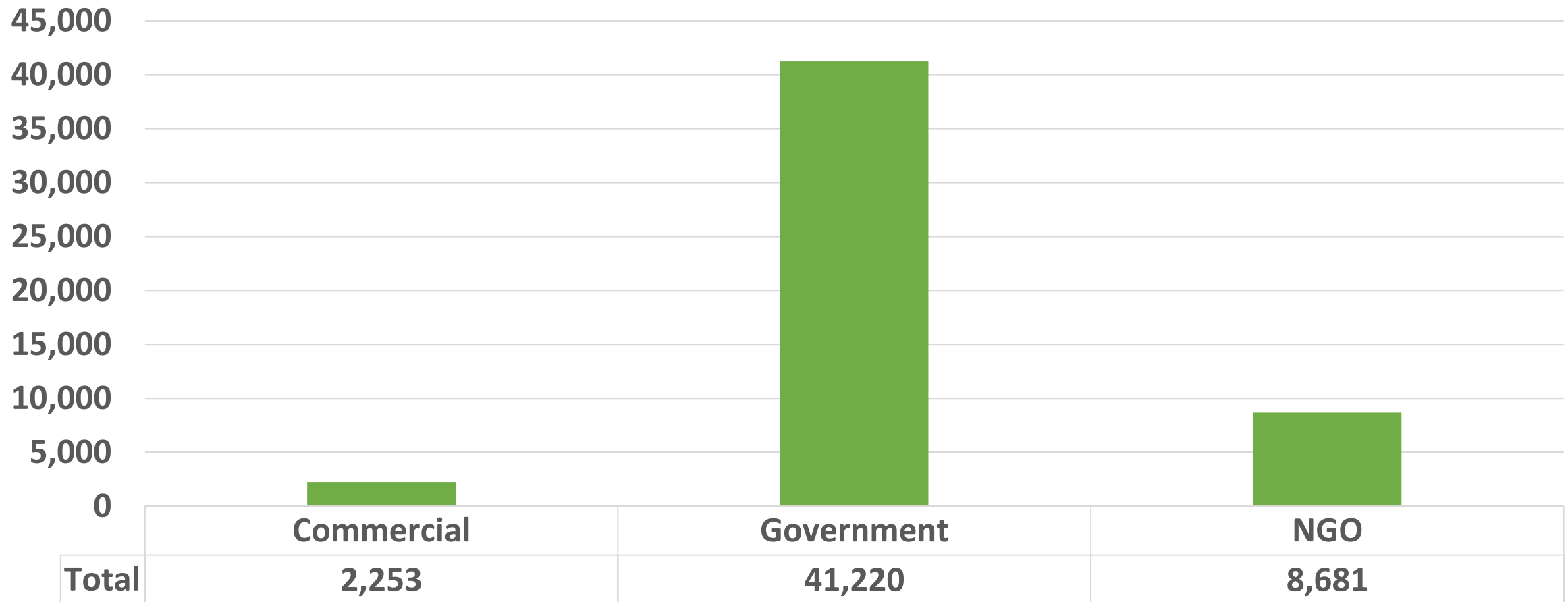


Source of population / International Organization for Migration (IOM) – IRAQ  
General population from ORNL for Land scan 2015 Global Population  
data:  
IDP Returnees from DTM

Province	District	Population Impacted by IEDs Locations with 3 Km Buffer		Impacted Population by District
		Families	Individual	
Anbar	Falluja	392	2,352	441,713
	Haditha	467	2,802	90,277
	Heet	19,457	116,742	140,238
	Ramadi	31,906	191,436	206,957
Baghdad	Abu Ghraib	995	5,970	200,736
Kirkuk	Daquq	166	996	153,904
Ninewa	Al-Hamdaniya	4,270	25,620	608,870
	Al-Shikhan	36	216	97,238
	Mosul	5,028	30,168	513,718
	Sinjar	3,420	20,520	130,623
	Telafar	7,872	47,232	202,128
	Tilkaif	1,700	10,200	133,526
Salah al-Din	Tikrit	6,806	40,836	111,878
<b>Total</b>		<b>82,515</b>	<b>495,090</b>	<b>3,031,806</b>



## IEDs Removed/Destroyed by partners





## Mechanisms of IEDs

1. Pressure
2. Release/ Anti lift
3. Vibrations
4. Wire and Wireless
5. Booby Traps
6. Photo Cell
7. Using mercury liquid theory



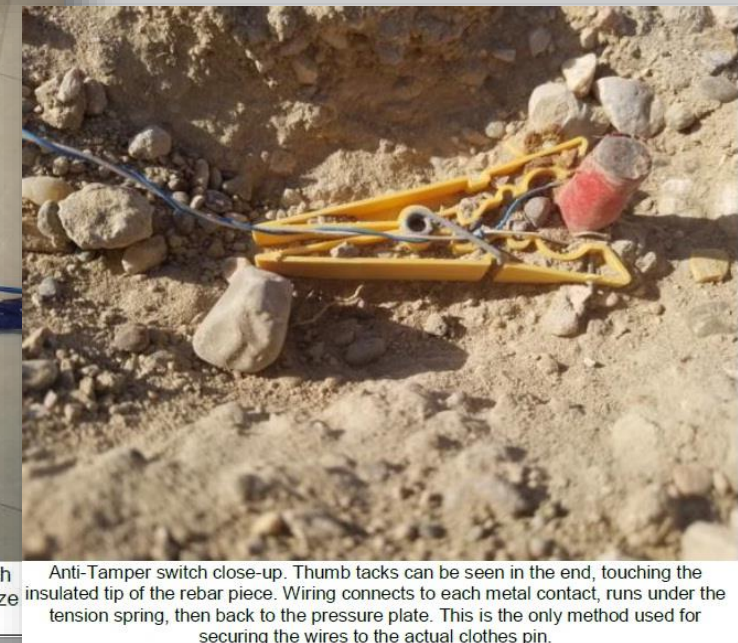
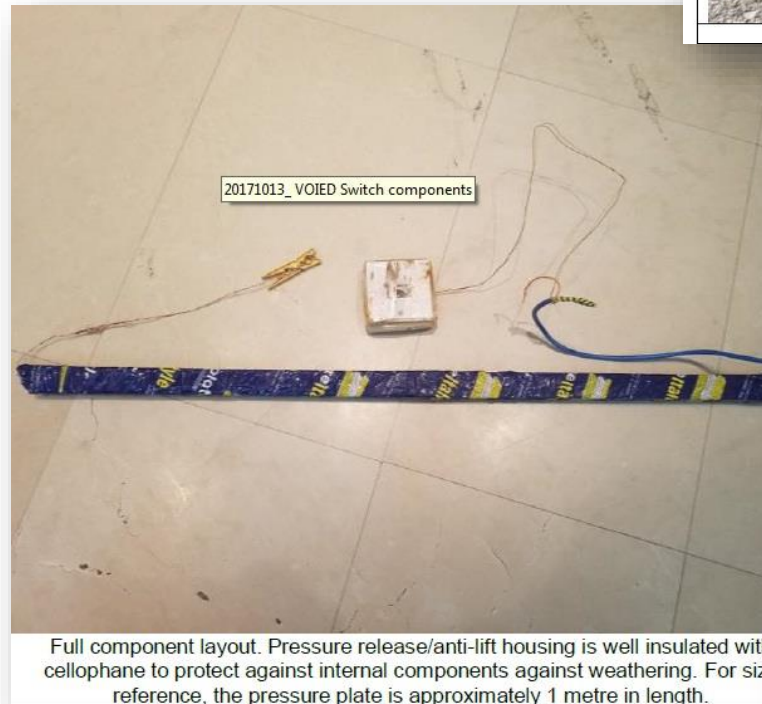
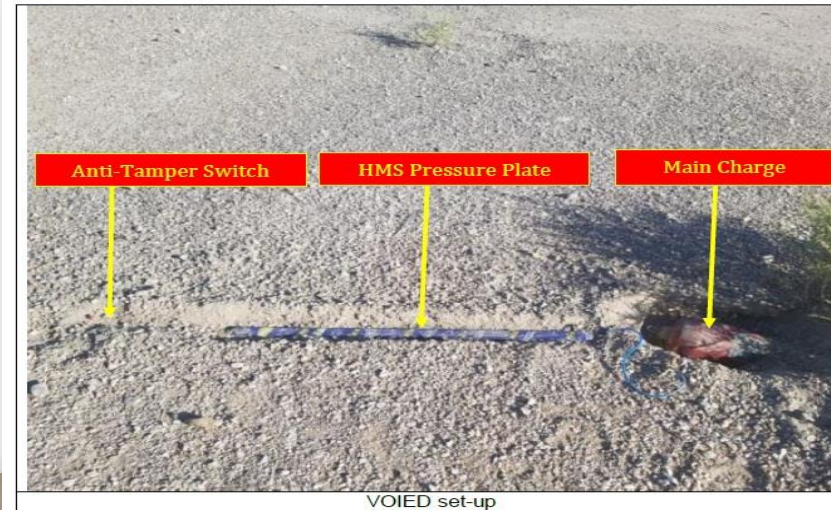


## Mechanism of Improvised Explosive Device Disposal (IEDD)

**Components for this type of VOIED, are listed below:**

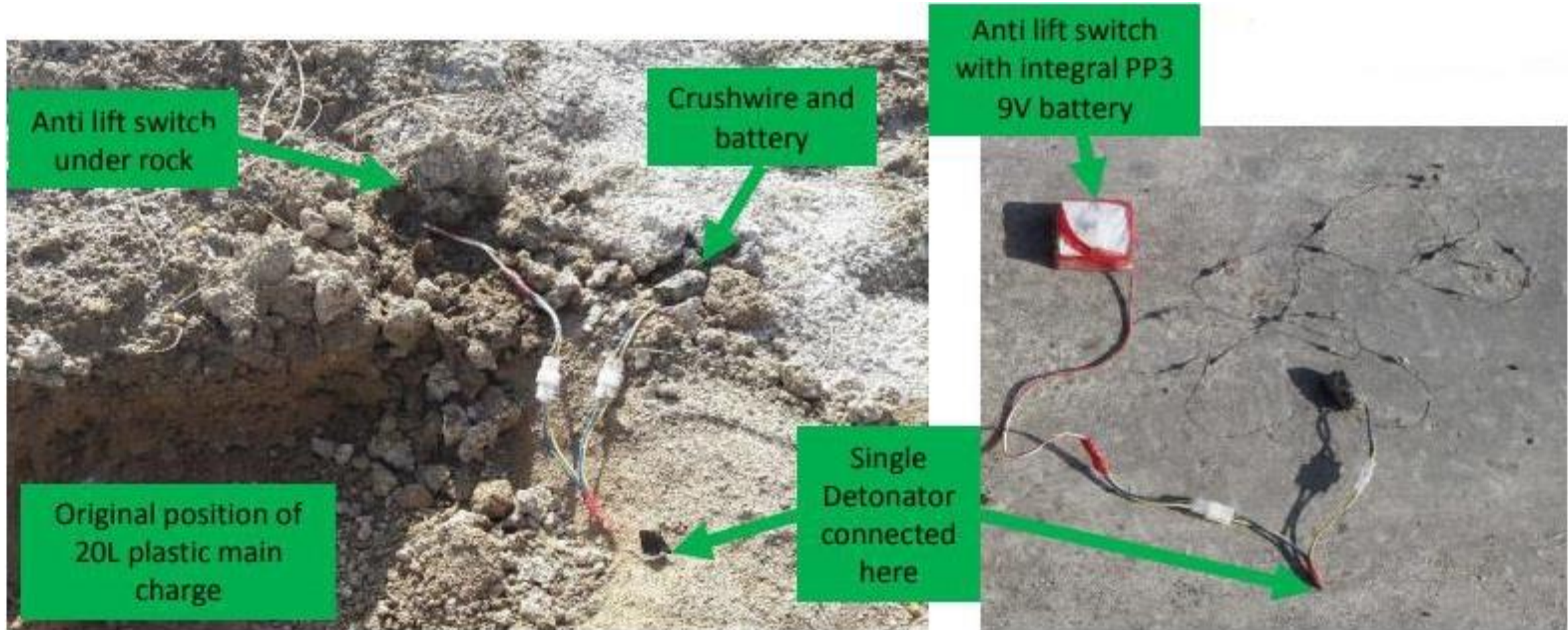
- 1 x High Metal Signature HMS pressure plate.
- 1 x pressure release/anti-lift device.
- 1 x clothes pin/anti-tamper switch.
- 2 x 9V power source.
- 1 x commercial electric detonator.
- 1 x main charge utilizing approximately 15kg of ANAL (Ammonium Nitrate Aluminum)  
(Home-made Explosives).
- Container for HME have been standard fire extinguisher casings.

Pictures/Diagrams





## Anti lift switch under rock





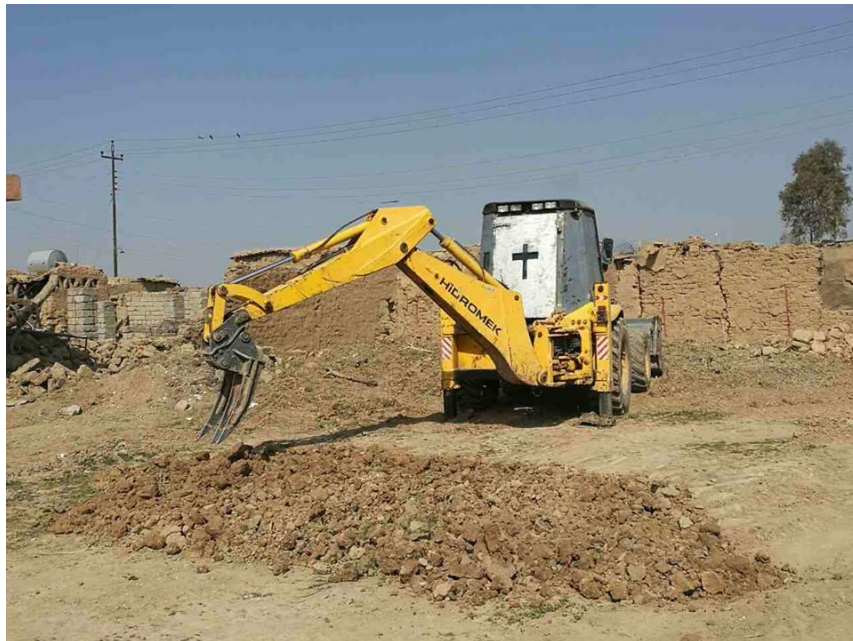
## Pressure Activator Types Used with IEDs Found in the Visited Sites







## IEDs Clearance by Mechanical







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# THANK YOU

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