



## > Efficient survey and clearance of Cluster Munitions

**Åsa Gilbert**

**Geneva International Centre for Humanitarian Demining (GICHD)**



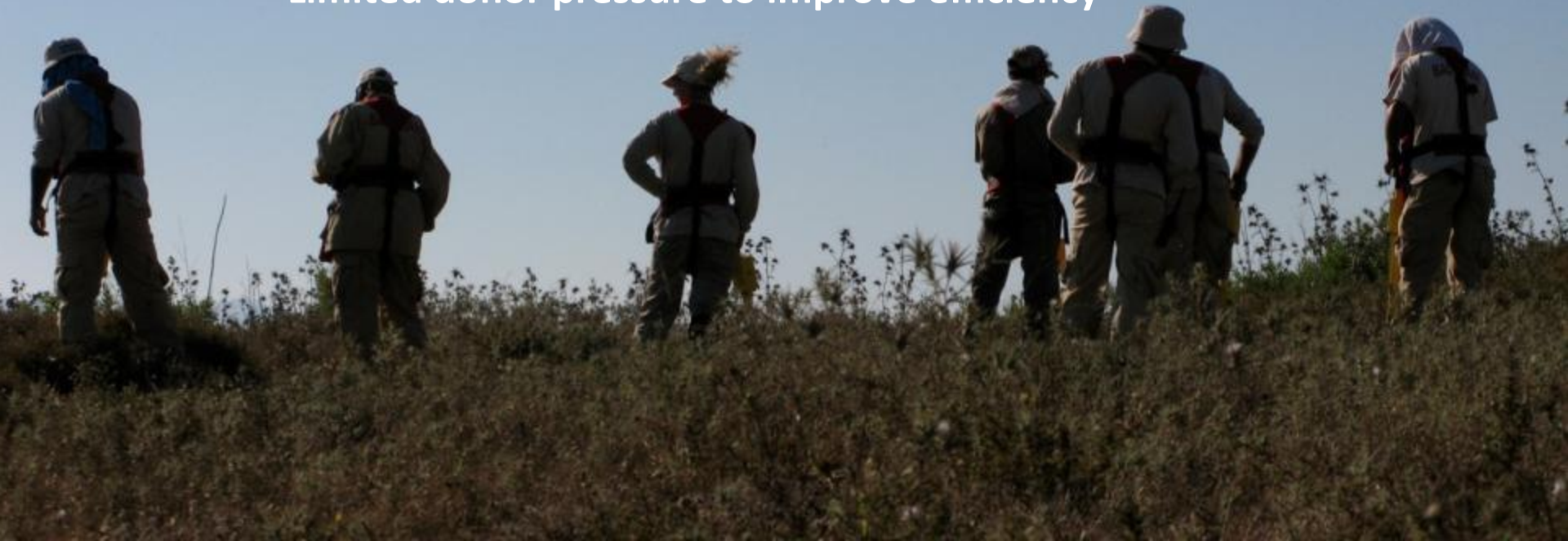


## > **CCM 2<sup>nd</sup> Meeting of State Parties Beirut**

*Application of all available methods for  
the efficient survey and clearance of  
cluster munition remnants*

## > The Problem

- Often poor information available on the location of unexploded sub-munitions
- Faulty survey processes that inflate the problem
- Subsequent tasking of huge areas
- Operator conservatism producing “over clearance” (when is enough?)
- Use of slow mine clearance procedures instead of procedures adopted to address areas contaminated by submunitions
- Fear of liability
- Limited donor pressure to improve efficiency



# Different Characteristics Mines, Explosive Submunitions and other UXO



	Pattern	Metal Content	Failure Rate	Risk of accidental activation (accessibility during survey)
<b>MINES</b>	Laid in a pattern or placed for tactical reasons.	Low/ Medium/ High	Not applicable	Victim activated <u>No access to the area during survey</u>
<b>SUBMUNITIONS</b>	Create a pattern or Footprint as a result of their delivery or dispersal process	High	Variable - can be as high as 30%	Designed to function by detonation prior to, on or after impact <u>Possible to access the area during survey in most cases</u>
<b>OTHER UXO</b>	Generally no pattern	High	Depends on type, but in general lower than for submunitions	Generally designed to detonate on impact <u>Possible to access the area during survey</u>



# Land Release

*‘Increasing efficiency in Survey and Clearance’*

- **National Authority to accept the concept of Land Release**
- **More land cancelled/released through Survey processes**
- **More effective use of technology and assets**
- **More efficient operational planning/contracting/QM**

*Also applicable in a cluster munition context!*



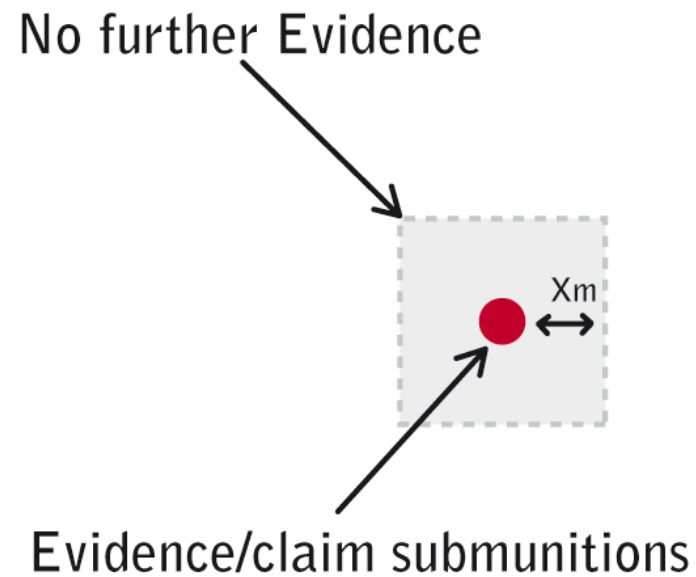
# Methodology

- > Evidence based approach
- > Non-technical Survey
- > Technical Survey and Clearance
- > Guidance on where to start and stop





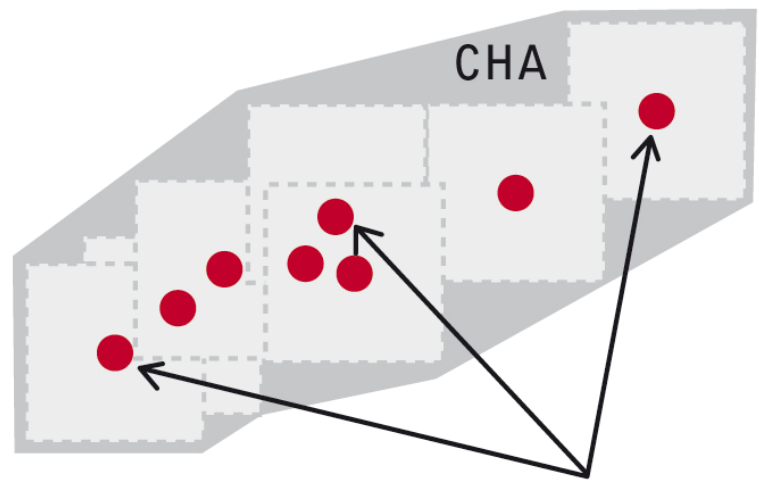
## > Survey – identify the footprint







# > Technical Survey



Evidence/claim submunitions



Cleared Area



Released Area





## > Challenges for survey and clearance

- > “Old” vs “New” contamination
- > Bombing data
- > Mixed contamination
- > Tasking of survey/clearance teams
  - > Evidence based vs. community/development driven
  - > 33% of all completed clearance tasks had no items found



# Main Points (1)

**Submunitions vary from mines and other UXO and therefore require different methodologies and operational systems to gain the most effective outcome for survey/clearance**





## Main Points (2)

**Recording of ‘Evidence Points’ (or similar), as opposed to recording polygons (hazardous areas), should be considered when the boundaries of the contamination can not be accurately determined**





## Main Points (3)

**While some procedures and equipment used in mine clearance are suitable for submunitions, more efficient procedures and more suitable detection equipment should be used**





# GICHD Publication

