

Field Risk Assessment in Land Release Operations

1. Introduction:

Field Risk Assessment (FRA) is the process through which the risk factors involved in various demining worksites and field activities are carefully identified, evaluated and assessed and required and appropriate risk mitigation measures and actions are applied.

2. Purpose:

The purpose of FRA in a demining worksite is to allow the informed selection of a combination of measures, actions and steps that mitigate the risk to a tolerable level and improve safety of the team members and the beneficiaries and to ensure effective implementation of land release process including the application of all reasonable efforts to realize a safe land is handed over to the community.

3. Requirement:

FRA shall be conducted in each demining worksite and recorded within the task dossier and shall be revised and updated as soon as new risk factors are identified. FRA shall also be verified by the internal and external QM and operations staff, confirming that it is conducted, revised and updated (as required) and is appropriate to identified risk factors.

4. Risk Assessment Process:

4.1. Identification of Risk Factors:

4.1.1 Worksite Condition within entire task, divided to parts if different:

A. Ground Profile:

Ground Profile	Soft	Medium	Hard	Wet	Extra Soil	Metal Contamination
Flat						
Hillside						
Valley, Canal, Riverbed						
Uneven						
Others specify						

Score from 1 to 5 (suitable to difficult)

B. Obstacles:

Obstacles	Slight	Medium	Heavy	Roots	Leaf Litter	Dump	Other
Bushes							
Jungle/Trees							
Sands/Gravel							
Flint/Rocks							
Ruins/extra							

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soil							
Old Military Positions							
Other specify							

Score from 1 to 5 (Suitable to difficult)

C. Other Obstacles:

Ditches	Trench /Dump	Wire Obstruction	Power Poles	Holes	Underground aqueduct	Heavy Metal

Score from 1 to 5 (Suitable to difficult)


D. Terrain and Climate:

Terrain				
Low Slope	Medium Slope	Steep Slopping	Sliding steep	
Climate				
Very hot	Hot	Normal	Cold	Strong wind

Score from 1 to 5 (Suitable to unsuitable)

- a) Summary and Freehand Map of the task with description of the ground conditions in different parts:

Summary:

	Freehand Map
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4.2. Types of Hazards:

- a) AP blast mines;
- b) AP bounding fragmentation mines
- c) AP fragmentation mines (stake mounted)
- d) AP fragmentation mines (stake dissolved)
- e) AP mines with emerged fuse
- f) AT mines metallic
- g) AT minimum metallic mine
- h) Different ERW
- i) Grenades (hand)
- j) Fuses (unidentified)
- k) Sub munitions

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- l) Rockets
- m) Mortar bombs (HE)
- n) Phosphorous
- o) Propellant
- p) Other specify:

Landmine, ERW contamination history to identify the age of mines laid and ERW left in the site:

List probable changes in hazards that made them more sensitive and riskier, for example:

- a) Stained and sensitive
- b) Changed direction
- c) Washed down with extra soil
- d)
- e)

Score from 1 to 5 (Low to high risk or normal to difficult)

4.3. Intended/Applied Technical Survey/Clearance Procedures:

- a) Manual: Signal Investigation Full Excavation
- b) Mechanical: Preparation Verification Processing
- c) Mine Detection Dogs: Reduction Verification
- d) Manual + Mechanical + MDD: Integrated Operations

Score from 1 to 5 (Suitability of the procedure to unsuitable procedures)

4.4. Human Resource:

- a) Deminers Experience in intended/applied procedures:.....
- b) Deminers Training in intended/applied procedures:.....
- c) Adequate Command and Control Element/Experience in Intended/applied procedures:
.....

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d) Training and Qualification of Command Group in Intended/applied procedures:.....

Score from 1 to 5 (Suitable to unfit)

4.5. Demining Tools and Equipment:

a) Metal Detector (Type and Specification):.....

b) Prodding/excavation tools: Bayonet Scraper ; If any other tools require to be used; provide reason:

c) Demining tool kits

d) Demolition tools including explosives materials

e) Pulling tools and ropes

f) Marking materials

g) PPE and Visors

h) Other specify:

Score from 1 to 5 (Suitable to unsuitable)

4.6. Medical Support:

Qualified paramedic, medical kit and emergency equipment, including appropriate stretcher:

Ambulance and driver:

Medical evacuation plan:

Score from 1 to 5 (Suitable to unsuitable)

5. Evaluation of the Risk Factors:

Analyze the risk factors considering the scores allocated to worksite conditions including ground profile, terrain, obstacles and climate, type and condition of hazards items, intended/applied procedures, human resource and demining tools and equipment:

a) What is the risk level to the personnel and risk of missed EO?

1) High – if the average of scores is 4 or 5.

2) Medium – if the average of scores is 3.

3) Low – if the average of scores is 2.

4) Improbable – if the average of scores is 1.

If the risk level is 4 to 5 the team must consult with Operations Manager of the organization and

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the issue is to be escalated further to NMAC and UNMAS sub office and Operations.
If the risk level is 3, the Operations Manager of the organization should be consulted and if required NMAC and UNMAS sub office to be consulted.
If the risk level is 2 the team command group must share the FRA findings with Operations and NMAC and UNMAS sub office for information.
If the risk level is 1, the team should proceed with clearance and follow routine reporting procedures.

- b) If any demining accident happens, what will be the severity of consequences and why?
- 1) Fatal?
 - 2) Severe?
 - 3) Minor?
 - 4) No injuries?

- c) What Risk mitigation measures are necessary?

1) Changing procedures? describe the changes and state the reason:

2) Changing tools, equipment? describe changes and state the reason:

3) Changing staff? describe the changes and state the reason:

4) Increase number of the command and control elements? describe increment and state reason:

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- 5) Emphasize on and provide information about present risks and precautionary measures, on daily basis to the team members? Brief description:

- d) List of additional assets if required to mitigate the risks?
 - 1) Machinery?
 - 2) Tools?
 - 3) Equipment?
 - 4) Staff?
- e) What appropriate actions are taken so far?
- f) Do the team members know the risks involved in the task?
- g) Are the required changes communicated to the office and then office to NMAC and UNMAS SO and HQ operations?

6. Conclusion and Record of Actions:

FRA shall not be limited to one time at the start of technical survey and clearance operations; rather this shall be conducted periodically, maintained as a continual effort, and updated as soon as new risk factors are identified. All appropriate actions taken at the result of FRA shall be recorded. Internal and external QM and Operations visitors shall verify the conduct and appropriateness of the FRA.

7. Record of Actions Taken and Recommended:

- 1.
- 2.
- 3.
- 4.

Date of FRA conducted:

Sign by Team Leader, Site Supervisor:

Date of FRA revised and updated:

Sign by Team Leader, Site Supervisor:

Verified by Internal QMI, OPS, QM Manager:

Date verified: