

# LMAS 09.50 Annex B ACCEPTANCE TEST FORM

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#### Note:

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# MECHANICAL ON-SITE ASESSMENT (ACCEPTANCE TEST) FORM

**GENERAL** 

#### MINE ACTION ORGANISATION

Organisation	Name	Position	Department / Unit

#### **ASSESSING ORGANISATION**

Organisation	Name	Position	Department / Unit

#### LOCATION

Area	Nearest Village	
Grid reference	Task / ID Number	

#### DURATION

Start	Date	Time	
Finish	Date	Time	

#### CLIMATE

Wet		
Dry		
Cold		
Mild		
Warm		

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Hot		
Temp		

Light and Sight Conditions:

#### PURPOSE OF EVALUATION

Have relevant documents, e.g., specifications, pre-test information and test results, been reviewed by the SMACO? Yes No NA Remarks:

Has a Desk Assessment been completed by the SMACO?

Yes No N/A

Remarks:

#### **MACHINE IDENTIFICATION**

Make / Model	Engine No	Chassis No	Designated No

#### **MACHINE CLASSIFICATION**

Class	Details	Confi	rmation
Category	Detonation	Yes	No
	Detection	Yes	No
	Ground Preparation	Yes	No
	Mine Protected Vehicle (MPV)	Yes	No
	Other ( )	Yes	No
Weight	Light: Up to 5 tonnes	Yes	No
	Medium: 5-20 tonnes	Yes	No
	Heavy: greater than 20 tonnes	Yes	No
Mode of Operation	From cabin	Yes	No
	Remote control	Yes	No
	Remote control & video monitor	Yes	No
Mode of Movement	Wheels	Yes	No

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	Tracks	Yes	No	
	Platform (fixed)	Yes	No	
	Other ( )	Yes	No	
ΤοοΙ	Flail	Yes	No	
	Tiller	Yes	No	
	Roller	Yes	No	
	Excavator	Yes	No	
	Crusher	Yes	No	
	Screen / sifter	Yes	No	
	Strimmer	Yes	No	
	Other ( )	Yes	No	
Role	Detect – mines, ERW	Yes	No	
	Detonate – mines, ERW	Yes	No	
	Destroy – mines, ERW	Yes	No	
	Remove – mines, ERW	Yes	No	
	Remove – earth, rubble, vegetation, obstacles	Yes	No	
	Apply – restoration, marking	Yes	No	
	Incinerate – mines, ERW	Yes	No	
	Remote Explosive Scent Tracing (REST)	Yes	No	
	Other ( )	Yes	No	
Operational Deployment	Non-hazardous ground	Yes	No	
Deproyment	Non-hazardous rubble	Yes	No	
	Non-hazardous vegetation	Yes	No	
	AP Hazardous ground	Yes	No	

AT Hazardous ground	Yes	No	
ERW Hazardous ground	Yes	No	
AP Hazardous rubble	Yes	No	
AT Hazardous rubble	Yes	No	
ERW Hazardous rubble	Yes	No	

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	Other ( )	Yes	No
Capability to Traverse Over	AP Hazardous ground	Yes	No
Specific Terrain	AT Hazardous ground	Yes	No
	ERW Hazardous ground	Yes	No

## LEVEL OF PROTECTION

Specification of Protection (Type, thickness)	Degree of Protection (location on machine)	Remarks

# **MECHANICAL TEST AND EVALUATION (T&E)**

Category	Details
Performance	A test to establish whether the machine and its tool(s) is capable of performing the role for which it is intended under comparable and repeatable conditions and to evaluate the manufacturer's specifications.
Survivability	A test to verify that the machine survives the explosive forces used as design criteria.
Acceptance	A test to ensure that a machine is able to work in the environment where it is intended to be used.

# TESTS CONDUCTED

Test	Tested by	Test Location	Test Date	Test Results
Performance				Pass Fail Ongo
Remarks:				·
Survivability				Pass Fail Ongo ing
Remarks:				
Acceptance Test				Pass Fail Ongoing
Remarks:				·

# SURVIVABILITY OF MACHINE

Level	Condition	Action	Duration	APM Blast	APM Frag	ATM	ERW	OTHER	Unconfirmed
1	No incapacitation.	Nil.	N/A.						
Remarks:									

2	Temporary incapacitation.	Effect repairs on site.	Hours.	
Remarks:				
3	Temporary incapacitation. No structural damage.	Recovery to field workshop. Requires general components.	Days.	
Remarks:			1	
4	Semi permanent incapacitation. Light to medium structural damage.	Recovery to field workshop. Requires factory supplied sub- systems.	Weeks.	
Remarks:				
5	Destroyed beyond economic repair.	Recover to workshop. Salvage usable parts & systems.	N/A.	
Remarks:				
6	Other			
Remarks:				

# SURVIVABILITY OF OCCUPANTS

Level	Condition	Action	Duration						
				<b>APM Blast</b>	APM Frag	ATM	ERW	OTHER	Unconfirmed
1	No incapacitation.	Nil	N/A						
Remarks:			-						
2	Temporary loss of hearing. Light lacerations. Minor fractures of limbs. Not life threatening.	First Aid.	Hours.						
Remarks:									
3	Temporary loss of hearing. Severe multiple lacerations. Severe multiple fractures. Not life threatening.	First aid & stabilisation. Casualty evacuation to clinic.	Days.						
Remarks:									
4	Partial/complete loss of hearing. Temporary/perma nent loss of sight. Severe multiple lacerations. Burst lung. Limbs completely severed. Multiple fractures. Life threatening.	Stabilisation & immediate casualty evacuation. Trauma surgery & amputations.	Months.						
Remarks:									
5 Remarks:	Instant Death.	N/A	N/A						
6	Other								
Remarks:		1	1	1			1	1	1

# **CLASSIFICATION FOR TESTS**

## 1. Soil

Grade	Details
А	Sand (only).
В	Gravel (only).
С	Topsoil (only).
D	Humus, loam, compact sand, hard & semi-hard soil covered in vegetation. Use of manual tools (shovel, pickaxe). Work with prodder in accordance with the rules.
E	Dirt mixed with stone, dirt is prevailing, rare vegetation. Limestone, soft, easily crushed by demining machine tool. Work with prodder is difficult.
F	Stony terrain, stone plates with dirt in between, low vegetation in places. Semi-hard stone. Machine works in reduced depths. Prodder could only be used in some places.
G	Specific conditions where the other classes are not applicable. Difficult to work with the machine with acceptable result. <b>Describe below</b> .

# 2. Vegetation

Grade	Details			
А	Low - Green or dry grass, thin or thick, weeds. Few			
	low bushes up to 1 m high			
В	Medium - Grass, weeds, individual bushes, medium to high density, 1-2 m high.			
	Few individual trees up to 10cm in diameter.			
С	<u>High</u> - Bushes, weeds, grass. High density. Greater than 2m high. Individual trees with diameter greater than 10cm.			
D	Specific conditions where the other classes are not applicable. <b>Describe below</b> .			

# 3. Terrain

Grade	Details		
А	Level.		
В	Uneven.		
С	Incline less than 30 degrees.		
D	Incline greater than 30 degrees.		
E	Specific conditions where the other classes are not applicable. Describe		
	below.		

#### 4. Climate

Grade	Details
А	Sunny.
В	Cloudy.
С	Raining.
D	Dusty, sand storm.
E	Specific conditions where the other classes are not applicable. Describe
	below.

# 5. Target

Grade	Details
А	Anti-personnel (AP) mine.
В	Anti-tank (AT) mine.
С	Abandoned Exploded Ordnance (AXO).
D	Unexploded Ordnance (ERW).
E	Fibre Board.
F	Wooden Picket.
G	Dummy mine.
Н	Vegetation.

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Other - Describe below.

#### 6. Mine / ERW Evidence

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Grade	Details
А	Triggered (detonated) – The firing chain or circuit has been completed.
В	<b>Mechanically neutralised (untriggered, damaged, non-functional)</b> – The target has been engaged by the tool, and the firing chain or circuit cannot be completed.
С	<b>Live damaged (untriggered, damaged, still functional)</b> – The tool has engaged the target, but the possibility of the firing chain being completed exists.
D	<b>Live (untriggered, undamaged)</b> – the target has not been engaged by the tool, and the firing chanin or circuit remains active.
Е	Other. Describe below.

#### 7. Environment effects on Machine

Grade	Details
A	No problem.
В	Mechanical problem.
С	Electrical problem.
D	Pneumatic problem.
E	Hydraulic problem.
G	Fuel problem
Н	Other. Describe below.

## 8. Environment effects on Occupants

Grade	Details
А	No effects.
В	Fatigued or other ailment after 0-1 hours work.
С	Fatigued or other ailment after 1-2 hours work.
D	Fatigued or other ailment after 2-3 hours work.
E	Fatigued or other ailment after 3+ hours work.
G	Other. Describe below.

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# 9. Ergonomics

Grade	Details
А	Comfortable for occupants.
В	Easy to operate (possible to learn in a few hours).
С	Some discomfort for occupants.
D	Fairly easy to operate (possible to learn in a few days).
E	Uncomfortable for occupants
F	Difficult to operate (possible to learn in a few weeks).
G	Other. Describe below.

# 10. Operator Ability

Grade	Details
A	At the required standard.
В	Below the required standard.
С	Other. Describe below.

#### 11. Maximum Driving Speed

Grade	Details
Α	As per manufacturer or MA Org. specifications/pre-tests (km/h).
В	Less than manufacturer or MA Org. specifications/pre-tests (km/h).
С	Greater manufacturer or MA Org. specifications/pre-tests (km/h).
D	Other. Describe below.

#### 12. Maximum Operating Speed

Grade	Details
А	As per manufacturer or MA Org. specifications/pre-tests (m/min/cm).
В	Less than manufacturer or MA Org. specifications/pre-tests (m/min/cm).
С	Greater manufacturer or MA Org. specifications/pre-tests (m/min/cm).
D	Other. Describe below.

# 13. Maximum Capacity for Cutting Vegetation

Grade	Details
А	As per manufacturer or MA Org. specifications/pre-tests (m <sup>2</sup> /h).
В	Less than manufacturer or MA Org. specifications/pre-tests (m <sup>2</sup> /h).
С	Greater manufacturer or MA Org. specifications/pre-tests (m²/h).
D	Other. Describe below.

#### 14. Maximum and Minimum Operating Temperature

Grade	Details
А	As per manufacturer or MA Org. specifications/pre-tests (°c).
В	Less than manufacturer or MA Org. specifications/pre-tests (°c).
С	Greater manufacturer or MA Org. specifications/pre-tests (°c).
D	Other. Describe below.

#### **15. Maximum Communications Range**

Grade	Details
А	As per manufacturer or MA Org. specifications/pre-tests (m, km).
В	Less than manufacturer or MA Org. specifications/pre-tests (m, km).
С	Greater manufacturer or MA Org. specifications/pre-tests (m, km).
D	Other. Describe below.

#### 16. Maximum Ascending Slope

	Details
А	As per manufacturer or MA Org. specifications/pre-tests (degrees).
В	Less than manufacturer or MA Org. specifications/pre-tests (degrees).
С	Greater manufacturer or MA Org. specifications/pre-tests (degrees).
D	Other. Describe below.

#### 17. Maximum Descending Slope

Grade	Details
А	As per manufacturer or MA Org. specifications/pre-tests (degrees).
В	Less than manufacturer or MA Org. specifications/pre-tests (degrees).
С	Greater manufacturer or MA Org. specifications/pre-tests (degrees).
D	Other. Describe below.

#### **18. Maximum Traversing Slope**

Grade	Details
А	As per manufacturer or MA Org. specifications/pre-tests (degrees).
В	Less than manufacturer or MA Org. specifications/pre-tests (degrees).
С	Greater manufacturer or MA Org. specifications/pre-tests (degrees).

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D	Other. Describe below.

#### **19. Maximum Working Hours**

Grade	Details
А	As per manufacturer or MA Org. specifications/pre-tests (hr/min).
В	Less than manufacturer or MA Org. specifications/pre-tests (hr/min).
С	Greater manufacturer or MA Org. specifications/pre-tests (hr/min).
D	Other. Describe below.

#### 20. Self Deployment

Grade	Details
А	As per manufacturer or MA Org. specifications/pre-tests (m, km).
В	Less than manufacturer or MA Org. specifications/pre-tests (m, km)
С	Greater manufacturer or MA Org. specifications/pre-tests (m, km).
D	Other. Describe below.
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#### 21. Self Recovery

Grade	Details
А	As per manufacturer or MA Org. specifications/pre-tests.
В	Less than manufacturer or MA Org. specifications/pre-tests.
С	Greater manufacturer or MA Org. specifications/pre-tests.
D	Other. Describe below.

#### 22. Minimum Turning Circle (radius)

Grade	Details
А	As per manufacturer or MA Org. specifications/pre-tests (m).
В	Less than manufacturer or MA Org. specifications/pre-tests (m).
С	Greater manufacturer or MA Org. specifications/pre-tests (m).
D	Other. Describe below.

# 23. Reliability (consistency over period of time)

Grade	Details
А	As per manufacturer or MA Org. specifications/pre-tests (time/depth/ m <sup>2</sup> ).

В	Less than manufacturer or MA Org. specifications/pre-tests (time/depth/m <sup>2</sup> ).
С	Greater manufacturer or MA Org. specifications/pre-tests (time/depth/ m <sup>2</sup> ).
D	Other. Describe below.

#### 24. Fuel Consumption

Details
As per manufacturer or MA Org. specifications/pre-tests (lt/hr).
Less than manufacturer or MA Org. specifications/pre-tests (lt/hr).
Greater manufacturer or MA Org. specifications/pre-tests (lt/hr).
Other. Describe below.

## 25. Maximum Demining Width

Grade	Details
А	As per manufacturer or MA Org. specifications/pre-tests (m, cm).
В	Less than manufacturer or MA Org. specifications/pre-tests (m, cm).
С	Greater manufacturer or MA Org. specifications/pre-tests (m, cm).
D	Other. Describe below.

# 26. Maximum Demining Depth

As per manufacturer or MA Org. specifications/pre-tests (m, cm).
Less than manufacturer or MA Org. specifications/pre-tests (m, cm).
Greater manufacturer or MA Org. specifications/pre-tests (m, cm).
Other. Describe below.

#### 27. Maximum Angle of Decline

Grade	Details
А	As per manufacturer or MA Org. specifications/pre-tests (degrees).
В	Less than manufacturer or MA Org. specifications/pre-tests (degrees).
С	Greater manufacturer or MA Org. specifications/pre-tests (degrees).
D	Other. Describe below.

# 28. Maximum Angle of Elevation

Grade	Details
А	As per manufacturer or MA Org. specifications/pre-tests (degrees).
В	Less than manufacturer or MA Org. specifications/pre-tests (degrees).
С	Greater manufacturer or MA Org. specifications/pre-tests (degrees).
D	Other. Describe below.

#### 29. Maximum Working Load

Grade	Details
А	As per manufacturer or MA Org. specifications/pre-tests (tonne, kg, m <sup>3</sup> ).
В	Less than manufacturer or MA Org. specifications/pre-tests (tonne, kg, m <sup>3</sup> ).
С	Greater manufacturer or MA Org. specifications/pre-tests (tonne, kg, m <sup>3</sup> ).
D	Other. Describe below.

#### 30. Safety / Fire Prevention

Grade	Details
А	As per manufacturer or MA Org. specifications/pre-tests.
В	Less than manufacturer or MA Org. specifications/pre-tests.
С	Greater manufacturer or MA Org. specifications/pre-tests.
D	Other. Describe below.
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#### **31. Marking During Operations**

Grade	Details
А	As per MA Org. SOP and LMAS.
В	As per MA Org. SOP, not as per LMAS.
С	As per LMAS, not as per MA Org. SOP.
D	Other. Describe below.

## 32. Machine Operational Procedures

Grade	Details
А	As per MA Org. SOP and LMAS.
В	As per MA Org. SOP, not as per LMAS.
С	As per LMAS, not as per MA Org. SOP.
D	Other. Describe below.

## 33. Overlap (safety margin)

Grade	Details
А	As per MA Org. SOP and LMAS.
В	As per MA Org. SOP, not as per LMAS.
С	As per LMAS, not as per MA Org. SOP.
D	Other. Describe below.

#### 34. Skip Area (follow up)

Grade	Details
А	As per MA Org. SOP and LMAS.
В	As per MA Org. SOP, not as per LMAS.
С	As per LMAS, not as per MA Org. SOP.
D	Other. Describe below.

#### 35. Maximum Number of Passes (to achieve required objective)

Grade	Details
А	As per MA Org. SOP and LMAS.
В	As per MA Org. SOP, not as per LMAS.
С	As per LMAS, not as per MA Org. SOP.
D	Other. Describe below.

#### 36. Inspection of Ground (follow-up)

Grade	Details
A	Manual.
В	Mechanical.
С	MDD.
D	Other. Describe below.

#### 37. Inspection of Machine (follow-up)

Grade	Details

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А	As per MA Org. SOP and LMAS.
В	As per MA Org. SOP, not as per LMAS.
С	As per LMAS, not as per MA Org. SOP.
D	Other. Describe below.

#### 38. Maximum Targets Located

Grade	Details
А	As per manufacturer or MA Org. specifications/pre-tests.
В	Less than manufacturer or MA Org. specifications/pre-tests.
С	Greater manufacturer or MA Org. specifications/pre-tests.
D	Other. Describe below.

#### **39. Maximum Targets Detonated**

Grade	Details
А	As per manufacturer or MA Org. specifications/pre-tests.
В	Less than manufacturer or MA Org. specifications/pre-tests.
С	Greater manufacturer or MA Org. specifications/pre-tests.
D	Other. Describe below.

#### 40. Maximum Targets Destroyed

Grade	Details
А	As per manufacturer or MA Org. specifications/pre-tests.
В	Less than manufacturer or MA Org. specifications/pre-tests.
С	Greater manufacturer or MA Org. specifications/pre-tests.
D	Other. Describe below.

#### 41. Ground Processed – excavated, crushed, sifted

Grade	Details
А	As per manufacturer or MA Org. specifications/pre-tests.
В	Less than manufacturer or MA Org. specifications/pre-tests.
С	Greater manufacturer or MA Org. specifications/pre-tests.
D	Other. Describe below.

#### 42. Protection for Machine (Survivability)

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Grade	Details
А	As per manufacturer or MA Org. specifications/pre-tests.
В	Less than manufacturer or MA Org. specifications/pre-tests.
С	Greater manufacturer or MA Org. specifications/pre-tests.
D	Other. Describe below.

# 43. Protection for Occupants (Survivability)

Grade	Details
А	As per manufacturer or MA Org. specifications/pre-tests.
В	Less than manufacturer or MA Org. specifications/pre-tests.
С	Greater manufacturer or MA Org. specifications/pre-tests.
D	Other. Describe below.

# 44. Quality Assurance / Quality Control

Grade	Detailscm
A	Manual.
В	Mechanical.
С	MDD.
D	Other. Describe below.

#### TEST RESULTS

Class	Grade/s	Remarks	Yes	No	N/A
1. Soil					
2. Vegetation					
3. Terrain					
4. Climate					
5. Target					

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6. Mine/ERW Evidence					
7. Environment on Machine					
8. Environment on Occupants					
9. Ergonomics					
10. Operator Ability					
11. Max Driving		 		$\Box$	$\Box$
Speed			<u> </u>		
12. Max Operating Speed					
13. Max Capacity for Cutting Vegetation					
14. Max & Min Operating Temp		 			
15. Max Comms Range					
16. Max Ascending Slope					
17. Max Descending Slope					
18. Max Traversing Slope					
19. Max Working Hours					
20. Self Deployment					

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21. Self Recovery						-		
22. Min Turning Circle (radius)						-		
23. Reliability						<u> </u>		
24. Fuel Consumption								
25. Max Demining Width						-		
26. Max Demining Depth						-		
27. Max Angle of Decline						-		
28. Max Angle of Elevation						-		
29. Max Working Load								
30. Safety / Fire Prevention								
31. Marking During Operations								
32. Machine Operational Procedures								
33. Overlap (safety margin)	<u> </u>							
34. Skip Area (follow up)								
35. Max Number of								
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Passes		_	
36. Inspection of Ground			
37. Inspection of Machine			
38. Max Targets			

Located			
39. Max Targets Detonated			
40. Max Targets Destroyed			
41. Ground Processed			
42. Protection for Machine			
43. Protection for Occupants.			
44. QA / QC			

#### SUMMARY OF ON-SITE ASSESSMENT

Machine Category	Operational Deployment	Tool	Max Demining Depth (m, cm)	Target

# **OVERALL RESULTS OF ON-SITE ASSESSMENT**

Acceptable

Unacceptable

On-going Assessment

(detail reasons below) <u>Proposed Date</u>:

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Re-Assessment	(detail reasons below)	Proposed Date:	

# Assessing Organisation Comments / Recommendations

Demining Organisation Comments / Recommendations

Insert Diagram if Required:

# AGREED BY

Assessing	1.	Mine Action	1.
Organisation	2.	Organisation	2.
	3.		3.
Position	1.	Position	1.
	2.		2. 3.
	3.		
Name	1.	Name	1.
	2.		2.
	3.		3.
Department / Unit	1.	Department / Unit	1.
	2.		2.
	3.		3.
Signature(s)	1.	Signature(s)	1.
	2.		2.
	3.		3.
Date		Date	

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