

SECRETARIAT

RE-CLASSIFICATION OF MINE-RESISTANT AMBUSH-PROTECTED VEHICLES

Secretariat Issue Paper # 01 - Mandated Study

1. ISSUE PAPER THEME: Major Equipment

2. SUMMARY / BACKGROUND / PREVIOUS HISTORY

The 2020 COE Manual, Chapter 3, Annex A, Appendix 2, Page 44, Paragraph 6 defined an MRAP as: “A mine-resistant ambush-protected vehicle is a military-pattern wheeled vehicle that cannot be classified as an armoured personnel carrier but is protected against mines and explosive devices by specific design characteristics to mitigate the effects of an explosive blast. These are typically identified as a V-shaped hull and/or enhanced undercarriage protection that can withstand the effects of a minimum 6 kg anti-tank landmine. The mine-resistant ambush-protected vehicle is used to carry an infantry team of a minimum of four persons. The mine-resistant ambush-protected vehicle can be either unarmed or armed with cannon and/or machine gun with an appropriate calibre as recommended in the statement of unit requirement. The mine-resistant ambush-protected vehicle can also be used for engineering tasks and/or explosive ordnance disposal in mined environments.”

In the 2023 COE WG, an issue paper was presented to introduce different classifications for mine-resistant ambush-protected vehicles based on their blast resistance without changing the definition. The working group recommended to introduce heavy mine-resistant ambush-protected vehicles with a minimum blast rating of 8 kg anti-tank blast mine on a special case basis and tasked a secretariat study to further investigate the re-classification of MRAP (A/77/736).

The 2023 COE Manual (A/78/87) differentiates between light and heavy MRAP, as follows:

- MRAP Light: minimum blast resistance of 6 kg but less than 8 kg anti-tank blast mine.
- MRAP Heavy: minimum blast resistance of 8 kg or more anti-tank blast mine.

Based on the operational needs of UN missions, the 2023 Contingent Owned Equipment Working Group tasked the Secretariat to conduct a study on the requirements for mine-resistant ambush-protected (MRAP) vehicles in UN peace operations.

The classification of armoured personnel carriers (APCs) by the 2023 Contingent Owned Equipment Working Group based on their capabilities, and the introduction of light and heavy MRAPs, has raised the need to differentiate between MRAPs and APCs, as well as the appropriate classification for MRAPs.

This issue paper reflects the results of the study that examined the existing APC and MRAP classifications available in the COE Manual with the aim of finding a practical solution.

3. DETAILED PROPOSAL

The Study reviewed mine-resistant ambush-protected vehicles (MRAP) using the following aspects and procedures:

1. Review of all MRAPs deployed in field missions.
2. Review of definition for MRAP in the COE Manual based on the current definition, attributes of currently deployed MRAPs and the requirement for a capability-based classification system. The definition set minimum technical specifications and provided clear distinguishability from armoured personnel carriers.

3. Draft of capability-based classification system aligned with the new draft MRAP definition and established performance criteria.
4. Validation of new definition and classification system through collection of Member State national cost data (NCD) and information available on the internet.
The validation process showed that differences between APC and MRAP, despite a new definition remain unclear.
5. Comparison of MRAP classification with the APC classification established in the COEWG 2023:
 - a. The comparison established that there are no fundamental differences between the two vehicle types.
 - b. During this comparison, the study group identified the need to further revise the APC definition to better align it with the new classification system introduced through the COEWG 2023.
6. A second review, covering all deployed MRAPs and wheeled APC, reflected that many vehicles understood to be MRAPs, as per both the current and the new MRAP definition, are classified as wheeled APCs in different configurations. This further strengthened the assessment that there are no fundamental differences between APCs and MRAPs and all MRAPs can be classified under the new APC classification system available in the COE Manual.
7. If needed, SUR can call for specific protection against blasts from land mines, improvised explosive devices, and ambushes in conflict zones. Modern, wheeled APC that are built specifically for peacekeeping operations are generally based on a mine-resistant ambush-protected vehicle (MRAP) design and have a blast protection of 6 kg TNT equivalent or higher.

As a result, it is proposed that all MRAPs are deleted from the COE Manual, chapter 8 and Chapter 3, annex A, appendix 2 be amended as follows:

- delete MRAP definition, and
- amend APC definition to remove inconsistencies and explicitly include MRAP

4. FINANCIAL IMPLICATIONS

No financial implications are expected.

Currently deployed MRAP, light will need to be reclassified as APC based on their capabilities as per Chapter 3, annex A, appendix 6 (wheeled APC, armed) or Chapter 3, annex A, appendix 8 (wheeled APC, unarmed).

5. PROPOSED 2026 COE MANUAL TEXT

Revise paragraph 1 in Chapter 3, annex A, appendix 2 “Armoured Personnel Carriers”, page 43, add the text in bold and remove the text in bold with a strikethrough.

Armoured personnel carriers

1. An armoured personnel carrier is an armoured carrier (either tracked or wheeled) designed and equipped to transport ~~personnel an infantry section (minimum of 8 to 10 persons)~~. An armoured personnel carrier can be armed or unarmed with an integral or organic weapon, the calibre of which will be determined in the statement of unit requirements. By convention, armoured personnel carriers are not intended to take part in direct-fire battle, but are armed for self-defence (armoured personnel carriers can be gathered together to generate a fire-support nest, if necessary). They are armoured to provide protection from heavy machine guns, small arms fire and fragments. Protection can be upgraded with additional armoured layers against anti-vehicle weapons, shrapnel and small arms fire, including rocket-propelled grenade nets. The armoured personnel carrier category includes different equipment types, such as infantry carrier, recovery, command post and ambulance armoured personnel carriers. **Modern, wheeled APC that are built specifically for peacekeeping operations are generally based on a mine-resistant ambush-protected vehicle (MRAP) design and have a blast protection of 6 kg TNT equivalent or higher.**

Delete paragraph 6 in Chapter 3, annex A, appendix 2 “Mine-resistant ambush-protected vehicle”, page 44 and revise all subsequent para numberings.

~~Mine-resistant ambush-protected vehicle~~

~~6. A mine-resistant ambush-protected vehicle is a military-pattern wheeled vehicle that cannot be classified as an armoured personnel carrier but is protected against mines and explosive devices by specific design characteristics to mitigate the effects of an explosive blast. These are typically identified as a V-shaped hull and/or enhanced undercarriage protection that can withstand the effects of a minimum 6 kg anti-tank landmine. The mine-resistant ambush-protected vehicle is used to carry an infantry team of a minimum of four persons. The mine-resistant ambush-protected vehicle can be either unarmed or armed with cannon and/or machine gun with an appropriate calibre as recommended in the statement of unit requirements. The mine-resistant ambush-protected vehicle can also be used for engineering tasks and/or explosive ordnance disposal in mined environments.~~

Delete the following entries in bold with a strikethrough in Chapter 8, annex A, page 186:

Reimbursement rates for major equipment under a wet lease or dry lease arrangement

Category of equipment	Type of equipment	GFMV	Est. useful life	Maintenance rate	Monthly dry lease rate	Monthly wet lease rate	No fault incident factor	Monthly non-UN POL	Painting rate	Repainting rate
Armoured personnel carriers, wheeled	Mine-resistant ambush-protected vehicle, light (6 to less than 8 kg blast anti-tank mine)	304 710	15	3 555	1 718	5 273	0.1	350	891	1012
	Mine-resistant ambush-protected vehicle, heavy (greater than or equal to 8 kg blast anti-tank mine)	Special case								