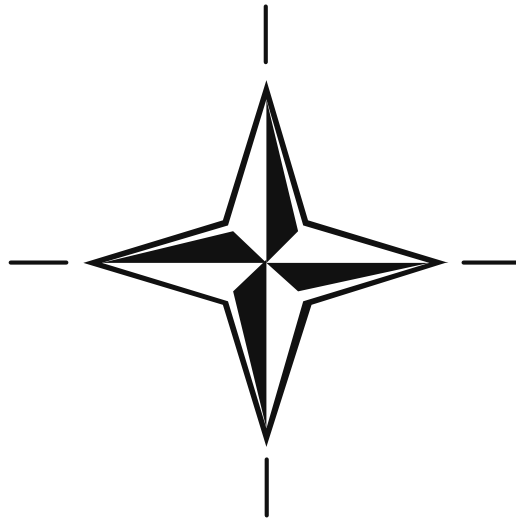


NATO/PfP UNCLASSIFIED

AMovP – 1(A)

**ROAD MOVEMENTS
AND MOVEMENT CONTROL**



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NORTH ATLANTIC TREATY ORGANIZATION
NATO STANDARDIZATION AGENCY (NSA)
NATO LETTER OF PROMULGATION

December 2004

1. AMovP-1(A) - ROAD MOVEMENTS AND MOVEMENT CONTROL is a NATO/PfP UNCLASSIFIED publication. The agreement of nations to use this publication is recorded in STANAG 2454.
2. AMovP-1(A) is effective (upon receipt). It supersedes AMovP-1 which should be destroyed in accordance with the local procedure for the destruction of documents.



J. MAJ
Brigadier General, POL (A)
Director/Directeur

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RESERVATIONS

CAN: Chapter 2

- a. When ground guiding vehicles at night, Canada will not use the NATO light signal that is used to indicate to the driver to reverse his/her vehicle (a flashing or "occluding" light). The Canadian signal for "reverse" will be to hold a flashlight at chest level and rotate it in a circular motion in a counter-clockwise fashion.
- b. When ground guiding vehicles at night, the Canadian Forces will use a flashing (occluding) signal to indicate to the driver to reduce his/her speed.

Chapter 8

- a. Drivers must have Air Brake endorsement. This requirement is to be considered mandatory.

CZE: General: The Czech Republic reserves the regulations of AMovP-1 will be used by military vehicles or columns on the military routes and/or military road network in the wartime only.

Chapter 2:

- a. Signals by drivers or military vehicles. Hand signals given by drivers of military vehicles will be given in order to legal rights of the Czech Republic
- b. Distinguishing cuffs. Traffic control personnel will be distinguishing in order to legal rights of the Czech Republic.
- c. Traffic control signals. Hand signals given by traffic personnel will be given in order to legal rights of the Czech Republic

Chapter 5 Minimum lightning and flagging.

Vehicles of the Czech Armed Forces will use for indication of first and last vehicle in the column orange twinkled light. The column commander will be indicated a black and white table as indicated. The table must be approximately 10 cm/4 inch (height) x 15/6 inch (length) in size placed on the right-hand down side of the windscreen. Yellow flag to indicate a broken down vehicle if technical assistance is required will not be used. It is not any equipment on the vehicles to mount flags as required. Financial resources to mount such equipment will not be available.

DEU: Chapter 3

- a. The Federal Republic of Germany reserves the right to calculate the passtime according to a different formula, without using the term of "traffic density".
- b. Instructions from responsible foreign appointments/troops to German soldiers do not constitute orders in the spirit of legal German order. Rather they (the previously mentioned instructions) possess the character of terms for a binding agreement.

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- a. Flagging. In GBR, national regulations do not recognise column flagging of any sort.
- b. Legal. Convoys/Vehicles have no special legal rights when operating with minimum flagging and lighting in GBR.

Chapter 7

The Royal Air Force reserves the right to use its own design of armbands to identify Movement Control personnel as follows:

- a. Officers. The armband will be red, approximately 16 inches long and 3½ inches wide with a Royal Air Force Crown and Eagle centred on the band.
- b. Airmen. The armband will be red, approximately 16 inches long and 3½ inches wide with the letters “MOV” on block capitals embroidered in gold/yellow thread centred on the armband.

However, in compliance with this Chapter, RAF Movement Control personnel will wear approved NATO pattern armband when operating as part of a NATO force.

NLD: Chapter 8

- a. Participation of Netherlands military personnel or Netherlands military vehicles in the driver familiarisation program will only take place in cases where matters of liability arising out of or in connection with the above mentioned program are fully covered by bilateral or multilateral agreements with the participants involved. Furthermore, no execution of the driver familiarisation program will take place on Netherlands territory if the above mentioned matters of liability have not been covered by bilateral or multilateral agreements with the participants involved
- b. The Netherlands reserves the right to extend the driver familiarisation program when considered necessary.

PRT: Chapter 6 (Annex N)

POAF will not comply with symbols for marking of military vehicles.

USA: Chapter 2 (para 205)

The United States reserves the right not to use Movement Control armbands on Unites States Movement Control Personnel.

RESERVES**CAN:** Chapitre 2

- a. Lors du guidage au sol nocturne des véhicules le Canada ne se servira pas du signal lumineux utilisé par l'OTAN pour indiquer au chauffeur de faire marche arrière (feu tournant ou “intermittent”). Le signal canadien pour “faire marche arrière” se fera en tenant une torche au

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niveau de la poitrine et en la tournant d'un mouvement circulaire en sens inverse des aiguilles d'une montre.

- b. Lors du guidage au sol nocturne des véhicules les forces canadiennes se serviront d'un signal tournant (intermittent) pour indiquer au chauffeur de ralentir.

Chapitre 8

- a. Les chauffeurs doivent être habilités à utiliser le système de freinage pneumatique. Cette exigence est obligatoire.

DEU: Chapitre 3

La République fédérale d'Allemagne se réserve le droit de calculer la durée d'écoulement à l'aide d'une formule différente, sans utiliser le terme "densité du trafic".

Les instructions provenant d'officiers ou de sous-officiers étrangers responsables à l'adresse de soldats allemands ne constituent pas des ordres dans l'esprit de l'ordre juridique allemand. Elles (les instructions mentionnées ci-dessus) ont plutôt le caractère de termes d'une convention ayant force obligatoire.

GRB: Chapitre 5

- a. Fanions. Au Royaume-Uni, la réglementation ne reconnaît aucune signalisation des colonnes au moyen de fanions, quelle qu'en soit la nature.
- b. Droits légaux. Les convois/véhicules n'ont pas de droits particuliers lorsqu'ils se déplacent avec leurs signalisation minimaes (fanions et feux).

Chapitre 7

La Royal Air Force se réserve le droit d'utiliser comme suit ses propres modèles de brassard pour identifier le personnel responsable de l'organisation des mouvements:

- a. Officiers. Le brassard sera rouge, mesurera environ 40 cm (16 inches) de long et 9 cm (3½ inches) de large, et portera en son centre la couronne et l'aigle de la Royal Air Force.
- b. Aviateurs. Le brassard sera rouge, mesurera environ 40 cm (16 inches) de long et 9 cm (3½ inches) de large, et portera en son centre les lettres MOV en gros caractères, brodées en fil de couleurs jaune ou or.

Toutefois, conformément au présent Chapitre, le personnel de la RAF responsable de l'organisation des mouvements portera un brassard du modèle OTAN agréé lorsqu'il opéra dans le cadre d'une force OTAN.

NLD: Chapitre 8

- a. Les personnels ou véhicules militaires néerlandais ne participeront au programme de familiarisation des conducteurs que lorsque les questions de responsabilité, résultant du programme mentionné ci-dessus ou liées à celui-ci, sont entièrement couvertes par des accords bilatéraux ou multilatéraux passés avec les participants concernés. Par ailleurs, il ne pourra être exécuté de programme de familiarisation des conducteurs sur le territoire néerlandais, si

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les questions de responsabilité mentionnées ci-dessus ne sont pas couvertes par des accords bilatéraux ou multilatéraux passés avec les participants concernés.

- b. Les pays-Bas se réservent le droit d'élargir le programme de familiarisation des conducteurs, s'ils le jugent nécessaire.

PRT: Chapitre 6 (annex N)

La POAF ne se conformera pas aux symboles pour le marquage des véhicules militaires

USA: Chapitre 2 (par 205)

Les Etats-Unis se réservent le droit de ne pas faire porter les brassards du contrôle des mouvements par leurs personnels.

RESERVATIONS BY NATIONS

CHAPTER	RECORD OF RESERVATIONS BY NATIONS
1	
2	CAN ; USA
3	DEU
4	
5	GBR
6	PRT
7	GBR ; USA
8	NLD ; CAN

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RECORD OF CHANGES

Change Date	Date Entered	Effective Date	By Whom Entered

TABLE OF CONTENTSChapter 1 - INTRODUCTION

- 101. Aim.
- 102. Agreement.
- 103. Areas of Responsibilities.
- 104. National Implementation Documents.

Chapter 2 - BASIC MILITARY ROAD TRAFFIC REGULATIONS

- 201. Related documents.
- 202. General regulations for military road traffic control organization.
- 203. Action by road traffic control elements.
- 204. Road traffic regulations to be observed by drivers of military vehicles.
- 205. Traffic control personnel and their relationship with military road users.
- 206. Signals for guiding and marshalling a single vehicle.

Chapter 3 - OPERATIONS ORDERS, TABLES AND GRAPHS FOR ROAD MOVEMENT

- 301. Related documents.
- 302. Definitions.
- 303. Orders.
- 304. Road Movement Tables.
- 305. Road Movement Graphs.

Chapter 4 - MILITARY ROUTES AND ROUTE/ROAD NETWORKS

- 401. Related documents.
- 402. Route classification.
- 403. Route signing.
- 404. Lighting.
- 405. Visibility of military traffic control personnel at night.
- 406. List of relevant definitions.

Chapter 5 - REGULATIONS FOR MILITARY MOTOR VEHICLE MOVEMENT BY ROAD

- 501. Related documents.
- 502. Definitions.
- 503. General.

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- 504. Composition of columns.
- 505. Identification of columns.
- 506. Movement bid.
- 507. Movement credit.
- 508. Special regulations for the execution of movements.

Chapter 6 - MARKING OF MILITARY VEHICLES

- 601. Related documents.
- 602. Security.
- 603. Registration numbers.
- 604. National distinguishing symbols.
- 605. General Officers markings.
- 606. Bridge classification markings.
- 607. Speed limit markings.
- 608. Tactical markings.
- 609. Special markings.
- 610. Markings and identification of vehicles for road movements.

Chapter 7 - IDENTIFICATION OF MOVEMENT CONTROL AND TRAFFIC CONTROL PERSONNEL AND AGENCIES

- 701. Related documents.
- 702. Identification of movement control personnel.
- 703. Identification of traffic control personnel.
- 704. Identification of movement control and traffic control agencies.

Chapter 8 - DRIVER FAMILIARISATION

- 801. Background
- 802. Aim
- 803. Application
- 804. Eligibility for training
- 805. Selection of drivers and assessors
- 806. Risk reduction
- 807. Method of training
- 808. Student – Instructor ratio
- 809. Method of assessment
- 810. Training to drive with trailers
- 811. Operation of vehicle fitted equipment
- 812. Training resources
- 813. Lack of competence
- 814. Certificate of competence

Annexes (A – F) with training objectives
Annex G Certificate of competence

CHAPTER 1

INTRODUCTION

101. AIM

The aim of the Allied Movement Publication Nr. 1(A) is to standardize for NATO forces the:

1. basic military road traffic regulations;
2. operation orders, tables and graphs for road movement;
3. methods and procedures used on military routes and route/road networks;
4. basic regulations for military road movement by wheeled and tracked vehicles;
5. marking of military vehicles;
6. methods of identifying movement control and traffic control personnel and agencies (for all modes of transport);
7. driver familiarisation program.

102. AGREEMENT

Participating nations agree to use:

1. the basic military road traffic regulations in particular as regards to the movements of vehicles or columns in an area under the control of a different authority, as defined in Chapter 2;
2. the standard layouts for operation orders for road movement, road movement tables and graphs, as defined in Chapter 3;
3. the methods and procedures as a basis for the classification, the signing and the lighting of military routes and route/road networks, and for ensuring the visibility of traffic control personnel at night, as defined in Chapter 4;
4. the regulations applying to military road movement, as defined in Chapter 5;
5. the standard marking of vehicles, as defined in Chapter 6;
6. the identification of movement control and traffic control personnel and agencies (for all modes of transport), as defined in Chapter 7;
7. the driver familiarisation program as defined in Chapter 8.

103. AREAS OF RESPONSIBILITIES

1. Coordinating custodian for the AMovP-1 (A) is: NLD.
2. This AP is subdivided in chapters. For the updating of each chapter, a nation is designated as custodian.
3. The subdivision by chapters, with indication of the custodian nation, is given as follows:

<u>Chapter</u>	<u>Custodian nation</u>
Chapter 1. Introduction	NLD
Chapter 2. Basic military road traffic regulations.	CAN
Chapter 3. Operations orders, tables and graphs for road movement.	PRT

Chapter 4.	Military routes and route/road networks.	ITA
Chapter 5.	Regulations for military motor vehicle movement by road.	NOR
Chapter 6.	Marking of military vehicles.	BEL
Chapter 7.	Identification of movement control and traffic control personnel and agencies.	USA
Chapter 8.	Driver familiarisation	GRB

104. NATIONAL IMPLEMENTATION DOCUMENTS
See next page.

NATIONAL IMPLEMENTATION DOCUMENTS

NATION	CHAPTER 1	CHAPTER 2	CHAPTER 3	CHAPTER 4	CHAPTER 5	CHAPTER 6	CHAPTER 7	CHAPTER 8
BEL								
BGR								
CAN								
CZE								
DEU								
DNK	AMOVp-1(A) and HRN 717-1 "Haandbog i T-tjeneste"							
ESP								
FRA								
GRB								
GRC								
HUN								
ITA								
LUX								
NLD	AMOVp-1(A)							
NOR								
POL								
PRT								
SVK								
TUR								
USA								

CHAPTER 2BASIC MILITARY ROAD TRAFFIC REGULATIONSANNEXES

- A. Driver hand signals to be used by drivers of left hand drive military vehicles.
- B. Driver hand signals to be used by drivers of right hand drive military vehicles.
- C. Hand signals to be used by military traffic control personnel.
- D. Standard layout for offence to be used by NATO traffic control personnel.
- E. Example of distinguishing cuffs.
- F. (Part I) - Hand signals for guiding or marshalling single vehicles by day.
(Part II) - Hand signals for guiding or marshalling single vehicles when visibility precludes the use of day signals.

201. RELATED DOCUMENTS

- STANAG 2010 ENGR - Military load classification markings.
- STANAG 2021 ENGR - Computation of bridge, ferry, raft and vehicle classifications

202. GENERAL REGULATION FOR MILITARY ROAD TRAFFIC CONTROL ORGANIZATION

1. The military road traffic control organisation is intended to regulate control and facilitate the movement of military vehicles and columns of vehicles by road.
2. Within each area of responsibility, the overall steps taken by the appropriate authority to organise and control military movement by road constitute a road traffic plan which serves as the basis for preparing road movements orders and instructions.
3. The road traffic plan and related orders must enable those concerned to ascertain:
 - a. General traffic regulations affecting military vehicles in particular.
 - b. The layout of the routes which it will be required to follow, and the details relating to those routes:
 - (1) Controlled routes.
 - (2) One way route sections.
 - (3) Authorised or prescribed speeds.
 - (4) Special orders applicable to certain route sections or to certain critical points.
 - (5) Location of traffic control posts.
 - c. Priorities allocated to certain vehicles or columns.
 - d. Various prohibitions or restrictions (parking, overtaking, etc).
 - e. Regulations relating to day or night traffic and in particular:
 - (1) The lines beyond which the movement of vehicles and the lighting of signs are subject or reduced lighting conditions or blackout conditions.
 - (2) If appropriate, route sections on which road markings are used.
 - f. The conditions under which the appropriate authority wishes to be kept informed of the execution of movements.

203. ACTION BY ROAD TRAFFIC CONTROL ELEMENTS

1. To ensure implementation of the road traffic plan and the execution of related orders as well as for the purpose of being kept informed of the execution of current movements, the responsible national territorial authority has road traffic control elements at its disposal.
2. These elements are the representatives of the responsible national territorial authority. As such, the orders and instructions given by them must be obeyed by all military road users, irrespective of nationality. In accordance with NATO alert measures, responsibility for military traffic will be transferred to the appropriate military commanders in the combat zone.
3. Road traffic control elements can be:
 - a. Military or civil Police units.
 - b. Special military units.
4. These units discharge their task by means of:
 - a. Traffic control posts set up along the routes as necessary and staffed by traffic control personnel.
 - b. Mobile patrols (may be air patrols) or guides.
 - c. Erection of the signs and equipment described in chapter 4 and any other temporary device for the purpose of regulating the flow of traffic.
5. Their primary duties are to:
 - a. **Enforce road traffic regulations, instructions** given by military and civil road signs and the instructions contained in the road traffic plan. (For this purpose, they are empowered to prohibit access to controlled routes for which a movement credit is required to any military column and/or independent military vehicle not in possession of one).
 - b. **Take appropriate action to prevent or reduce congestion.** (For this purpose they must be familiar with their allocated area and available detours.)
 - c. **Supply military road users with all information and guidance** which they may require.
6. When these units have the task of keeping the responsible national territorial authority informed of the execution of movements, they set up on the routes traffic control posts equipped with necessary means of communication and in possession of the movement plan for these routes.
7. These traffic control posts are indicated by panels of the type defined in chapter 4 erected along the route at a suitable distance on either side of and close by the control post.
8. Action by column commanders on passing traffic control posts is given in chapter 6.

9. When the movement of a column of one nationality is controlled by an authority of a different nationality, representatives of the National Command to which the column belongs may be posted alongside the control post commanders.

10. Action by the traffic control elements is facilitated by the erection of the signs and equipment stated in chapter 4, and any other temporary device for the purpose of easing the flow of columns, at particularly difficult points along routes.

204. ROAD TRAFFIC REGULATIONS TO BE OBSERVED BY DRIVERS OF MILITARY VEHICLES

1. Civil Traffic Regulations

a. Road Traffic Regulations. The drivers of military motor vehicles are at all times subject to the road traffic regulations of the country in which they are driving.

b. Road Traffic Signs. Except in the cases referred to in chapter 4 drivers of military motor vehicles must at all times obey the civil road traffic signs of the country in which they are driving.

c. Training. All drivers of military motor vehicles must be instructed on the traffic regulations of the country in which they are to drive including the signals given by civilian and/or military personnel engaged in traffic control as well as the civil road traffic signs, including in particular, the right of way signs used at road intersections.

2. Military Road Traffic Regulations

a. Speed Limits

(1) Military vehicles, whether moving in columns or as single vehicles, must abide by the speed limits laid down by the responsible national military territorial authority controlling road movements in the area concerned. These speed limits will, in principle, exceed or, in the case of minimum speed limits, be less than civil speed limits applying to the roads in question.

(2) In all inter-allied orders relating to road movement (e.g. standing orders, movement orders), speeds must be described both in "kilometres per hour" (km/h) and "miles per hour" (mph).

b. Signals by Drivers of Military Vehicles

(1) All drivers of military vehicles must indicate changes in direction by the use of the illuminated direction indicators with which vehicles are equipped except when their use is prohibited (in particular forward of the light line).

(2) When the use of illuminated direction indicators is prohibited, or where the technical manufacturing and usage characteristics of vehicles are incompatible with the fitting of illuminated direction indicators, all drivers of military vehicles must indicate changes of direction by use of hand signals.

-
- (a) In countries where traffic normally drives on the right hand side of the road, drivers must use the signals described and illustrated in Annex A (for left hand drive vehicles); for traffic which drives on the left hand side of the road, the signals are in Annex B (for right hand drive vehicles).
- (b) Prior to driving in a country other than their own, drivers are to check the road traffic regulations of the nation concerned, to verify the hand signals used, and to familiarise themselves with that nation's traffic regulations.
- c. Stopping of Single Military Vehicles. When the driver of a single military vehicle has to stop his vehicle:
- (1) He¹ must indicate to drivers behind that he is stopped and that if safe they may pass.
- (2) The driver must switch-on hazard warning lights and place a reflective warning triangle as well as an omnidirectional or flashing amber warning light, if the vehicle is equipped with them, beside the road at least 100 meters behind the vehicle to warn approaching traffic of its presence. All occupants must then leave the vehicle and go to a safe position. If appropriate, crew members may direct traffic around the parked vehicle when parking off the road is not possible and if no control personnel are present.
- d. Movement over Bridges and Rafts.
- (1) STANAG 2021 indicates the relationship between the classification number of a vehicle and those of bridges and rafts. No driver must move his vehicle on to a bridge or raft if his vehicle bears a classification number higher than that of the bridge or raft as established by STANAG 2010, unless directed to do so by traffic control personnel.
- (2) All military traffic approaching or crossing bridges under repair, temporary bridges and rafts must move with particular care.
- e. Military Road Signs
- (1) All drivers of military vehicles must be taught and, where appropriate, must obey the military route signs given in chapter 4.
- (2) When responsibility for military traffic in a combat zone is transferred to a military commander, military road signs will take precedence over civilian road signs.
- f. Priority Vehicles. All drivers of military vehicles must facilitate the movement of any vehicle which has priority on the road. Military priority vehicles are marked in accordance with the provisions of chapter 7.

¹ In this document the use of the word "he" is not to be taken to imply that the person referred to has to be male. The word "she" may be substituted as required.

205. TRAFFIC CONTROL PERSONNEL AND THEIR RELATIONSHIP WITH MILITARY ROAD USERS

1. Traffic Control Personnel For the purpose of this AP the term "Traffic Control Personnel" is used to denote any person acting under the orders of the national territorial authority responsible for traffic control and instructed by this authority to facilitate the movement of traffic and to prevent and/or report any breach of road traffic regulations.

2. Distinguishing Cuffs

- a. All military traffic control personnel, when on duty, must wear and be distinguished by a reflective white cuff, with longitudinal light-reflecting stripes, given a white or yellow effect to be worn on each sleeve.
- b. As a guide, refer to Annex E.

3. Duties and Power of Traffic Control Personnel. Traffic control personnel when on duty, must be empowered to give the drivers of military vehicles:

- a. Any order designed to ensure that the traffic regulations imposed by the national military territorial authorities responsible for the preparation of the road traffic plan and/or the appropriate road traffic regulation are observed. These must include but are not restricted to:
 - (1) Direction of traffic.
 - (2) Speed limits.
 - (3) Authority or prohibition to move on certain roads.
 - (4) Lighting regulation.
 - (5) Application of priority of movements.
- b. Any order designed to facilitate road movement or to prevent accidents. This must include, but is not restricted to the following:
 - (1) To stop, to slow, to part, to speed up, etc.
 - (2) Not to overtake.
 - (3) Not to enter a certain route.
 - (4) To facilitate the movement of traffic at cross roads.
 - (5) To be concerned with the evacuation of broken down vehicles.

4. Indication of Direction to Be Followed. Drivers of single military vehicles or column commanders are responsible for finding their own way. The only exceptions of this rule are:

- a. Important movement serials planned by movement staffs, for which traffic control personnel may be ordered to direct traffic on a given route.
- b. Local diversions reconnoitred and identified by responsible traffic control personnel.

5. Information to Drivers, etc. Traffic control personnel on duty may be authorised to give certain specific information to drivers of military vehicles, with the object of assisting them, in particular as regards to their routes, the location of supply points, recovery posts, emergency posts, etc. Where traffic control personnel are asked for information which they are not authorised to give, or where they are not satisfied that the enquirer is competent to receive such information, they must refer the enquiry to the next superior officer or the nearest traffic control posts.


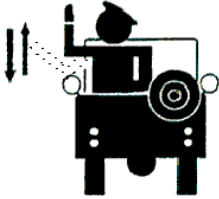
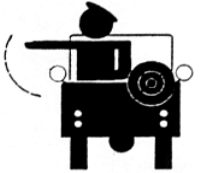

6. Breaches of Regulations. Where a member of the traffic control personnel has reason to believe that a breach of regulations has taken place, he must report the matter on the standard Offence Report Form described in ANNEX D to the offender's commanding officer through the normal military channels.
7. Offence Report. Traffic control personnel must report any breach of regulations by means of a form of the type shown at Annex D to this chapter. The layout of this form will be the same in all languages.
8. Traffic Control Signals. Road traffic may be controlled by one of the following means:
 - a. Hand signals, if necessary with signalling disc or luminous appliance (lamp or electrical baton), using the signals described and illustrated in Annex C; whistles may be used for the purpose of attracting attention to such signals.
 - b. Traffic and road signs.
 - c. By verbal orders, where necessary.
9. Duties of Military Road Users in Regard to Military or Civil Traffic Control Personnel
 - a. All orders given by traffic control personnel to military road users are to be regarded as being orders given by the national territorial authority responsible for road movement in the area concerned.
 - b. All military road users, when called upon to do so by traffic control personnel, must be prepared to show:
 - (1) Their own identity documents.
 - (2) The documents concerning their vehicles and/or mission.
 - c. Similarly, traffic control personnel must themselves be prepared to show their identity documents, if required.

206. SIGNALS FOR GUIDING AND MARSHALLING A SINGLE VEHICLE

1. General rules for using hand signals:
 - a. All signals must be given correctly and clearly to avoid confusion.
 - b. The signals must be given from a place, in full view of the driver of the guided vehicle.
 - c. If the guide has to move, the guided vehicle must be stopped beforehand; this refers specifically to the guiding of vehicles on flat wagons or rafts in order to avoid accidents by walking backwards on the flat wagons or rafts.
 - d. The signals must be given with the guide facing the vehicle to be guided.
 - e. The signals must be repeated as long as the guided vehicle is moving or has to move into the given direction.
 - f. When the visibility is such that day signals are impracticable, the signal must be given by means of an illuminating device (torch, flash light, signal lamp, etc.) with the light pointing towards the vehicle.
 - g. During darkness if the illuminating device fails to function, the guided vehicles must stop immediately.
 - h. During the guiding or marshalling, the vehicle must move slowly.
 - i. Day signals may be combined, by the guide, according to circumstances and the size of the marshalling area.

2. All signals are illustrated and described in Annex F.

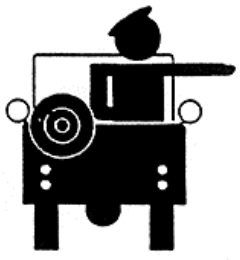
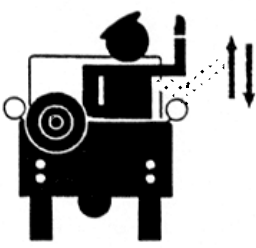
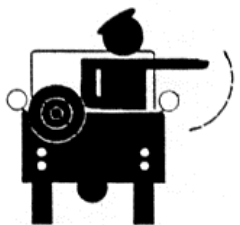

DRIVER HAND SIGNALS TO BE USED BY DRIVERS OF
LEFT HAND DRIVE MILITARY VEHICLES

SERIAL	ILLUSTRATION OF SIGNAL	DESCRIPTION OF SIGNAL	MEANING OF SIGNAL
1	(REAR VIEW) 	a. Left arm extended horizontally. b. See notes (1) and (2)	"I am going to turn to my LEFT"
2	(REAR VIEW) 	a. Left arm extended forearm raised vertically and then moved slowly down and up several times. b. Same signal when vehicle is moving.	"I am MOVING OFF" "I am ACCELERATING"
3	(REAR VIEW) 	a. Left arm extended horizontally and then moved slowly down and up several times in the vertical plane. b. The arm is then stopped at the lowest position.	"I am SLOWING DOWN ..." "... and STOPPING"
4	(SIDE VIEW) 	The palm of the hand is placed on, or in the normal position of the windscreen.	"I am going STRAIGHT ON" (Normally a signal given to Traffic Control personnel)

NOTE (1): Use only when illuminated direction indicators cannot be used.

NOTE (2): An arm signal "I am going to turn right" has not been established because it is not clear enough.


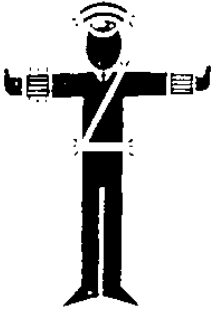

DRIVER HAND SIGNALS TO BE USED BY DRIVERS OF
RIGHT HAND DRIVE MILITARY VEHICLES


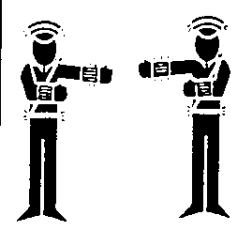

SERIAL	ILLUSTRATION OF SIGNAL	DESCRIPTION OF SIGNAL	MEANING OF SIGNAL
1	(REAR VIEW) 	a. Right arm extended horizontally. b. See notes (1) and (2).	"I am going to turn to my RIGHT"
2	(REAR VIEW) 	a. Right arm extended, forearm raised vertically and then moved slowly down and up several times. b. Same signal when vehicle is moving.	"I am MOVING OFF" "I am ACCELERATING"
3	(REAR VIEW) 	a. Right arm extended horizontally and then moved slowly down and up several times in the vertical plane. b. The arm is then stopped at the lowest position.	"I am SLOWING DOWN ..." "... and STOPPING"
4	(SIDE VIEW) 	The palm of the hand is placed on, or in the normal position of the windscreen.	"I am going STRAIGHT ON" (Normally a signal given to Traffic Control personnel)


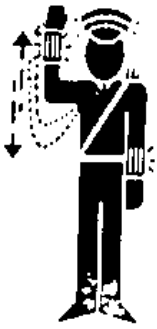
NOTE (1): Use only when illuminated direction indicators cannot be used.

NOTE (2): An arm signal "I am going to turn left" has not been established because it is not clear enough.

HAND SIGNALS TO BE USED BY MILITARY TRAFFIC CONTROL PERSONNEL

SERIAL	ILLUSTRATION OF SIGNAL	DESCRIPTION OF SIGNAL	MEANING OF SIGNAL
1		<p>a. Arm raised vertically, palm of the hand forward, body facing the traffic to be stopped.</p> <p>b. Red light used similarly.</p>	<p>a. "STOP" (to traffic coming from all directions faced).</p> <p>b. Traffic at crossing and junctions will wait for the next signal before crossing.</p>
2A		<p>Both arms raised horizontally, body facing one of the lines of traffic to be stopped (Use only during good visibility).</p>	<p>a. "STOP" (to traffic approaching in front and behind).</p> <p>b. Transverse traffic is given free way.</p> <p>c. Traffic given free way may only turn off taking the provisions for turning into account.</p>
2B		<p>Faces same direction as 2A and waves one arm towards body and away.</p>	<p>Same meaning as 2A.</p>

SERIAL	ILLUSTRATION OF SIGNAL	DESCRIPTION OF SIGNAL	MEANING OF SIGNAL
3		<p>One arm horizontal other forearm held vertically, body facing one of the lines of traffic to be stopped. (Used only during good visibility).</p>	<p>ALTERNATIVE SIGNAL with the same meaning as that at Serial 2 above</p>
4		<p>The left (right) arm extended horizontally, the right (left) arm folded across the body to the left (right). (A green light may be used with this signal).</p>	<p>"FORK" or "TURN TO YOUR RIGHT" (LEFT) (to traffic approaching from the direction faced).</p>
5		<p>The signal may, or may not, be started from either "STOP" positions at Serials 1 or 2 above. In any case, the hand and the arm are first extended horizontally with fingers pointed towards the stream for which the signal is intended. The forearm then describes an arc in the vertical plane and stops, fingers pointed towards the direction to be taken by the vehicle(s). (A green light may be used with this signal).</p>	<p>"GO" Signal to either a stopped or moving vehicle to proceed.</p>

SERIAL	ILLUSTRATION OF SIGNAL	DESCRIPTION OF SIGNAL	MEANING OF SIGNAL
6		<p>The arm extended horizontally and then moved slowly up and down. (A red light may be held in the moving hand).</p>	<p>"SLOW DOWN"</p>
7		<p>The fist raised and lowered quickly, above the right shoulder. (A green light may be held in the moving hand).</p>	<p>"SPEED UP"</p>

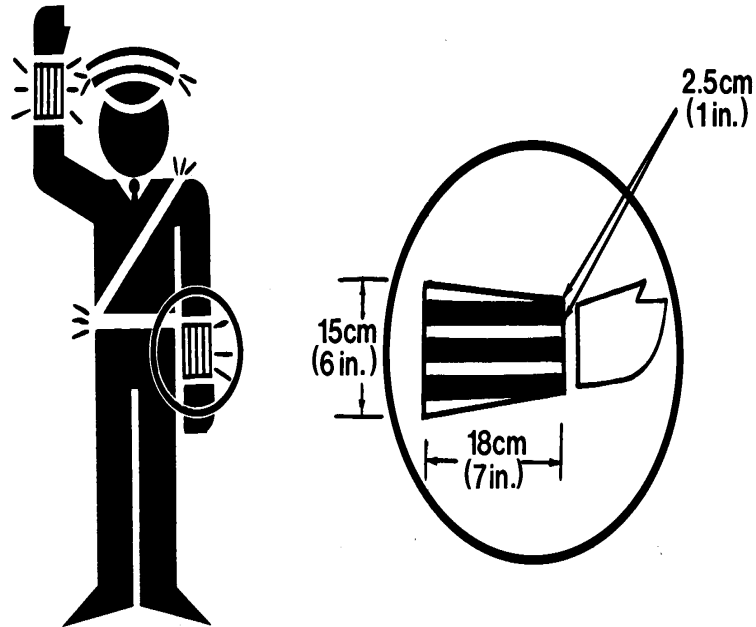
**STANDARD LAYOUT FOR OFFENCE REPORT TO BE USED BY NATO
TRAFFIC CONTROL PERSONNEL****PRESENTATION STANDARD DE LA FICHE D'INFRACTION A
EMPLOYER PAR LES AGENTS DE LA CIRCULATION DE L'OTAN
OFFENCE REPORT/FICHE D'INFRACTION**

This form will be sent through the normal military channels to the driver's Commanding Officer.
 Cette fiche sera transmise par la voie hiérarchique à l'autorité dont dépend le conducteur en faute.

1. Date, time, place of offence(1)/ Date, heure et lieu de l'infraction(1)
2. Driver's name(1) Nationality (if military) Rank, Service No. & Unit
 Nom du conducteur(1) Nationalité (pour les militaires) Grade, No Matricule & Unité
- (if civilian) address of employer
 (pour les civils) adresse de l'employeur
3. Name of vehicle Nationality (if military) Rank, Service No. & Unit
 Commander/ Nationalité (pour les militaires) Grade, No Matricule & Unité
 Nom du chef de
 voiture
- (if civilian) address
 (pour les civils) adresse
4. Particulars of vehicle checked/Caractéristiques du véhicule contrôlé
- a. Make/Marque
- b. Type/Type
- c. Registration No/No d'immatriculation
- d. (Address of unit or civil owner)
 (Affectation du véhicule ou adresse du propriétaire)
5. Offence observed(2) Infraction constatée(2)
 (Detailed statement of evidence to be given) (Constat détaillé)
 (2)
6. Action taken Mesures prises
7. Name, rank, service No & Unit of Traffic Control/Nom, grade, No Matricule et Unité de l'agent de circulation (1)
 policeman(1)
- Signature: _ Witnessed:
 (Person rendering the report) Témoigné par:
 (de l'agent établissant la fiche)

- NOTE: (1) all names will be written in block letters.
 tous les noms propres seront écrits en capitales d'imprimerie.
- (2) further details may be added on the reverse side.
 tous détails supplémentaires pourront être indiqués au dos.

EXAMPLE OF DISTINGUISHING CUFFS



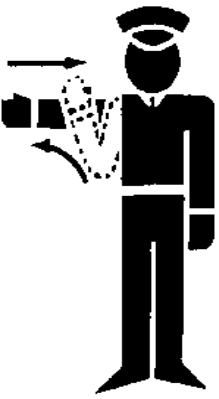




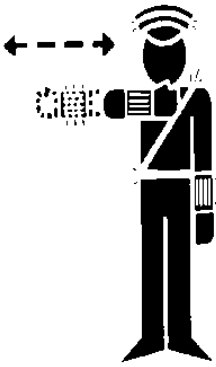
NOTE: The cuff may be approximately the following dimensions, the stripes being parallel with the arm:

- (a) width of widest part- 15 cm (6 inches)
- (b) length- 18 cm (7 inches)
- (c) width of stripes- 2.5 cm (1 inch)

PART I


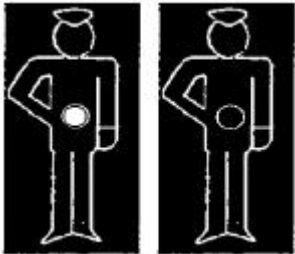

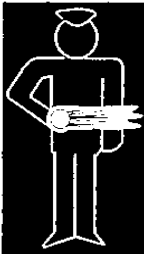
HAND SIGNALS FOR GUIDING OR MARSHALLING SINGLE VEHICLES BY DAY

SERIAL	ILLUSTRATION OF SIGNAL	DESCRIPTION OF SIGNAL	MEANING OF SIGNAL
1	 <p>A silhouette of a person in a uniform and cap, standing and facing forward. Their right arm is extended to the side, with the hand open and fingers slightly curled. The hand is moving back and forth, as indicated by small curved lines around it.</p>	<p>a. With both hands moving backwards and forward; b. Palms of the hand turned to the chest; c. As "pulling" the vehicle.</p>	"COME FORWARD"
2	 <p>A silhouette of a person in a uniform and cap, standing and facing forward. Their right arm is extended to the side, with the hand open and fingers slightly curled. The hand is moving forward and backward, as indicated by a horizontal arrow above the hand.</p>	<p>a. With both hands moving forward and backward; b. Palms of the hand turned to the vehicle; c. As "pushing off" the vehicle.</p>	"REVERSE"
3	 <p>A silhouette of a person in a uniform and cap, standing and facing forward. Their right arm is extended to the side, with the hand open and fingers slightly curled. The hand is moving from the shoulder horizontally into the direction of the turn, as indicated by a horizontal arrow above the hand.</p>	<p>a. Hand moving from shoulder, horizontally into the direction into which the vehicle must be turned; b. "Turn to the left" is given with the right arm; c. "Turn to the right" is given with the left arm; d. The speed, in which the hand is moved, indicates the speed of turning the vehicle.</p>	"TURN TO THE LEFT/ RIGHT"

SERIAL	ILLUSTRATION OF SIGNAL	DESCRIPTION OF SIGNAL	MEANING OF SIGNAL
4		<p>a. With both hands; b. Palms of the hand facing each other; c. Distance between hands indicates the distance between the guided vehicle and an obstacle to be approached. d. Touching hands means; the distance between the guided vehicle and the obstacle has become nil.</p>	"INDICATING DISTANCE"
5		<p>a. One or both hands raised vertically; b. Palms of the hand turned to the vehicle;</p>	"STOP"
6		<p>a. With the right arm; b. Cutting motion across the throat; c. Extend the arm and bend across the chest from the elbow to the throat.</p>	"STOP ENGINE"

PART II

**HAND SIGNALS FOR GUIDING OR MARSHALLING SINGLE
VEHICLES WHEN VISIBILITY PRECLUDES THE USE
OF DAY SIGNALS**

SERIAL	ILLUSTRATION OF SIGNAL	DESCRIPTION OF SIGNAL	MEANING OF SIGNAL
7		With an illuminating device moving vertically from chin to waist.	"ADVANCE"
8		With an illuminating device flash, giving an occulting signal, not moving the device.	"REVERSE"
9		With an illuminating device, at least chest level, rotating slowly in a circular motion (clockwise or anti-clockwise to the driver).	"TURN" a. Clockwise - turn right. b. Anti-clockwise - turn left.
10		Switch off or cover the illuminating device.	a. "STOP" b. See note (1).

NOTE (1): The driver must stop his vehicle when any other light signal such as horizontally motion of light, etc. is given; unless the signal is agreed in principle between the driver and the guide prior to the marshalling.

CHAPTER 3OPERATIONS ORDERS, TABLES AND GRAPHS
FOR ROAD MOVEMENTANNEXES

- A. Example of an Operation Order for Road Movement
- B. Specimen Road Movement Table
- C. Example of a Road Movement Graph

301. RELATED DOCUMENTS

- STANAG 2014 TOP - Operation orders, warning orders, administrative / logistics orders.
STANAG 2029 TOP - Method of describing ground locations, areas and boundaries.
AAP-6 - NATO Glossary of terms and definitions (English and French).

302. DEFINITIONS

These definitions are taken from the AAP-6 and are repeated for convenience:

1. Warning Order. A preliminary notice of an order or action which is to follow. It is designed to give subordinates time to make necessary plans and preparations.
2. Operation Orders. A directive, usually formal, issued by a commander to subordinate commanders for the purpose of effecting the co-ordinated execution of an operation.
3. Standing Operating Procedure. Set of instructions covering those features of operations which lend themselves to a definite or standardize procedure without loss of effectiveness. The procedure is applicable unless prescribed otherwise in a particular case. Thus, the flexibility necessary in special situations is retained.
4. Standing Order. A promulgated order which remains in force until amended or cancelled.

303. ORDERS

1. Warning orders and operation orders are the primary means of effecting a road movement. Much detail can be eliminated from these orders by the use of standing operating procedures and standing orders for road movement:

- a. Warning Orders. These orders are issued when required and should include sufficient data to alert troops for movement and to allow subordinate commanders to make preliminary plans. The amount of detail included will depend on the military and traffic situation, the state of training of the troops and the extent to which standing orders/standing operating procedures have been developed.
- b. Operation Orders for Road Movement. Whenever possible, detailed orders should be issued in the form of operation orders for road movement, in conformity with STANAG 2014 and Annex A. Annexes to the orders may include road movement tables and/or road movement graphs (see Annexes B and C). Overlays may be used to reduce the amount of written detail.
- c. Standing Operating Procedures and Standing Orders. These instructions should contain information on techniques, drills and procedures which are likely to be

constant under any conditions. Properly developed, they will help to avoid unnecessary repetition of detail in orders. Some headings that may be used in preparing standing operating procedures and standing orders are:

- (1) Composition and duties of advance party.
- (2) Vehicle loads, including personnel.
- (3) Grouping of vehicles and group commanders.
- (4) Organization of columns.
- (5) Sign-posting and traffic control.
- (6) Responsibility for manning start point and release point.
- (7) Discipline; halts; lighting.
- (8) Action in the event of enemy attack.
- (9) Drill for establishing headquarters on arrival.
- (10) Responsibility for issue of operation orders for movements for headquarters.
- (11) Safety measures.

304. ROAD MOVEMENT TABLES (See Annex B)

1.
 - a. Road movement tables will consist of two parts; one giving "data" paragraphs reflecting general information common to two or more columns (or elements of column), the other listing the columns (or elements of column), together with all other necessary information arranged in tabular form.
 - b. These afford a convenient means of transmitting to subordinates their schedules and other essential detail pertaining to road movement. This is particularly so in cases when the inclusion of such detail in the body of the operation order would tend to complicate it or make it unduly long.
 - c. They will frequently require a wider distribution than a normal operation order so that copies can be issued to movement control personnel, traffic posts, etc.
 - d. Their security classification will be based on content and need not necessarily be the same as that of the operation order for road movement.

305. ROAD MOVEMENT GRAPHS (See Annex C)

1. General

- a. Road movement graphs are used by staffs in planning, supervising and regulating complicated movements and for providing a convenient means of recording actual moves of units over a period.
- b. The unit of measure to be used, i.e. kilometres or miles, will depend on the requirements of the authorities concerned. However, the resulting orders and instructions should not contain a mixture of units except where both are shown throughout, e.g. 5 miles (8 kilometres).

2. Pass Time. (Road) Pass time is calculated by the following formula:

$$\text{Pass time (in mins)} = \frac{N \times 60}{D \times S} + \text{TG}$$

- Where N = Number of vehicles
 D = Traffic Density (No of vehicles per km/mile)
 S = Average speed
 TG = Time Gap

The time gap is expressed in minutes and is the sum of the intervals between columns

and elements of the columns.

3. Time Gaps between Columns. Between columns having different movement numbers, no standard time gaps are prescribed; these time gaps are allotted by the staff ordering the movement.

EXAMPLE OF AN OPERATION ORDER FOR ROAD MOVEMENT (See STANAG 2014)

(Sub-headings of paragraphs 3, 4 and 5 are intended as a guide only and may be varied according to national requirements)

(SECURITY CLASSIFICATION)
(Change from Oral Orders, if any)

Copy No. of copies
Issuing Headquarters
Place of Issue (may be in code)
Date-Time Group of Signature
Message Reference No.

MOVEMENT ORDER No.

References: A. Maps, tables and relevant documents (see STANAG 2029)
B.

Time Zone used throughout the Order:

Task Organization

1. SITUATION
 - a. Enemy Forces
 - b. Friendly Forces
 - c. Attachments and Detachments
 - d. Commander's Evaluation (optional)

2. MISSION

3. EXECUTION
 - a. Concept of movement
 - b. Task to subordinate units
 - c.
 - d.
 - e. Detailed timings
 - f. Co-ordinating Instructions
 - (1) Order of March
 - (2) Routes
 - (3) Density
 - (4) Speed
 - (5) Method of Movement
 - (6) Defence on Move
 - (7) Start, Release or Other Critical Points
 - (8) Convoy Control
 - (9) Harbour Areas
 - (10) Instruction for Halts
 - (11) Lighting
 - (12) Air Support

4. SERVICE SUPPORT
 - a. Traffic Control
 - b. Recovery
 - c. Medical
 - d. Petrol, Oil and Lubricants
 - e. Water

5. COMMAND AND SIGNAL
 - a. Commander(s)
 - b. Communications
 - c. Position of Key Vehicles

Last name of commander:
Rank:

Acknowledgement Instructions:
Authentication:
Annexes:
Distribution:

(SECURITY CLASSIFICATION)

SPECIMEN ROAD MOVEMENT TABLE

(A guide only, the size of columns and the amount of data may need adjustment to suit individual cases)

(SECURITY CLASSIFICATION)

Annex B - "movement Table " to Operation Order for Movement No.
Map :

Copy No :
Issuing HQ :
Place of Issue :
Date - Time Group of
Signature:
Message Reference No:

General Data :

1. Average Speed
2. Traffic Density
3. Halts
4. Routes (i.e. between Start Points and Release Points)
5. Critical Points (See Note 4)
 - (a) Start Points
 - (b) Release Points
 - () Other Critical Points
6. Main Routes to Start Points (See Note 7)
7. Main Routes from Release Points (See Note 7)



Connect with paragraph 4.a. of this STANAG. These routes and points are here described by grid references, code words, etc, and if necessary numbered or lettered for ease of reference in the columns below.

Serial or Movement Number	Date	Unit / Formation	Number of Vehicles	Load Class of Heaviest Vehicles	From	To	Route	Route to Start Point (See Note 7)	Critical Points			Route from Release Point (See Note 7)	Remarks
									Ref.	Due (hrs.)	Clear (hrs.)		
(a)	(b)	()	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)
(See Note 5)													

Acknowledge

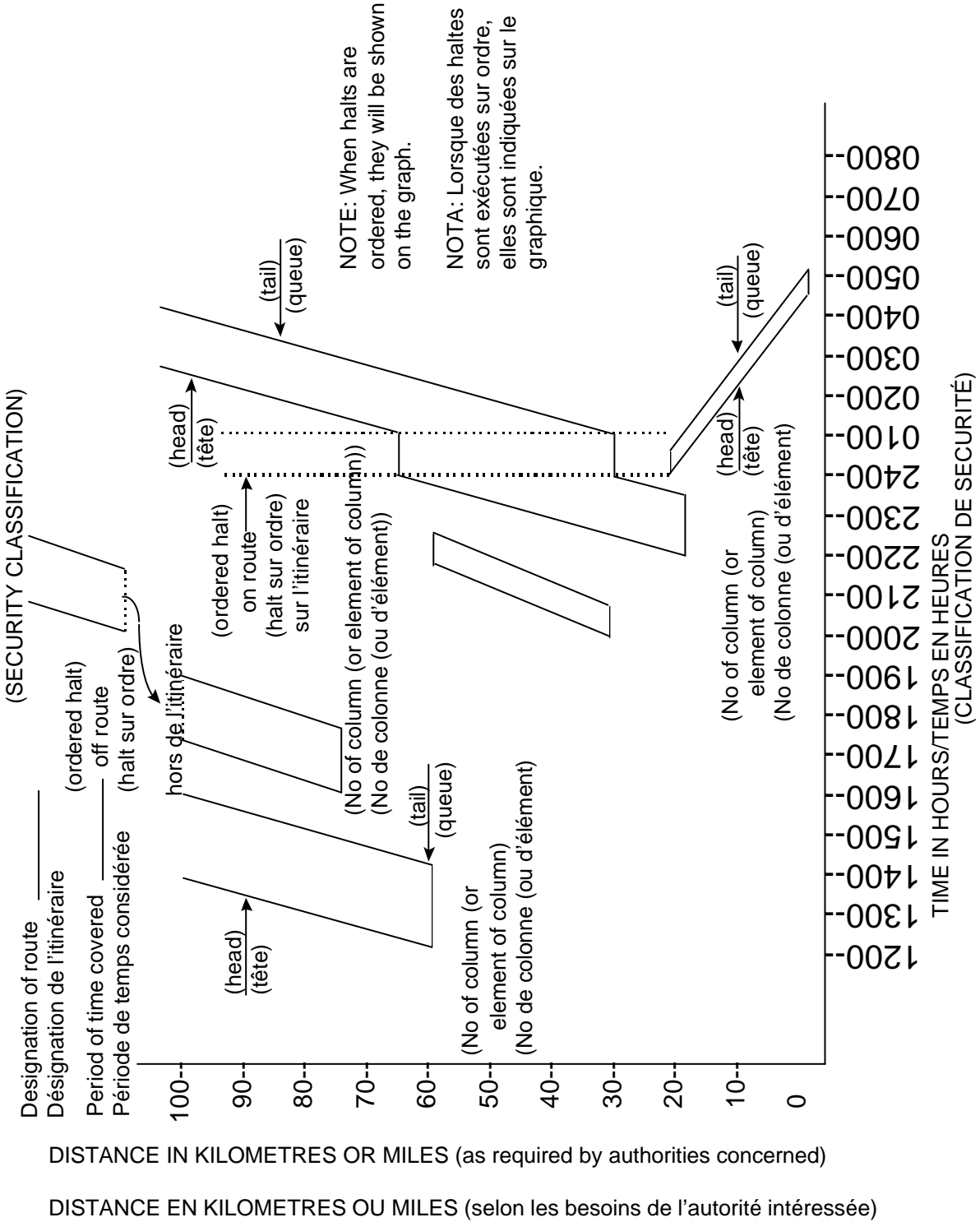
Distribution :

Authentication :

(SECURITY CLASSIFICATION)

- NOTES:
- (1) Only the minimum number of headings above should be used. Any information which is common to two or more movement numbers should be included under the "data" paragraphs.
 - (2) As the table may be issued to personnel concerned with control of traffic, the security aspect must be remembered. It may not be desirable to include dates or locations.
 - (3) If the table is issued by itself, and not as an annex to a more detailed order, the table must be signed or authenticated in the normal way.
 - (4) "Critical Point" is defined as "a selected point along a route used for reference in giving instructions. It includes start points, release points and other points along a route where interference with movement may occur or where timings are critical".
 - (5) This will be the number which is used to identify a column (or element of column) during the whole of the movement (see chapter 6).
 - (6) In the case of an annex having the same distribution as an operation order it will not be necessary to include the headings and ending as shown on this page.
 - (7) Definitions of these terms will be found in AAP-6.

EXAMPLE OF A ROAD MOVEMENT GRAPH
MODÈLE DE GRAPHIQUE DE MOUVEMENTS PAR VOIE ROUTIÈRE



CHAPTER 4MILITARY ROUTES AND ROUTE/ROAD NETWORKSANNEXES

- A. Hazard warning signs.
- B. Blackout signs, warning, enforcement and relaxation signs.
- C. Guide signs.

401. RELATED DOCUMENTS

- STANAG 2002 NBC - Warning signs for the marking of contaminated or dangerous land areas, complete equipment's, supplies and stores.
- STANAG 2010 ENGR - Military load classification markings.
- STANAG 2021 ENGR - Military computation of bridge, ferry, raft and vehicles classifications.
- STANAG 2035 TOP - Signing of headquarters and installations.
- STANAG 2036 ENGR - Land mine laying, marking, recording and reporting procedures.
- APP-6 - Military symbols for land based systems.
- European rules concerning road traffic signs and signals (1974)¹

402. ROUTE CLASSIFICATION

1. General. Route classification enables the authorities responsible for the organization of movement and transport to assess more easily the characteristic of a route network or routes. The following factors are involved, which are subsequently explained in detail:

- a. Width of route in metres or feet (see paragraph 402.2).
- b. Type of route (see paragraph 402.3).
- c. Military load classification (see paragraphs 402.4, 402.5, 402.6).
- d. Overhead clearance in metres or feet (see paragraph 402.7).
- e. Obstructions to traffic, if any (see paragraph 402.10).

2. Width

- a. The width of a route, for any given section, is that of the narrowest part of its travelled way and is expressed in metres or feet.
- b. The number of lanes is determined by the width of the travelled way. The width of lane normally required for wheeled vehicles is estimated at 3.50 m (11.5 ft.) and for tracked combat vehicles 4 m (13 ft.).
- c. According to the number of lanes, a road can be classified as follows:
 - (1) Limited Access - permits passage of isolated vehicles of appropriate width and in one direction only.
 - (2) Single Lane - permits use only in one direction at any one time. Passing or movement in the opposite direction is impossible.

¹ This document arises from the Geneva Convention and incorporates subsequent protocols and agreements.

- (3) Single Flow - permits passage of a column of vehicles and allows isolated vehicles to pass or travel in the opposite direction at predetermined points. It is desirable that such a route/road be at least 1+1/2 lanes wide.
- (4) Double flow - permits two columns of vehicles to proceed simultaneously. Such a route/road must be at least 2 lanes wide.

d. The tables 4-1 and figure 4-1 illustrate the various measurements applicable to road width and traffic flow possibilities.

Flow Possibilities	Road/Route Widths
Limited Access	Up to 3.5 m (11'6") incl.
Single Lane	Between 3.5 m (11'6") and 5.50 m (18 ft.) incl.
Single Flow	Between 5.50 m (18 ft.) and 7.30 m (24 ft.) incl.
Double Flow	Over 7.30 m (24 ft.)

Table 4-I

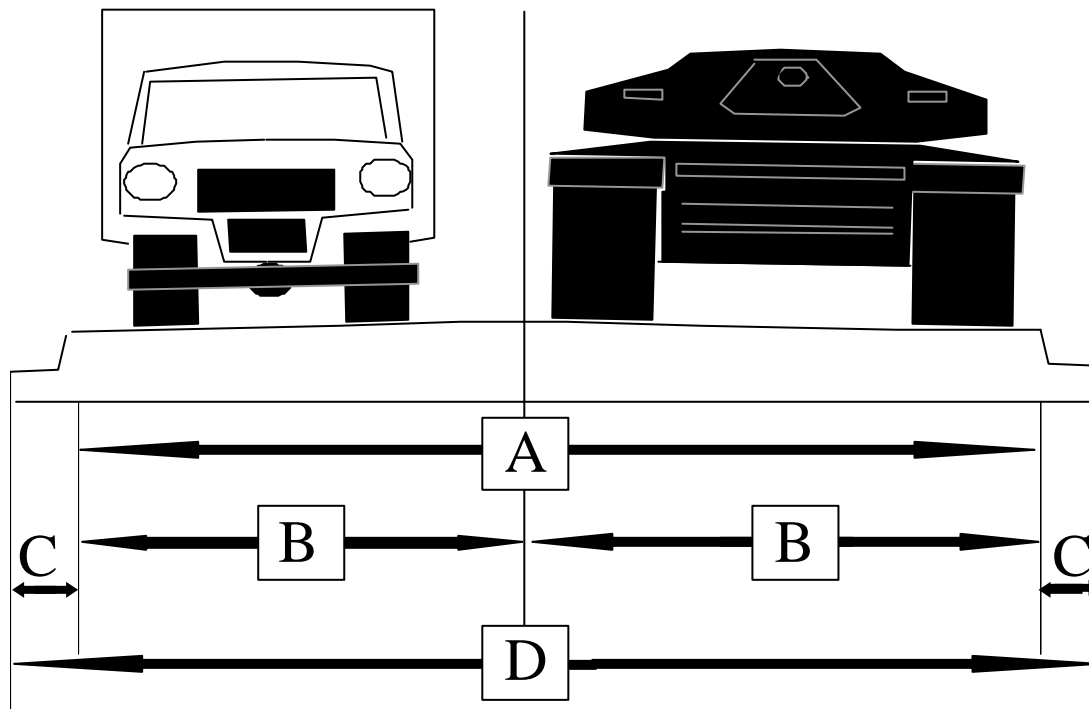


Figure 4-I : Road Characteristics:

- A. Width of travelled way
- B. Width of lane
- C. Width of hard shoulder
- D. Width of grading

-
3. Type of route. On the basis of their ability to withstand the effects of the weather, routes are divided into three types:
- a. Type X - All-Weather Routes. Such a route has the following characteristics:
 - (1) With reasonable maintenance, passable throughout the year to a volume of traffic never appreciably less than its maximum capacity.
 - (2) Normally formed of roads which have waterproof surfaces and are only slightly affected by rain, frost, thaw or heat.
 - (3) Never closed because of weather effects other than snow or flood blockage.
 - b. Type Y - Limited All-Weather Route. Such a route has the following characteristics:
 - (1) With reasonable maintenance, passable throughout the year but at times the volume or traffic is considerably less than maximum capacity.
 - (2) Normally formed of roads which do not have waterproof surface and are considerably affected by rain, frost thaw or heat.
 - (3) Closed for short periods of up to one day at a time by adverse weather condition during which heavy use of the road would probably lead to collapse.
 - c. Type Z - Fair-Weather Route. Such a route has the following characteristics:
 - (1) Passable only in fair weather.
 - (2) So seriously affected by adverse conditions that the route may remain closed for long periods.
 - (3) Improvement of such a route can only be achieved by construction or realignment.
4. Military load classification. The military load classification of a route is a class number which represents the safe load carrying capacity of the route and indicates the maximum vehicle class that can be accepted under normal conditions. (The maximum class of vehicles which can safely use the route will usually be that of the weakest bridge on the route - see STANAG 2021).
5. Movement routes included in a low class network but over which heavier equipment can be moved, are grouped in broad categories:
- a. Average traffic routes - Class 50.
 - b. Heavy traffic routes - Class 80.
 - c. Very heavy traffic routes - Class 120.
6. Whenever possible the basic military route network should include very heavy traffic routes.
7. Overhead clearance. Overhead clearance is the least vertical distance between the route/road surface and any obstruction above it which denies use of the route/road to all vehicles or loads, which exceed this height.

8. Route classification formula. Route classification may be expressed by a formula incorporating the factors given in paras 402.2 to 402.7 above. For example, the formula for a 10 m (33 ft.) wide "all weather" route with a class 80 load restriction, and a height restriction of 4 m (13 ft.) may be expressed as follows:

$$10m/x/80/4m \text{ or } 33ft/x/80/13ft.$$

9. It must be noted that the lowest classification encountered on a route will determine the overall classification of that route.

10. If there is a temporary obstruction or single obstruction other than a bridge, or should there be special conditions described below, the overall classification will not be altered. However, these factors should be included in the route classification formula as they could affect movement over a route until conditions return to normal. The symbols to be included in the formula are as follows:

a. Temporary or Single Obstructions: the formula for a route will be followed by "(OB)".

b. Snow Blockage: where snow blockage on a route is regular, recurrent and serious, the formula for classifying a route will be followed by "(T)".
For example:

$$6m/Y/50(T) \text{ and } \quad \text{or} \quad 20ft/Y/50(T) \text{ and}$$

$$6m/Y/50(OB) (T) \quad \quad \quad 20ft/Y/50(OB) (T)$$

c. Flooding: where flooding is regular, recurrent and serious, the formula for classifying a route will be followed by "(W)".
For example:

$$6m/Y/50(W) \text{ and } \quad \text{or} \quad 20ft/Y/50(W) \text{ and}$$

$$6m/Y/50(OB) (W) \quad \quad \quad 20ft/Y/50(OB) (W)$$

11. Traffic flow. The traffic flow is the total number of vehicles passing a given point in a given time. It is expressed as vehicles per hour (VPH) (AAP-6). It is dependent on the factors above. From these are derived:

a. Route/Road Capacity (Expressed in Vehicles). The maximum traffic flow (VPH) in one direction over a particular road or route. It cannot be greater than the maximum traffic flow at the most restricted point on the road or route (When the road is to be used in both directions this should be noted and the two capacities can be reduced accordingly).

b. Route/Road Capacity (Expressed in Tons). The maximum number of tons that can be moved in one direction over a particular road or road in one hour. It is the product of the Route Capacity (Vehicles) and the average payload of the vehicles using the road or route. (When the road is to be used in both directions this should be noted and the two capacities can be reduced accordingly).

- c. Potential. For planning purposes it would be useful that the potential of a route should be expressed in diagrams, tables and maps (by road sections) by:
- (1) Road capacity (in vehicles per hour - one-way traffic or two-way traffic).
 - (2) Number of lanes (normal vehicles).
 - (3) Load class (tracked vehicles, one-way).
(Example: 900/2/80/780 means a route with a one-way traffic capacity of 900 VPH, 2 lanes, class 80; or a two-way traffic capacity of 780 VPH).

403. ROUTE SIGNING

1. Purpose of signs. The purpose of a route signing system is to enable movement by day and by night without difficulty on any territory, including the blackout zone, whether controlled by the operational military command or a national authority. This system will be capable of being integrated with any existing civil system to meet any specifically military requirement.
2. Authority for military route signing. The authority for military route signing is vested in the senior headquarters controlling the particular route network. This headquarters will be responsible for ensuring that military route signing is integrated with any existing agreements with national authorities. Routes may be signed by a unit on its own initiative under the conditions prescribed by the commander or the movement instructions and in accordance with this chapter.
3. Types of military signs to be used². In any area under military control, the additional signing inside such areas to be set up as required, will be in accordance with the system for military route signing as laid down in the agreement. All military routes signs fall into one of three categories:
 - a. Hazard Signs. Signs used to indicate traffic hazards, e.g. dangerous corners, steep hills or crossroads. In the communication and rear combat zones, military hazards signs should only be used in accordance with existing agreements with national authorities, and in very exceptional circumstances.
 - b. Regulatory Signs. Signs used by competent authority to regulate and control traffic (AAP-6). They may also be used to define the light line. (Example of such signs are at Annex B).
 - c. Guide Signs. Signs used to indicate locations, distances, directions, routes and similar information (AAP-6) (Example of these signs are ANNEX C).
4. General shape and colour of signs. All military route signs are to conform with the signs included in the Geneva Convention as far as possible in shape, size and colouring. Details are shown in Annexes A, B and C.
5. Hazard Warning Signs. Hazard warning signs will be triangular in shape and will conform to the Geneva Convention. Where no suitable symbol exists within the Geneva Convention, a rectangular placard is to be affixed below the hazarded warning sign with an explanatory legend. Details are shown in Annex A.

² Contaminated, Dangerous Land Areas and Minefield. The signs for these areas are not within the scope of this chapter. Reference should be made to STANAGS 2002 and 2036.

6. Regulatory Signs. Regulatory signs will conform to the shape, size and colours of Geneva Convention signs with the following exceptions:

- a. Military Load Classification Markings. Bridges will be marked with Military Load Classification Marking in accordance with STANAG 2010.
- b. Blackout Signs:
 - (1) Blackout Warning Signs. This sign will be based on the Geneva Convention hazard warning sign with the legend and any distance indication mounted on rectangular placards beneath the warning signs.
 - (2) Blackout Enforcement Sign. This sign will have the Geneva Convention prohibitory sign with the words "VEHICLES LIGHTS FORBIDDEN" on a plaque affixed below the prohibitory sign.
 - (3) Blackout End Sign. Details of these signs are in Annex B.
- c. Special Provisions. For civilian purposes, the military might be requested to erect signs or to ask the civil authorities to do so. If provision is made for suitable signs in the existing system, they must be used.

7. Guide Signs. Guide signs will be rectangular in shape with the long axis vertical. They will have a black background on which the legend or symbol will be superimposed in white. Exceptions to this rule are as follows:

- a. Detour Signs. The detour signs will be a black arrow with or without a white square, placed with one diagonal vertical; as illustrated at Annex C. The number of the diverted main route will be shown either:
 - (1) Painted in black above the arrow.
 - (2) Added under the square by means of the small panels already provided for the guide signs for routes.
- b. Directional Discs. These will be circular in shape and will be inscribed with a black arrow, on a white background. (Examples are given at Annex C).
 - (1) The discs will be used in addition to other guide signs to indicate the direction of a route. These may be used with the distinguishing signs of a major formation or a large unit to indicate the route of that formation or unit.
 - (2) Battalions and lower formations may not use this directional disc. They may, however, use directional arrows (see sub-paragraph c. below).
- c. Directional Arrows. These signs are to be used by battalions and lower units. The arrows should be black on a white background and bear the identification symbol of the unit in question. They may be of a similar type to that shown at Annex C. The arrows should be installed shortly before the passage of the column and should be removed as soon as possible after the end of the column has passed.
- d. Military Casualty Evacuation Route Signs:
 - (1) These will normally be rectangular signs with a white background on which the following information will be inscribed in red:
 - (a) Directional arrow.
 - (b) Cross or crescent.

- (c) The word "Military" in the language of the force erecting the sign.
 - (d) Unit or sub-unit designation in abbreviated form or using military symbols.
 - (e) Additional information, such as formation or national markings.
- (2) As an alternative, a normal rectangular sign with four segments cut out to give a cruciform shape or a directional disc with a crescent may be used as a background. The information shown will be similar that above.
- (3) Examples of these signs at Annex C.
- e. Civilian Casualty Evacuation Route Signs. These may be a Geneva Convention Informative sign, blue in colour with the silhouette of an ambulance in white with red cross or crescent on the silhouette. A supplementary placard bearing the words "Civilian Casualty Evacuation Route" in the language of the host nation, be affixed beneath the sign. (An illustration of this sign is at Annex C).
- f. HQ's and Dumps. For HQ's and Dumps the signs will also be marked with the appropriate symbols in accordance with APP-6 (see also STANAG 2035).
- g. Traffic Posts and Regulating Headquarters. For traffic posts and regulating headquarters guide signs will consist of the agreed operational conventional symbol together with the direction and distance to the traffic post or regulating headquarters indicating there on. (See APP-6).
8. Alternative Colour in Snow Conditions. In constructing purely military signs, yellow may be used instead of white if the sign is to be used during prolonged snowfall conditions, or is to be permanently erected in an area which is annually subject to prolonged snowfalls.
9. Dimensions of signs. Signs must be sufficiently large to be easily read but need not be constructed to a standard size except that:
- a. Signs for international use are not to be less than 40 cm x 33 cm (16 in x 13 in).
 - b. Military load classification markings are to conform to the dimension specified in STANAG 2010.
 - c. Directional discs are not to be less than 30 cm (12 in) in diameter and will have eight holes drilled at equal intervals around the circumference to allow the disc to be erected with the arrow pointing in the appropriate direction.
10. Route Identification Numbers
- a. Each axial and lateral route will be allotted one route number, which is to be used to describe the route throughout its length.
 - b. Axial routes will be given odd number and are shown on a tracing or map by continuous lines.
 - c. Lateral routes will be given an even number and are shown on a tracing or map by broken lines.
 - d. Connecting routes will be given a number formulated on b. or c. above followed by a serial number and will be shown on a tracing or map by dotted

- lines.
- e. The theatre commander is responsible for allotting blocks of numbers to the Army Group, etc. operating in his theatre, in accordance with paragraphs 403.10.a. to d. above.
 - f. Formation (Brigade or equivalent and above) axis may be signed:
 - (1) In the case of routes of the manoeuvre network (axial or lateral) by supplementing the route number with a separate and removable formation sign, letter, colour or emblem. These additional signs should be used only as a temporary measure.
 - (2) In all other cases with the removable formation sign (letter, colour or emblem).

11. Military Routes Markers

- a. The legend on a route marker (i.e. guide sign used to indicate a route) will consist of the route number on an appropriate directional disc.
- b. Commanders may supplement for their own purpose the route number system with a pictorial symbol and/or name (e.g. DOG, HEN).
- c. Route markers should show the direction of the traffic. In the case of axial routes, differentiation between the stream of traffic moving to the front and the stream moving to the rear will be by the use of different types of arrows. The stream moving to the front will be indicated by a plain arrow: that to the rear by an arrow with a bar at its tail. On route signs for lateral routes, the standard letters N, E, S, W, NE, SE, NW and SW will be used to indicate the general direction of movement of each traffic stream.
- d. Example of military route markers are given in Annex C.

12. Signs outside built-up areas. The military signs described above should be placed so that they provide adequate warning and reaction time for military drivers but do not obscure existing civilian signs. As a general rule the placement of signs will conform to the following guidelines:

- a. Signs shall be placed on that side of the road used by the traffic, 0,60 m (2 ft) off the travelled way, and the sign panels should be from 1 to 2 m (3 to 7 ft) above the level of the road.
- b. Hazard signs should be placed approximately 150 m (160 yards) in advance of the hazards.
- c. Regulatory signs should be placed at the exact location at which the regulation applies, but panels used as warnings should be placed at a convenient distance from the point where the regulation is applicable; this distance may be indicated on the panel (e.g. Blackout 500 m (550 yards)).
- d. Guide signs should be placed in such a manner as to eliminate possible confusion at road junctions; if necessary, both sides of the road to be followed will be signed, and in any event confirmatory guide signs will be placed 150m (160 yards) after the junction.
- e. Detour signs, when used in conjunction with other general traffic signs, should be placed beside the general sign approximately 150 m (160 yards) in advance of the detour, and on that side (left or right) of the general sign which corresponds to the new direction to be taken.

404. LIGHTING

1. General conditions for lighting. The conditions under which military traffic will move at night will be determined by the Commander in relation to the enemy threat, and, as far as possible, with due regard to regulations in force in the host country. Such conditions may be directly imposed on operators by this threat (especially in the case of air raid warnings). These conditions may be as follows:

- a. Normal Lighting Conditions. Normal lighting is as prescribed or authorized by the law of a given country without restrictions for military reasons.
- b. Reduced Lighting Conditions. The expression "Reduced Lighting Conditions" implies that the brightness of all exterior and interior lights must be reduced by power reduction or screening in such a way that the direction or reflected light visible to an aerial observer is limited to a minimum which will permit military vehicles, either singly or in column:
 - (1) To travel as fast as possible compatible with safety.
 - (2) To brake in time.
 - (3) To see the side of the road.
- c. Blackout Conditions. The expression "Blackout Conditions" implies either:
 - (1) Total blackout, in which all lights are extinguished.
 - (2) Partial blackout, in which lights are used which cannot be spotted by enemy observation, but which prevent collision by showing the position of the vehicle to other road users.

2. Illumination of signs. The appropriate authority responsible for military route signing in an area will specify those signs which must be illuminated. Primary consideration will be given to danger or warning signs and signs indicating a change of direction. Under the various lighting conditions outlined above, signs shall be illuminated as follows:

- a. Normal Lighting Conditions. Under normal lighting conditions, signs must be clearly visible during the hours of darkness and in any other condition of restricted visibility.
- b. Reduced Light Conditions. Under these conditions the positioning of the signs and the methods adopted to render them visible (illumination, reflection) must enable them to be seen by drivers whose vehicles have lights fitted with screening devices.
- c. Blackout Conditions. Under blackout conditions the requirement for any system of illuminating route/road signs are as follows:
 - (1) The route/road traffic sign will be provided with an upper mask which would prevent the light from being seen from above.
 - (2) The intensity of the light illuminating the route/road traffic sign will be such that it would not be possible for a pilot flying higher than 150 m (500 ft) to locate the sign or the reflection of the light on other adjacent surfaces.
 - (3) Where possible, the light will be so oriented that to truck drivers sitting in the cabs of their vehicles, it would be visible at a minimum distance of 100 m (110 yards) and readable at a distance of 30 m (33 yards).

3. Equipment for illuminating signs. It is not considered necessary to standardize the equipment to be used; however, the following characteristics are desirable. The equipment should:

- a. Be capable of providing the illumination for a minimum period of 15 hours without refuelling or change of battery.
- b. Permit rapid and easy replacement of the power source under wartime

- conditions.
- c. Be shock resisting, fireproof, and damp and weather proof.
 - d. Be simple to operate.
 - e. When based on an independent light source, be lightweight, easy to store, and easy to transport in small vehicles.
 - f. Be easy and quick to place in operation.
4. Indication of light line. The light line will be indicated by a BLACKOUT panel preceded by two warning panels corresponding to the example shown at Annex B. These warning panels will be placed to the best advantage in relation to the situation and the nature of the ground, in accordance with the instructions of the Command responsible for traffic control in the area in question. Locations of panels will be:
- a. The first, preferably at a distance varying between 1 km (1,100 yards) and 500 m (550 yards).
 - b. The second, preferably at a distance varying between 500 m (550 yards) and 200 m (220 yards).

At the end of the restriction a relaxation sign as illustrated in Annex B will be displayed.

5. These distances are given as an indication only; it may be useful in certain cases to spread these panels over a much greater distance. However, the distance between the first warning panel and the sign indicating the light line must under no circumstances exceed 10 km (7 miles). In the black section of the rectangular warning sign the distance separating this panel from the sign indicating the light line will be shown in white figures.

405. VISIBILITY OF MILITARY TRAFFIC CONTROL PERSONNEL AT NIGHT

1. Visibility. It will be the responsibility of each NATO country to ensure that military traffic control personnel, when on duty, are readily visible to drivers at night, whether under normal lighting, reduced lighting or blackout conditions.
2. Equipment. Traffic control personnel, in addition to wearing the distinguishing cuff, will be equipped with a luminous or illuminated appliance for directing the movement of traffic. This appliance must comply with the visibility requirements appropriate to the conditions of movement at night in force at the time.

406. LIST OF ALL RELEVANT DEFINITIONS

1. Military load classification. The military load classification of a route is a class number which represents the safe load carrying capacity of the route and indicates the maximum vehicle class that can be accepted under normal conditions.
2. Overhead clearance. Overhead clearance is the minimum vertical distance between the route/road surface and any obstruction above it which denies use of the route/road to all vehicles or loads, which exceed this height.
3. Route classification formula. The road formula shows, in a combination of letters and figures, the main characteristics of a road section that are expressed as following:
 - a. Limiting factors.
 - b. Width of travelled way.
 - c. Obstructions is applicable.

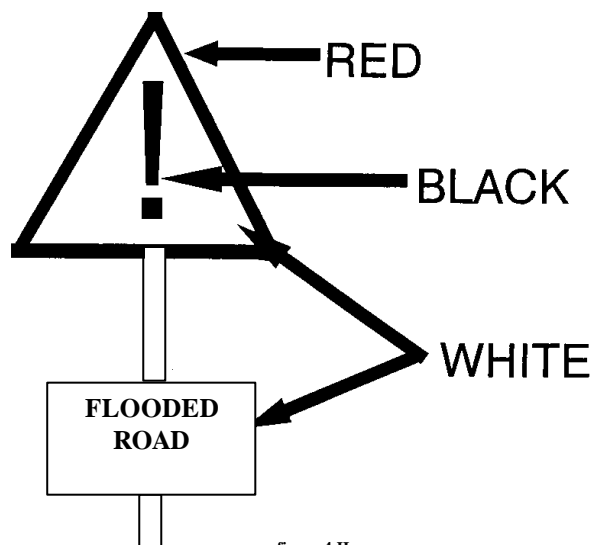
HAZARD WARNING SIGNS

Military Signs not included in the Geneva Convention

Black symbol or legend on a white background affixed beneath Geneva Convention general hazard warning sign.

In such cases the language or languages used will be determined by the authority erecting the sign.

See for an example figure 4-II.



figuur 4-II

BLACKOUT SIGNS, WARNING, ENFORCEMENT AND RELAXATION
SIGNS

1. Blackout warning, enforcement and relaxation signs are illustrated in the figures 1, 2 and 3 below.
2. The warning sign shall indicate the distance from the commencement of the blackout enforcement area.
3. The enforcement sign will indicate the distance for which the blackout restrictions are operative.

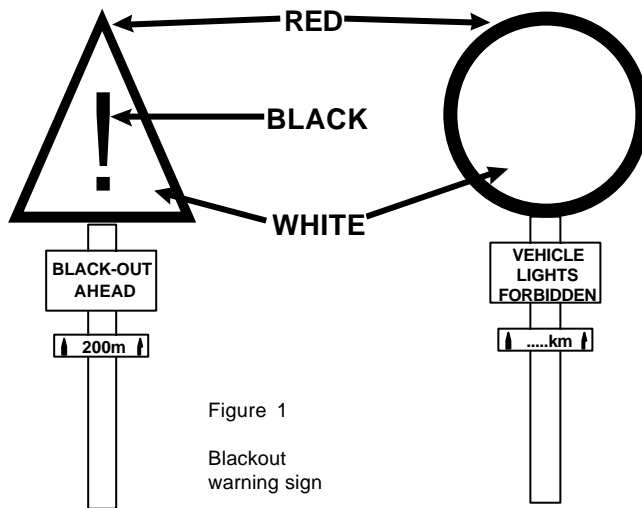


Figure 1
Blackout
warning sign

Figure 2
Blackout
Enforcement sign

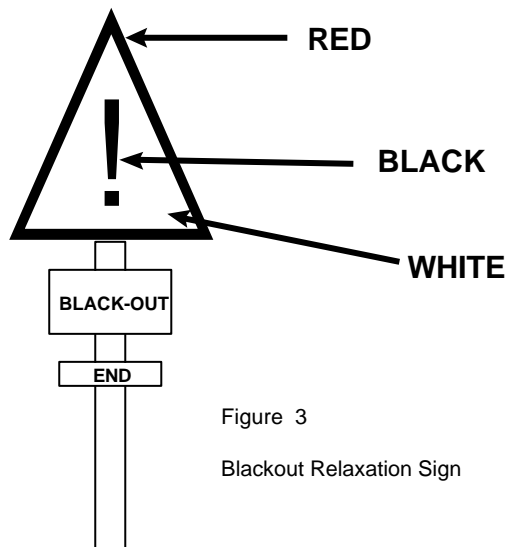


Figure 3
Blackout Relaxation Sign

GUIDE SIGNS

1. ROUTE MARKERS. The following signs are examples of route markers (colours are black and white): See figures 1 to 5.

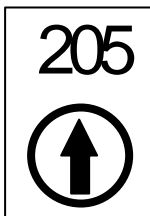


Figure 1A
Axial Route 205
Front going traffic straight on

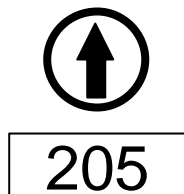


Figure 1B
as for 1A

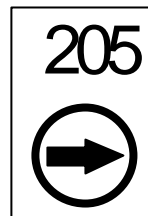


Figure 2A
Axial Route 205
Front going traffic turn right

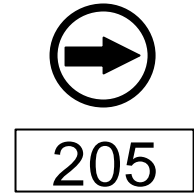


Figure 2B
as for 2A

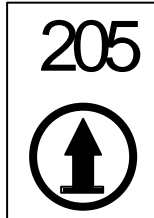


Figure 3A
Axial Route 205
Rear going traffic straight on

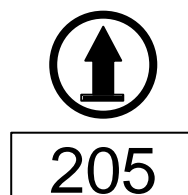


Figure 3B
as for 3A

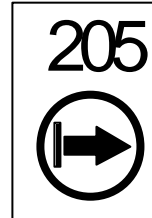


Figure 4A
Axial Route 205
Rear going traffic turn right

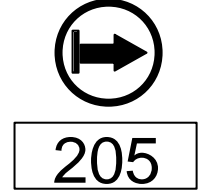


Figure 4B
as for 4A

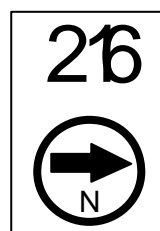


Figure 5A
Lateral Route 216
North going traffic turn right

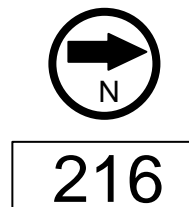


Figure 5B
as for 5A

2. DETOUR SIGNS



Figure 6A
Detour to Axial Route 205

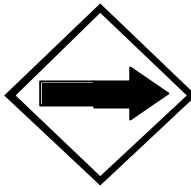


Figure 6B
as for 6A



Figure 7A
Detour to Axial Route 205
Rear going traffic turn right

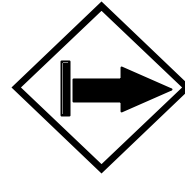


Figure 7B
as for 7A

- NOTES:
- a. Figure 1A to 7A show the normal route and detour markers.
 - b. Figure 1B to 5B show the alternative route markers which can be prepared with directional discs and Figures 6B and 7B show alternate detour signs. In these cases the indication of the route markers is shown under the directional disc or sign.

3. DIRECTIONAL DISCS

- a. Directional discs (black arrow on white circular background) will be used to indicate the following on axial and lateral routes.



Figure 1
Straight on

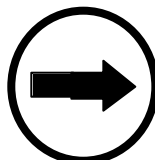


Figure 2
Turn right

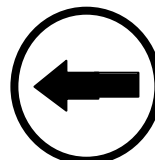


Figure 3
Turn left

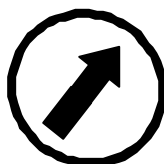


Figure 4
Fork right

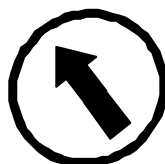


Figure 5
Fork left

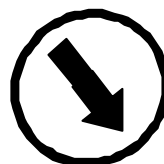


Figure 6
Sharp turn to
right rear

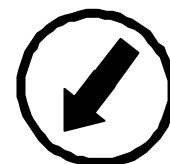


Figure 7
Sharp turn to
left rear

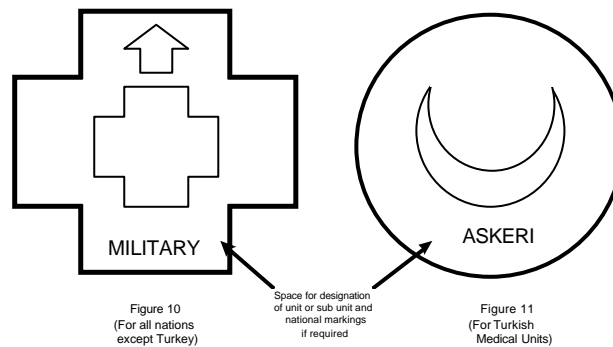
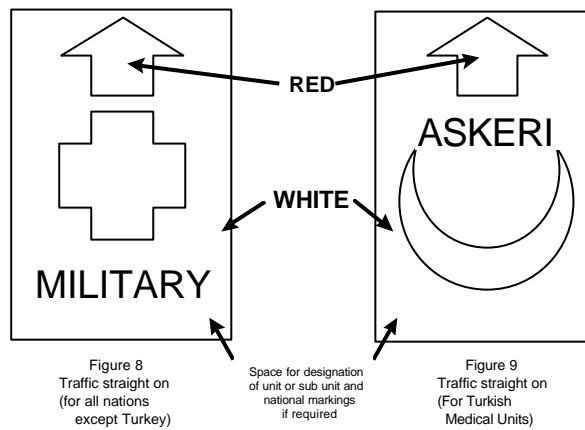
- b. Directional discs used on axial routes with stream of traffic moving from the front line to the rear is to be of the "barred arrow". They are to give the same indications as in figures 1-7 above.
- c. Normal directional discs (i.e. those with a black arrow on a white circular back-

ground) are to be used in all cases except on detours, when the detour signs (i.e. those with a black arrow on a white square background, placed with one diagonal vertical) are to be used.

- d. The use of the directional discs as given above in no way supersedes the use of regulatory signs provided for in the Geneva Convention 1973 and in Annex B. These regulatory signs are to be used in addition to the directional discs which only indicate a route to be followed. In due course, special signs may be used to replace temporary directional discs.

4. OTHER GUIDE SIGNS

- a. Signs indicating evacuating routes for military casualties - medical unit signs. See figures 8 to 11.



- b. Signs indicating evacuation routes for civilian casualties. See figure 12 (The left sign is an example for a directional sign for a civilian casualty evacuation route. The right sign is an example for a directional sign for a civilian casualty treatment centre.).

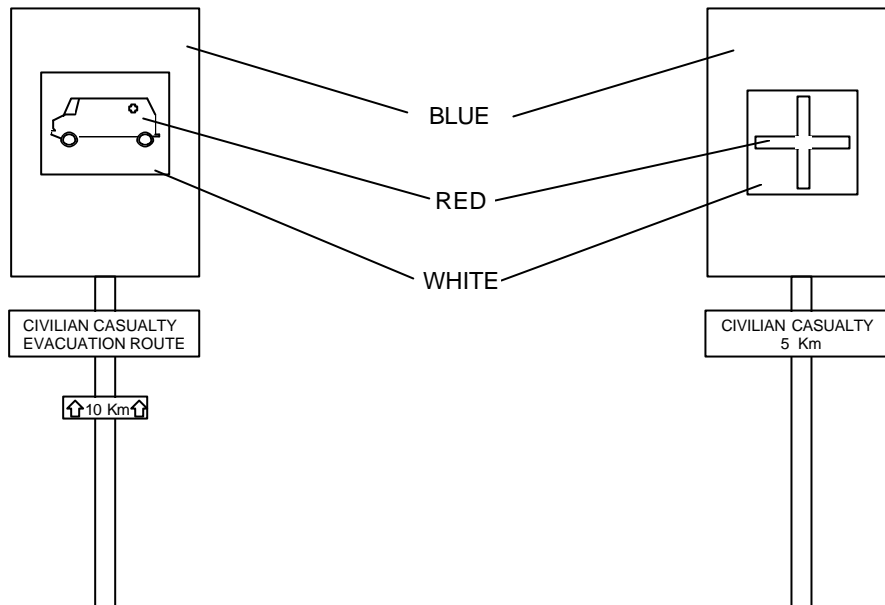


Figure 12.

5. DIRECTIONAL ARROWS
See figure 13.

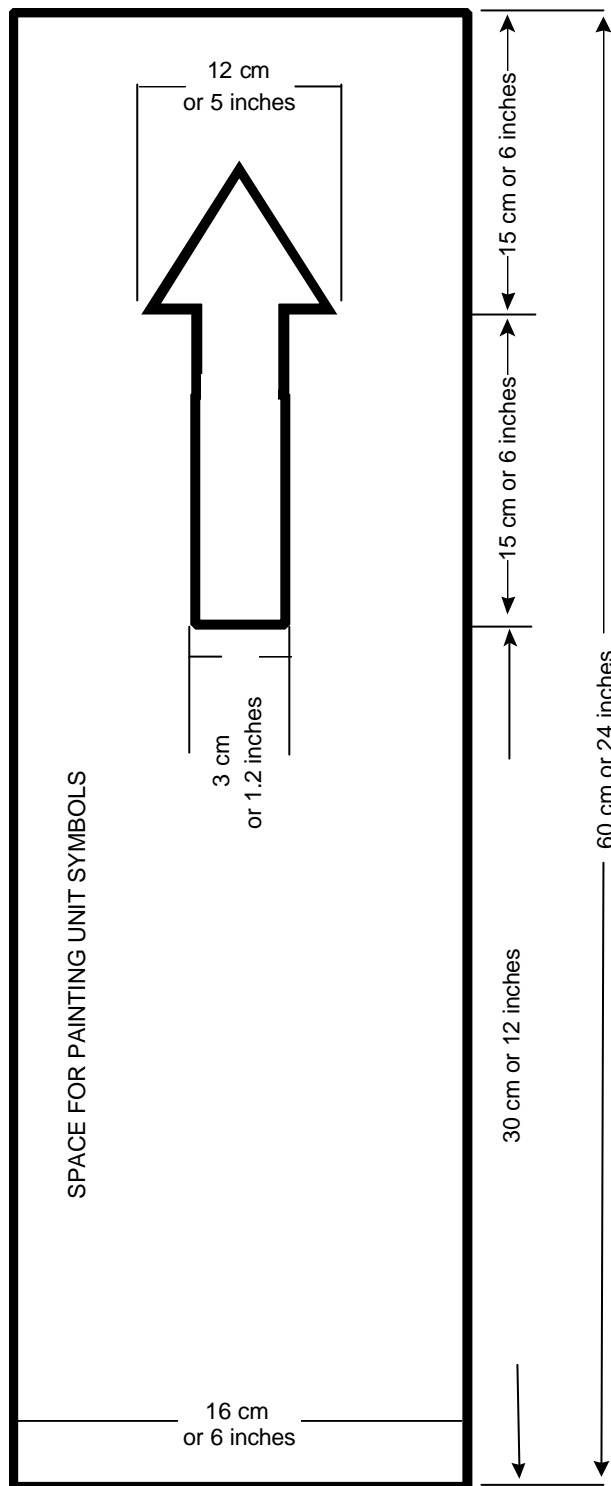


Figure 13.

CHAPTER 5

REGULATIONS FOR MILITARY MOTOR VEHICLE
MOVEMENT BY ROAD

ANNEXES

- A. Terms and definitions.
- B. National marking of columns and legal rights.
- C. Table listing the minimum period of time for a movement bid to be submitted.
- D. Table listing the minimum number of vehicles for which a movement credit is required.
- E. Special movement - Vehicle dimensions and weight limits.

501. RELATED DOCUMENTS

- STANAG 1059 TOP - National distinguishing letters for use by NATO armed forces.
- STANAG 2010 ENGR - Military load classification markings.
- AMovP-2 (A) - AP on border crossing.
- AMovP-3 (A) - AP on documents and message text formats.
- AAP-6 - NATO glossary of terms and definitions (English and French).

502. DEFINITIONS

For terms and definitions related to this chapter, see Annex A.

503. GENERAL

Movement and transport staffs who are responsible for road movement and transport are required to act in accordance with this chapter, in order to optimise the use of available road network.

504. COMPOSITIONS OF COLUMNS

1. A column may be composed of a number of organised elements.
2. Each organised element includes:
 - a. A commander whose location may vary.
 - b. In the first vehicle: a subordinate commander known as the pace setter.
 - c. At the end: a subordinate commander known as the trail officer.
3. A reporting officer¹ is to precede each column when approaching a traffic control post or border crossing point and is to contact the post commander in order to:
 - a. Report the movement credit number and deviations from the movement credit in case of road movements with movement credit;
 - b. Report in case of road movement without movement credit the required data on formation/unit, route and destination.

The reporting officer will also receive notifications and instructions, if required.

¹ May be of any rank as considered appropriate by the column commander.

4. An officer (who may be the trail officer) is to be appointed to report to each traffic control post once the column has passed, giving details of any occurrences including vehicle casualties.

5. Each vehicle must have a vehicle commander, who may be the driver. He is responsible for both crew discipline and execution of the mission.

505. IDENTIFICATION OF COLUMNS

1. Movement credit number (example at Annex A)

- a. Each column which has been allocated a movement credit must be identified by a number known as the "movement credit number". This number identifies the column during the whole of the movement, including the crossing of national boundaries.
- b. The movement credit number must be a contrasting colour to the colour on which it is marked and must be placed on both sides of each vehicle. It must be legible from ground level at a minimum distance of 6 meters in normal daylight and remain legible in all weather during the whole movement. It must be removed as soon as the movement is completed.

2. Minimum lighting and flagging

- a. In peacetime headlights of all vehicles moving in column must be on at all times (low beam).
- b. The first vehicle of each element must display a blue flag mounted on the left-hand front side of the vehicle.
- c. The last vehicle of each element must display a green flag mounted on the left-hand front side of the vehicle.

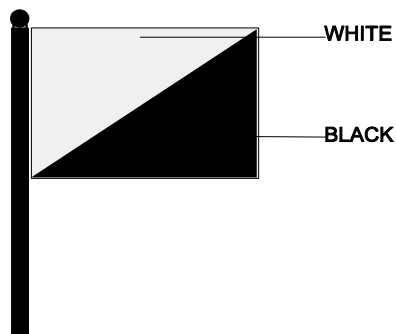


Figure 1

- d. The column commander must display a black and white flag at the left-hand front side as indicated in figure 1.
 - e. The driver of a broken down vehicle must remove the flag (if any) and, if technical assistance is required, a yellow flag is to be attached to the vehicle so that it is visible to approaching traffic.
 - f. Flags must be approximately 30 cm (12 inch) (height) x 45 cm (18 inch) (length) in size.
 - g. Special regulations concerning lighting and flagging in different countries: see Annex B.
3. **Legal rights.** To obtain legal rights for column movements for different countries: see Annex B.

506. MOVEMENT BID

A movement bid (see AMovP-3 (A)) is a request for a movement credit. It is submitted by a unit or a staff to the national movement staff or appointed authority on whose territory the movement starts (for the minimum period of time for a movement bid to be submitted: see Annex C). A movement bid is to be submitted for:

1. Any column of vehicles whose quantity meets or exceeds the nationally-specified number at Annex D.
2. Any vehicle which exceeds the nationally specified dimension and weight limits at Annex E.
3. In case of a border crossing movement on controlled routes.
4. Dangerous goods (in accordance with national/military regulations).

507. MOVEMENT CREDIT

A movement credit (see AMovP-3 (A)) is the permission to execute the movement on an assigned route during a limited period of time. It is issued by the National Movement Staff or appointed authority, on whose territory the movement starts and the credit is co-ordinated by that staff or authority with the movement staff or authority of another nation where the crossing of international boundaries is concerned. A movement credit is required for movements as mentioned in paragraph 506.1 to 4.

508. SPECIAL REGULATIONS FOR THE EXECUTION OF MOVEMENTS

1. Halts

- a. Short halts made by columns normally are to last at least 10 minutes and should be taken when possible after every 2 hours of operation.
- b. Long halts made by columns for at least 30 minutes must always be specifically plotted on road movement graphs.
- c. The movement control staff can give additional instructions concerning time, duration and/or place of halts.
- d. Particular attention is to be paid to the following aspects of traffic discipline during halts:
 - (1) When making a halt single vehicles, or vehicles forming part of a column, should move off the road as much as possible.
 - (2) If this practice cannot be observed, the commander of a column which is halted must take all necessary measures to facilitate movement of other road users and avoid accidents or traffic jams.
The measures to be taken will vary according to the conditions and width of the road and should include:
 - (a) Warning at a sufficient distance from the front and rear of the column (guards, warning flags, lights or flares).
 - (b) Organising and directing a system of one-way traffic along the column.

2. Overtaking of columns

- a. Single vehicles are authorised to overtake columns during their halts or if there is a large speed differential. Vehicles may only overtake if it is safe to do so.

- b. Columns may only be authorised to overtake other columns by the movement control authorities and if so, the overtaking manoeuvre has to be supported by traffic regulation personnel.
 - c. A column without movement credit may overtake another column in the following circumstances:
 - (1) When the other column is halted and it is safe to do so.
 - (2) When the column commander of the leading column gives clear indication that the following column may overtake and it is safe to do so.
3. Road movement of outsize/heavy vehicles, dangerous goods/cargo material and/or ammunition carrying vehicles (except (tactical) movements in the combat zone)
- a. These kind of road movements will be known as **special movement** (See Annex A, 2.c.).
 - b. Special application for the movement of above mentioned vehicles and/or cargo must be made before movement credits are granted. National restrictions, above which special application to move must be made, are contained at Annex E.
4. Tactical situation
- a. On principle the directions from the local police and from the military police must be obeyed. In times of crisis or in wartime the tactical situation may require a deviation from one or more regulations laid down in this agreement. Such situations may occur for the units in case of immediate danger of enemy threat.
 - b. In times of crisis or in wartime night movements will also have to be accomplished without or with restricted lighting (black-out lighting) depending on the situation, with due regard to regulations in force in the host nation. It is desirable that a device be incorporated in the vehicle lighting switch, in order to prevent the driver inadvertently switching on the driving lights, passing lights or direction indicators when the vehicle is operating under black out conditions.

TERMS AND DEFINITIONS

1. Terms and definitions included in AAP-6.
 - a. Column formation (see Figure 2).
 - b. Column gap (see Figure 2).
 - c. Column length (see Figure 2).
 - d. Movement credit.
 - e. Movement control.
 - f. Pace setter (see Figure 2).

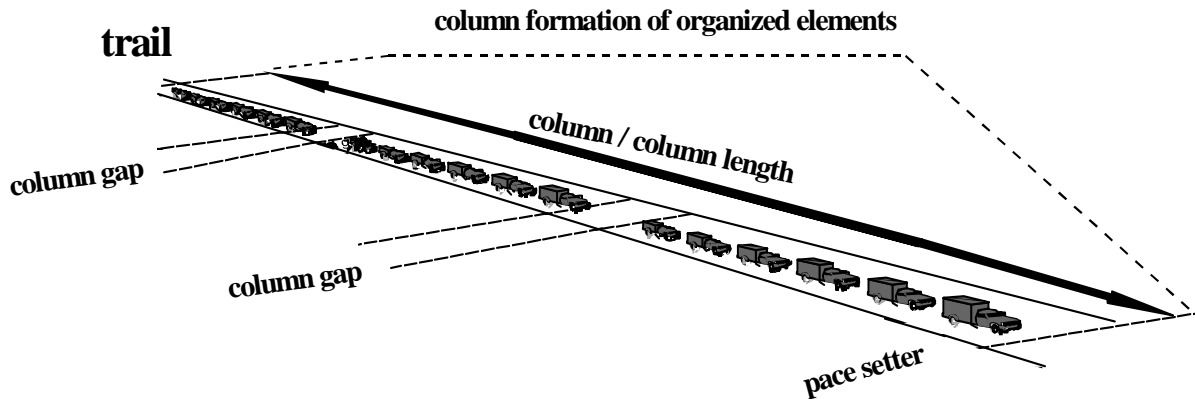


Figure 2

2. Terms and definitions used for the purpose of this agreement.
 - a. Column (see Figure 2). A group of vehicles moving under a single column commander over the same route at the same time in the same direction. A column may be composed of a number of organised elements which could be named 'Marching Groups, Convoys or Packets' (See paragraph 506.1).
 - b. Movement credit number. A number, allocated to a movement by the movement control staff responsible for the issue of a movement credit. The movement number should comprise (see Figure 3):
 - (1) Two figures indicating the day of the month on which the movement is due to commence.
 - (2) Three or more letters indicating the movement agency issuing the movement credit, the first two letters being the national symbols of the movement agency (see STANAG 1059).
 - (3) Two or three figures indicating the serial number of the movement.

- (4) One letter to identify the packets of the column (this is optional).

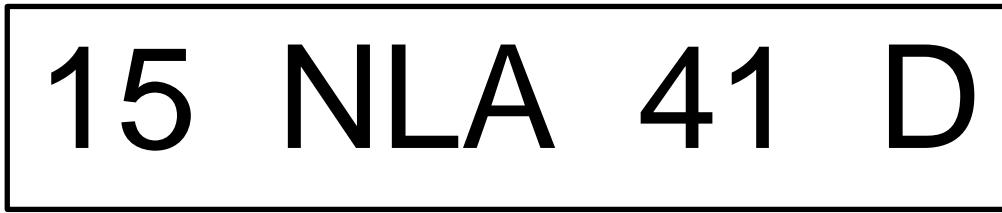


Figure 3

- c. Special movement. Road movement of vehicles/equipment with or without load which requires a movement credit because of MLC, dimension or movement restrictions based on national requirements.
- d. Trail officer. A subordinate commander in each column who travels at the rear of the column. His duties are to be determined by the column commander. His duties **may** include:
- (1) Reporting type and location of dropped-out vehicles.
 - (2) Organising the safety measures at the rear of the column required at halts.
 - (3) Observing and reporting column discipline.

NATIONAL MARKING OF COLUMNS AND LEGAL RIGHTS
(in addition to and/or in deviation of paragraph 605)

Country: BEL

1. Legal rights. None.

Country: CZE

1. Lighting: The first (front) and the last (rear) vehicles of each column must display an orange flashing light mounted on a vehicle roof and headlights (low beam) of all vehicles moving in column must be switched on at all times.
2. Other provisions: In each column of more than three vehicles, the first and the last vehicle must be marked with a five-digits identification number. The first figure indicates the origin(initial) movement agency. The second figure indicates the destination movement agency. The three last figures indicate the serial movement number. The same rule applies to outsize/heavy vehicles, dangerous goods/cargo material and/or ammunition carrying vehicles, except for tactical movements. The identification number figures must be 10 cm high and in black colour on a white (background) plate: size 15 cm high and 25 cm wide. This plate must be placed in the right-bottom corner of the windshield.

Country: DEU

1. Flagging.
 - a. Columns consisting of three or more vehicles are to be marked by flags. All vehicles except for the last vehicle display a blue flag. The last vehicle displays a green flag.
 - b. If a column is separated in several independent elements and if the distance between the last vehicle of the previous element of the column and the first vehicle of the following element exceeds the distance ordered between the individual vehicles each element of the column is to be marked by flags according to the provisions for a column.
2. Lighting. During the day the headlights of all vehicles moving in column must be on.
3. Other provisions. In order to warn the following rapid traffic on highways and freeways the last vehicle may display an omni-directional amber light, or if this light is not available the last vehicle may display operating hazard warning lights instead.
4. Legal rights. Closed formations moving in column must leave gaps for the remaining traffic at appropriate intervals. Such traffic must not interrupt the column at any other point. Hence follows that a closed formation or an element thereof is to be considered one road user. That also applies at crossings and junctions. If a part of the formation has already moved into a crossing, the next vehicle must not wait when a vehicle approaches on the road with right-of-way or from the right. It is, however, not justifiable that that right of way is called upon without warning the remaining road users. The warning tasks

(no traffic regulation) may be accomplished by military police forces or other military personnel unless police forces regulate the traffic. Military police forces or military personnel detailed for warning must be clearly recognisable as military traffic posts (warning posts), e.g. by brassards or respective clothing.

When accomplishing their tasks military traffic posts are to use the same signals as prescribed for traffic regulation by police forces (chapter 2). Other signals to warn road users - where necessary and appropriate must, however, not be excluded. Warning of the other road users must not be accomplished as a traffic regulation function. Only the German Police has traffic regulation authority over civilian road users.

The priority rights of closed formations must not be called upon if:

- the traffic is regulated in another way by police forces;
- other road users call upon priority by displaying a blue flashing light together with a signal horn. Such vehicles must always be given free way;
- a threat to other road users cannot effectively be prevented by traffic regulation by police forces, warning by military police forces or other military personnel detailed for that tasks. That applies especially if the traffic is regulated by alternating lights, permanent lights (traffic signals) or by the traffic signs "Stop! Give way" or "Give way!".

Country: DNK

1. Legal rights. None.

Country: ESP

1. Flagging. A red flag must be displayed on vehicles carrying explosives or ammunition, dimensions are not regulated.
2. Lighting. See paragraph 605.2. "Minimum lighting and flagging". In order to warn the following rapid traffic on highways and freeways the last vehicle may display an omni-directional amber light.
3. Other provisions. A hazard triangle must be displayed at the front of the first vehicle and at the rear of the last vehicle (see Figure 5).

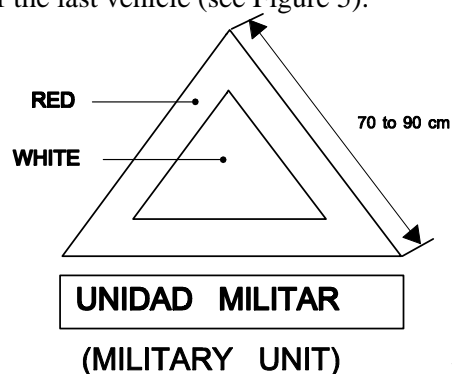


Figure 5

4. Legal rights. None.

Country: GBR

1. **Flagging.** In UK the national regulations do not recognise column flagging of any sort. It is only recognised by the services.
2. **Legal rights.** The UK has no special legal rights when operating with minimum flagging and lighting.

Country: GRC

1. **Lighting.**
 - a. The first vehicle of each element must display a blue filter on the front left-hand side headlight or a blue light;
 - b. The last vehicle of each element must display a green filter on the front left-hand side headlight or a green light.
2. **Legal rights.** If a part of the column/element, complying to the above stated national requirements, has already moved into a crossing, the next vehicles have right of way. This right should be exercised with necessary caution. Civilian drivers are not to disturb or obstruct a column.

Country: HUN

1. **Lighting:** Headlights (low beam) of all vehicles moving in a column must be switched on at all times.
2. **Legal rights:** None

Country: ITA

1. **Flagging and lighting.** See paragraph 605.2. "Minimum lighting and flagging".

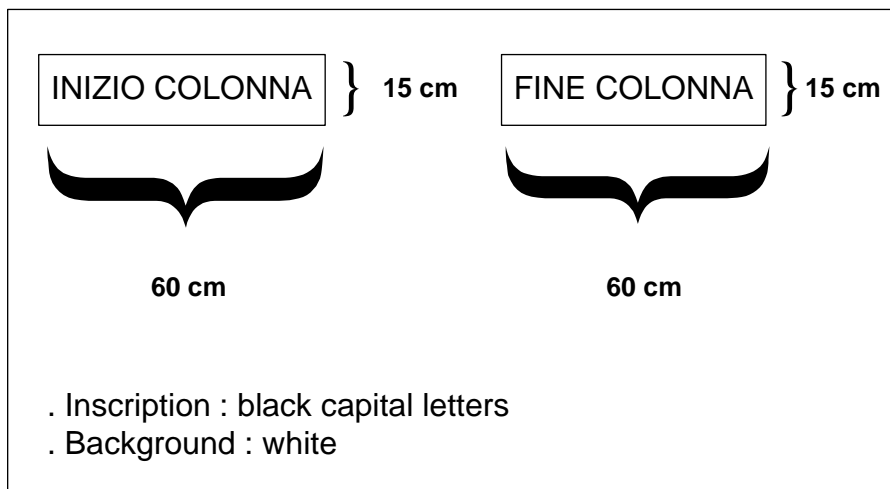


Figure 4

2. Other provisions. In each column of more than ten vehicles; the first and the last vehicles must be marked with two white 'plates' each (see Figure 4), to be displayed respectively:
 - a. for the first vehicle (head):
 - (1) at the front of the vehicle the plate with the inscription: INIZIO COLONNA (column head);
 - (2) at the rear of the vehicle the plate with the inscription: FINE COLONNA (column tail);
 - b. for the last vehicle (tail):
 - (1) at the front of the vehicle the plate with the inscription: FINE COLONNA (column tail);
 - (2) at the rear of the vehicle the plate with the inscription: INIZIO COLONNA (column head);
 3. Legal rights. Closed formations moving in column must not be interrupted. So, civilian drivers are not to disturb or obstruct a column.
-

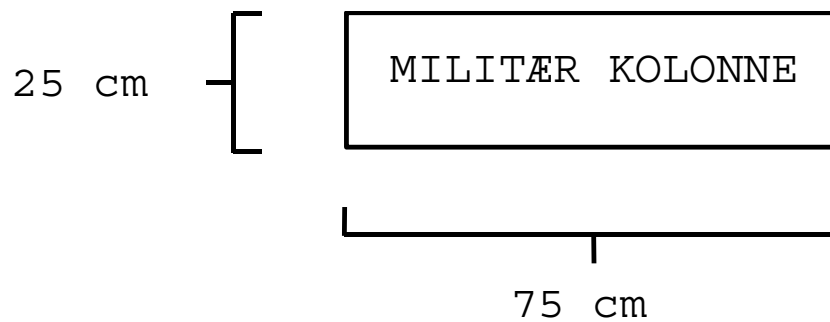
Country: NLD

NL requirements for marking of columns in peacetime only:

1. Flagging.
 - a. Two blue flags displayed on the first vehicle of an element mounted on the left- and right-hand front side of the vehicle;
 - b. One blue flag displayed on each following vehicle of an element, except for the last vehicle, mounted on the right-hand front side of the vehicles;
 - c. One green flag displayed on the last vehicle of an element mounted on the right-hand front side of the vehicle.
 2. Lighting.
 - a. Headlights (low beam) of all vehicles moving in column must be switched on at all times;
 - b. Each vehicle except the last of each element must display a blue filter on the front right-hand side headlight;
 - c. The last vehicle of each element must display a green filter on the front right-hand side headlight.
 3. Legal rights. If a part of the column/element, complying to the above stated national requirements, has already moved into a crossing, the next vehicles have right of way. This right should be exercised with necessary caution. Civilian drivers are not to disturb or disrupt a column.
-

Country: NOR

1. Flagging.
 - a. Columns or elements of columns consisting of four or more vehicles are to be marked by flags and signs on the first and last vehicle;
 - b. One sign displayed on the front-side of the first vehicle and one sign displayed on the rear-side of the last vehicle of an element stating "MILITAER KOLONNE" (Black capital characters on a white board).
-



- c. The yellow flag, for broken down vehicles, is not used in NO.
2. **Legal rights.** Columns complying to the above stated national requirements have right of way. This right should be exercised with necessary caution. Civilian drivers are not to disturb or obstruct a column.
3. **Lighting.**
- a. Headlights (low beam) of all vehicles moving in column must be switched on at all times;
 - b. During darkness, the first vehicle of each element must display a blue filter on the front left-hand side headlight, and the last vehicle of each element must display a green filter on the front left-hand side headlight.

Country: POL

1. **Lighting.**
Headlights (low beam) of all vehicles moving in column must be switched on at all times.
2. **Marking.**
 - a. All convoys are to be marked by a warning board on the first and last vehicle: One sign (see figure 4a) displayed on the left front side of the first vehicle and one sign displayed on the left rear side of the last vehicle of the convoy. The board shape is 40 cm x 30cm rectangular reflective orange with 15 mm wide black frame and with a picture of the car column.
 - b. Additionally, on the highway, the first and the last vehicle of each element must display a traffic yellow pulse light, visible from the minimum distance 150 m. If there is no such light, switch the Hazard lights on.
3. **Legal rights.** The minimum number of vehicles to constitute a column is five or more. One package (group) of a convoy can not exceed more than twenty vehicles. Civilian drivers must give right-of-way to military columns. Military columns must not interfere with other traffic and must circulate with necessary caution to prevent accidents.

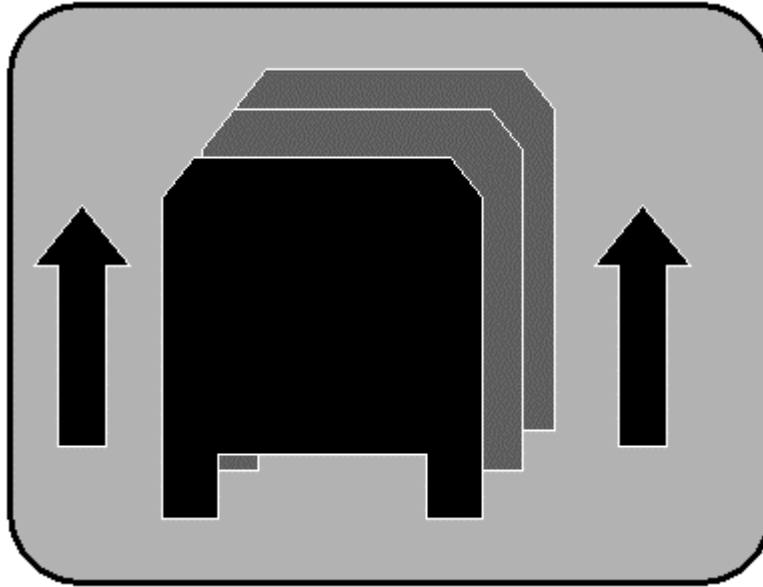


Figure 4a

Country: PRT

1. **Lighting.** During daytime, headlights (low beam) of all vehicles moving in column must be on at all times.
2. **Legal rights.** The minimum number of vehicles to constitute a column is two. Civilian drivers must give right-of-way to military columns. Military columns must not interfere with other traffic and must circulate with necessary caution to prevent accidents. The warning tasks (not traffic regulation) is performed by the Military Police (PE) or other military personnel. Police forces regulate the traffic.

Country: TUR

1. **Flagging.** A red flag must be displayed on vehicles, within a column, carrying dangerous cargo.
2. **Legal rights.** There are no special privileges for military columns.

Country: USA

1. **Flagging.** Flagging in the United States is an internal command and control measure used by the military units and not recognized by national highway regulations. Convoy control numbers are issued by the Defense Movement Coordinator (DMC) in the State Movement Control Center where the convoy originated and written in chalk on the front doors of the vehicle. The convoy control numbers are used by the DMC to track convoy movements.
 2. **Legal rights.** The United States has no special legal rights when operating with minimum flagging and lighting.
-

**TABLE LISTING THE MINIMUM PERIOD OF TIME FOR A
MOVEMENT BID TO BE SUBMITTED
(In working –days)**

NATION MOVEMENT		BEL	BGR	CAN	CZE	DEU	DNK	ESP	FRA	GBR	GRC	HUN	ITA	LUX	NLD	NOR	POL	PRT	SVK	TUR	USA	
		NATIONAL MOVEMENT	COLUMN	10	20	5	5	5	15	9	15	5	5	10	5	5	5	10	10	10	10	10
EXCEEDING WEIGHTS AND DIMENSIONS	15		20	5	30	10	20	20	20	10	10	10	10	5	5	10	20	10	10	10	10	*
DANGEROUS CARGO	10		20	5	30	5	15	20	20	5	10	10	10	5	5	10	20	10	10	10	10	*
BORDERCROSSING MOVEMENT	COLUMN	15	20	15	14	15	15	9	15	10	10	10	10	10	10	10	10	10	10	10	10	*
	EXCEEDING WEIGHTS AND DIMENSIONS	15	20	15	30	15	20	20	20	10	10	10	15	10	10	10	20	10	10	10	10	*
	DANGEROUS CARGO	15	20	15	30	15	20	20	20	10	10	10	15	10	10	10	20	10	10	10	10	*

Table 5-I

Remark BGR: exception can be made in particular occasions with 48 hours period for a movement bid to be submitted

Remark DNK: Due to civil regulations for traffic in DNK oversize vehicles, tracked vehicles and lowloaders moving by own means outside military areas have to have a special permission from the Ministry of Transport. Vehicles exceeding the dimensions as mentioned in Annex E must in each case have permission for driving outside military areas in Denmark. This permission is to be requested - with the normal request for movement bid -, through MTCC/AOC DEN at least four weeks (20 days) before the movements are to take place.

The request has to contain:

- a drawing of the vehicle with the dimensions (length, width and height) and if the vehicle is loaded, the total dimension including the load;
- type and number of vehicle;
- number of axle, number of wheel on each axle, axle load and wheel load ;
- total weight.

Remark POL: movement bid for a single vehicle or columns up to 5 vehicles is to be submitted no later than 5 days before the movement starts.

* Remark USA: There is not a uniform standard for the number of working days in the USA. Contact the Defense Movement Center (DMC) in the State where the convoy will originate for the particular submission standard.

TABLE LISTING THE MINIMUM NUMBER OF VEHICLES FOR WHICH A MOVEMENT CREDIT IS REQUIRED

N A T I O N	BEL	BGR α	CAN	CZE #	DEU	DNK	ESP	FRA	GBR	GRC	HUN	ITA *	LUX	NLD	NOR	POL •	PRT	SVK	TUR	USA
	N U M B E R O F V E H I C L E S																			
P E A C E T I M E	20	11	31	4	11	10	9	10	10	10	10	7	20	10	20	6	10	10	1	6
W A R T I M E	20	31	31	4	31	10	9	20	10	10	10	1	20	20	20	6	10	10	10	6

Table 5-II

- * (1): In ITA in time of crisis or war:
 - a. over controlled routes: a movement credit is needed for convoy /-columns of more than 19 vehicles.
 - b. over supervised routes: the minimum number of vehicles by which a movement credit is determined by the military authority supervising the routes.
 - c. over reserved routes: an authorisation / movement credit is required for every movement, even in the case of a single vehicle.
- # (2) In CZE a column is a group of more than three moving vehicles. A ceiling number in one column is 30 vehicles, except tactical movements.
- (3) In POL quantity of vehicles in a column of vehicles can not be more than 20 vehicles. If a column only consists of cars, the column of cars can be equal 30 vehicles.
- α (4) BGR: An authorisation /movement credit can be given and according to other signed by both sides agreement.

SPECIAL MOVEMENT VEHICLE DIMENSIONS AND WEIGHT LIMITS

All vehicles/equipment exceeding dimensions and weights listed below (Table 5-III) must be considered as special movement and require a road movement credit.

C O U N T R Y	All measures in meters							Class MLC
	Width (including all projec-tions)	Length of vehicles					Total height (including load)	
		Single Vehicles (prime mover)	Prime Mover and Trailer	Total length of		Motor coach		
				Tractor and Semi Trailer	Semi Trailer			
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
BEL	2.5	12	15.5	18	11	12	4	=<50
BGR	2.5	12	22	16.5	-	12	4	- (* 1)
CAN	2.6	12.2	20	23	-	12.2	4	- (* 2)
CZE	2.55	12	18	15.5	12	12	4.15	- (* 3)
DEU	2.55	12	18.35	15.5	12	12	-	- (* 6)
DNK	2.55	12	18.75	16.5	12	12	4	- (* 4)
ESP	2.5	12	18.35	18	-	12	4	- (* 15)
FRA	2.55	12	18.75	16.5	12	12	4	=<50 (* 5)
GBR	2.5	12	18.75	18	12.20	12	4.2	=<50 (* 16)
GRC	2.55	-(* 7)	14	18	-	12	3.8	-
HUN	2.55	12	18.75	16.5	12	12	4	=<40 (* 8)
ITA	2.55	12	18.75	16.5	12	12	4	(* 9,* 10)
LUX	2.6	12	15.5	18	12	12	4	-<44
NLD	2.6	12	18.75	16.5	-	12	4	- (* 12)
NOR	2.5	12.4	17	18.5	-	12.4	3.8	=<50
POL	2.6	12	18.75	18.75	-	12	4	- (*13)
PRT	2.5	12	18.35	16.5	12	12	4	=<50 (*14)
SVK	2.55	12	18	15.5	-	15	4	(* 11)
TUR	2.5	10	18	16	-	12	4	=<42
USA	2.438	10.668	15.24	18.228	10.668	12.192	3.81	=<50

Table 5-III

Explanatory notes to Annex E

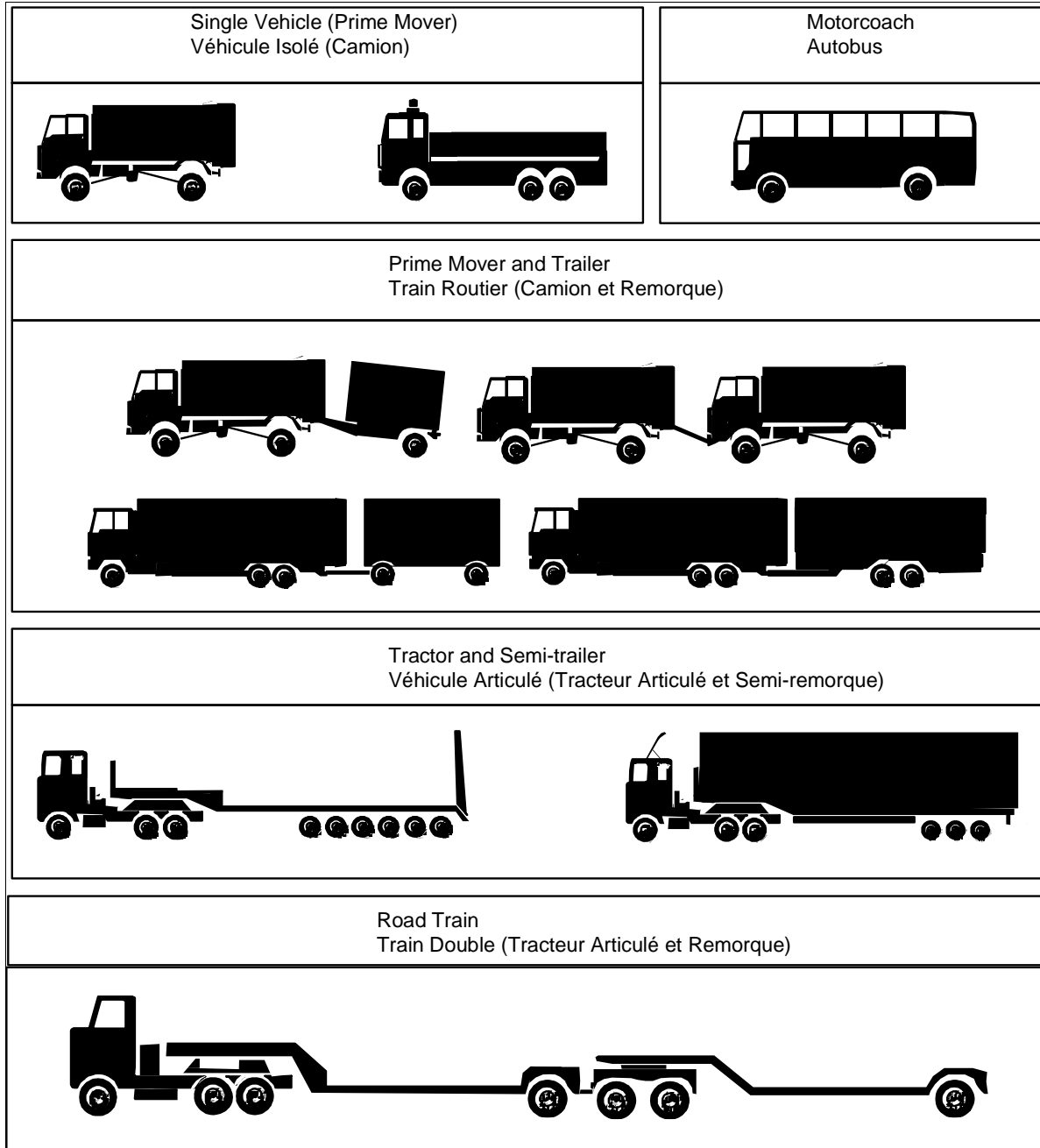


Figure 6: Vehicles and possible vehicle combinations

Country: BGR

- * 1 Overweight is any vehicle, which is:
- more than 38 tonnes
 - more than 10 tonnes/axle

Country: CAN

- * 2 Generally in most provinces and designated highways size limits exceed the limitations quoted. In some provinces certain types of articulated trains are not permitted. Weight limitations are based on axle loads, axle spacing and tyre size. They vary by provinces and designated highways. Restrictions on weight may be imposed during spring thaws.

Country: CZE

- * 3 (See Table 5-IV)

Weight limits- All measures in tons

	2 axles	3 axles	>=4 axles
Single vehicles	18.00	25.00	32.00
Prime mover and trailer	18.00	24.00	32.00
Tractor and semi-trailer	48.00	48.00	48.00

Country: DNK

- * 4 (See Table 5-V)

Type of Vehicles	Permissible total weight			Permissible axle load		
	2 axles	3 axles	>=4 axles	per axle	bogie w/2 axles	bogie w/3 axles
Single Vehicle	18.0 t	24.0 t	29.5 t	10.0 t	16.0 t	24.0 t
Trailer	--	24.0 t	24.0 t	10.0 t	18.0 t	24.0 t
Semi-trailer	--	--	--	10.0 t	20.0 t	24.0 t
Tractor and Semi-trailer	--	--	48.0 t	--	--	--
Other types	--	--	44.0 t	--	--	--

Table 5-V: Special Movement Regulations in DNK

- a) If the two front axles are steering axles, and the axle distance is less than 1.8 m, and, at the same time the distance between the front axle and the rear axle is more than 5.0 m, the permissible total weight can be extended up to 32 tonne.
- b) This is, if the axle distance is 1.0 m to less than 2.0 m. For each single axle the permissible axle load may not exceed 8.0 tonne, if the axle distance is less than 1.3 m.
- c) The permissible axle load for each single axle may not exceed 8.0 tonne. The total amount of permissible axle load may not exceed 22.0 tonne, if only one of the axle distances is less than 1.3 tonne.
- d) If the axle distance is 1.0 m to less than 1.3 m, then 16.0 tonne. Less than 1.0 m max 11.0 tonne. If the total permissible axle load is exceeding 16.0 tonne, the permissible axle load on each single axle, may not exceed more than 9.0 tonne. If the total permissible axle load is less than 16.0 tonne, then the permissible axle load may not exceed 8.0 tonne per axle.
- e) If the axle distance is 1.0 m to less than 1.3 m, then max. 22.0 tonne. Less than 1.0 m: max 21.0 tonne. This is, if only one of the axle distances is below the mentioned limits.

The above mentioned regulations regarding permissible axle load and total weight do not apply to block cars or engine driven vehicles which are only used as a drawing power.

Country: FRA

* 5 (See Table 5-VI)

Type of Vehicles	Permissible total weight			Permissible axle load	
	2 axles	3 axles	>=4 axles	per axle	bogie w/2 axles
Single Vehicle	19.0 t	26.0 t	32.0 t	13.0 t	21.0 t
Prime mover & Trailer	--	40.0 t	1)	13.0 t	21.0 t
Tractor and Semi-trailer	--	38.0 t	1) 2)	13.0 t	21.0 t

1): Combined "Rail-Route" transport: 44.0 t

2): 4 axles: 38.0 t ; 5 axles: 40.0 t

Table 5-VI: Special Movement Regulations in FRA

Country: DEU

- * 6 For vehicles and trailers with pneumatic tires the permissible axle load must not exceed the following values:
- a. Single axle load
 - (1) single axles 10.0 t
 - (2) single axles (live) 11.5 t

 - b. Double axle load, for Motor vehicles taking into consideration the regulations for the single axle load
 - (1) axle distance less than 1.00 m 11.5 t
 - (2) axle distance 1.00 m to less than 1.30 m 16.0 t
 - (3) axle distance 1.30 m to less than 1.80 m 18.0 t
 - (4) axle distance 1.30 m to less than 1.80 m, if live axle has double tires and pneumatic suspension, or if each live axle has double tires and the permissible load of 9.50 t per axle is not exceeded 19.0 t

 - c. Double axle load for trailers taking into consideration the regulation for the single axle load
 - (1) axle distance less than 1.0 m 11.0 t
 - (2) axle distance 1.0 m to less than 1.30 m 16.0 t
 - (3) axle distance 1.3 m to less than 1.80 m 18.0 t
 - (4) axle distance 1.8 m or more 20.0 t

 - d. Triple axle load, taking into consideration the regulations for the double axle load
 - (1) axle distance 1.30 m or less 21.0 t
 - (2) axle distance more than 1.30 m to 1.40 m 24.0 t
 If vehicles are equipped not with pneumatic tires the maximum axle load must not exceed 4.00 t.

 - e. Total weight of individual vehicles, except for semi-trailers and centre axle trailers, taking into consideration the regulations for axle loads
 - (1) Vehicles with not more than 2 axles:
 - (a) vehicles or trailers 18.0 t
 - (2) Vehicles with more than 2 axles:
 - (a) vehicles 25.0 t
 - (b) vehicles with a double axle load according to Para b. (4) 26.0 t
 - (c) trailers 24.0 t
 - (d) buses which are constructed as articulated vehicles 28.0 t
 - (3) Vehicles with more than 3 axles
 - (a) vehicles with 2 double axles, the centres of which are at least 4.00 m apart 32.0 t
 - (b) vehicles with 2 steering axles and a double axle load according to Para b.(4) with the permissible load referring to the distance

	between the centres of foremost and rearmost axle not exceeding 5.00 t per meter, not more than	32.0 t
(4)	Vehicles with more than 4 axles, taking into consideration the regulation under Para e.(3)	32.0 t
f.	<u>Total weight</u> of vehicle combinations (see Figure 6 above) taking into consideration the regulations for axle loads and individual vehicles	
(1)	vehicle combinations with less than 4 axles	28.0 t
(2)	two-axle vehicle with two-axle trailer	36.0 t
(3)	two-axle towing vehicle with two-axle semi-trailer	
	(a) with an axle distance of semi-trailer being 1.3 m or more	36.0 t
	(b) with an axle distance of semi-trailer exceeding 1.8 m, if live axle has double tires and pneumatic suspension, or is provided with equivalent suspension	38.0 t
(4)	other vehicle combinations with 4 axles	
	(a) with towing vehicle according to Para e.2.(a)	35.0 t
	(b) with towing vehicle according to Para e.2.(b)	36.0 t
(5)	vehicle combinations with more than 4 axles	40.0 t
(6)	three-axle vehicle with two- or three axle semi-trailer which transports a 40 foot ISO container in combined freight traffic in accordance with the applicable EU Directive	44.0 t

Country: GRC

- * 7 Motor vehicles with one rear-axle: 11 m (IT motor coaches excluded). Motor vehicles with two or more axles: 12 m.

Country: HUN

- * 8 In Hungary route permit is needed also for
- vehicles (sets of trucks) with gross weight of over 40.0 t
 - vehicles with load axle surpassing
 1. per axle 10.0 t
 2. for road saving axle 11.0 t
 3. for set of two axles, if the distance between the axles is not more than 2 meters 16.0 t
 4. for set of three axles if the distance between the end axles is not greater than 2.6 meters 22.0 t
 5. for set of three axles if the distance between the end axles is greater than 2.6 meters 24.0 t

If the distance between two axles is less than 1.0 m, the two axles shall be considered as one axle.

Country: ITA

* 9 ≤ 50; highways can be considered up to class 120; in peacetime forbidden for tracked vehicles.

* 10 **PERMISSIBLE AXLE LOAD**

d = axle distance in m

a.	<u>Single axle load</u>	
	single axles	10 t
	single axles (live)	11.5 t
b.	<u>Double axle load for trailers and semitrailers, taking into consideration the regulations for the single axle load</u>	
	(1) d < 1.0 m	11 t
	(2) 1.0 m ≤ d < 1.3 m	16 t
	(3) 1.3 m ≤ d < 1.8 m	18 t
	(4) d ≥ 1.8 m	20 t
c.	<u>Triple axle load for trailers and semitrailers, taking into consideration the regulations for the double axle load</u>	
	(1) d < 1.0 m	21 t
	(2) 1.3 m ≤ d < 1.4 m	24 t
d.	<u>Double axle load for motor vehicles, taking into consideration the regulations for the single axle load</u>	
	(1) d < 1.0 m	11.5 t
	(2) 1.0 m ≤ d < 1.3 m	16 t
	(3) 1.3 m ≤ d < 1.8 m	18 t
	(4) 1.3 m ≤ d < 1.8 m, if live axle has double tires and pneumatic suspension, or if each live axle has double tires and the permissible load of 9.50 t per axle is not exceeded	19 t

Whatever the type of the vehicle is, the mass burdening on the more loaded axle must not exceed 12 t.

PERMISSABLE TOTAL WEIGHT FOR INDIVIDUAL VEHICLES

a.	<u>Vehicles</u>	
	(1) 1 axle	5 t
	(2) 2 axles	8 t
	(3) 3 or more axles	10 t
b.	<u>Single Motor Vehicle</u>	
	(1) 2 axles	18 t
	(2) 3 or more axles	25 t
	(3) 3 axles (with double tires and pneumatic suspensions)	26 t

	(4) 4 or more axles (with double tires and pneumatic suspensions)	32 t
c.	<u>Prime Mover and Trailer with 3 axles</u>	24 t
d.	<u>Tractor and Semi/Trailer or Articulated Bus with 3 axles</u>	30 t
e.	<u>Prime Mover and Trailer, Tractor and Semi-Trailer or Articulated Bus with 4 axles</u>	40 t
f.	<u>Prime Mover and Trailer, Tractor and Semi-Trailer or Articulated Bus with 5 or more axles</u>	44 t
g.	<u>Trailers</u>	
	(1) 1 axle	6 t
	(2) 2 axles	22 t
	(3) 3 or more axles	26 t

PERMISSIBLE TOTAL WEIGHT FOR VEHICLE COMBINATIONS

a.	<u>Prime mover and Trailer with 5 or 6 axles</u>	
	(a) two-axle Motor Vehicle with three-axle trailer	40 t
	(b) three-axle Motor Vehicle with two or three-axle trailer	40 t
b.	<u>Tractor and Semi-Trailer with 5 or 6 axles</u>	
	(a) two-axle Motor Vehicle with three-axle semi-trailer	40 t
	(b) three axle Motor Vehicle with two or three- axle semi-trailer	40 t
	(c) three-axle Motor Vehicle with two or three-axle semi-trailer which transports 40 ft ISO container	44 t
c.	<u>Prime Mover and Trailer with 4 axles consisting of two-axle Motor Vehicle with two-axle Trailer</u>	36 t
d.	<u>Tractor and Semi-Trailer with 4 axles consisting of two-axle Motor Vehicle with two-axle Semi-Trailer</u>	36 t

*11

Country: SVK

Type of Vehicles	Permissible total weight			Permissible axle load		
	2 axles	3 axles	>=4 axles	Per axle	Bogie w/2 axles	Bogie w/3 axles
Single vehicle	18,0 t	25,0 t	32,0 t	10,0 t	16,0 t	24,0 t
Trailer	18,0 t	24,0 t	32,0 t	10,0 t	16,0 t	21,0 t
Semi-trailer	-	-	-	10,0 t	18,0 t	24,0 t
-tractor and semi trailer	-	-	-	40,0 t	-	-
- other types	-	-	-	40,0 t	-	-

Table 5-IV : Special Movement Regulations in SVK

- a. Gross vehicle weight can be no more than on motor vehicle with three axles; 25,0 t
if power axle is equipped by double-tyre installation and pneumatically or other
equivalent sprung with maximum weight, that is 9,5 t on each axle 26,0 t
- b. Propelling from gross vehicle weight fall on his component axles can not top on motor
vehicle with two axles total weights fall on two axles at their component axle base
from 1,0 m and less than 1,3 m 16,0 t
from 1,3 m and less than 1,8 m 18,0 t
from 1,8 m and less than 1,8 m , if power axle is equipped by double-tyre installation
and pneumatically or other equivalent sprung 19,0 t
- c. on towed vehicle with two axles total weights fall on two axles at their component axle
base
from 1,0 m and less than 1,3 m 16,0 t
from 1,3 m up to 1,8 m including
18,0 t
- d. on towed vehicle with three axles total weights fall on each three axles at their
component axle base
up to 1,3 m including 21,0 t
over 1,3 m up to 1,4 m including 24,0 t

Country : NLD

- *12 Maximum:
 total weight: 50,000 kg (50 t);
 single axle load: 10,000 kg (10 t);
 double axle load: 18,000 kg (18 t);
 double axle load: 20,000 kg (20 t), if axle distance >2,00 m;
 triple axle load: 24,000 kg (24 t).

The maximum width of vehicles is 2.6 m. When a vehicle weights equal or more than 10,000 kg (10 t) the maximum width may not exceed 2.55 m.

* 13

Country: POL

Type of vehicles: All types including trailers	Permissible total weight				Permissible axle load			
					Distance between axles*			
	2 axles	3 axles	4 axles	>4 axles	Per Axle	<1,2m	1,2-1,3m	>1,3m
	16t	24t	32t	42t	8t	5,7t per axle	6,5t per axle	7,2t per axle

* - for all kind of vehicles and trailers with more than two axles in the front or rear part.

Country: PRT

- *14 a. Permissible total weight: See Table 5-VII
 b. Permissible axle load. The maximum gross weight allowed per axle is as follows:
 (1) Single axle.
 Front (motor vehicles) 7.5 t
 Single axle (not live) 10 t
 Single axle (live) 12 t

Type of Vehicles	Permissible total weight (tons)							
	1 axles	2 axles	3 axles	>3 axles	4 axles	>4 axles	>5 axles	>5 axles w/40' ISO container
Single Vehicle	--	19	26	--	--	32	--	--
Tractor and Semi-trailer	--	--	29	--	38	--	40	44
Prime mover & Trailer	--	--	29	--	37	--	40	--
Trailers	10	18	--	24	--	--	--	--

Table VII: Permissible total weight.

- (2) **Double axle** (live or not-live) -the distance (L) is measured between the axles-
 - L less than 1 m 12 t
 - L 1 m up to 1.29 m 17 t
 - L 1.3 m up to 1.79 m 19 t
 - L equal or bigger than 1.8 m 20 t
- (3) **Triple axle** (live or not-live) -the distance (D) is measured between the two end axles-
 - D less than 2.6 m 21 t
 - D equal or bigger than 2.6 m 24 t

The gross weight carried out on the axle or live axles of a vehicle or vehicles can not be less than 25% of the gross weight of the vehicle or vehicle combinations. The gross weight falling on the front axle can not be less than 20% or 15% of the total gross weight corresponding, respectively, to vehicles with one ore more rear axles.

Country: ESP

- *15 Max. load per single axle 13 t
- Max. load per tandem axle 21 t
- (Two single axles separated 1.5 m. or less are considered a tandem axle)
- From a separation of 1.35 m. down, the maximum limit of 21 t has to be reduced in 700 kg for each decrease of 0.05 m. in the distance between the twin axles.
- Vehicles with two axles, max weight 20 t
- Vehicles with three axles, max weight 26 t
- Vehicles with more than three axles, max weight 38 t
- Combined or articulated vehicles, max weight 38 t
- Max load density between farthest axles: 5 t per meter
- Max pressure to the road: 9 kg per square/cm

Country: GBR

- *16 In UK the legal limit is effectively 13.6 m for the semi-trailer and the overall combination limit of prime mover and semi-trailer is limited to 16.5 m.

A trailer with at least 4 wheels (and one which is not a semi-trailer or composite trailer) being drawn by a goods vehicle with a maximum gross weight exceeding 3500 kg may have a maximum length of 12 m. Any other trailer is limited to a maximum of 7 m.

For a large motor coach fitted with seating for more than 8 passengers and which is able to turn within a circle of 24 m diameter maximum and an inner circle of 10.6 m diameter maximum, the overall length may be no more than 12 m.

For a large motor coach (see Note 12) the maximum height is 4.57 m. For tractor and semi-trailer combinations there is a limit of 4.2 m. Certain vehicles or combinations over 3.66 m, eg carrying containers or heavy plant, must carry a note in the vehicle cab which states the height in feet and inches.

Country: USA

There is no uniform standard for special movement vehicle dimensions and weight limits in the United States. Contact the Defense Movement Coordinator (DMC) in the State Movement Control Center where the convoy will originate.

CHAPTER 6MARKING OF MILITARY VEHICLESANNEXES ON NATIONAL DISTINGUISHING SYMBOLS FOR:

- A. Belgium
- B. Canada
- C. Czech Republic
- D. Denmark
- E. France
- F. Federal Republic of Germany
- G. Greece
- H. Hungary
- I. Italy
- J. Luxembourg
- K. Netherlands
- L. Norway
- M. Poland
- N. Portugal
- O. Spain
- P. Turkey
- Q. United Kingdom
- R. United States

601. RELATED DOCUMENTS

- STANAG 2010 ENGR - Military Load Classification Markings.
- APP-6 - Military Symbols for Land Based Systems.
- STANAG 2931 TOP - Cross and Red Crescent on Land in Tactical Operations.

602. SECURITY

When the interests of security so demand, the markings (including national markings on medical vehicles) may be covered or removed. The markings of medical vehicles in accordance with paragraph 609.3 are not to be covered or removed. This exception does not, however, preclude the complete camouflage or concealment of medical vehicles.

603. REGISTRATION NUMBERS

The marking of vehicles with registration numbers (or a combination of letters and numbers) is to be determined by the national authorities concerned.

604. NATIONAL DISTINGUISHING SYMBOLS

The national symbols illustrated in Annexes A to R are to be used to identify the vehicles of each nation. As a minimum, symbols must be shown front and rear.

605. GENERAL OFFICERS MARKINGS

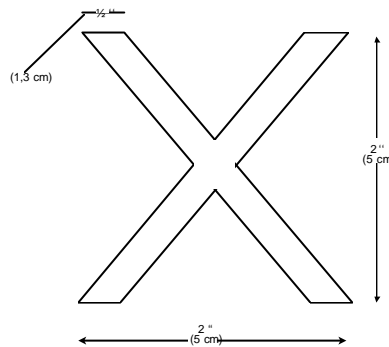
1. Symbols. The symbols to be used for marking vehicles carrying general officers or their equivalent are either "Xs", stars or equivalent rank symbols on a plate secured to the front and rear of the vehicle. The symbols are to be arranged in a horizontal line centred on the plate as follows:

- | | | |
|----|----------------------------------|-------------|
| a. | General or equivalent | - 4 symbols |
| b. | Lieutenant General or equivalent | - 3 symbols |
| c. | Major General or equivalent | - 2 symbols |
| d. | Brigadier General or equivalent | - 1 symbol |

2. Size of Plate. The plate is to be approximately 6 inches (15 cm) high by 12 inches (30 cm) wide.

3. Colours. The colours of the plate are optional, but the symbols are to be white, silver or gold.

4. Dimensions. Symbols are to be approximately 2 inches (5 cm) by 2 inches (5 cm). See figure 1 below.



5. Position of Plates. The plates are to be positioned at the right end of the front bumper and the left end of the rear bumper, looking in the direction of travel (or in comparable positions if bumpers are not available).

6. Flags. Flags indicating the rank or function of general officers may be flown at the discretion of the field commander or national authority concerned.

606. BRIDGE CLASSIFICATION MARKINGS

Bridge classification marking are to be placed on vehicles in accordance with STANAG 2010.

607. SPEED LIMIT MARKINGS

Speed limit markings are to be placed on vehicles as directed by the national authority concerned.

608. TACTICAL MARKINGS

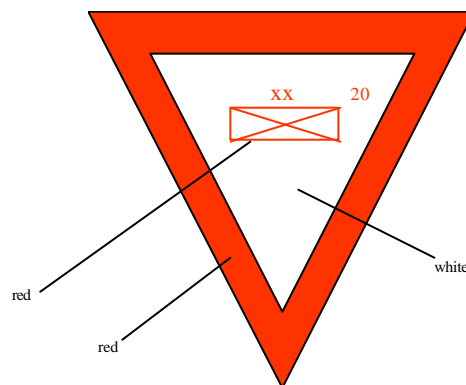
Tactical markings serve in general as identification markings within units, and consist of stripes and geometrical figures or combinations thereof, and may also include a name. Colours may be used. The markings should be large enough to make ground to ground identification of vehicles possible. Such markings are provided primarily for easy battlefield recognition. The design and position of such markings are to be prescribed by the field commander directing their use. They are to be removed when vehicles are permanently released from the jurisdiction of the commander prescribing their use.

609. SPECIAL MARKINGS

1. Marking of vehicles transporting dangerous goods. These vehicles will be marked in

accordance with existing national regulations and international agreements.

2. Military Police and Traffic Control. Military police and traffic control vehicles are to be marked prominently front and rear by means of signs with the military police or traffic control conventional symbol (see APP-6).
3. Medical Vehicles. Ambulances and other vehicles provided exclusively for medical purposes are to be marked in conformity with the rules of the Geneva Convention. Such markings are one Red Cross or Red Crescent on a square or round white background painted on:
 - a. Side body panels.
 - b. Roof of body.
 - c. Roof of driver's cab.
 - d. Rear door(s) or panel.
4. Explosive Ordnance Disposal. Vehicles of explosive ordnance disposal units will be marked in accordance with existing national regulations and international agreements. In Western Europe these vehicles are to have all mudguard painted red.
5. Priority Vehicles¹. Any vehicle which for any reason (special liaison officers, signal vehicles carrying priority dispatches, damage assessment personnel, etc.) carrying priority over all other vehicles may be so marked by any commander having area responsibility. Such priority markings are valid only in the area of the commander concerned. The marking is to consist of an equilateral triangle of red border on a white background displayed on the front and rear of the vehicle as indicated below and marked with red symbols. A single priority sign may be used if visible from both front and rear. The size of priority signs will depend on the dimensions of the vehicle concerned.

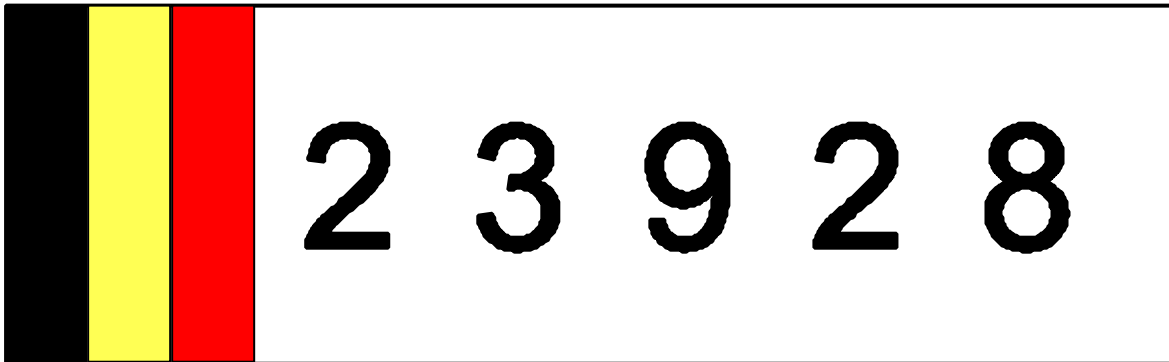


610. MARKING AND IDENTIFICATION OF VEHICLES FOR ROAD MOVEMENTS
The marking and identification of these vehicles are to be in accordance with Chapter 5.

¹ The symbol inside the triangle is to indicate the commander authorizing use of this priority sign. This sign must be removable in order to avoid misuse and normally is used only on direct orders of the commander concerned.

NATIONAL DISTINGUISHING SYMBOL FOR MARKING OF
MILITARY VEHICLES
SYMBOLE DISTINCTIF DE NATIONALITE POUR LE MARQUAGE DES VEHICULES
MILITAIRES

1. Nation: Belgium/Belgique.
2. Symbol: Rectangular plate (or marking on combat vehicles bearing registration number in black figures on a white background, preceded by the national colours (black, yellow and red) in the form of a strip placed at the end and across the whole width of the plate.
Plaque rectangulaire (ou marque rectangulaire sur les véhicules de combat) comportant le numéro d'immatriculation en chiffres noirs sur fond blanc, précédé des couleurs nationales (noir, jaune et rouge) sous forme de bandes verticales placées à l'extrémité et sur toute la hauteur de la plaque.
3. Example/Exemple:



NATIONAL DISTINGUISHING SYMBOL FOR MARKING OF
MILITARY VEHICLES
SYMBOLE DISTINCTIF DE NATIONALITE POUR LE MARQUAGE DES VEHICULES
MILITAIRES

1. Nation: Canada.
2. For garrison and administrative vehicles/Pour les véhicules de garnison et administratifs:
 - a. Symbol/Symbole: The red Canadian flag, whose proportions are two by length and one by width, containing in its centre a white square the width of the flat, bearing a single red maple leaf.
Le drapeau canadien rouge dont la longueur est le double de la largeur accolée à la hampe; il comporte en son centre un carré blanc dont la hauteur est égale à la largeur du drapeau, portant une seule feuille d'érable rouge.
 - b. Example/Exemple:



3. For combat/tactical vehicles/Pour les véhicules de combats et tactiques:

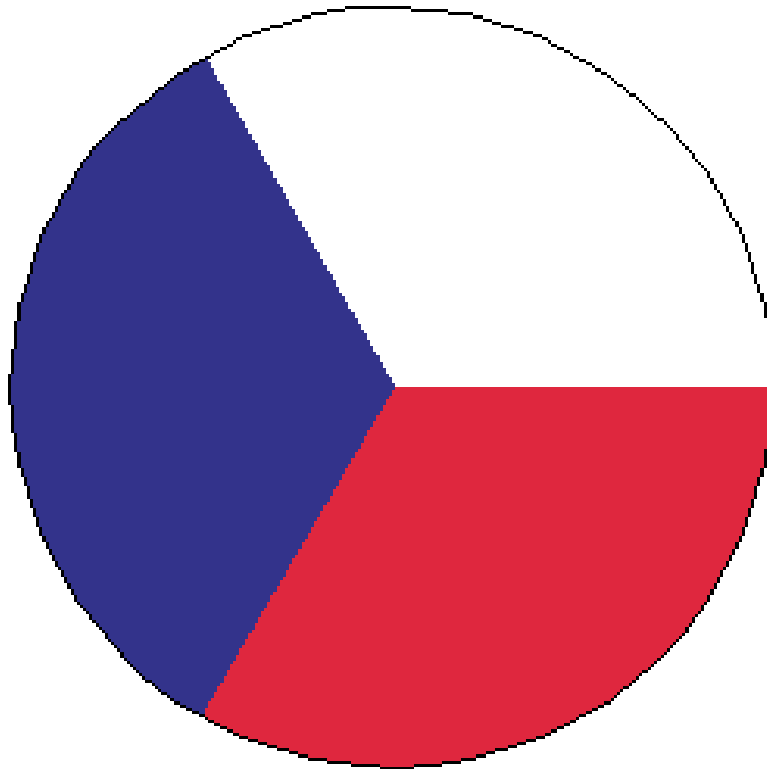
a. Symbol/Symbole: A single red maple leaf/une seule
feuille d'érable rouge.

b. Example/Exemple:



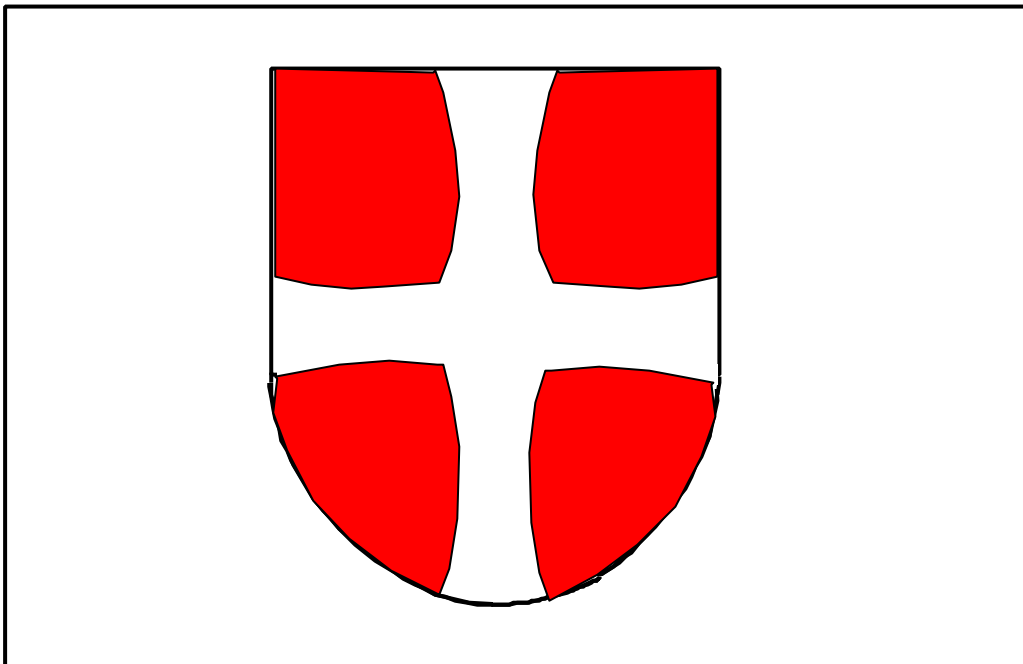
NATIONAL DISTINGUISHING SYMBOL FOR MARKING OF
MILITARY VEHICLES
SYMBOLE DISTINCTIF DE NATIONALITE POUR LE MARQUAGE DES VEHICULES
MILITAIRES

1. Nation: The Czech Republic/ La République Tchèque
2. Symbol/Symbole: The Czech national flag in a circle shape divided into three colour segments: blue on the left, red on the bottom, white on the top (see example). The national distinguishing symbols are to be positioned at the right front part and the left rear part of the vehicles and on both front vehicle doors.
Le drapeau national Tchèque dans un cercle divisé en trois couleurs: bleu sur la gauche, rouge en bas et blanc au sommet (voir l'exemple). Les symboles distinctifs nationaux doivent être placés sur la partie avant droite et arrière gauche des véhicules et sur les deux portes avant des véhicules.
3. Example/Exemple:



NATIONAL DISTINGUISHING SYMBOL FOR MARKING OF
MILITARY VEHICLES
SYMBOLE DISTINCTIF DE NATIONALITE POUR LE MARQUAGE DES VEHICULES
MILITAIRES

1. Nation: Denmark/Danemark.
2. Symbol/Symbole: Red shield with white cross/Ecu rouge à croix blanche.
3. Example/Exemple:



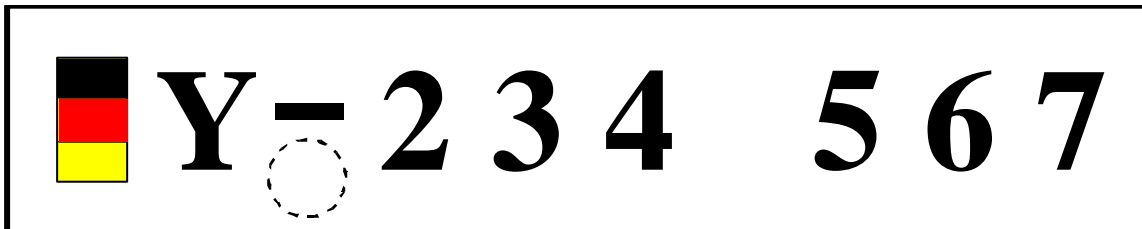
NATIONAL DISTINGUISHING SYMBOL FOR MARKING OF
MILITARY VEHICLES
SYMBOLE DISTINCTIF DE NATIONALITE POUR LE MARQUAGE DES VEHICULES
MILITAIRES

1. Nation: France.
2. Symbol/Symbole: Rectangular plate (or marking on combat vehicles) bearing registration number in white figures, on a black background, preceded by the national colour (blue, white and red) in the form of a strip placed at the end and across the whole width of the plates.
Plaque rectangulaire (ou marquage rectangulaire sur les véhicules de combat) comportant le numéro d'immatriculation en chiffres blancs sur fond noir, précédé des couleurs nationales (bleu, blanc et rouge) sous forme de bandes verticales placées à l'extrémité et sur toute la hauteur de la plaque.
3. Example/Exemple:



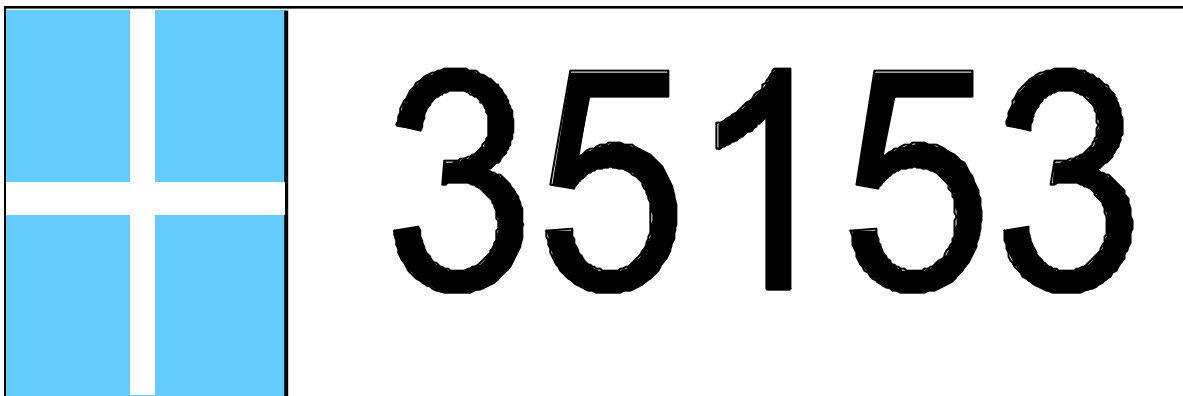
NATIONAL DISTINGUISHING SYMBOL FOR MARKING OF
MILITARY VEHICLES
SYMBOLE DISTINCTIF DE NATIONALITE POUR LE MARQUAGE DES VEHICULES
MILITAIRES

1. Nation: Federal Republic of Germany/République Fédérale d'Allemagne.
2. Symbol: Rectangular plate (in the case of semi- or full-tracked vehicles the plate is painted on) showing a Y, a hyphen, a stamp and the registration number in black on a white background. The plate has a black edge. On the left hand side of the plate the national colours (black, red, gold) are shown in horizontal stripes.
Plaque rectangulaire (sur les véhicules chenillés et semi-chenillés le rectangle est peint) portant un Y, un tiret, un tampon et le numéro d'immatriculation en noir sur fond blanc. La plaque est bordée de noir. A gauche de la plaque les couleurs nationales (noir, rouge et or) sont disposées en bande horizontales.
3. Example/Exemple:



NATIONAL DISTINGUISHING SYMBOL FOR MARKING OF
MILITARY VEHICLES
SYMBOLE DISTINCTIF DE NATIONALITE POUR LE MARQUAGE DES VEHICULES
MILITAIRES

1. Nation: Greece/Grèce.
2. Symbol/Symbole: Rectangular plate (or marking on combat vehicles) bearing registration number in black figures on a white background, preceded by a white christian cross on blue background.
Plaque rectangulaire (ou marque rectangulaire sur les véhicules de combat) comportant le numéro d'immatriculation en chiffres noirs sur fond blanc précédé d'une croix chrétienne blanche sur fond bleu.
3. Example/Exemple:



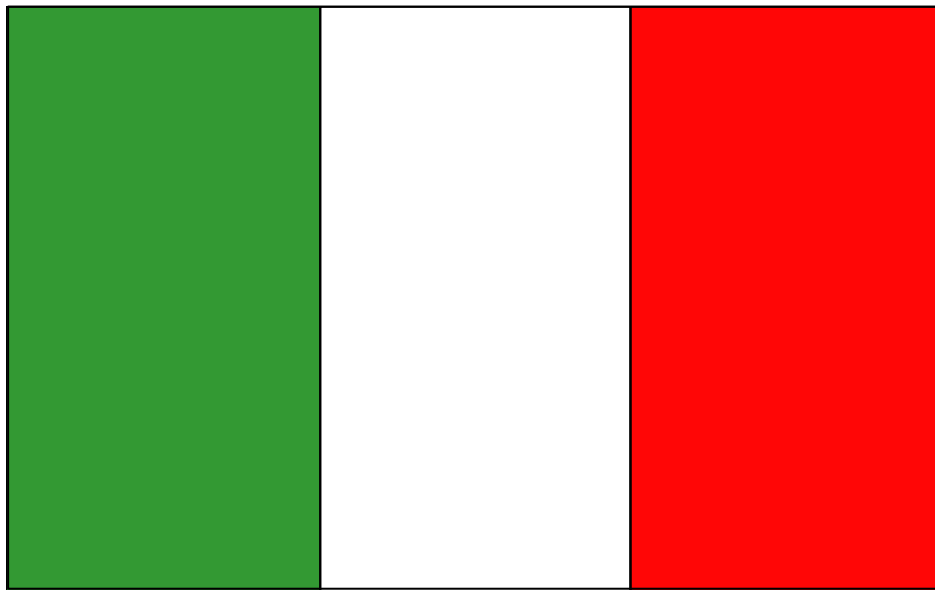
NATIONAL DISTINGUISHING SYMBOL FOR MARKING OF
MILITARY VEHICLES
SYMBOLE DISTINCTIF DE NATIONALITE POUR LE MARQUAGE DES VEHICULES
MILITAIRES

1. Nation: Hungary/Hongrie.
2. Symbol/Symbole:
 - a. Rectangular white plate with the national tricolour (red, white, green) on the left hand side, bearing a black registration number consisting of 2 letters (the first is always H) and 4 digits.
Plaque rectangulaire blanche comportant le drapeau tricolore national (rouge, blanc, vert) sur le côté gauche, et un numéro d'immatriculation noir constitué de deux lettres (la première est toujours un "H" et quatre chiffres.
 - b. Combat vehicles do not bear this registration number but are marked with a tricolour triangle.
Les véhicules de combat ne comportent pas de numéro d'immatriculation mais marqués d'un triangle tricolore.
3. Example/Exemple:



NATIONAL DISTINGUISHING SYMBOL FOR MARKING OF
MILITARY VEHICLES
SYMBOLE DISTINCTIF DE NATIONALITE POUR LE MARQUAGE DES VEHICULES
MILITAIRES

1. Nation: Italy/Italie.
2. Symbol/Symbole: Tricolour Flag (green, white, red).
Drapeau tricolore (vert, blanc, rouge)
3. Example/Exemple:



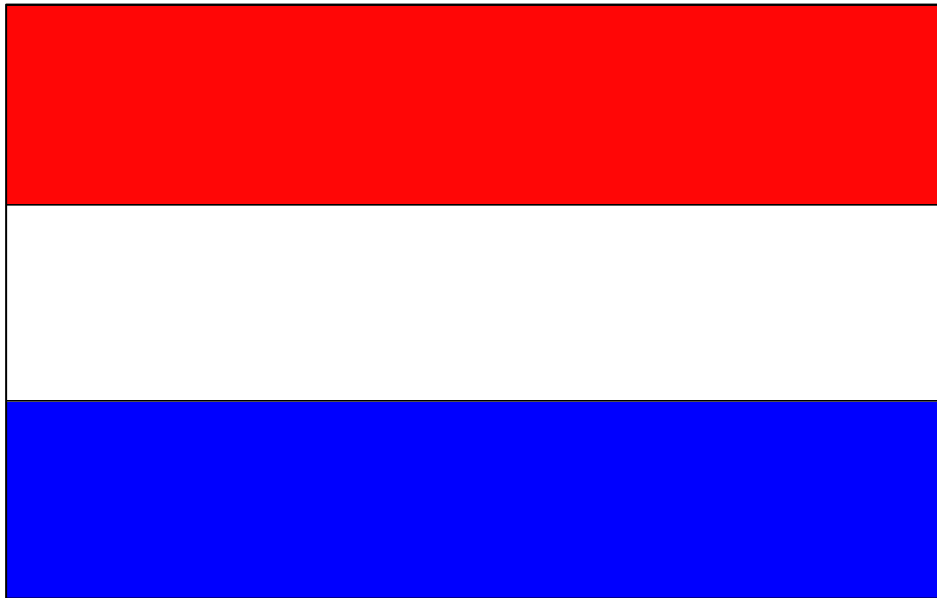
NATIONAL DISTINGUISHING SYMBOL FOR MARKING OF
MILITARY VEHICLES
SYMBOLE DISTINCTIF DE NATIONALITE POUR LE MARQUAGE DES VEHICULES
MILITAIRES

1. Nation: Luxembourg.
2. Symbol/Symbole: Rectangular plate bearing registration number in white figures on a black background, preceded by red lion on horizontally striped blue and white background.
Plaque rectangulaire comportant le numéro d'immatriculation en chiffres blancs sur fond noir précédé des armoiries du Grand-Duché (lion rouge sur fond rayé horizontalement bleu et blanc).
3. Example/Exemple:



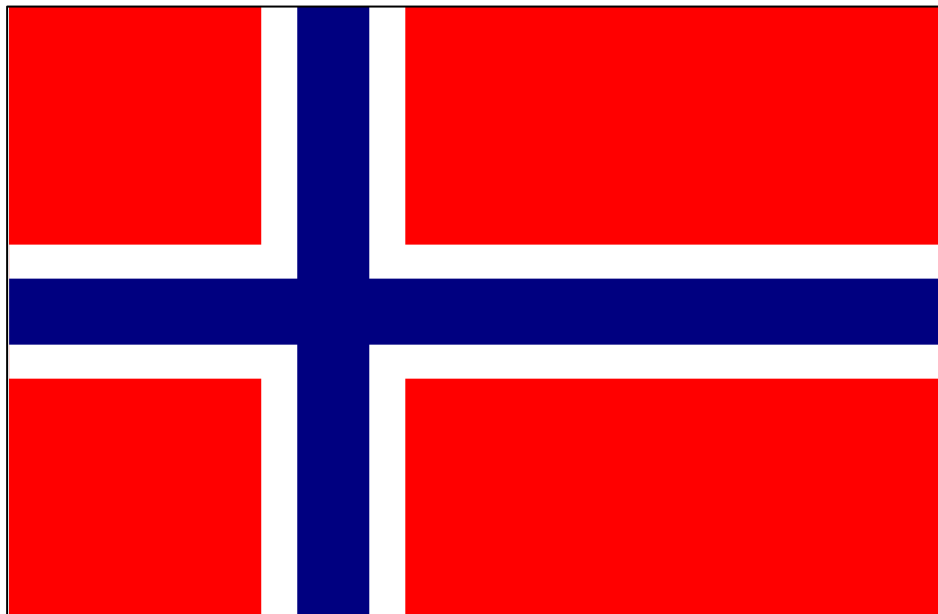
NATIONAL DISTINGUISHING SYMBOL FOR MARKING OF
MILITARY VEHICLES
SYMBOLE DISTINCTIF DE NATIONALITE POUR LE MARQUAGE DES VEHICULES
MILITAIRES

1. Nation: The Netherlands/Pays-Bas.
2. Symbol/Symbole: Tricolour Flag, (red, white, blue). This symbol cannot be used in combination with the registration number.
Drapeau tricolore (rouge, blanc, bleu). Ce symbole ne peut pas être utilisé avec le numéro d'immatriculation.
3. Example/Exemple:



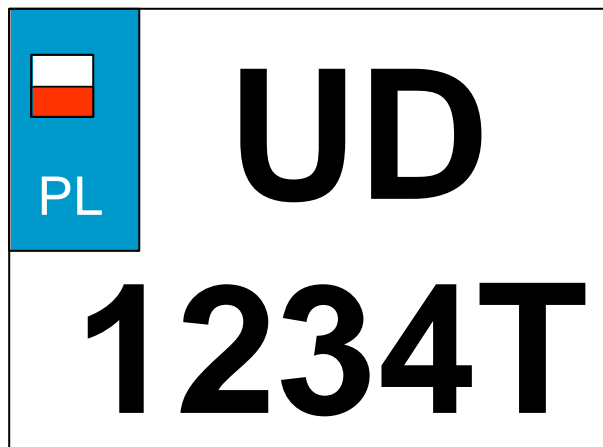
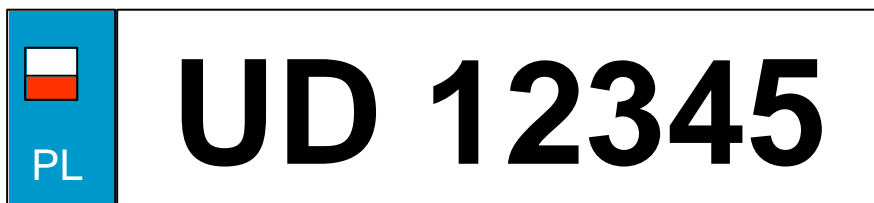
NATIONAL DISTINGUISHING SYMBOL FOR MARKING OF
MILITARY VEHICLES
SYMBOLE DISTINCTIF DE NATIONALITE POUR LE MARQUAGE DES VEHICULES
MILITAIRES

1. Nation: Norway/Norvège.
2. Symbol/Symbole: Norwegian Flag on a shield.
Drapeau norvégien sur un écu.
3. Example/Exemple:



NATIONAL DISTINGUISHING SYMBOL FOR MARKING OF
MILITARY VEHICLES
SYMBOLE DISTINCTIF DE NATIONALITE POUR LE MARQUAGE DES VEHICULES
MILITAIRES

1. Nation: Poland/Pologne
2. Symbol/Symbole:
 - a. Rectangular (or square) plate bearing registration number in black figures on a white background, preceded by the Polish flag (white and red) and white capitals "PL" on blue background – for garrison and administrative vehicles.
Plaque rectangulaire (ou carrée) comportant le numéro d'immatriculation en chiffres noirs sur fond blanc précédé d'un drapeau polonais (blanc et rouge) avec les lettres "PL" sur fond bleu - pour les véhicules de garnison et administratifs.
 - b. Rectangular (or square) directly painted sign (mark) on vehicles bearing registration number in black figures on a white background (with hyphen between capitals), preceded by the Polish flag (white and red) – for combat/tactical vehicles.
Un signe rectangulaire (ou carré) marqué sur les véhicules de combat, comportant le numero d'immatriculation en chiffres noirs sur fond blanc (avec un tiret entre les lettres) précédé d'un drapeau polonais - pour les véhicules de combats et tactiques.
3. Example/Exemple:
 - a. Rectangular (or square) plate bearing registration number/Plaque rectangulaire (ou carrée) comportant le numéro d'immatriculation



- b. Rectangular (or square) painted for combat/tactical vehicles/ Un signe rectangulaire (ou carré) sur les véhicules de combat

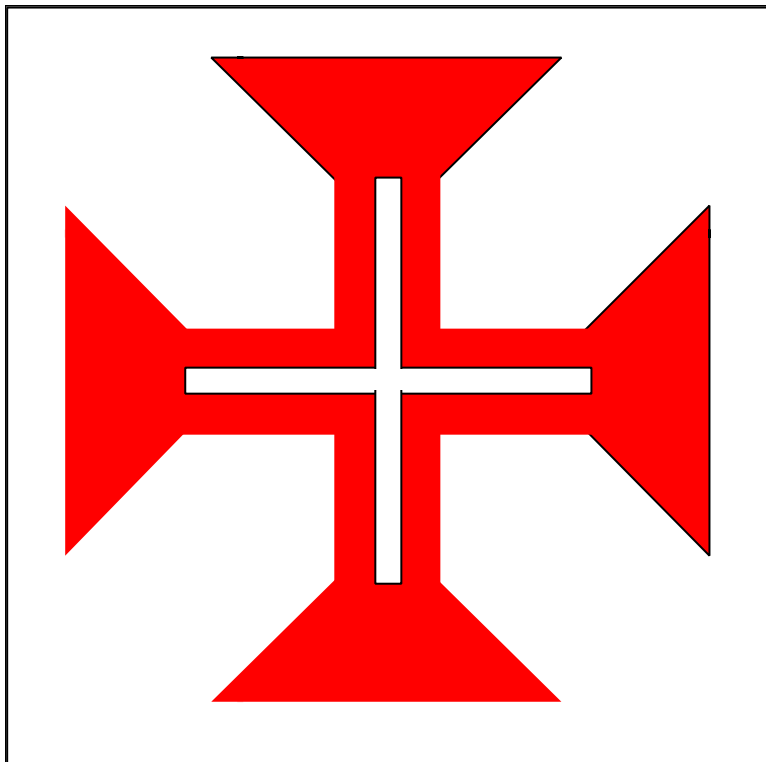


REMARKS:

1. "U" is always the first capital for all kind of military vehicles/"U" est toujours la première lettre pour tous les types de véhicules militaires.
2. "T" is always the last capital for all kind of military tracked vehicles/"T" est toujours la dernière lettre pour tous les types de véhicules chenillés.

NATIONAL DISTINGUISHING SYMBOL FOR MARKING OF
MILITARY VEHICLES
SYMBOLE DISTINCTIF DE NATIONALITE POUR LE MARQUAGE DES VEHICULES
MILITAIRES

1. Nation: Portugal.
2. Symbol/Symbole: White square with Portuguese Christian cross.
Croix chrétienne portugaise sur carré blanc.
3. Example/Exemple:



NATIONAL DISTINGUISHING SYMBOL FOR MARKING OF
MILITARY VEHICLES
SYMBOLE DISTINCTIF DE NATIONALITE POUR LE MARQUAGE DES VEHICULES
MILITAIRES

1. Nation: Spain/Espagne.
2. Symbol/Symbole: The Spanish flag (red, yellow, red). The central yellow strip is double the width of the red strips. This symbol cannot be used in combination with the registration number.
Le drapeau espagnol (rouge, jaune, rouge) dont la bande centrale jaune est deux fois plus large que les rouges. Ce symbole ne peut pas être utilisé avec le numéro d'immatriculation.
3. Example/Exemple:



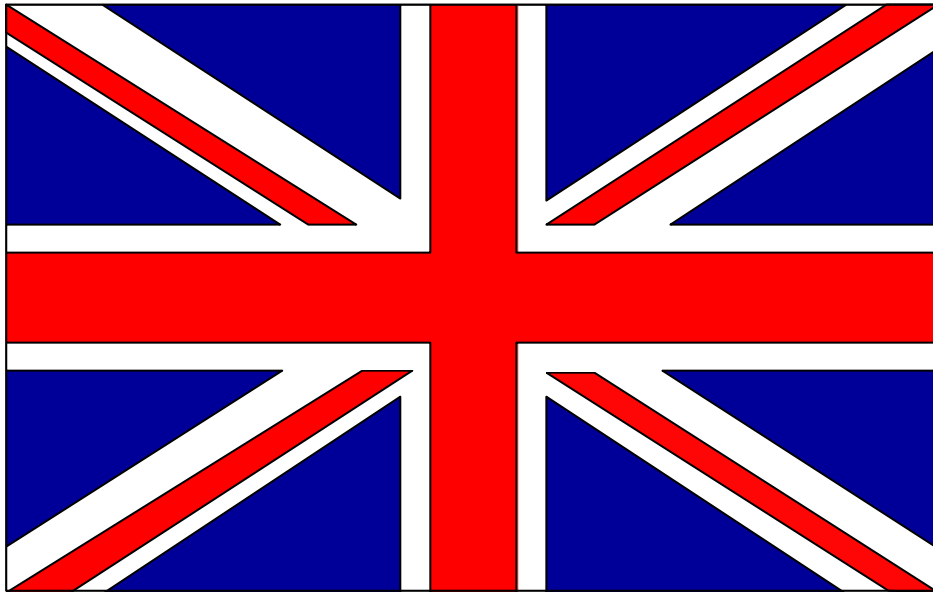
NATIONAL DISTINGUISHING SYMBOL FOR MARKING OF
MILITARY VEHICLES
SYMBOLE DISTINCTIF DE NATIONALITE POUR LE MARQUAGE DES VEHICULES
MILITAIRES

1. Nation: Turkey/Turquie.
2. Symbol/Symbole: White crescent and star on red background (as on Turkish flag).
Croissant et étoile blancs sur fond rouge (comme sur le drapeau turc).
3. Example/Exemple:



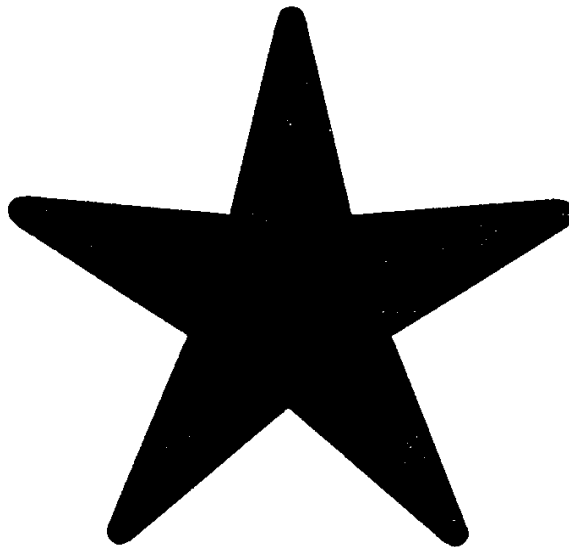
NATIONAL DISTINGUISHING SYMBOL FOR MARKING OF
MILITARY VEHICLES
SYMBOLE DISTINCTIF DE NATIONALITE POUR LE MARQUAGE DES VEHICULES
MILITAIRES

1. Nation: United Kingdom/Royaume-Uni.
2. Symbol/Symbole: Union Flag.
Drapeau de l'Union
3. Example/Exemple:



NATIONAL DISTINGUISHING SYMBOL FOR MARKING OF
MILITARY VEHICLES
SYMBOLE DISTINCTIF DE NATIONALITE POUR LE MARQUAGE DES VEHICULES
MILITAIRES

1. Nation: United States/Etats-Unis.
2. Symbol/Symbole: Black, five-pointed star.
Etoile noire à cinq points.
3. Example/Exemple:



CHAPTER 7

IDENTIFICATION OF MOVEMENT CONTROL AND TRAFFIC
CONTROL PERSONNEL AND AGENCIES

701. RELATED DOCUMENTS

- STANAG 1059 INT - National distinguishing letters for use by Nato armed forces.
- AAP-6 - Military symbols for landbased systems.
- STANAG 2035 TOP - Marking of headquarters and dumps.

702. IDENTIFICATION OF MOVEMENT CONTROL PERSONNEL

1. Armbands will be used to identify all movement control personnel who come into personal contact with forces (individual members and/or units of the forces) being moved by water, rail, road or air transport modes.
2. The armband will be red, approximately 42 cm (16 ½ in.) long and 9 cm (3 ½ in.) wide with an eight-spoked yellow wheel 7,5 cm (3 in.) in diameter, centred on the band.
3. The armband will be worn by movement control personnel while on duty in accordance with the uniform regulations of the country concerned, and in a manner so that the wheel is clearly visible. Staff Officers may wear normal staff armbands if that is the usual practice of the countries concerned.

703. IDENTIFICATION OF TRAFFIC CONTROL PERSONNEL

Personnel posted along routes and engaged in the physical direction of traffic control, will wear white cuffs. A general description (including recommended dimensions) of these cuffs is contained in chapter 2.

704. IDENTIFICATION OF MOVEMENT CONTROL AND TRAFFIC CONTROL
AGENCIES

1. Standard identification and guide signs shall be used to identify and provide road directions to movement control and traffic control agencies.
2. For those agencies which are part of a superior headquarters, identification signs will conform with STANAG 2035.
3. For those agencies which are not an integral part of a superior headquarters, identification signs will conform to AAP-6, Annex I.
4. The guide signs for the agencies noted in chapter 5 annex B will conform to chapter 4, and will display the following:
 - a. The symbols laid down in AAP-6, or if no appropriate symbol can be found in AAP-6, an eight-spoked wheel.
 - b. The national distinguishing letters in accordance with STANAG 1059.
 - c. The direction and/or distance to the agency concerned, if necessary.

CHAPTER 8 - DRIVER FAMILIARISATION

General

801. **Background.** Under their "Duty of Care" to their soldiers, commanders are required to ensure that drivers have completed familiarisation on the vehicles they are required to drive, before being permitted to drive without supervision.
802. **Aim.** The aim of this publication is to provide instructors from NATO nations with the information necessary to carry out driver familiarisation on military vehicles provided by another country.
803. **Application.** This training is the minimum to be provided when any nation supplies a vehicle or driver to another country, for its use during NATO joint operations or exercises.
804. **Eligibility for Training.** Training is only to be given to those service personnel, civil servants and contractors whose employment requires them to drive the vehicle and who hold the relevant full licence issued by their parent nation.
805. **Selection of trainers and assessors.** Those selected to instruct, and assess competence to drive, are to be experienced drivers who are conversant with the language of the donor nation.

Safety

806. **Risk Reduction.** Units are to ensure that risk of injury / accident is minimised throughout familiarisation training. Drivers and assessors are to be fully briefed on the training to be undertaken and the risks to be avoided. The following general measures are to be put in place.
- a. Instructors / assessors are to ensure all vehicles are fully roadworthy.
 - b. Vehicles and equipment are only used and operated in accordance with the operator's handbook. Drivers / operators are not to be put at risk by operating the vehicle / equipment for tasks or under conditions for which the vehicle / equipment is not designed.
 - c. The driver is to be made familiar with the particular handling characteristics of the individual vehicle before driving on the public road. This activity is to be carried out on a manoeuvring area. Whilst the driver becomes familiar with the vehicle, the instructor is to ensure that the manoeuvring area is "out of bounds" to other vehicles.
 - d. Wherever possible, the same route is to be used for assessment both by day and in hours of darkness. Where a number of units are co-located, formation transport staff are to provide co-ordination and ensure that route trafficking does not create major inconvenience to other road users.
 - e. Cross-country training is to be undertaken by a suitably qualified instructor. Training and assessment is to be planned so that there are always at least 2 vehicles present at

the training location. A first aid kit is to be available in the training vehicle at the training location and a means of communications to the emergency services.

- f. Training is to be planned so that fatigue amongst drivers and assessors is minimised.

Training Regime

807. **Method of Training.** The Training regime consists of both theoretical and practical training:

- a. The training is to be accomplished by completing the appropriate training objectives (TO), shown in the following annexes to ensure that a common standard is achieved.

TO No	Description	Annex
(a)	(b)	(c)
1	State the information required by the driver of a vehicle.	A
2	Identify the vehicle components.	B
3	Carry out Before Use, During Use and After Use checks on a vehicle.	C
4	Drive a vehicle on public roads by day and during limited visibility.	D
5	Drive a vehicle cross-country by day and during limited visibility.	E
6	Manoeuvre a vehicle being guided by hand signals.	F

- b. The depth of training required, prior to assessment, will vary on the previous experience of the driver. Prior to conducting training, instructors are to ascertain the previous experience of drivers and set training at an appropriate level and duration. An experienced driver should be able to complete the package in one 8-hour period; recommended training times shown in each Annex. There are benefits in using driving simulators to familiarise driving which cannot be replicated in all areas.
- c. The format of training to be used should be progressive. The following system is recommended:
 - (1) Practical training on the stationary vehicle and verification tests.
 - (2) Practical driving test.
 - (3) Issue of the Certificate of Competence

808. **Student – Instructor Ratio.** The student to instructor ratio will vary:

- a. Theoretical training will be limited by the size of the classroom or area available. It is recommended that the maximum ratio of students to instructor is 12:1.
- b. Driving on public roads is to be limited to the seating capacity of the vehicle cab.

- c. Cross-country driver assessment is to be undertaken on a 1:1 student – assessor ratio; the assessor being seated in the cab. No passengers are to be carried in the vehicle for the duration of assessment unless the vehicle is fitted with a crew cab and rear passenger doors.
809. **Method of Assessment.** Assessment is to be of both theoretical knowledge and practical skills. The practical skills are to be demonstrated both in daylight and during hours of darkness.
810. **Training To Drive With Trailers.** Where a driver is required to drive a vehicle towing a trailer, the training programme is to incorporate familiarisation training in the coupling, uncoupling and operation of the trailer. To be fully familiarised each driver is to undertake the training at Annexes D to F with the prime mover being attached to the appropriate trailer. The driver is also to practice / demonstrate the procedure for the coupling and uncoupling of the trailer from the prime mover. It is strongly recommended that this training is only carried out once a driver is fully proficient in the operation of the prime mover.
811. **Operation Of Vehicle Fitted Equipment.** Additional instruction is to be given to drivers who will be required to operate ancillary items. Such training does **not** form part of this package.
- a. Radio or weapons operators are to be trained in the use and maintenance of radio installation kit or weapon mounting equipment. Such training is to be undertaken by a trained radio or weapons instructor.
- b. Training in the operation of cranes, winches and tippers is only to be provided by specialist instructors who have completed the appropriate training.
812. **Training Resources.** Equipment and resources required during training are to be utilised for assessing competence. Specimen question papers are also included where written confirmation of knowledge is required.
813. **Lack of Competence.** Drivers who fail to demonstrate competence, after initial training, are to receive further training and be re-assessed by the appropriate instructor. Should a driver fail to achieve competence after further training, the matter is to be brought to the attention of the employing officer who is to decide, in concert with the officer responsible for familiarisation training, what action should then be taken.

Driver Familiarisation – Certificate of Competence

814. On commencement of training, a record is to be opened in respect of each driver; the format of which is at Annex G. The driver must complete all elements detailed on the Certificate of Competence in order to successfully complete familiarisation training. As each TO is completed, against the requirements listed in paragraph 807a, the name of the assessor and the date is to be entered.
815. Once all TO's have been completed, the record is to be countersigned by the driver and the Driving Permit Officer. The completed record is to be retained in the driver's personal records. Successful completion of familiarisation is also to be recorded on the unit MT Management Information System and the Driver's Permit. The certificate may be used as a driving qualification where the familiarisation training requirement is above that required by the national licensing authority.

Annexes:

- A. Training Objective No 1.
- B. Training Objective No 2.
- C. Training Objective No 3.
- D. Training Objective No 4.
- E. Training Objective No 5.
- F. Training Objective No 6.
- G. Certificate of Competence.

ANNEX 8A - TRAINING OBJECTIVE No 1

Instructors Notes

1. **Performance:** State the information required by the driver of a vehicle.
2. **Conditions:** Written or oral, as an individual, without assistance or access to references.
3. **Standards:** Each driver must:
 - a. State the following specifications:
 - (1) The vehicle length, width and height.
 - (2) Maximum authorised mass and unladen weight.
 - (3) Axle weights and Military Bridge classification.
 - (4) Turning circle.
 - (5) Cross-country capabilities (maximum slope, gradients, step, wading).
 - (6) Passenger capacity.
 - (7) Fuel - type and capacity.
 - (8) Range of operations.
 - (9) Maximum vehicle speed on normal roads, on dual carriageways and on motorways.
 - b. State the action to be taken following a breakdown and a Road Traffic Accident (RTA).

**Outline Lesson Plan - Training Objective 1
State Vehicle Specifications**

Serial	Main Teaching Points	Method Of Instruction	Resources
1	<p>Dimensions:</p> <ul style="list-style-type: none"> • Length, width and height - driver's legal responsibility for ensuring vehicle does not attempt to travel on restricted route e.g. low bridges. • Maximum Authorised Mass (MAM) and unladen weight. • Axle weights and military bridge classification markings - driver's legal responsibility for ensuring vehicle is not overloaded nor passes over restricted weight bridges. • Turning circle - drivers must ensure that vehicle is able to be manoeuvred within road patterns. 	Theory Lesson	1 x Classroom 1 x OHP 1 x Screen
2	<p>Capacities:</p> <ul style="list-style-type: none"> • Load Capacity – linked to MAM and axle weights. • Passenger capacity (cab and body) - not to be exceeded, numbers of troops to be reduced when wearing equipment. • Fuel (type & capacities) linked to range of operations. 		
3	<p>Range of operations:</p> <ul style="list-style-type: none"> • Range is reduced by excessive speed, use of the vehicle off-road and when load is being carried. • Requirement to pre-plan refuelling points to ensure that vehicle does not run out of fuel. 		
4	<p>Cross-country capabilities:</p> <ul style="list-style-type: none"> • Maximum gradients and slope. • Maximum Step – linked to approach and departure angle. • Wading – maximum depth after preparation. 		
5	<p>Speed Limits:</p> <ul style="list-style-type: none"> • MOD vehicles may be required to drive at lower speeds than national limits owing to construction of vehicle. • Maximum speeds are normal roads, dual carriageways and motorways. • Braking distances: Increased by load on vehicle, road surface (wet / icy / cobbles/ gravel). 		
Time	Recommended Training Time		Periods
40 mins	30 minutes teaching – 10 minutes for assessment		1.00

Specimen Question Paper
State The Vehicle Specifications, the Licence Requirement and Maximum Speed

Maximum time allowed to complete the test - 10 Mins
All elements must be completed

Details of Driver			
Staff/Service Number		Rank and Surname	

Requirement	Answer
Vehicle Length	
Vehicle Width	
Vehicle Height	
Maximum Authorised Mass	
Unladen Weight	
Axle Weights	
Bridge Classification	
Turning Circle	
Maximum Nos (passengers) in cab	
Maximum Nos (passengers) in cargo compartment	
Fuel Type and Tank Capacity	
Range of Operations	
Maximum gradient (cross country)	
Maximum slope (cross country)	
Maximum step (cross country)	
Maximum wading depth (cross country)	
Licence required for troop carrying role	
Licence required for load carrying role	
Maximum Service Speed – Normal roads	
Maximum Service Speed – Dual carriageways	
Maximum Service Speed – Motorways	

Outline Lesson Plan - Training Objective 1
State the action to be taken following a breakdown and RTA

Serial	Main Teaching Points	Method of Instruction	Resources
State the action to be taken following a breakdown			
1	Move to a safe place: <ul style="list-style-type: none"> • Avoid stopping on the hard shoulder of a dual carriageway. • If travelling in a convoy only the unserviceable vehicle must stop; the remainder must continue unless special security arrangements apply. 	Theory Lesson	1 x Classroom 1 x OHP 1 x Screen 1 x Instructor
2	Carry out safety precautions: <ul style="list-style-type: none"> • Switch on hazard warning lights. • Put on any reflective clothing before leaving the cab. • Move passengers to a safe place (for example beyond the safety barriers on a motorway). • Erect warning triangle. 		
3	Attempt self help repairs: <ul style="list-style-type: none"> • Only if it is safe to do so and within driver's competence. • Especial care is to be taken when on the hard shoulder of a motorway. 		
4	Contact the breakdown recovery service: <ul style="list-style-type: none"> • After calling, return to your vehicle: 		
5	Provide traffic control if necessary.		
6	Remain at the reported location until assistance arrives: <ul style="list-style-type: none"> • If the vehicle has been involved in an accident, no attempt should be made to effect repair. 		
State the action to be taken following a RTA			
7	Minimise risk of fire, explosion or spillage of load: <ul style="list-style-type: none"> • Save life. • Take fire fighting /HAZMAT kit when you leave the vehicle if safe to do so. • Set up fire precautions. • Warn emergency services. 		
8	Clear the road: <ul style="list-style-type: none"> • Warn other traffic and summon first aid to any injured person. • Contact the recovery agency shown in your instructions. • Set up some form of traffic control. 		
9	Summon police assistance if there is injury, serious damage to vehicles or obstruction to the highway.		
10	Provide other driver with details of local claims staff <ul style="list-style-type: none"> • Complete EU accident form 		
11	Inform Unit by telephone if deaths of serious injuries. Inform police within 24 hours if they do not attend the scene.		
12	Complete accident report on return to unit		
Time	Recommended Training Time		
40 mins	30 mins teaching – 10 mins for assessment	1.00	

Specimen Question Paper

State the action to be taken following a breakdown and a RTA

Maximum time allowed to complete the test - 10 Mins

All elements must be completed

Details of Driver			
Staff / Service Number		Rank and Surname	

STATE THE ACTION TO BE TAKEN FOLLOWING A BREAKDOWN	
1	
2	
3	
4	
5	
6	
STATE THE ACTION TO BE TAKEN FOLLOWING A RTA	
7	
8	
9	
10	
11	
12	
13	

(INTENTIONALLY BLANK)

ANNEX 8B - TRAINING OBJECTIVE No 2

Instructor's Notes

1. **Performance:** Identify the vehicle components.
2. **Conditions:** Practical and oral.
3. **Standards:** Each driver must identify and state the purpose / function of the following:
 - a. Cab controls and instruments to include (if applicable):
 - (1) Lights including convoy light switch.
 - (2) Indicators and hazard warning lights.
 - (3) Windscreen washers and wipers.
 - (4) Warning lights panel.
 - (5) Seat adjustment.
 - (6) Transfer gear / differential lock lever.
 - (7) Cab heating and window de-misting system controls.
 - (8) Horn and other warning devices.
 - b. Inter-vehicle starting socket.
 - c. Main fuse box.
 - d. Fuel tank and jerrican storage racks.
 - e. Stowage compartments.
 - f. Other controls or instruments specific to the vehicle.
4. **Safety. This TO is to be completed prior to commencing TO No 4.**

Outline Lesson Plan - Training Objective No 2

Identify and state the purpose of the cab controls, instruments and vehicle components

Serial	Main Teaching Points	Method Of Instruction	Resources
1	Cab controls: <ul style="list-style-type: none"> • Lights including convoy light switch. • Indicators and hazard warning lights. • Washers and wipers. • Warning lights panel. • Seat adjustment. • Transfer gearbox. • Differential lock lever. • Cab heating and window de-misting controls. • Horn and other warning devices. 	Practical Lesson	Vehicle complete with all ancillary equipment
2	Inter-vehicle Starting Socket.		
3	Main Fuse Box: <ul style="list-style-type: none"> • Location. • Types of fuses. • Procedure for changing fuses. 		
4	Fuel: <ul style="list-style-type: none"> • Tank. • Jerrican stowage racks. • Refilling - use of filters when using jerricans. 		
5	Stowage compartments: <ul style="list-style-type: none"> • Road safety equipment (tyre changing kit etc) must be accessible. 		
6	Controls/instruments specific to the vehicle.		
Time	Recommended Training Time	Periods	
40 mins	30 mins teaching, 10 mins for assessment	1.00	

ANNEX 8C - TRAINING OBJECTIVE No 3

Instructor's Notes

1. **Performance:** Carry out Before, During and After Use checks on a vehicle.
2. **Conditions :**
 - a. Practical / oral.
 - b. Given the appropriate vehicle complete with all ancillary equipment and servicing schedule.
 - c. As an individual.
 - d. By night and during hours of limited visibility.
 - e. Without assistance.
3. **Standards:** Each driver is to carry out Before, During and After use checks on the appropriate vehicle, safely without damage to vehicle, equipment or personnel, correctly in accordance with references.
4. **Teaching Points :**
 - a. Daily Checks consist of Before, During and After Use checks. Driver will require assistance to carry out check of equipment which is not in sight (rear brake lights etc).
 - b. Weekly checks will also be required; some checks may be required on a monthly basis. Details are in the Operator's Handbook.
 - c. Fault reporting procedure - driver's responsibility.
5. **Safety Points:** The driver is to be advised of the following precautions:
 - a. Care is to be taken when removing the radiator cap, fuel cap or battery cover.
 - b. Care is taken when climbing onto the vehicle.
 - c. Do not operate any switches in the vehicle unless are the driver is aware of their purpose and that operation will not injure any person in the vicinity of the vehicle.
 - d. When checking steering and brakes, ensure that the vehicle does not create a danger to other road users.

Outline Lesson Plan - Training Objective No 3
Carry out before, during and after use checks on a military vehicle

Serial	Main Teaching Points	Method Of Instruction	Resources
1	Safety Points: <ul style="list-style-type: none"> • Care is to be taken when • Removing radiator cap / battery cover • Climbing onto the vehicle. • Remove jewellery, such as rings, watches, bracelets, when working in and around batteries. • Do not operate switches unless purpose is known and operation will not cause injury to others. • Caution when testing steering and brakes. 	Practical Lesson	Vehicle complete with all ancillary equipment Operator's Handbook
2	“Before Use” Checks (both prime mover and trailer): <ul style="list-style-type: none"> • Vehicle - clean and free from damage. • Engine oil, radiator coolant, windscreen washer fluid - to the correct level, if low top up. • Brake fluid, clutch fluid and power steering fluid- to the correct level - if low report to supervisor. • Transmission (if automatic/semi automatic) to the correct level – if low fill to the appropriate level. • Tyres - no excessive wear, cuts or other damage. • Exhaust Emission - report if black. • Emergency equipment-all present and serviceable. • All lights, windscreen wipers and washers - all serviceable. • Brake System (service, parking and emergency) check for proper performance. • Fuel – sufficient to commence journey. • Odometer and speedometer - serviceable • Mirrors and windows - clear. • Canopy and seating - securely fitted, • No loose items secured, load secured and labelled. • Camouflage nets and trailer - secured. 		
3	During Use Checks – Load security and Roadworthiness.		
4	After Use Checks. – Roadworthiness and Refuel.		
5	Periodic Checks: Identified in the Operators Handbook. <ul style="list-style-type: none"> • Weekly. • Monthly. 		
6	Local Fault Reporting Procedures:		
Time	Recommended Training Time		Periods
40 mins	30 mins teaching, 10 mins for assessment		1

ANNEX 8D - TRAINING OBJECTIVE No 4

Instructor's Notes

1. **Performance:** Drive a vehicle on public roads by day and night.
2. **Conditions :**
 - a. Practical.
 - b. Given:
 - (1) A vehicle complete with all ancillary equipment - the vehicle is to be laden whenever possible.
 - (2) A manoeuvring area or approved training area with minimal traffic.
 - (3) An approved route of at least 40 kms distance to include:
 - (a) Major roads including dual Carriageways
 - (b) Minor roads.
 - c. By day and night (during the hours of darkness).
 - d. Weather as found.
3. **Standards:** Each driver is to:
 - a. Demonstrate effective breaking of the vehicle.
 - b. Drive safely and effectively, taking into account the road conditions, by day and night.
 - c. Drive economically and with regard to the environment.
4. **Safety Measures.**
 - a. Assessors are to ensure the vehicle is absolutely roadworthy in all respects before commencing this EO.
 - b. The driver is to be made familiar with the particular characteristics of the individual vehicle before driving on the public road; this is to include the use of the brakes. This activity may be carried out on a manoeuvring area / vehicle park and is not be considered as part of the assessment. Whilst the driver becomes familiar with the vehicle, the instructor is to ensure that the manoeuvring area / vehicle park is out of bounds to other vehicles.

- c. The emergency braking objective is to be carried out within a controlled area and in such a way that other drivers/ road users are not put at risk as a result from the practice. The emergency halt is to be carried out when the vehicle has reached approximately 20 mph.
- d. The driver is to be briefed on the route to be used and likely hazards to be encountered. During the assessment the assessor should give directions to the driver on the route to be followed.
- e. For the first 15 minutes of the assessment the assessor may provide guidance on driving techniques specific to the vehicle type; no such advice should be given for the remainder of the assessment.

5. Route Selection. Routes are to be selected to avoid known hazards or critical points during peak traffic periods. Assessors are to be fully familiar with, and are to have driven, the selected route on a number of occasions prior to first undertaking assessment of drivers. Each route is to be not less than 40 kms in length. The route must not contain any height, weight or width restriction on the vehicle type. The route should contain:

- a. Major roads, including dual carriageways or motorways, which should account for no more than 25% of the total distance to be travelled.
- b. Minor roads - care should be taken to ensure that 2 way traffic flow is not disrupted.
- c. Urban / built up areas - extensive use of urban roads is to be avoided. Where possible routes are to be selected requiring drivers to negotiate traffic lights, pedestrian crossings and roundabouts.
- d. Rural areas - as a guide, routes used by scheduled buses are suitable for training.
- e. Gradients of not less than 8% (1 in 12). The driver is to be assessed on his ability to halt the vehicle on the slope and then continue with the journey.
- f. An equal number of right and left turns; should this not be possible routes should be selected which require a larger number of offside turns.

Outline Lesson Plan

Drive a vehicle on public roads by day and during limited visibility

Serial	Main Teaching Points	Method of Instruction	Resources
1	Importance of effective control of vehicles: <ul style="list-style-type: none"> • Must drive within own and vehicle capabilities. • Drive at suitable speed for conditions (not to the speed limit or of other vehicles). 	Theory lesson then practical training	Vehicle complete with all ancillary equipment
2	Before Use Checks. Revision of TO3 plus: Ensure that prior to driving at night: <ul style="list-style-type: none"> • All lights are operating. • Windscreen and windows clean inside and out. • All light lenses / reflectors are clean and serviceable 		
3	Starting and Stopping the Engine. <ul style="list-style-type: none"> • Cold weather starting hazards. • If vehicle fitted with turbo, let engine idle before switching off. 		
4	Use of defensive driving skills : <ul style="list-style-type: none"> • Continuous need for anticipation. • Don't put yourself in a position where you need to brake unnecessarily. • Anticipate use of gears - especially when descending hills. 		
5	Smooth driving will assist economy and save environment: <ul style="list-style-type: none"> • Minimum acceleration. • Drive in highest possible gear. 		
6	Progressive braking technique: <ul style="list-style-type: none"> • Brakes applied lightly to reduce momentum. • Brakes then applied progressively until vehicle is brought almost to a stop. In dry conditions, the engine braking system (when fitted) may be used. • Brakes are then released gradually, under control, until the vehicle becomes stationary. • Use of air and exhaust brakes (where fitted to vehicle) 		
7	Braking in adverse conditions: <ul style="list-style-type: none"> • Engine braking system (when fitted) – when the road surface is dry. • Cadence braking - when the road is slippery or has a loose surface (e.g. ice, gravel or surface water). 		
8	Method of braking – emergency halts: <ul style="list-style-type: none"> • Poor weather conditions, road surface and visibility will increase stopping distance. • Instant reaction with foot brake. • Use of horn only if time / conditions permit. • Do not give signals. • Maintain straight course. • Avoid locking the wheels. • Unladen vehicles are more prone to skid / slew. 		

Serial	Main Teaching Points	Method of Instruction	Resources
9	Use of mirrors: <ul style="list-style-type: none"> • Adjust prior to moving off. • Check prior to and clearing obstacles. • Use guide when reversing. 		
10	Road positioning: <ul style="list-style-type: none"> • Keep the vehicle in the correct lane. • On straight roads keep towards crown of road. • On bends move to where vision is best. 		
11	Making Progress: <ul style="list-style-type: none"> • Based on anticipation. • Do not use vehicle to intimidate other drivers. 		
12	Dual carriageways: <ul style="list-style-type: none"> • Be vigilant during entry and exit. • Remain in nearside lane except when overtaking. 		
13	Overtaking: <ul style="list-style-type: none"> • Only when road conditions allow. • Ensure plenty of room before moving to inside lane 		
14	Signals: <ul style="list-style-type: none"> • Use well in advance. • Ensure signals are cancelled after completing move. 		
15	Obstructions and Artificial hazards : <ul style="list-style-type: none"> • Only enter area when exit is clear. • Once committed to passing obstruction, do not stop. 		
Time	Recommended Training Time	Periods	
180 mins	20 mins theory , 20 mins braking practice then 2 drives (one by day, one during limited visibility - this includes 10 mins theory revision and briefing on route followed by practical driving assessment)	4.5	

ANNEX 8E- TRAINING OBJECTIVE No 5

Instructor's Notes

1. **Performance:** Drive the vehicle over a 5 kms cross-country route (by day and during limited visibility) to include ruts, ridges, ditches and “v” shaped gullies, ascents and descents (of at least 1 in 5 gradient) and a suitable wading area (if possible).
2. **Conditions :**
 - a. Using a fully equipped vehicle - the vehicle is to be laden whenever possible.
 - b. On a training area, using a suitable cross-country route of approximately 5 kms; the route being approved by a qualified instructor.
 - c. By day and or during limited visibility when the vehicle is to use convoy or black out lights only.
 - d. In weather as found.
3. **Standards:** The driver is to demonstrate cross-country driving techniques including:
 - a. Preparations prior to cross-country driving.
 - b. Using the appropriate gear ratio and differential lock to negotiate:
 - (1) Rutted and existing tracks.
 - (2) Ditches and "V" shaped gullies.
 - (3) Ridges.
 - (2) Ascending / descending hills (the gradients to be not less than 20%).
 - (5) Wading to a depth of 0.5 m (where possible).
 - c. Stalling procedure (in daylight only).
 - d. Post cross-country checks.
4. **Teaching Points:** The instructor is to demonstrate the technique appropriate to each obstacle and then practice the driver until proficient. The assessment is only to take place once the driver has mastered all techniques.
5. **Safety Points:** Owing to the additional risk involved:
 - a. Cross-country driver training is to be undertaken by a suitably qualified instructor.

- b. Training and assessment is to be planned so that there are always at least 2 vehicles present at the training location.
- c. A first aid kit is to be available at the training location together with a means for contacting the emergency services.
- d. Cross-country driver training is to be undertaken on a 1:1 Student – Instructor Ratio. No passengers are to be carried in the vehicle for the duration of this training unless the vehicle is fitted with a crew cab and rear passenger doors.
- e. Where more than one vehicle is using the cross-country route, instructors are to ensure that drivers do not attempt an obstacle until other vehicles are well clear.
- f. Drivers are to be fully familiarised with the obstacles prior to under-taking assessment.
- g. During the hours of darkness and in poor visibility (dust etc), special care is to be taken, to ensure that vehicles maintain an appropriate distance and speed.
- h. Post cross-country checks are to be completed, prior to returning to the public road, to ensure that the vehicle is roadworthy and brakes are effective.

Outline Lesson Plan

Drive a vehicle cross-country by day and during limited visibility.

Serial	Main Teaching Points	Method of Instruction	Resources
1	Use of gear box and differential locks.	Theory and Practical Lesson	Vehicle complete with all ancillary equipment (laden if possible). Assessment Route (marked with tape / lights at night). 1 x First Aid Box. Communications to Emergency Services
2	Use existing (rutted) tracks: <ul style="list-style-type: none"> • Beware of ground clearance. • Avoid deep ruts. • Permit vehicle to follow own route. • Avoid over steering. 		
3	Negotiate ditches and “v”shaped gullies: <ul style="list-style-type: none"> • Ditches - don’t cross at right angles. • Straddle gully - avoid using one side of valley. 		
4	Ascending/descending hills: <ul style="list-style-type: none"> • Avoid driving across slopes. • Stop before descending a steep hill. • Select first gear (low range). • Do not use clutch or brakes during the descent. • Cross ridges at right angles. 		
5	Stalling procedure on hills (in daylight only): <ul style="list-style-type: none"> • Hold vehicle on foot brake. • Engage reverse gear. • Let out clutch then release foot brake. • Start engine whilst in gear. • Allow vehicle to reverse down slope using engine to retard speed. 		
6	Wading (where possible): <ul style="list-style-type: none"> • Check depth of water / nature of river bottom. • Avoid setting up a bow wave. • Maintain a speed of no more than 5 kph. • On leaving water, drive for a short distance with the brakes applied to ensure they are effective. 		
Time	Recommended Training Time		Periods
3 hrs 20 mins	80 mins practical training, 20 mins assessment by day, 40 mins practical training by night, 40 mins assessment by night		5

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ANNEX 8F- TRAINING OBJECTIVE No 6

Instructors Notes

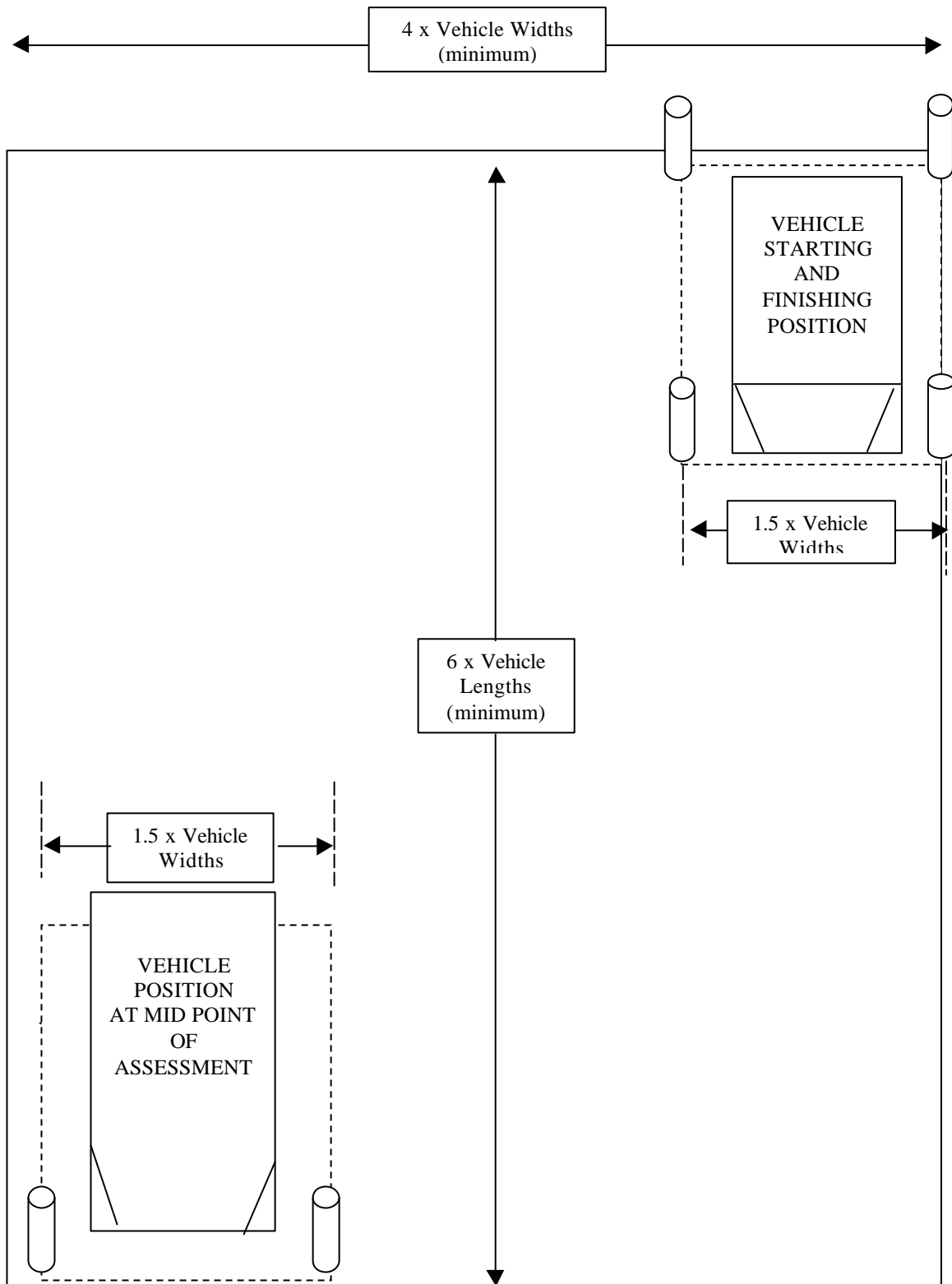
1. **Standard:** Manoeuvre a vehicle being guided by hand signals laid down in Ch 2, Annexes F and G.
2. **Conditions :** By day and during the hours of darkness, weather as found, Given:
 - a. A fully equipped vehicle.
 - b. A guide who has completed familiarisation training.
 - c. A manoeuvring area, on level ground, with parking bays – see Page 8F-3.
 - d. Hand-held lights (for use during darkness only).
3. **Standards:** The driver is to manoeuvre the vehicle using forward and reverse gears:
 - a. Reacting promptly and correctly to signals given by the guide.
 - b. Slow and constant speed using lowest gears (normal ratio).
 - c. Without damage to vehicle, equipment or personnel, correctly in accordance with the reference.
4. **Safety Points .**
 - a. This assessment is to be undertaken after completion of TO4 during which the driver must have demonstrated effective clutch, accelerator and brake control of the vehicle. The driver must be fully conversant with the hand signals to be given.
 - b. At the beginning of the training, and before any manoeuvre takes place, the supervisor conducting the training is to ensure that:
 - (1) The driver is to be instructed that, in the event of doubt or losing sight of the controller, the vehicle is immediately to be brought to a halt.
 - (2) All signals must be given in good time, be clear and unambiguous.
 - (3) Any signal not acted upon by the driver is to be repeated by the guide.

OUTLINE LESSON PLAN

Manoeuvre a vehicle being guided by signals by day and during limited visibility

Serial	Main Teaching Points	Method of Instruction	Resources
1	General: <ul style="list-style-type: none"> • Guide is in control. • Guide can see where the driver cannot. • Trust is essential. 	Practical Lesson	1 x Vehicle complete with all ancillary equipment. 1x Trained Guide 1 x Manoeuvring Area 6 x Marker Cones Hand Held Lights (for use during limited visibility)
2	Response to signals as the driver of a vehicle: <ul style="list-style-type: none"> • Act promptly. • Follow directions for as long as given. • Do not anticipate guide's directions. 		
3	Use of Speed: <ul style="list-style-type: none"> • Drive slowly and steadily. • Minimise revolutions. • Avoid use of clutch. 		
4	Use of Steering: <ul style="list-style-type: none"> • Do not cross hands. • Do not rush movement. 		
5	Use of Gears: <ul style="list-style-type: none"> • Use lowest gear in normal range. • Do not use the clutch. 		
Time	Recommended Training Time		Periods
40 mins	20 minutes practical training then 10 minutes assessment by day and 10 minutes assessment in hours of limited visibility		1

MANOEUVRING AREA LAYOUT
(Not to scale)



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ANNEX 8G – CERTIFICATE OF COMPETENCE

VEHICLE TYPE: _____

DRIVER'S DETAILS:

NUMBER: _____ RANK: _____ NAME: _____

UNIT _____

completed the following Training Objectives (TO) on the dates shown:

TO No	SUBJECT	NAME OF ASSESSOR	DATE OF ASSESSMENT
1.	State the information required by the driver of a vehicle.		
2.	Identify the vehicle components		
3.	Carry out Before Use, During Use and After Use checks.		
4.	Drive the vehicle on public roads.		
5.	Drive the vehicle cross-country		
6.	Manoeuvre a vehicle being guided by signals		

The driver may drive the vehicle, without supervision, on authorised tasks.

Driver's Signature	Unit Date Stamp
Driving Permit Officer's Signature	
Driving Permit Officer's Rank and Name	

To be retained in the Driver's Personal File

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