	MILITARY COMMITTEE LAND STANDARDIZATION BOARD	
	BUREAU DE NORMALISATION TERRE DU COMITÉ MILITAIRE	

28 April 2021 NSO(ARMY)0454(2021)MILENG

MCLSB
MILENGWG

TERMS OF REFERENCE MILITARY ENGINEERING WORKING GROUP (MILENGWG)

References:
A. NSO(ARMY)0446(2021)MILENG, End of Silence Report: NSO(ARMY)0381(2021) MILENG, dated 28 April 2021
B. NSO(ARMY)0466(2017)MILENG, Terms of Reference for the Military Engineering Working Group (MILENGWG), dated 4 April 2017

1. With Reference A, the MCLSB approved the Terms of Reference (TOR) of the Military Engineering Working Group (MILENGWG).

2. The TOR is effective upon receipt and supersedes Reference B.

P. KAPSANAKIS
Colonel, GRC (A)
Chairman

Enclosure:
I Terms of Reference Military Engineering Working Group (MILENGWG)

TERMS OF REFERENCE
MILITARY ENGINEERING WORKING GROUP (MILENGWG)

References:	
PO(2011)0212	Implementing Guidance for the Partnership Cooperation Menu (PCM)
PO(2015)0193	NATO Terminology Directive
PO(2016)0315	NATO Policy for Standardization
C-M(2002)49	Security within the North Atlantic Treaty Organization
C-M(2002)60	The Management of Non-classified NATO Information
C-M(2007)0023	Guidance for the Development and Publication of NATO Terminology
C-M(2008)0017	NATO Intellectual Property Rights Policy for NATO Standardization Documents and NATO Dispositions related to the issue of copyrights for NATO Standardization Documents
MC 20/11	Military Committee Policy for Military Operational Standardization
AAP-03	Directive for the Production, Maintenance and Management of NATO Standardization Documents
AAP-32	Publishing Standards for NATO Standardization Documents
AAP-47	Allied Joint Doctrine Development
AAP-52	Guidance on Top-Down Standardization
AAP-77	NATO Terminology Manual
APP-06	NATO Joint Military Symbology
APP-15	NATO Information Exchange Requirements Specification Process
	NATOTerm

INTRODUCTION

1.   Standardization is the key element and principal means for North Atlantic Treaty Organization (NATO), member states and Strategic Commands (SCs) to achieve interoperability. In this context the terms "standardization" and "interoperability" are defined, in accordance with NATO Policy for Standardization, as follows: standardization is "the development and implementation of procedures, designs and terminology to the level necessary for the interoperability required by Allies, or to recommend useful practices in multinational cooperation" and interoperability is "the ability to act together coherently, effectively and efficiently to achieve Allied tactical, operational and strategic objectives". It can be read, in operational terms, as the ability of Alliance's forces and, when appropriate, forces of partner nations to train, exercise, and operate effectively together in the execution of assigned missions and tasks.

AIM

2.   The Military Engineering Working Group (MILENGWG) is established by the Military Committee (MC), and is under authority of and tasked by the Military Committee Land Standardization Board (MCLSB) to contribute, initiate, and develop standardization in Land Operations Doctrine. In addition to the MCLSB, the NATO Army Armaments Group (NAAG) is the second Delegated Tasking Authority (DTA) of the MILENGWG through the MCLSB.

3.   To improve NATO interoperability, the MILENGWG advises the MCLSB and through the MCLSB the MC on military engineering topics and issues. The MILENGWG encompasses all DOTMLPFI domains of MILENG and will focus on integrating operational standards, doctrine, training, procedures, terminology, armaments and equipment in order to ensure complete, sustainable MILENG capabilities. The WG reviews and recommends engineering concepts, and develops doctrine, tactics and materiel covering all of these areas from the tactical to the strategic levels, which are essential for current and future NATO operations.

4.   The MILENGWG receives also guidance and priorities from the NATO Senior Joint Engineer Conference (NSJEC) according to MC 0560 - Policy for Military Engineering.

COMPOSITION

5.   The WG consists of delegates of those member states, SCs, NATO subordinate commands, and NATO agencies that agree to participate.

6.   The WG is encouraged to identify and involve any relevant NATO Military Bodies, NATO accredited Centres of Excellence (CoEs), NATO Education and Training Facilities (NETFs), and other NATO entities.

7.   The WG may involve non-NATO entities, and shall promote cooperation with civil Standards Developing Organizations (SDOs) and other interested parties in standardization activities within the guidance provided by the North Atlantic Council (NAC) and in accordance with NATO documents, on a case-by-case basis, and subject to the approval of the MCLSB. If participation of a partner nation has already been addressed in the Partnership Cooperation Menu (PCM)[1], then no further approval is required.

8.   Representatives from industry may be invited to participate in suitable WG activities, subject to MCLSB approval. Such participants are to be suitably accredited (security), must be sponsored by a member state or NATO entity and ought to refrain from sales-related presentations.

9.   The chairperson is appointed by the MCLSB for a 3-year period to ensure the continuity of the WG's Programme of Work and to enable other member states to nominate candidates. The WG vice-chairperson is appointed by the WG and the retirement dates of both need to be deconflicted. The vice-chairperson will assume the duties of the chairperson upon the absence of the WG chairperson.

10.   The chairperson is responsible to MCLSB for maintenance and development of standards.

11.   The NSO will appoint a staff officer to act as WG secretary.

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[1] The PCM is a "living document", and as such, additional activities/events are added through updates, on a rolling basis, approved by the NAC.

12.   The MCLSB will designate a representative to attend WG meetings for liaison purposes. This representative will provide guidance and direction to the WG, and ensure harmonization with MCLSB activities and will report back at the following MCLSB meeting.

13.   Subordinate to the WG, there are panels. Members of WG subordinate panels are encouraged to attend and may contribute to discussion during WG meetings.

STRUCTURE

14.   The MILENGWG has seven panels:

    a.   Doctrine and Planning Panel (DPP).

    b.   Information Exchange Requirements Panel (IERP).

    c.   Infrastructure Management Panel (IMP)

    d.   Materiel Panel (MatP).

    e.   Support to Force Protection Panel (SFPP) (dormant).

    f.   Support to Civil Authorities Panel (SCAP) (dormant).

    g.   Terminology Panel (TP).

TASKS

15.   The general tasks include:

    a.   Review, at least once every five years, the promulgated Standardization Agreements (STANAGs) and Allied Publications (APs), for which they have been allocated responsibility (see Annex A), to determine their continued validity and recommend amendment, consolidation, transfer of information to APs or cancellation, where appropriate.

    b.   Ensure all STANAGs contain an implementation paragraph that set a list of specific actions, including qualification if necessary, that member states should take to complete implementation.

    c.   Ensure that Standards support the capabilities, agreed by member states, in the Capability Codes & Capability Statements (CC&CS) Catalogue as part of the NATO Defence Planning Process (NDPP) and support member states in achieving their capability targets.

    d.   Ensure all APs that fall within the WG's responsibility are fully harmonized with documents under the Allied Joint Doctrine Architecture (AJDA) and other related APs.

    e.   Liaise with the Military Committee Joint Standardization Board (MCJSB) Financial WG (FinWG), the Logistics Committee Executive Group - Standardization

(LCEG(S)) through the Combat Service Support WG (CSSWG) and the respective MC Medical SB (MCMedSB) WGs to ensure, where appropriate and applicable, inclusion and harmonization of the respective aspects during the development and review phases.

f.   Identify land interoperability gaps by collecting interoperability lessons identified and/or learned from NATO and (multi)national operations, activities, and exercises and provide advice to the MCLSB, through the Land Interoperability and Standardization Working Group (LISWG), in order to mitigate the identified gaps.

g.   Ensure standing WG representation at the LISWG and its Evaluation, Analysis and Reporting Cell (EARC) to support validation of relevance and effectiveness of Standards during exercises and training events as requested.

h.   Ensure standing WG representation at the Land Operations Working Group (LOWG) / Senior Land Doctrine Panel (SLDP) to support harmonization of identified Standards.

i.   Initiate and develop new or amended standardization proposals in the Land domain, taking into account lessons identified and lessons learned from recent operations exercises and experimentation, for their potential to enhance interoperability. Ensure involvement of both SCs from the onset of Standardization documents/AP development.

j.   Ensure that standardization documents, for which the WG is the sponsor, do not include any detailed formatted or structured message formats or voice templates for character-oriented information exchange. These formats are commonly summarized and published in APP-11 - NATO Message Catalogue and ATP-105 - Land Operational Reports to which other publications shall refer.

k.   Develop and review related terminology and symbology in close coordination with the LOWG / Senior Land Terminology and Symbology Panel (SLTSP).

l.   Support SMART Defence projects in order to ensure that standardization aspects and emerging standardization voids are sufficiently considered in the development and revision of NATO Standards.

m.   Ensure Fratricide Prevention, Defence against Terrorism (DAT), C-IED aspects and Building Integrity are addressed, where relevant, when developing new standards or reviewing the existing ones.

n.   Adopt any suitable civilian standard.

o.   Consider United Nations Security Council Resolution (UNSCR) 1325 (2000) on Women, Peace and Security and BI-SC 040-001 - Integrating UNSCR 1325 and Gender Perspective into the NATO Command Structure (16 May 2017), where appropriate and applicable, in the development and revision of Standards.

p.   Review its TOR annually and recommend changes as required.

q.   Update the Programme of Work at each WG meeting.

r.   Carry out, or coordinate, such tasks as directed by the MCLSB, including the annual direction and priorities.

16.   The specific task include the WG responsibilities to:

a.   Promote cooperation and standardization in the area of materiel as directed by the NAAG, through the MCLSB, in its Land Armament Management Plan (LAMP).

b.   Support the continued implementation and integration of MC 0560.

c.   Assist in translating relevant long-term capability requirements (LTCR) into armament objectives; maintain roadmaps and pursue work to meet the defined objectives.

d.   Develop proposals for studies by the NATO Science and Technology Organisation (STO) and the NATO Industrial Advisory Group in accordance with the Phased Armaments Programming System (PAPS) Process of AAP-20. Recommend to the NAAG proposals for bi- or multilateral cooperation.

e.   Identify, during the biannual NAAG meetings, any requirement for formation of new Teams of Experts within the MatP.

f.   Appoint the chairperson of the TP as the Terminology/Symbology representative to liaise with the LOWG / Senior Land Terminology and Symbology Panel (SLTSP).

g.   Appoint the chairperson of the IERP as the IER representative to liaise with the LOWG / Senior Land IER Panel (SLIERP).

PROCEDURES

17.   The WG chairperson should ensure the WG meets as few times as necessary. Habitually the WG meets twice per year at a venue as offered by a hosting member state and coordinated with the MCLSB.

18.   The WG chairperson should monitor the progress of the Programme of Work during and between meetings.

19.   The WG can utilize video-teleconferences (VTCs) as a complementary means between WG meetings.

20.   The MCLSB will issue a convening order prior to the WG meeting, detailing particular tasks. The convening order will also contain MCLSB Guidance and a tentative agenda. Member states are expected to submit specific items for inclusion in the final agenda for the WG meeting not later than the scheduled date. If required, a final agenda will be issued prior to the meeting.

21.   Delegates to the WG should come to the meetings fully briefed and prepared to present national views. They are expected to participate in discussions on proposals to reach agreement in the interest of standardization. Final acceptance of proposals is obtained from member states by the MCLSB. Furthermore, delegates from SCs and other entities are expected to present views according to their origin and expertise.

22.   The chairperson will be assisted in the preparation and conduct of the meeting, as well as in the preparation of the meeting report, by the NSO Staff Officer appointed as WG secretary.

23.   When a member state is represented by more than one delegate, it will designate a Head of Delegation (HOD), who will be responsible for expressing the official position of that member state. Only the HODs are voting members.

24.   Decisions of the WG are expressed in terms of recommendations (action items) to the MCLSB. Decisions taken by the WG will be agreed by the HODs from member states, following advice from the SCs. Consensus is not required and HODs may inform their national MCLSB representative. The matter will be passed to the MCLSB for resolution and this will be reflected in the WG report.

25.   A Report and an Action List shall be, kept from each meeting and made available to WG members and the MCLSB. The chairperson produces the executive summary of the report. The WG's recommendations (action items) become effective after the approval of the WG Action List by the MCLSB.

26.   The MCLSB appoints custodial responsibilities to member states or NATO entities participating in the WG, for carrying out the work related to the development and maintenance of the WG's standardization documents, in accordance with AAP-03.

27.   If a fast track procedure is required when drafting a STANAG, it should be clearly indicated in the ratification request. The Fast Track Procedure is described in AAP-03.

28.   The WG may decide on the formation of a sub-group to undertake a specific task, or cluster of tasks. Where a sub-group is convened during and/or outside the meeting period, it is referred to as a team or syndicate. Justification for new panels and proposed changes in the TOR must be submitted to the MCLSB for approval.

29.   The WG chairperson must participate in the MCLSB meetings at least once per year at the 2nd MCLSB meeting to update the Board on the status of work to include issues of interest for the Board and requests for support. The chairperson in his/her absence should be represented by the vice-chairperson.

30.   The WG will utilize the NSO website as the main source for its documents. The WG dedicated forum will be used as the primary means of communication, co-ordination, and information exchange in the development of Standards. When posting messages or action items on the forum, all WG correspondents must be alerted via the "Notify Forum users" function.

TERMINOLOGY

31.   Under the NATO Policy for Standardization, NATO documents must use NATO Agreed terminology. Therefore NATO Agreed terminology is the most basic component of any STANAG or AP. In order to achieve this goal, the NATO Terminology Directive provides a process whereby NATO standardizes terminology, the so-called NATO Terminology Programme (NTP). The Directive details the responsibilities of the various actors in the programme and the procedures to be followed to assign "NATO Agreed" status to terminology.

32.   When drafting NATO Standardization documents the WG must proceed in accordance with AAP-03, AAP-32, AAP-77, PO(2015)0193, and NATOTerm.

33.   Proposals aiming to add, modify or delete terms and definitions in NATOTerm must be processed by the NATO Terminology Office (NTO) using the Terminology Proposal Form (TTF) through the SLTSP using the "LandTermNow" Process.

34.   To maintain terminology situational awareness, the WG terminology representative(s) must be subscribed to the LOWG/SLTSP Forum, on the NSO Protected Website.

SYMBOLOGY

35.   Under the NATO Policy for Standardization, NATO graphics must use NATO Agreed symbols as detailed in Allied Procedural Publication APP-06 - NATO Joint Military Symbology. APP-06 provides common operational symbology and details how to display and plot these symbols to enhance the interoperability of NATO command and control systems, operations and training.

36.   Proposals aiming to add, modify or delete symbology should be endorsed by the WG and must be processed by the SLTSP using the Symbology Change Proposals (SCPs) or inclusion in APP-06. The SCP(s) will be submitted to the Joint Symbology Panel (JSP) for consideration and forwarding to the Information Exchange Requirement Harmonization Working Group (IERHWG) for endorsement and subsequent Military Committee Joint Standardization Board (MCJSB) approval.

INFORMATION EXCHANGE REQUIREMENTS

37.   The development, staffing, and configuration management of NATO Land IERs must be in accordance with the NATO IER development process, APP-15 - Information Exchange Requirements Specification Process.

38.   Proposals aiming to add, modify or delete any IER must be processed by the LOWG/SLIERP. For further details refer to the TOR of the LOWG/SLIERP.

39.   The WG will appoint a delegate to undertake the role of the IER representative and will liaise with LOWG/SLIERP. Before each meeting this delegate is to verify that the SLIERP database accurately reflects the current status of the messages for which the panel is responsible and report any discrepancies to the chairperson and/or secretary of the SLIERP.

LIAISON

40.   The WG is required to liaise with other groups (NATO and non-NATO as required) to achieve information on projects related to the WG's areas of interest. The WG should appoint specific delegations to monitor the activities of these entities and identify any possible duplication of effort, conflict, omission or requirement for mutual collaboration. As a minimum, liaison may be accomplished by reviewing reports of the respective entity; ideally, a member from the WG will attend the meeting of the entity in question or to have personal contact with a representative.

41.   Appointed delegations as listed below will report to the WG meeting, and circulate written reports as requested by the respective convening order. Liaison reports must be clear, concise, and limited to areas of direct relevance to the WG. Any member state or entity with responsibility for liaison reporting, who experiences difficulty obtaining the relevant information, is requested to contact the NSO and seek assistance.

Entity	Action
Aviation Committee (AVC) - Air Ops Support Working Group (AOSWG) - Crash, Fire-fighting and Rescue Panel (CFRP)	TUR
American, British, Canadian, Australian, and New Zealand (ABCANZ) Armies' Program - Shield Capability Group	CAN
ACO Force Protection Working Group (ACO FPWG)	MILENG COE
Civil Emergency Planning Committee (CEPC)	TUR
Counter-Improvised Explosive Device Centre of Excellence (C-IED COE)	ESP
Explosive Ordnance Disposal Centre of Excellence (EOD COE)	EOD COE
Logistics Committee (LC) and sub-committees	SHAPE
Logistics Planning Advisory Committee (LPAC)	SHAPE
MCASB - Air Operations Working Group (AOS WG)	MILENG COE
MCJSB - Allied Joint Operations Doctrine Working Group (AJODWG)	MILENG COE
MCJSB – ACO Environmental Protection and Energy Efficiency Working Group (ACO EPEE WG)	SHAPE
MCJSB - Joint Chemical, Biological, Radiological and Nuclear Defence Capability Group Development (JCBRND-CDB)	DNK
MCJSB - Joint Geospatial Standards Working Group (JGSWG)	USA
MCJSB - Joint Intelligence Working Group (JINTWG)	NLD
MCLSB - Combat Service Support Working Group (CSSWG)	NOR
MCLSB - Counter-Improvised Explosive Device Working Group (C-IEDWG)	MILENG COE
MCLSB - Explosive Ordnance Disposal Interservice Working Group (EODWG)	MILENG COE

Entity	Action
MCLSB - Integrated Capability Group on Indirect Fire (ICG IF)	CAN
MCLSB - Land Operations Working Group (LOWG)	MILENG COE
MCLSB - LOWG - Senior Land Information Exchange Requirement Panel (SLIERP)	GBR
MCLSB - NATO Range Safety Working Group (NRSWG)	NLD
MCMSB - Maritime Operations Working Group (MAROPS WG)	NLD
MCMSB - Underwater Diving Working Group (UD WG)	NLD
Multinational Interoperability Council (MIC) and subgroups	USA
NAFAG – Joint Capability Group on Intelligence, Surveillance and Reconnaissance – Working Group on Camouflage, Concealment, Deception, and Obscuration (CCDO)	DNK
NATO Resources Conference	SHAPE
Force Protection WG - Allied Command Operations (FP WG – ACO)	MILENG COE

SECURITY

42.   All NATO non-classified ("NATO Unclassified" and "Public Releasable-No Markings") documents must be handled in accordance with C-M(2002)60 and all NATO classified documents must be handled in accordance with C-M(2002)49.

43.   When assessing the possibility to release the documents related to the development of a standard to the invited participants and observers from non-NATO entities, the existing memorandums and special approvals have to be considered and, if needed, supplementary approvals must be requested.

44.   NATO non-classified documents relevant to meeting agenda items may be released, to the invited participants and observers, as NATO security regulations allow.

45.   The security classification of NATO classified standardization documents shall be kept at the lowest level possible in order to allow for distribution to the widest possible audience.

PROTECTION OF PROPERTY RIGHTS

46.   In accordance with NATO's Intellectual Property Rights (IPR) policy, a NATO document becomes the intellectual property of NATO, managed by the NSO on behalf of member states and NATO. Additionally, each WG member involved in standardization activities shall use reasonable endeavours to identify and expeditiously inform the NSO on essential IPRs instrumental to the development of a NATO standardization document. AAP-32 - Publishing Standards for Allied Publications will be used as a reference for instructions on the protection of IPRs in Standards.

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Annexes:
A.   STANAGs and APs for which the WG is responsible
B.   List of critical WG STANAGs
C.   STANAGs and APs of interest to the WG
D.   IERs/Messages for which the WG is operational sponsor
E.   Terms of Reference Doctrine and Planning Panel (DPP)
F.   Terms of Reference Information Exchange Requirements Panel (IERP)
G.   Terms of Reference Infrastructure Management Panel (IMP)
H.   Terms of Reference Materiel Panel (MatP)
I.   Terms of Reference Terminology Panel (TP)

STANAGs AND APs FOR WHICH THE WG IS RESPONSIBLE

STANAG / AP		Title	Custodian	Panel	Harmonization
2017	*ATP-3.12.1.6*	Orders to the Demolition Guard Commander and Demolition Firing Party Commander (Non-Nuclear)	GBR	DPP	N/A
2021	AEP-3.12.1.5	Military Load Classification of Bridges, Ferries, Rafts and Vehicles	FRA	MatP	N/A
2036	*ATP-3.12.1.7*	Land Mine Laying, Marking, Recording and Reporting Procedures	USA	DPP	N/A
2237	*ATP-3.12.1.15*	Engineer Obstacle Numbering	USA	IERP	N/A
2238	AJP-3.12	Allied Joint Doctrine for Military Engineering	MILENG COE	DPP	LOWG, AJODWG
2280	ATP-3.12.1.8	Test Procedures and classification of the Effects of Weapons on Structures	GBR	DPP	N/A
2283	ATP-3.12.1.1	Allied Tactical Doctrine for Military Search	GBR	DPP	N/A
2394	ATP-3.12.1	Allied Tactical Doctrine for Military Engineering	MILENG COE	DPP	LOWG
2395	*ATP-3.12.1.9*	Deliberate Water Crossing Procedures	CAN	DPP	LOWG
2430	AEngrP-02	Land Forces Combat Engineer Messages, Reports and Returns	MILENG COE	IERP	LOWG
2485	*ATP-3.12.1.11*	Countermine Operations in Land Warfare	USA	DPP	N/A
2625	ATP-3.12.1.3	Allied Tactical Doctrine for Route Clearance	MILENG COE	DPP	LOWG
2626	ATP-3.12.1.2	Allied Tactical Doctrine for Military Search Training Requirements	GBR	DPP	N/A
2632	ATP-3.12.1.4	Deployed Force Infrastructure	CAN	IMP	N/A

STANAG / AP		Title	Custodian	Panel	Harmonization
2642	APP- 34	Testing And Interoperability of Area Access Control Obstacle Systems	GBR	MatP	N/A
2885	*ATP-3.12.1.12*	Emergency Supply of Water in Operations	DEU	IMP	N/A
2989	*ATP-3.12.1.13*	Transfer of Barriers	ESP	DPP	N/A
4133	AEP-4133	Electrical Power Supplies: Standard Types And Rotating Generating Sets (AC-DC)	FRA	MatP	N/A
	AEP-28	Field electrical power supply technical aspects for interoperability	FRA	MatP	N/A

STANREC / AP		Title	Custodian	Panel	Harmonization
4587	AEP-4587	Hand-Held And Robotic Detector Testing	USA	MatP	N/A
4843	AEP-4843	Standardized Recommendation for Considerations for the Testing of Military Search Equipment	NLD	MatP	N/A

Remarks:
1.   ATP-3.12.1.1 will be renamed into ATP-3.12.2 and ATP-3.12.1.2 will become a SRD to ATP-3.12.2.
2.   AEP-28 will be incorporated into a next edition of AEP-4133.
3.   Proposed new numbering is in *Italic* and requires MCLSB approval.

LIST OF CRITICAL WG STANAGs

The BI-SC Capability Codes and Capability Statements[2] provides a common language for capabilities in Defence Planning and Operations Planning. It defines the capabilities used in Defence Planning products (Minimum Capability Requirements, Capability Targets, Defence Planning Capability Surveys, and the Suitability and Risk Assessment) and Operational Planning products (ACO Forces Standards, NATO Response Force Elements lists, Reference Force Lists, Graduated Force Lists, and Combined Joint Statements of Requirements).

The following STANAGs are mentioned as a reference to the Capability Codes and Capability Statements (CC & CS) and therefore these are the critical WG STANAGs.

STANAG / AP		Title
STANAG 2238	AJP-3.12	Allied Joint Doctrine for Military Engineering
STANAG 2280	ATP-3.12.1.8	Test Procedures and classification of the Effects of Weapons on Structures
STANAG 2283	ATP-3.12.1.1	Allied Tactical Doctrine for Military Search
STANAG 2394	ATP-3.12.1	Allied Tactical Doctrine for Military Engineering
STANAG 2395		Deliberate Water Crossing Procedures
STANAG 2430	AEngrP-02	Land Forces Combat Engineer Messages, Reports and Returns
STANAG 2625	ATP-3.12.1.3	Allied Tactical Doctrine for Route Clearance
STANAG 2626	ATP-3.12.1.2	Allied Tactical Doctrine for Military Search Training Requirements
STANAG 2885		Emergency Supply of Water in Operations

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[2] SH/SDP/SDF/CFR/DPF/19-003782, 5000/FPR - 0070/TT-1758/Ser:NU0517, Bi-SC Capability Codes and Capability Statements, dated 22 January 2020

STANAGs AND APs OF INTEREST TO THE WG

STANAG / AP		Title	Sponsor
2019	APP-6	NATO Joint Military Symbology	MCJSB/IERHWG
2136	AmedP-4.9	Requirements for Water Potability during Field Operations and in Emergency Situations	MCMedSB/FWSVS
2221	AEODP-6	Explosive Ordnance Disposal Reports and Messages	MCLSB/EOD
2294	ACIEDP-01	Countering Improvised Explosive Device Training Requirements	MCLSB/C-IEDWG
2295	AJP-3.15	Allied Joint Doctrine for Countering Improvised Explosive Devices (C-IED)	MCLSB/C-IEDWG
2391	AEODP-5	Explosive Ordnance Disposal Recovery Operations on Fixed Installations	MCLSB/EODWG
2528	AJP-3.14	Allied Joint Doctrine For Force Protection	MCJSB/AJODWG
2582	AJEPP-2	Environmental Protection Best Practices and Standards for Military Camps in NATO Operations	MCJSB/EPWG
2583	AJEPP-3	Environmental Management System in NATO Military Activities	MCJSB/EPWG
2590	AJP-3.4.5	Allied Joint Doctrine for the Military Contribution to Stabilization and Reconstruction	MCJSB/AJODWG
2606	ATP-3.2.1.1	Guidance for the conduct of Tactical Stability Activities and Tasks	MCLSB/LOWG
2628	AJP-3.18	Allied Joint Doctrine for Explosive Ordnance Disposal Support to Operations	MCLSB/EODWG
2629	ATP-104	Water Production, Storage and Distribution	MCLSB/LISWG
2818	AOP-31	Demolition Materiel: Design, Testing and Assessments	CNAD/ASG
2897	AEODP-7	EOD Equipment Requirements and Equipment	MCLSB/EODWG

STANAG / AP		Title	Sponsor
2929	AATMP-03	Airfield Damage Repair (ADR) Capability	AVC/ATM-CNS AG
6500	AJEPP-6	NATO Camp Environmental File during NATO-led Activities	MCJSB/EPWG
7141	AJEPP-4	Joint NATO Doctrine for Environmental Protection during NATO-led Military Activities	MCJSB/EPWG

Remarks:
1. New title of next edition of STANAG 2606 - ATP-3.2.1.1: Conduct of Land Tactical Activities.
2. STANAG 2629 will be transferred to CSSWG, once the next edition has been promulgated.

IERs/MESSAGES FOR WHICH THE WG IS OPERATIONAL SPONSOR

Short Name	Message Full Name	Purpose	Publication	Format
BARREP	BARRIER REPORT	The BARREP is used to transmit, from headquarters to unit level, information on friendly obstacles, both current and planned.	AEngrP-2, APP-11	MTF
BRDMLORD	BRIDGE DEMOLITION ORDER	The BRDMLORD is used to order bridge demolition operations by friendly forces.	AEngrP-2, APP-11	MTF
BRDMLRECCEORD	BRIDGE DEMOLITION RECONNAISSANCE ORDER	The BRDMLRECCEORD is used to order friendly forces to conduct a reconnaissance of bridges for possible demolition.	AEngrP-2, APP-11	MTF
BRDMLRECCEREP	BRIDGE DEMOLITION RECONNAISSANCE REPORT	The BRDMLRECCEREP is used to report the results of a bridge demolition reconnaissance by friendly forces.	AEngrP-2, APP-11	MTF
BRDMLREP	BRIDGE DEMOLITION REPORT	The BRDMLREP is used to report the results of bridge demolition operations.	AEngrP-2, APP-11	MTF
DMLORD	RESERVED DEMOLITION ORDER	The DMLORD message is used to disseminate information relating to the execution of a reserved demolition.	AEngrP-2, APP-11	MTF
ENGGSORD	GENERAL ENGINEER SUPPORT EXECUTION ORDER	The ENGGSORD is used to order the execution of general engineer support tasks or those tasks which do not fall under the categories of mobility, counter-mobility and survivability.	AEngrP-2, APP-11	MTF
ENGGSRECCEORD	GENERAL ENGINEER SUPPORT RECONNAISSANCE ORDER	The ENGGSRECCEORD is used to order a reconnaissance for general engineer support tasks or those tasks which do not fall under the categories of mobility, counter-mobility and survivability.	AEngrP-2, APP-11	MTF
ENGGSRECCEREP	GENERAL ENGINEER SUPPORT RECONNAISSANCE REPORT	The ENGGSRECCEORD is used to order a reconnaissance for general engineer support tasks or those tasks which do not fall under the categories of mobility, counter-mobility and survivability.	AEngrP-2, APP-11	MTF
ENGGSREP	GENERAL ENGINEER SUPPORT COMPLETION REPORT	The ENGGSREP is used to report the completion of general engineer support tasks or those tasks which do not fall under the categories of mobility, counter-mobility and survivability.	AEngrP-2, APP-11	MTF

Short Name	Message Full Name	Purpose	Publication	Format
ENGMATREQREL	ENGINEER MATERIEL REQUEST RELEASE ORDER	The ENGMATREQREL is used to disseminate information relating to the request or release of engineer materiel.	AEngrP-2, APP-11	MTF
ENGOPO	ENGINEER ANNEX TO THE OPERATION ORDER	The ENGOPO is used to disseminate information relating to the engineer annex of a formation operation order.	AEngrP-2, APP-11	MTF
ENGRDATAREP	ENGINEER DATA REPORT	The ENGRDATAREP is used to pass effective combat engineer unit and asset details from brigade to corps level. This message provides detailed information about the number of effective units by type, generic equipment types in terms of availability and committed and uncommitted major items of materiel.	AEngrP-2, APP-11	MTF
ENGRECCEORD	ENGINEER RECCE ORDER	The ENGRECCEORD is used to order combat engineer reconnaissance of mobility, counter-mobility, survivability and general engineer support tasks.	AEngrP-2, APP-11	MTF
ENGRECCEREP	ENGINEER RECCE REPORT	The ENGRECCEREP is used to report combat engineer reconnaissance of mobility, counter-mobility, survivability and general engineer support tasks.	AEngrP-2, APP-11	MTF
ENGREP	ENGINEER REPORT	The ENGREP is used to report combat engineer task progress and unit combat effectiveness from brigade level to corps level.	AEngrP-2, APP-11	MTF
ENGRRESREP	ENGINEER RESOURCES REPORT	The ENGRRESREP is used to provide information relating to engineer resources as a contribution to intelligence collection plans using the G2 staff chain.	AEngrP-2, APP-11	MTF
ENGSTATREP	ENGINEER UNIT STATUS REPORT	The ENGSTATREP is used to disseminate information relating to the reporting of sub-unit status to engineer battalion level.	AEngrP-2, APP-11	MTF
ENGTASKREP	ENGINEER TASK STATUS REPORT	The ENGTASKREP is used to report the progress on task reconnaissance or task execution.	AEngrP-2, APP-11	MTF
GAPORD	GAP CROSSING EXECUTION ORDER	The GAPORD is used to order the execution of a gap crossing site task.	AEngrP-2, APP-11	MTF
GAPRECCEORD	GAP RECONNAISSANCE ORDER	The GAPRECCEORD is used to order the reconnaissance of a gap crossing site.	AEngrP-2, APP-11	MTF
GAPRECCEREP	GAP RECONNAISSANCE REPORT	The GAPRECCEREP is used to report the results of a gap crossing site reconnaissance.	AEngrP-2, APP-11	MTF
GAPREP	GAP CROSSING COMPLETION REPORT	The GAPREP is used to report the completion of a gap crossing site task.	AEngrP-2, APP-11	MTF
INTTOLAY	INTENT TO LAY MINEFIELD	The INTTOLAY is used to disseminate information relating to a tactical commander's intent to lay a minefield.	AEngrP-2, APP-11	MTF
MINCLRORD	MINEFIELD CLEARING EXECUTION ORDER	The MINCLRORD is used to order mine clearing operations by friendly forces.	AEngrP-2, APP-11	MTF
MINCLRRECCEORD	MINEFIELD CLEARING RECONNAISSANCE ORDER	The MINCLRRECCEORD is used to order friendly forces to conduct a minefield clearing reconnaissance.	AEngrP-2, APP-11	MTF

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Short Name	Message Full Name	Purpose	Publication	Format
MINCLRRECCEREP	MINEFIELD CLEARING RECONNAISSANCE REPORT	The MINCLRRECCEREP is used to report the results of a minefield clearing reconnaissance by friendly forces.	AEngrP-2, APP-11	MTF
MINCLRREP	MINEFIELD CLEARING COMPLETION REPORT	The MINCLRREP is used to report the results of minefield clearing operations by friendly forces.	AEngrP-2, APP-11	MTF
MINLAYORD	MINEFIELD LAYING ORDER	The MINLAYORD is used to order minefield laying operations by friendly forces.	AEngrP-2, APP-11	MTF
MINLAYRECCEORD	MINEFIELD LAYING RECONNAISSANCE ORDER	The MINLAYRECCEORD is used to order friendly forces to conduct a reconnaissance for the laying of minefields by engineers.	AEngrP-2, APP-11	MTF
MINLAYRECCEREP	MINEFIELD LAYING RECONNAISSANCE REPORT	The MINLAYRECCEREP is used to report the results of a mine laying reconnaissance by friendly forces.	AEngrP-2, APP-11	MTF
MINLAYREP	MINEFIELD LAYING REPORT	The MINLAYREP is used to report the results of mine laying operations by friendly engineer troops	AEngrP-2, APP-11	MTF
OBSEXORD	OBSTACLE EXECUTION ORDER	The OBSEXORD is used to order obstacle execution operations of enemy or friendly obstacles.	AEngrP-2, APP-11	MTF
OBSEXREP	OBSTACLE EXECUTION REPORT	The OBSEXREP is used to report the results of obstacle execution operations.	AEngrP-2, APP-11	MTF
OBSRECCEORD	OBSTACLE RECONNAISSANCE ORDER	The OBSRECCEORD is used to order friendly forces to conduct a reconnaissance of friendly or enemy obstacles, either existing or planned.	AEngrP-2, APP-11	MTF
OBSRECCEREP	OBSTACLE RECONNAISSANCE REPORT	The OBSRECCEREP is used to report the results of a reconnaissance of enemy or friendly obstacles, existing or planned.	AEngrP-2, APP-11	MTF
OBSREP	OBSTACLE REPORT	The OBSREP is used to report obstacles up the chain of command.	AEngrP-2, APP-11, ATP-97, ATP-105	MTF, SM, VMT
RBTMAINTORD	ROAD, BRIDGE OR TUNNEL MAINTENANCE ORDER	The RBTMAINTORD is used to order a specific repair or maintenance task along a section of a route.	AEngrP-2, APP-11	MTF
RBTMAINTREP	ROAD, BRIDGE OR TUNNEL MAINTENANCE REPORT	The RBTMAINTREP is used to report the results of a specific repair or maintenance task along a section of a route.	AEngrP-2, APP-11	MTF
RBTRECCEORD	ROAD, BRIDGE OR TUNNEL RECONNAISSANCE ORDER	The RBTRECCEORD is used to order the technical reconnaissance along a section of a route.	AEngrP-2, APP-11	MTF
RBTRECCEREP	ROAD, BRIDGE OR TUNNEL RECONNAISSANCE REPORT	The RBTRECCEREP is used to report the results of a technical reconnaissance of a road, bridge or tunnel along a section of a route.	AEngrP-2, APP-11	MTF
ROUTERECCEORD	ROUTE RECONNAISSANCE ORDER	The ROUTERECCEORD is used to order a route reconnaissance at battalion level and below.	AEngrP-2, APP-11	MTF
ROUTERECCEREP	ROUTE RECONNAISSANCE REPORT	The ROUTERECCEREP is used to report the results of a route reconnaissance at battalion level and below.	AEngrP-2, APP-11	MTF
SCATMINORD	SCATTERABLE MINEFIELD ORDER	The SCATMINORD is used to order a scatterable minefield.	AEngrP-2, APP-11	MTF
SCATMINREC	SCATTERABLE MINEFIELD RECORD	The SCATMINREC is used to transmit a record about a scatterable minefield.	AEngrP-2, APP-11	MTF

Short Name	Message Full Name	Purpose	Publication	Format
SCATMINREP	SCATTERABLE MINEFIELD REPORT	The SCATMINREP is used to transmit a report about a scatterable minefield.	AEngrP-2, APP-11	MTF
SCATMINREQ	SCATTERABLE MINEFIELD REQUEST	The SCATMINREQ is used to request a scatterable minefield.	AEngrP-2, APP-11	MTF
SCATMINWARN	SCATTERABLE MINEFIELD WARNING	The SCATMINWARN is used to transmit a warning about a scatterable minefield.	AEngrP-2, APP-11	MTF
SURORD	SURVIVABILITY EXECUTION ORDER	The SURORD is used to order the execution of survivability tasks.	AEngrP-2, APP-11	MTF
SURRECCEORD	SURVIVABILITY RECONNAISSANCE ORDER	The SURRECCEORD is used to order a reconnaissance for survivability tasks.	AEngrP-2, APP-11	MTF
SURRECCEREP	SURVIVABILITY RECONNAISSANCE REPORT	The SURRECCEREP is used to report the results of a survivability task reconnaissance.	AEngrP-2, APP-11	MTF
SURREP	SURVIVABILITY COMPLETION REPORT	The SURREP is used to report the completion of a survivability task.	AEngrP-2, APP-11	MTF
BARREP	BARRIER REPORT	The BARREP is used to transmit, from headquarters to unit level, information on friendly obstacles, both current and planned.	AEngrP-2, APP-11	MTF
BRDMLORD	BRIDGE DEMOLITION ORDER	The BRDMLORD is used to order bridge demolition operations by friendly forces.	AEngrP-2, APP-11	MTF
BRDMLRECCEORD	BRIDGE DEMOLITION RECONNAISSANCE ORDER	The BRDMLRECCEORD is used to order friendly forces to conduct a reconnaissance of bridges for possible demolition.	AEngrP-2, APP-11	MTF
BRDMLRECCEREP	BRIDGE DEMOLITION RECONNAISSANCE REPORT	The BRDMLRECCEREP is used to report the results of a bridge demolition reconnaissance by friendly forces.	AEngrP-2, APP-11	MTF
BRDMLREP	BRIDGE DEMOLITION REPORT	The BRDMLREP is used to report the results of bridge demolition operations.	AEngrP-2, APP-11	MTF
DMLORD	RESERVED DEMOLITION ORDER	The DMLORD message is used to disseminate information relating to the execution of a reserved demolition.	AEngrP-2, APP-11	MTF

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**TERMS OF REFERENCE
DOCTRINE AND PLANNING PANEL (DPP)**

AIM

1.   The Doctrine and Planning Panel (DPP) is established by the Military Committee Land Standardisation Board (MCLSB) as a subordinate body under the Military Engineering Working Group (MILENGWG).

2.   The DPP advises the MILENGWG on military engineering topics and issues. The DPP will develop operational Standardization Agreements (STANAGs) and Allied Publications (APs) on the requirements for the military engineering in order to support combat operations, which are essential for current and future NATO operations.

COMPOSITION

3.   The panel consists of delegates of those member states, Strategic Commands (SCs), NATO subordinate commands, and NATO agencies that agree to participate

4.   The panel is encouraged to identify and involve any relevant NATO Military Bodies, NATO accredited Centres of Excellence (CoEs), NATO Education and Training Facilities (NETFs), and other NATO entities.

5.   The panel may involve non-NATO entities, and shall promote cooperation with civil Standards Developing Organizations (SDOs) and other interested parties in standardization activities within the guidance provided by the North Atlantic Council (NAC) and in accordance with NATO documents, on a case-by-case basis, and subject to the approval of the MCLSB. If participation of a partner nation has already been addressed in the Partnership Cooperation Menu (PCM)[3], then no further approval is required.

6.   Representatives from industry may be invited to participate in suitable panel activities, subject to MCLSB approval. Such participants are to be suitably accredited (security), must be sponsored by a member state or NATO entity and are to refrain from sales-related presentations.

7.   The panel chairperson is appointed by the WG, on the recommendation of the panel based on a majority vote, or following receipt of national nomination(s). The panel may establish a vice-chairperson who will assume the duties of the chairperson when the chairperson is absent.

8.   The panel will appoint a secretary.

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[3] The PCM is a "living document", and as such, additional activities/events are added through updates, on a rolling basis, approved by the NAC.

TASKS

9.   The general tasks include:

a.   Review, at least once every five years, the promulgated Standardization Agreements (STANAGs) and Allied Publications (APs), for which they have been allocated responsibility (see Annex A), to determine their continued validity and recommend amendment, consolidation, transfer of information to APs or cancellation, where appropriate.

b.   Ensure all STANAGs contain an implementation paragraph that set a list of specific actions, including qualification if necessary, that member states should take to complete implementation.

c.   Ensure that Standards support the capabilities, agreed by member states, in the Capability Codes & Capability Statements (CC&CS) Catalogue as part of the NATO Defence Planning Process (NDPP) and support member states in achieving their capability targets.

d.   Ensure all APs that fall within the panel's responsibility are fully harmonized with documents under the Allied Joint Doctrine Architecture (AJDA) and other related APs.

e.   Identify land interoperability gaps by collecting interoperability lessons identified and/or learned from NATO and (multi)national operations, activities, and exercises and provide advice to the WG, in order to mitigate the identified gaps.

f.   Initiate and develop new or amended standardization proposals in the Land domain, taking into account lessons identified and lessons learned from recent operations, exercises and experimentation for their potential to enhance interoperability.

g.   Ensure that standardization documents, for which the panel is the sponsor, do not include any detailed formatted or structured message formats or voice templates for character-oriented information exchange. These formats are commonly summarized and published in APP-11 - NATO Message Catalogue and ATP-105 - Land Operational Reports to which other publications shall refer.

h.   Develop and review related terminology and symbology in close coordination with the WG terminology representative.

i.   Ensure Fratricide Prevention, Defence against Terrorism (DAT), C-IED aspects and Building Integrity are addressed where relevant when developing new standards or reviewing the existing ones.

j.   Adopt any suitable civilian standard.

k.   Consider United Nations Security Council Resolution (UNSCR) 1325 (2000) on Women, Peace and Security and BI-SC 040-001 - Integrating UNSCR 1325 and

Gender Perspective into the NATO Command Structure (16 May 2017), where appropriate and applicable, in the development and revision of Standards.

l.   Review its TOR annually and recommend changes as required.

m.   Update the Programme of Work at each WG meeting.

n.   Carry out, or coordinate, such tasks as directed by the WG, including the annual direction and priorities.

PROCEDURES

10.   The panel will meet in accordance with the schedule of the WG meeting, which has been MCLSB agreed in the issued convening order for the WG meeting. The panel will issue their agenda according to the timelines mentioned in the convening order.

11.   The panel chairperson will issue a convening order in case the panel needs to convene outside the WG meeting. The convening order needs to be approved by the WG. The convening order will also contain WG Guidance and a tentative agenda.

12.   The panel can utilize video-teleconferences (VTCs) as a complementary means between panel meetings.

13.   Delegates to the panel should come to the meetings fully briefed and prepared to present national views. They are expected to participate in discussions on proposals to reach agreement in the interest of standardization. Acceptance of proposals is obtained from members of the WG, with final acceptance of proposals obtained from member states by the MCLSB. Furthermore, delegates from SCs or other entities, are expected to present views, according to their origin and expertise.

14.   The chairperson will be assisted in the preparation and conduct of the meeting, as well as in the preparation of the meeting report, by the appointed secretary.

15.   The decisions of the panel are expressed in terms of recommendations (action items) to the WG.

16.   A report shall be kept from each meeting and made available to WG members. The panel's recommendations (action items) become effective after the approval of the WG Action List by the MCLSB.

17.   If a fast track procedure is required when drafting a STANAG, it should be clearly indicated in the ratification request. The Fast Track Procedure is described in AAP-03.

18.   The panel may decide on the formation of a sub-group to undertake a specific task, or cluster of tasks. Where a sub-group is convened during and/or outside the meeting period, it is referred to as a team or syndicate.

19.   The panel will utilize the NSO website as the main source for its documents. The panel-dedicated forum will be used as the primary means of communication, co-ordination, and information exchange in the development of standards. When posting messages or

action items on the forum, all correspondents must be alerted via the "Notify Forum Users" function.

TERMINOLOGY

20.   Under the NATO Policy for Standardization, NATO documents must use NATO Agreed terminology. Therefore NATO Agreed terminology is the most basic component of any STANAG or AP. In order to achieve this goal, the NATO Terminology Directive provides a process whereby NATO standardizes terminology, the so-called NATO Terminology Programme (NTP). The Directive details the responsibilities of the various actors in the programme and the procedures to be followed to assign "NATO Agreed" status to terminology.

21.   When drafting NATO Standardization documents the panel must proceed in accordance with AAP-03, AAP-32, AAP-77, PO(2015)0193, and NATOTerm.

22.   Proposals aiming to add, modify or delete terms and definitions in NATOTerm must be processed by the NATO Terminology Office (NTO) using the Terminology Proposal Form (TTF) through the SLTSP and the WG terminology representative using the "LandTermNow" Process.

SYMBOLOGY

23.   Under the NATO Policy for Standardization, NATO graphics must use NATO Agreed symbols as detailed in APP-06 - NATO Joint Military Symbology. APP-06 provides common operational symbology and details how to display and plot these symbols to enhance the interoperability of NATO command and control systems, operations and training.

24.   Proposals aiming to add, modify or delete symbology should be endorsed by the WG and must be processed by the SLTSP using the Symbology Change Proposals (SCPs) or inclusion in APP-06. The SCP(s) will be submitted to the Joint Symbology Panel (JSP) for consideration and forwarding to the Information Exchange Requirement Harmonization Working Group (IERHWG) for endorsement and subsequent Military Committee Joint Standardization Board (MCJSB) approval.

INFORMATION EXCHANGE REQUIREMENTS

25.   The development, staffing, and configuration management of NATO Land IERs must be in accordance with the NATO IER development process, APP-15 - Information Exchange Requirements Specification Process.

26.   Proposals aiming to add, modify or delete any IER must be processed by the LOWG/SLIERP through the WG IER representative.

SECURITY

27.   All NATO non-classified ("NATO Unclassified" and "Public Releasable-No Markings") documents must be handled in accordance with C-M(2002)60 and all NATO classified documents must be handled in accordance with C-M(2002)49.

28.   When assessing the possibility to release the documents related to the development of a standard to the invited participants and observers from non-NATO entities, the existing memorandums and special approvals have to be considered and, if needed, supplementary approvals must be requested.

29.   NATO non-classified documents relevant to meeting agenda items may be released, to the invited participants and observers, as NATO security regulations allow.

30.   The security classification of NATO classified standardization documents shall be kept at the lowest level possible in order to allow for distribution to the widest possible audience.

PROTECTION OF PROPERTY RIGHTS

31.   In accordance with NATO's Intellectual Property Rights (IPR) policy, a NATO document becomes the intellectual property of NATO, managed by the NSO on behalf of member states and NATO. Additionally, each WG member involved in standardization activities shall use reasonable endeavours to identify and expeditiously inform the NSO on essential IPRs instrumental to the development of a NATO standardization document. AAP-32 - Publishing Standards for Allied Publications will be used as a reference for instructions on the protection of IPRs in Standards.

**TERMS OF REFERENCE
INFORMATION EXCHANGE REQUIREMENTS PANEL (IERP)**

AIM

1.   The Information Exchange Requirements Panel (IERP) is established by the Military Committee Land Standardisation Board (MCLSB) as a subordinate body under the Military Engineering Working Group (MILENGWG).

2.   The IERP advises the MILENG on Information Exchange Requirements (IERs). The IERP will develop and MILENG related Information and data sets in use within NATO, considering compatibility with current and future information management systems in order to improve the initiation, collection, processing, and dissemination of MILENG information to support operations.

COMPOSITION

3.   The panel consists of delegates of those member states, Strategic Commands (SCs), NATO subordinate commands, and NATO agencies that agree to participate.

4.   The panel is encouraged to identify and involve any relevant NATO Military Bodies, NATO accredited Centres of Excellence (CoEs), NATO Education and Training Facilities (NETFs), and other NATO entities.

5.   The panel may involve non-NATO entities, and shall promote cooperation with civil Standards Developing Organizations (SDOs) and other interested parties in standardization activities within the guidance provided by the North Atlantic Council (NAC) and in accordance with NATO documents, on a case-by-case basis, and subject to the approval of the MCLSB. If participation of a partner nation has already been addressed in the Partnership Cooperation Menu (PCM)[4], then no further approval is required.

6.   Representatives from industry may be invited to participate in suitable panel activities, subject to MCLSB approval. Such participants are to be suitably accredited (security), must be sponsored by a member state or NATO entity and are to refrain from sales-related presentations.

7.   The panel chairperson is appointed by the WG, on the recommendation of the panel based on a majority vote, or following receipt of national nomination(s). The panel may establish a vice-chairperson who will assume the duties of the chairperson when the chairperson is absent.

8.   The panel will appoint a secretary.

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[4] The PCM is a "living document", and as such, additional activities/events are added through updates, on a rolling basis, approved by the NAC.

TASKS

9.	The general tasks include:

a. Review, at least once every five years, the promulgated Standardization Agreements (STANAGs) and Allied Publications (APs), for which they have been allocated responsibility (see Annex A), to determine their continued validity and recommend amendment, consolidation, transfer of information to APs or cancellation, where appropriate.

b. Ensure all STANAGs contain an implementation paragraph that set a list of specific actions, including qualification if necessary, that member states should take to complete implementation.

c. Ensure that Standards support the capabilities, agreed by member states, in the Capability Codes & Capability Statements (CC&CS) Catalogue as part of the NATO Defence Planning Process (NDPP) and support member states in achieving their capability targets.

d. Ensure all APs that fall within the panel's responsibility are fully harmonized with documents under the Allied Joint Doctrine Architecture (AJDA) and other related APs.

e. Identify land interoperability gaps by collecting interoperability lessons identified and/or learned from NATO and (multi)national operations, activities, and exercises and provide advice to the WG, in order to mitigate the identified gaps.

f. Initiate and develop new or amended standardization proposals in the Land domain, taking into account lessons identified and lessons learned from recent operations, exercises and experimentation for their potential to enhance interoperability.

g. Ensure that standardization documents, for which the panel is the sponsor, do not include any detailed formatted or structured message formats or voice templates for character-oriented information exchange. These formats are commonly summarized and published in APP-11 - NATO Message Catalogue and ATP-105 - Land Operational Reports to which other publications shall refer.

h. Review its TOR annually and recommend changes as required.

i. Update the Programme of Work at each WG meeting.

j. Carry out, or coordinate, such tasks as directed by the WG, including the annual direction and priorities.

10.	The specific tasks include:

a.	Develop and maintain the MILENWG sponsored IERs to ensure that it fulfils the intent of the operational requirement.

b.   Verify before each meeting that the SLIERP database accurately reflects the current status of the messages for which the panel is responsible and report any discrepancies to the Chairperson and/or Secretary of the LOWG/SLIERP.

c.   Ensuring that the IER expresses the complete requirement, taking into account as appropriate the needs of those outside the immediate user community.

d.   Expressing the IER in the appropriate format and with the required level of detail.

e.   Establishing the target dates for the development of the IER, indicating inter-dependencies.

f.   Liaising with agency/agencies responsible for the development of the appropriate IER (requirement, process activity and format).

g.   Formally presenting the completed information to the relevant body for development of the appropriate IER.

h.   Advising the development of a new or modification of an existing IER.

i.   Nominating a point of contact for the resolution of questions arising during the production of the IER.

j.   Providing an appropriate representative (subject matter expert) at appropriate stages of the IER development.[5]

k.   Validating the developed IER to ensure that it fulfils the intent of the operational requirement.

l.   Passing the completed IER to the LOWG/SLIERP.

m.   Documenting impacts on applicable NATO publications and notifying appropriate custodians.[6]

n.   Articulating the scope and detail of military engineering information/data that is required to support operations and training, ensuring that those responsible for the storage, handling, retrieval and exploitation of generic information, including that related to military engineering, take into account the requirements to manage such information.

o.   Serving as the liaison between the SHAPE JENG Information Management System integrator and the MILENG WG with the lead as the Implementation Team of Experts.

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[5] For example, the MTFWG FRS, in the case of an MTF.
[6] In accordance with MAS(JSB)045-AHWP 1 dated 8 October 1997.

p.   The panel is responsible to the LOWG/SLIERP:

(1)   Harmonizing with existing IERs and those in development elsewhere.

(2)   Confirming that the IER could not be satisfied by an existing message, report or return (R2), or modification of such.

(3)   Providing the scope and detail of military engineering information/data that is required to support operations and training to ACO (Bi-SC AIS Management Plan).

PROCEDURES

11.   The panel will meet in accordance with the schedule of the WG meeting, which has been MCLSB agreed in the issued convening order for the WG meeting. The panel will issue their agenda according to the timelines mentioned in the convening order.

12.   The panel chairperson will issue a convening order in case the panel needs to convene outside the WG meeting. The convening order needs to be approved by the WG. The convening order will also contain WG Guidance and a tentative agenda.

13.   The panel can utilize video-teleconferences (VTCs) as a complementary means between panel meetings.

14.   Delegates to the panel should come to the meetings fully briefed and prepared to present national views. They are expected to participate in discussions on proposals to reach agreement in the interest of standardization. Acceptance of proposals is obtained from members of the WG, with final acceptance of proposals obtained from member states by the MCLSB. Furthermore, delegates from SCs or other entities, are expected to present views, according to their origin and expertise.

15.   The chairperson will be assisted in the preparation and conduct of the meeting, as well as in the preparation of the meeting report, by the appointed secretary.

16.   The decisions of the panel are expressed in terms of recommendations (action items) to the WG.

17.   A report shall be kept from each meeting and made available to WG members. The panel's recommendations (action items) become effective after the approval of the WG Action List by the MCLSB.

18.   If a fast track procedure is required when drafting a STANAG, it should be clearly indicated in the ratification request. The Fast Track Procedure is described in AAP-03.

19.   The panel may decide on the formation of a sub-group to undertake a specific task, or cluster of tasks. Where a sub-group is convened during and/or outside the meeting period, it is referred to as a team or syndicate.

20.   The panel chairperson will participate in the WG meetings to update the WG on the status of work to include issues of interest for the WG and requests for support.

21.   The panel will utilize the NSO website as the main source for its documents. The panel-dedicated forum will be used as the primary means of communication, co-ordination, and information exchange in the development of standards. When posting messages or action items on the forum, all correspondents must be alerted via the "Notify Forum Users" function.

TERMINOLOGY

22.   Under the NATO Policy for Standardization, NATO documents must use NATO Agreed terminology. Therefore NATO Agreed terminology is the most basic component of any STANAG or AP. In order to achieve this goal, the NATO Terminology Directive provides a process whereby NATO standardizes terminology, the so-called NATO Terminology Programme (NTP). The Directive details the responsibilities of the various actors in the programme and the procedures to be followed to assign "NATO Agreed" status to terminology.

23.   When drafting NATO Standardization documents the panel must proceed in accordance with AAP-03, AAP-32, AAP-77, PO(2015)0193, and NATOTerm.

24.   Proposals aiming to add, modify or delete terms and definitions in NATOTerm must be processed by the NATO Terminology Office (NTO) using the Terminology Proposal Form (TTF) through the SLTSP and the WG terminology representative using the "LandTermNow" Process.

SYMBOLOGY

25.   Under the NATO Policy for Standardization, NATO graphics must use NATO Agreed symbols as detailed in APP-06 - NATO Joint Military Symbology. APP-06 provides common operational symbology and details how to display and plot these symbols to enhance the interoperability of NATO command and control systems, operations and training.

26.   Proposals aiming to add, modify or delete symbology should be endorsed by the WG and must be processed by the SLTSP using the Symbology Change Proposals (SCPs) or inclusion in APP-06. The SCP(s) will be submitted to the Joint Symbology Panel (JSP) for consideration and forwarding to the Information Exchange Requirement Harmonization Working Group (IERHWG) for endorsement and subsequent Military Committee Joint Standardization Board (MCJSB) approval.

INFORMATION EXCHANGE REQUIREMENTS

27.   The development, staffing, and configuration management of NATO Land IERs must be in accordance with the NATO IER development process, APP-15 - Information Exchange Requirements Specification Process.

28.   Proposals aiming to add, modify or delete any IER must be processed by the LOWG/SLIERP through the WG IER representative.

SECURITY

29.   All NATO non-classified ("NATO Unclassified" and "Public Releasable-No Markings") documents must be handled in accordance with C-M(2002)60 and all NATO classified documents must be handled in accordance with C-M(2002)49.

30.   When assessing the possibility to release the documents related to the development of a standard to the invited participants and observers from non-NATO entities, the existing memorandums and special approvals have to be considered and, if needed, supplementary approvals must be requested.

31.   NATO non-classified documents relevant to meeting agenda items may be released, to the invited participants and observers, as NATO security regulations allow.

32.   The security classification of NATO classified standardization documents shall be kept at the lowest level possible in order to allow for distribution to the widest possible audience.

PROTECTION OF PROPERTY RIGHTS

33.   In accordance with NATO's Intellectual Property Rights (IPR) policy, a NATO document becomes the intellectual property of NATO, managed by the NSO on behalf of member states and NATO. Additionally, each WG member involved in standardization activities shall use reasonable endeavours to identify and expeditiously inform the NSO on essential IPRs instrumental to the development of a NATO standardization document. AAP-32 - Publishing Standards for Allied Publications will be used as a reference for instructions on the protection of IPRs in Standards.

**TERMS OF REFERENCE
INFRASTRUCTURE MANAGEMENT PANEL (IMP)**

AIM

1.   The Infrastructure Management Panel (IMP) is established by the Military Committee Land Standardisation Board (MCLSB) as a subordinate body under the Military Engineering Working Group (MILENGWG).

2.   The IMP advises the MILENGWG on infrastructure related topics and issues. The IMP will develop Standardization Agreements (STANAGs) and Allied Publications (APs) on the requirements for infrastructure management for military engineering to support operations, which are essential for current and future North Atlantic Treaty Organization (NATO) operations.

COMPOSITION

3.   The panel consists of delegates of those member states, Strategic Commands (SCs), NATO subordinate commands, and NATO agencies that agree to participate.

4.   The panel is encouraged to identify and involve any relevant NATO Military Bodies, NATO accredited Centres of Excellence (CoEs), NATO Education and Training Facilities (NETFs), and other NATO entities.

5.   The panel may involve non-NATO entities, and shall promote cooperation with civil Standards Developing Organizations (SDOs) and other interested parties in standardization activities within the guidance provided by the North Atlantic Council (NAC) and in accordance with NATO documents, on a case-by-case basis, and subject to the approval of the MCLSB. If participation of a partner nation has already been addressed in the Partnership Cooperation Menu (PCM)[7], then no further approval is required.

6.   Representatives from industry may be invited to participate in suitable panel activities, subject to MCLSB approval. Such participants are to be suitably accredited (security), must be sponsored by a member state or NATO entity and are to refrain from sales-related presentations.

7.   The panel chairperson is appointed by the WG, on the recommendation of the panel based on a majority vote, or following receipt of national nomination(s). The panel may establish a vice-chairperson who will assume the duties of the chairperson when the chairperson is absent.

8.   The panel will appoint a secretary.

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[7] The PCM is a "living document", and as such, additional activities/events are added through updates, on a rolling basis, approved by the NAC.

TASKS

9.   The general tasks include:

    a.   Review, at least once every five years, the promulgated Standardization Agreements (STANAGs) and Allied Publications (APs), for which they have been allocated responsibility (see Annex A), to determine their continued validity and recommend amendment, consolidation, transfer of information to APs or cancellation, where appropriate.

    b.   Ensure all STANAGs contain an implementation paragraph that set a list of specific actions, including qualification if necessary, that member states should take to complete implementation.

    c.   Ensure that Standards support the capabilities, agreed by member states, in the Capability Codes & Capability Statements (CC&CS) Catalogue as part of the NATO Defence Planning Process (NDPP) and support member states in achieving their capability targets.

    d.   Ensure all APs that fall within the panel's responsibility are fully harmonized with documents under the Allied Joint Doctrine Architecture (AJDA) and other related APs.

    e.   Identify land interoperability gaps by collecting interoperability lessons identified and/or learned from NATO and (multi)national operations, activities, and exercises and provide advice to the WG, in order to mitigate the identified gaps.

    f.   Initiate and develop new or amended standardization proposals in the Land domain, taking into account lessons identified and lessons learned from recent operations, exercises and experimentation for their potential to enhance interoperability.

    g.   Ensure that standardization documents, for which the panel is the sponsor, do not include any detailed formatted or structured message formats or voice templates for character-oriented information exchange. These formats are commonly summarized and published in APP-11 - NATO Message Catalogue and ATP-105 - Land Operational Reports to which other publications shall refer.

    h.   Develop and review related terminology and symbology in close coordination with the WG terminology representative.

    i.   Ensure Fratricide Prevention, Defence against Terrorism (DAT), C-IED aspects and Building Integrity are addressed where relevant when developing new standards or reviewing the existing ones.

    j.   Adopt any suitable civilian standard.

    k.   Consider United Nations Security Council Resolution (UNSCR) 1325 (2000) on Women, Peace and Security and BI-SC 040-001 - Integrating UNSCR 1325 and

Gender Perspective into the NATO Command Structure (16 May 2017), where appropriate and applicable, in the development and revision of Standards.

l.   Review its TOR annually and recommend changes as required.

m.   Update the Programme of Work at each WG meeting.

n.   Carry out, or coordinate, such tasks as directed by the WG, including the annual direction and priorities.

10.   The specific tasks include:

a.   Develop proposals for NATO Science & Technology Office (STO) and NATO Industrial Advisory Group (NIAG) studies in close coordination with the Materiel Panel (MatP).

b.   Coordinate matters related to other panels, such as doctrine, materiel and terminology, with the appropriate panel.

PROCEDURES

11.   The panel will meet in accordance with the schedule of the WG meeting, which has been MCLSB agreed in the issued convening order for the WG meeting. The panel will issue their agenda according to the timelines mentioned in the convening order.

12.   The panel chairperson will issue a convening order in case the panel needs to convene outside the WG meeting. The convening order needs to be approved by the WG. The convening order will also contain WG Guidance and a tentative agenda.

13.   The panel can utilize video-teleconferences (VTCs) as a complementary means between panel meetings.

14.   Delegates to the panel should come to the meetings fully briefed and prepared to present national views. They are expected to participate in discussions on proposals to reach agreement in the interest of standardization. Acceptance of proposals is obtained from members of the WG, with final acceptance of proposals obtained from member states by the MCLSB. Furthermore, delegates from SCs or other entities, are expected to present views, according to their origin and expertise.

15.   The chairperson will be assisted in the preparation and conduct of the meeting, as well as in the preparation of the meeting report, by the appointed secretary.

16.   The decisions of the panel are expressed in terms of recommendations (action items) to the WG.

17.   A report shall be kept from each meeting and made available to WG members. The panel's recommendations (action items) become effective after the approval of the WG Action List by the MCLSB.

18.   If a fast track procedure is required when drafting a STANAG, it should be clearly indicated in the ratification request. The Fast Track Procedure is described in AAP-03.

19.   The panel may decide on the formation of a sub-group to undertake a specific task, or cluster of tasks. Where a sub-group is convened during and/or outside the meeting period, it is referred to as a team or syndicate.

20.   The panel chairperson will participate in the WG meetings to update the WG on the status of work to include issues of interest for the WG and requests for support.

21.   The panel will utilize the NSO website as the main source for its documents. The panel-dedicated forum will be used as the primary means of communication, co-ordination, and information exchange in the development of standards. When posting messages or action items on the forum, all correspondents must be alerted via the "Notify Forum Users" function.

TERMINOLOGY

22.   Under the NATO Policy for Standardization, NATO documents must use NATO Agreed terminology. Therefore NATO Agreed terminology is the most basic component of any STANAG or AP. In order to achieve this goal, the NATO Terminology Directive provides a process whereby NATO standardizes terminology, the so-called NATO Terminology Programme (NTP). The Directive details the responsibilities of the various actors in the programme and the procedures to be followed to assign "NATO Agreed" status to terminology.

23.   When drafting NATO Standardization documents the panel must proceed in accordance with AAP-03, AAP-32, AAP-77, PO(2015)0193, and NATOTerm.

24.   Proposals aiming to add, modify or delete terms and definitions in NATOTerm must be processed by the NATO Terminology Office (NTO) using the Terminology Proposal Form (TTF) through the SLTSP and the WG terminology representative using the "LandTermNow" Process.

SYMBOLOGY

25.   Under the NATO Policy for Standardization, NATO graphics must use NATO Agreed symbols as detailed in APP-06 - NATO Joint Military Symbology. APP-06 provides common operational symbology and details how to display and plot these symbols to enhance the interoperability of NATO command and control systems, operations and training.

26.   Proposals aiming to add, modify or delete symbology should be endorsed by the WG and must be processed by the SLTSP using the Symbology Change Proposals (SCPs) or inclusion in APP-06. The SCP(s) will be submitted to the Joint Symbology Panel (JSP) for consideration and forwarding to the Information Exchange Requirement Harmonization Working Group (IERHWG) for endorsement and subsequent Military Committee Joint Standardization Board (MCJSB) approval.

INFORMATION EXCHANGE REQUIREMENTS

27.   The development, staffing, and configuration management of NATO Land IERs must be in accordance with the NATO IER development process, APP-15 - Information Exchange Requirements Specification Process.

28.   Proposals aiming to add, modify or delete any IER must be processed by the LOWG/SLIERP through the WG IER representative.

SECURITY

29.   All NATO non-classified ("NATO Unclassified" and "Public Releasable-No Markings") documents must be handled in accordance with C-M(2002)60 and all NATO classified documents must be handled in accordance with C-M(2002)49.

30.   When assessing the possibility to release the documents related to the development of a standard to the invited participants and observers from non-NATO entities, the existing memorandums and special approvals have to be considered and, if needed, supplementary approvals must be requested.

31.   NATO non-classified documents relevant to meeting agenda items may be released, to the invited participants and observers, as NATO security regulations allow.

32.   The security classification of NATO classified standardization documents shall be kept at the lowest level possible in order to allow for distribution to the widest possible audience.

PROTECTION OF PROPERTY RIGHTS

33.   In accordance with NATO's Intellectual Property Rights (IPR) policy, a NATO document becomes the intellectual property of NATO, managed by the NSO on behalf of member states and NATO. Additionally, each WG member involved in standardization activities shall use reasonable endeavours to identify and expeditiously inform the NSO on essential IPRs instrumental to the development of a NATO standardization document. AAP-32 - Publishing Standards for Allied Publications will be used as a reference for instructions on the protection of IPRs in Standards.

TERMS OF REFERENCE
MATERIEL PANEL (MATP)

AIM

1.   The Materiel Panel (MatP) is established by the Military Committee Land Standardisation Board (MCLSB) as a subordinate body under the Military Engineering Working Group (MILENGWG). It is formed to discharge the duties to the MILENG WG to the Conference of National Armaments Directors (CNAD) through NATO Army Armaments Group (NAAG). CNAD is a 2nd Tasking Authority (TA) and NAAG is a 2nd Delegated Tasking Authority (DTA) through the MCLSB and the MILENGWG.

2.   The MatP supports the development of the MILENG capability by executing the materiel-related responsibilities of the MILENGWG. The MatP will develop a program of work to carry out tasks identified by the NAAG and the MILENGWG and identify other priority tasks and provide products as appropriate.

COMPOSITION

3.   The panel consists of delegates of those member states, Strategic Commands (SCs), NATO subordinate commands, and NATO agencies that agree to participate.

4.   The panel is encouraged to identify and involve any relevant NATO Military Bodies, NATO accredited Centres of Excellence (CoEs), NATO Education and Training Facilities (NETFs), and other NATO entities.

5.   The panel may involve non-NATO entities, and shall promote cooperation with civil Standards Developing Organizations (SDOs) and other interested parties in standardization activities within the guidance provided by the North Atlantic Council (NAC) and in accordance with NATO documents, on a case-by-case basis, and subject to the approval of the MCLSB. If participation of a partner nation has already been addressed in the Partnership Cooperation Menu (PCM)[8], then no further approval is required.

6.   Representatives from industry may be invited to participate in suitable panel activities, subject to MCLSB approval. Such participants are to be suitably accredited (security), must be sponsored by a member state or NATO entity and are to refrain from sales-related presentations.

7.   The panel chairperson is appointed by the WG, on the recommendation of the panel based on a majority vote, or following receipt of national nomination(s). The panel may establish a vice-chairperson who will assume the duties of the chairperson when the chairperson is absent.

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[8] The PCM is a "living document", and as such, additional activities/events are added through updates, on a rolling basis, approved by the NAC.

8.   The panel will appoint a secretary.

TASKS

9.   The general tasks include:

a.   Review, at least once every five years, the promulgated Standardization Agreements (STANAGs) and Allied Publications (APs), for which they have been allocated responsibility (see Annex A), to determine their continued validity and recommend amendment, consolidation, transfer of information to APs or cancellation, where appropriate.

b.   Ensure all STANAGs contain an implementation paragraph that set a list of specific actions, including qualification if necessary, that member states should take to complete implementation.

c.   Ensure that Standards support the capabilities, agreed by member states, in the Capability Codes & Capability Statements (CC&CS) Catalogue as part of the NATO Defence Planning Process (NDPP) and support member states in achieving their capability targets.

d.   Ensure all APs that fall within the panel's responsibility are fully harmonized with documents under the Allied Joint Doctrine Architecture (AJDA) and other related APs.

e.   Identify land interoperability gaps by collecting interoperability lessons identified and/or learned from NATO and (multi)national operations, activities, and exercises and provide advice to the WG, in order to mitigate the identified gaps.

f.   Initiate and develop new or amended standardization proposals in the Land domain, taking into account lessons identified and lessons learned from recent operations, exercises and experimentation for their potential to enhance interoperability.

g.   Ensure that standardization documents, for which the panel is the sponsor, do not include any detailed formatted or structured message formats or voice templates for character-oriented information exchange. These formats are commonly summarized and published in APP-11 - NATO Message Catalogue and ATP-105 - Land Operational Reports to which other publications shall refer.

h.   Develop and review related terminology and symbology in close coordination with the WG terminology representative.

i.   Ensure Fratricide Prevention, Defence against Terrorism (DAT), C-IED aspects and Building Integrity are addressed where relevant when developing new standards or reviewing the existing ones.

j.   Adopt any suitable civilian standard.

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k.   Consider United Nations Security Council Resolution (UNSCR) 1325 (2000) on Women, Peace and Security and BI-SC 040-001 - Integrating UNSCR 1325 and Gender Perspective into the NATO Command Structure (16 May 2017), where appropriate and applicable, in the development and revision of Standards.

l.   Review its TOR annually and recommend changes as required.

m.   Update the Programme of Work at each WG meeting.

n.   Carry out, or coordinate, such tasks as directed by the WG, including the annual direction and priorities.

10.   The specific tasks include:

a.   Harmonize MILENG materiel-related issues among the member states by:
(1)   Sharing information on existing, emerging and long-term capability requirements and shortfalls, and on the state of technology to address these needs. This includes sharing information on national programmers of possible interest to other member states.
(2)   Developing materiel standards to foster interoperability. These can be interface standards (such as Military Load Class), performance standards (such as Handheld Mine Detector Testing) and/or other topics such as energy.
(3)   Identifying and developing cooperative development, testing and procurement programs to achieve cost savings and achieve equipment commonality.
(4)   Providing materiel related expertise to other WG panels in order to foster cooperation and information exchange to achieve common goals.

b.   Support Defence against Terrorism Program of Work (DAT POW), C-IED and EOD efforts, when requested.

c.   Identify potential study proposals, typically within NATO Industrial Advisory Group (NIAG) and the Science and Technology Organization (STO).

d.   Foster multinational cooperation on materiel procurement.

e.   Share releasable materiel information from current operations and national programs.

f.   Act as is the lead organization for the materiel aspects of NDPP.

g.   Recommend materiel solutions for identified capability shortfalls, including NDPP requirements.

PROCEDURES

11.   The panel will meet in accordance with the schedule of the WG meeting, which has been MCLSB agreed in the issued convening order for the WG meeting. The panel will issue their agenda according to the timelines mentioned in the convening order.

12.   The panel chairperson will issue a convening order in case the panel needs to convene outside the WG meeting. The convening order needs to be approved by the WG. The convening order will also contain WG Guidance and a tentative agenda.

13.   The panel can utilize video-teleconferences (VTCs) as a complementary means between panel meetings.

14.   Delegates to the panel should come to the meetings fully briefed and prepared to present national views. They are expected to participate in discussions on proposals to reach agreement in the interest of standardization. Acceptance of proposals is obtained from members of the WG, with final acceptance of proposals obtained from member states by the MCLSB. Furthermore, delegates from SCs or other entities, are expected to present views, according to their origin and expertise.

15.   The chairperson will be assisted in the preparation and conduct of the meeting, as well as in the preparation of the meeting report, by the appointed secretary.

16.   The decisions of the panel are expressed in terms of recommendations (action items) to the WG.

17.   A report shall be kept from each meeting and made available to WG members. The panel's recommendations (action items) become effective after the approval of the WG Action List by the MCLSB.

18.   If a fast track procedure is required when drafting a STANAG, it should be clearly indicated in the ratification request. The Fast Track Procedure is described in AAP-03.

19.   The panel may decide on the formation of a sub-group to undertake a specific task, or cluster of tasks. Where a sub-group is convened during and/or outside the meeting period, it is referred to as a team or syndicate.

20.   The panel chairperson will participate in the WG meetings to update the WG on the status of work to include issues of interest for the WG and requests for support.

21.   The panel chairperson will represent the MILENG WG at the meetings twice annually of the NAAG, The panel chairperson will report on the progress of assigned tasks as outlined in the Land Armaments Management Plan (LAMP) and propose panel tasks to be included into the LAMP.

22.   The panel will utilize the NSO website as the main source for its documents. The panel-dedicated forum will be used as the primary means of communication, co-ordination, and information exchange in the development of standards. When posting messages or action items on the forum, all correspondents must be alerted via the "Notify Forum Users" function.

TERMINOLOGY

23.   Under the NATO Policy for Standardization, NATO documents must use NATO Agreed terminology. Therefore NATO Agreed terminology is the most basic component of

any STANAG or AP. In order to achieve this goal, the NATO Terminology Directive provides a process whereby NATO standardizes terminology, the so-called NATO Terminology Programme (NTP). The Directive details the responsibilities of the various actors in the programme and the procedures to be followed to assign "NATO Agreed" status to terminology.

34. When drafting NATO Standardization documents the panel must proceed in accordance with AAP-03, AAP-32, AAP-77, PO(2015)0193, and NATOTerm.

35. Proposals aiming to add, modify or delete terms and definitions in NATOTerm must be processed by the NATO Terminology Office (NTO) using the Terminology Proposal Form (TTF) through the SLTSP and the WG terminology representative using the "LandTermNow" Process.

SYMBOLOGY

24. Under the NATO Policy for Standardization, NATO graphics must use NATO Agreed symbols as detailed in APP-06 - NATO Joint Military Symbology. APP-06 provides common operational symbology and details how to display and plot these symbols to enhance the interoperability of NATO command and control systems, operations and training.

25. Proposals aiming to add, modify or delete symbology should be endorsed by the WG and must be processed by the SLTSP using the Symbology Change Proposals (SCPs) or inclusion in APP-06. The SCP(s) will be submitted to the Joint Symbology Panel (JSP) for consideration and forwarding to the Information Exchange Requirement Harmonization Working Group (IERHWG) for endorsement and subsequent Military Committee Joint Standardization Board (MCJSB) approval.

INFORMATION EXCHANGE REQUIREMENTS

26. The development, staffing, and configuration management of NATO Land IERs must be in accordance with the NATO IER development process, APP-15 - Information Exchange Requirements Specification Process.

27. Proposals aiming to add, modify or delete any IER must be processed by the LOWG/SLIERP through the WG IER representative.

SECURITY

28. All NATO non-classified ("NATO Unclassified" and "Public Releasable-No Markings") documents must be handled in accordance with C-M(2002)60 and all NATO classified documents must be handled in accordance with C-M(2002)49.

29. When assessing the possibility to release the documents related to the development of a standard to the invited participants and observers from non-NATO entities, the existing memorandums and special approvals have to be considered and, if needed, supplementary approvals must be requested.

30.   NATO non-classified documents relevant to meeting agenda items may be released, to the invited participants and observers, as NATO security regulations allow.

31.   The security classification of NATO classified standardization documents shall be kept at the lowest level possible in order to allow for distribution to the widest possible audience.

PROTECTION OF PROPERTY RIGHTS

32.   In accordance with NATO's Intellectual Property Rights (IPR) policy, a NATO document becomes the intellectual property of NATO, managed by the NSO on behalf of member states and NATO. Additionally, each WG member involved in standardization activities shall use reasonable endeavours to identify and expeditiously inform the NSO on essential IPRs instrumental to the development of a NATO standardization document. AAP-32 - Publishing Standards for Allied Publications will be used as a reference for instructions on the protection of IPRs in Standards.

**TERMS OF REFERENCE
TERMINOLOGY PANEL (TP)**

AIM

1.   The Terminology Panel (TP) is established by the Military Committee Land Standardisation Board (MCLSB) as a subordinate body under the Military Engineering Working Group (MILENGWG).

2.   The TP advises the MILENGWG on terminology and symbology topics and issues. The TP will support the use and development of MILENG related terminology and symbology in MILENGWG sponsored Standardization Agreements (STANAGs) and Allied Publications (APs).

COMPOSITION

3.   The panel consists of delegates of those member states, Strategic Commands (SCs), NATO subordinate commands, and agencies that agreed to participate and Partnership Cooperation Menu (PCM) nations that agree and are approved to participate.

4.   The panel consists of delegates of those member states, SCs, NATO subordinate commands, and NATO agencies that agree to participate.

5.   The panel is encouraged to identify and involve any relevant NATO Military Bodies, NATO accredited Centres of Excellence (CoEs), NATO Education and Training Facilities (NETFs), and other NATO entities.

6.   The panel may involve non-NATO entities, and shall promote cooperation with civil Standards Developing Organizations (SDOs) and other interested parties in standardization activities within the guidance provided by the North Atlantic Council (NAC) and in accordance with NATO documents, on a case-by-case basis, and subject to the approval of the MCLSB. If participation of a partner nation has already been addressed in the Partnership Cooperation Menu (PCM)[9], then no further approval is required.

7.   Representatives from industry may be invited to participate in suitable panel activities, subject to MCLSB approval. Such participants are to be suitably accredited (security), must be sponsored by a member state or NATO entity and are to refrain from sales-related presentations.

8.   The panel chairperson is appointed by the WG, on the recommendation of the panel based on a majority vote, or following receipt of national nomination(s). The panel may establish a vice-chairperson who will assume the duties of the chairperson when the chairperson is absent.

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[9] The PCM is a "living document", and as such, additional activities/events are added through updates, on a rolling basis, approved by the NAC.

9.   The panel will appoint a secretary.

TASKS

10.   The specific tasks include:

a.   Maintain terminology situational awareness within the WG.

b.   Develop and review related terminology and symbology in close coordination with the LOWG / Senior Land Terminology and Symbology Panel (SLTSP).

c.   Consider the adoption of any suitable civilian standard.

d.   Review its TOR annually and recommend changes as required.

e.   Update the Programme of Work at each WG meeting.

f.   Carry out, or coordinate, such tasks as directed by the WG, including the annual direction and priorities.

11.   The specific tasks include:

a.   To maintain terminology situational awareness, the panel terminology representative must be subscribed to the LOWG/SLTSP Forum, on the NSO Protected Website.

b.   Use the NATO Terminology Tracking File (TTF) Tracker, on the NSO Protected Website, to maintain situational awareness on the status of its TTFs and provide updates to their panel.

c.   Support custodians in using NATO agreed terminology and non-NATO agreed terms and symbology.

d.   Liaise with the LOWG/SLTSP and national terminology authorities.

PROCEDURES

12.   The panel will meet in accordance with the schedule of the WG meeting, which has been MCLSB agreed in the issued convening order for the WG meeting. The panel will issue their agenda according to the timelines mentioned in the convening order.

13.   The panel chairperson will issue a convening order in case the panel needs to convene outside the WG meeting. The convening order needs to be approved by the WG. The convening order will also contain WG Guidance and a tentative agenda.

14.   The panel can utilize video-teleconferences (VTCs) as a complementary means between panel meetings.

15.   Delegates to the panel should come to the meetings fully briefed and prepared to present national views. They are expected to participate in discussions on proposals to reach agreement in the interest of standardization. Acceptance of proposals is obtained

from members of the WG, with final acceptance of proposals obtained from member states by the MCLSB. Furthermore, delegates from SCs or other entities, are expected to present views, according to their origin and expertise.

16.   The chairperson will be assisted in the preparation and conduct of the meeting, as well as in the preparation of the meeting report, by the appointed secretary.

17.   The decisions of the panel are expressed in terms of recommendations (action items) to the WG.

18.   A report shall be kept from each meeting and made available to WG members. The panel's recommendations (action items) become effective after the approval of the WG Action List by the MCLSB.

19.   When drafting STANAGs, the "Fast Track Procedure" as laid down in AAP-03. If a fast track procedure is required, it shall be clearly indicated in the ratification request.

20.   The panel may decide on the formation of a sub-group to undertake a specific task, or cluster of tasks. Where a sub-group is convened during and/or outside the meeting period, it is referred to as a team or syndicate.

21.   The panel chairperson will participate in the WG meetings to update the WG on the status of work to include issues of interest for the WG and requests for support.

22.   The panel will utilize the NSO website as the main source for its documents. The panel-dedicated forum will be used as the primary means of communication, co-ordination, and information exchange in the development of standards. When posting messages or action items on the forum, all correspondents must be alerted via the "Notify Forum Users" function. For the purpose a capability development, useful information could be found at Defence Investment (DI) Web portal.

TERMINOLOGY

23.   Under the NATO Policy for Standardization, NATO documents must use NATO Agreed terminology. Therefore NATO Agreed terminology is the most basic component of any STANAG or AP. In order to achieve this goal, the NATO Terminology Directive provides a process whereby NATO standardizes terminology, the so-called NATO Terminology Programme (NTP). The Directive details the responsibilities of the various actors in the programme and the procedures to be followed to assign "NATO Agreed" status to terminology.

24.   When drafting NATO Standardization documents the panel must proceed in accordance with AAP-03, AAP-32, AAP-77, PO(2015)0193, and NATOTerm.

25.   Proposals aiming to add, modify or delete terms and definitions in NATOTerm must be processed using the "LandTermNow" Process.

SYMBOLOGY

26.   Under the NATO Policy for Standardization, NATO graphics must use NATO Agreed symbols as detailed in APP-06 - NATO Joint Military Symbology. APP-06 provides common operational symbology and details how to display and plot these symbols to enhance the interoperability of NATO command and control systems, operations and training.

27.   Proposals aiming to add, modify or delete symbology should be endorsed by the WG and must be processed by the SLTSP using the Symbology Change Proposals (SCPs) or inclusion in APP-06. The SCP(s) will be submitted to the Joint Symbology Panel (JSP) for consideration and forwarding to the Information Exchange Requirement Harmonization Working Group (IERHWG) for endorsement and subsequent Military Committee Joint Standardization Board (MCJSB) approval.

INFORMATION EXCHANGE REQUIREMENTS

28.   The development, staffing, and configuration management of NATO Land IERs must be in accordance with the NATO IER development process, APP-15 - Information Exchange Requirements Specification Process.

29.   Proposals aiming to add, modify or delete any IER must be processed by the LOWG/SLIERP through the WG IER representative.

SECURITY

30.   All NATO non-classified ("NATO Unclassified" and "Public Releasable-No Markings") documents must be handled in accordance with C-M(2002)60 and all NATO classified documents must be handled in accordance with C-M(2002)49.

31.   When assessing the possibility to release the documents related to the development of a standard to the invited participants and observers from non-NATO entities, the existing memorandums and special approvals have to be considered and, if needed, supplementary approvals must be requested.

32.   NATO non-classified documents relevant to meeting agenda items may be released, to the invited participants and observers, as NATO security regulations allow.

33.   The security classification of NATO classified standardization documents shall be kept at the lowest level possible in order to allow for distribution to the widest possible audience.

PROTECTION OF PROPERTY RIGHTS

34.   In accordance with NATO's Intellectual Property Rights (IPR) policy, a NATO document becomes the intellectual property of NATO, managed by the NSO on behalf of member states and NATO. Additionally, each WG member involved in standardization activities shall use reasonable endeavours to identify and expeditiously inform the NSO on essential IPRs instrumental to the development of a NATO standardization document. AAP-32 - Publishing Standards for Allied Publications will be used as a reference for instructions on the protection of IPRs in Standards.