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NATO ARMY ARMAMENTS GROUP (NAAG)

INTEGRATED CAPABILITY GROUP INDIRECT FIRE

Terms of Reference (ToR) of NAAG-MCLSB ICGIF Panels

Ref.1   AC/225(IF)DS(2017)0001

1.   Per Ref.1, ICGIF decided to publish the Terms of Reference (ToR) of its subordinate panels as a document for reference. The ToR of the Panels were agreed and posted on the DI Portal previously. The TORs were reviewed and minor necessary updates, mainly of administrative nature, have been implemented. This document consists of the following annexes:

1. ToR of the Doctrine Terminology and Symbology Panel (DTSP)
2. ToR of the Future Capabilities Panel (FCP)
3. ToR of the Information Exchange Requirements Panel (IERP)
4. ToR of the Procedures Panel (PP)
5. ToR of the SG/2 Panel on Ballistics, Effectiveness and Fire Control Software

(Signed) O. TASMAN

5 Annexes

Action Officer: O. TASMAN, x4300
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ANNEX 1
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**TERMS OF REFERENCE (TOR)
FOR THE
NATO ARMAMENTS GROUP (NAAG)
AND
MILITARY COMMITTEE LAND STANDARDIZATION BOARD (MCLSB)
INTEGRATED CAPABILITY GROUP ON INDIRECT FIRE (ICGIF)**

**INDIRECT FIRE TACTICAL DOCTRINE, TERMINOLOGY, AND SYMBOLOGY (DTS)
PANEL**

INTRODUCTION

1.   The NAAG and MCLSB ICGIF Indirect Fire Doctrine, Terminology, and Symbology Panel is established under the ICG IF in accordance with NSAP.

MISSION

2.   The NAAG and MCLSB ICGIF Indirect Fire Doctrine, Terminology and Symbology Panel will develop, harmonize and validate fire support and effect doctrine proposals, will co-ordinate Fire Support and Effect terminology and symbology proposals in support of operational requirements for the Land Standardization Board.

COMPOSITION

3.   The panel will consist of a Chairman and national delegates from the NAAG and MCLSB ICGIF. The custodian Nation of AArtyP-5 (currently DEU) will chair the panel. The Panel selects a Vice-Chairman who will lead the group in the absence of the Chairman. The Indirect Fire Doctrine, Terminology and Symbology Panel currently consists of the following volunteer nations: BEL, CAN, DEU, FRA, GBR, NLD, SWE and USA, and is open to participation of all ICGIF members.

4.   A Secretary may be appointed from within the Panel at the discretion of the Panel Chairman.

SPECIFIC WORKING PRACTICES

5.   The Panel normally meets 3 times a year, either in conjunction with the ICGIF Meetings or at a time and venue agreed by the Panel participants.

RESPONSIBILITIES

6.   The panel is responsible to the ICGIF for:

    a.   Developing Indirect Fire and Joint Fire Support Doctrine, Terminology and Symbology (eg AArty P-5 NATO INDIRECT FIRE SYSTEMS TACTICAL DOCTRINE)

    b.   Initiating and developing new standardization proposals and preparing STANAGs and APs on Fire Support Doctrine. Each STANAG must contain an implementation paragraph which clearly defines how and when the STANAG is implemented by the ratifying nations.

    c.   Introducing emerging doctrine to all APs of the ICGIF.

    d.   Harmonising with other LAND and JOINT DOCTRINE APs (eg AJP-3.2).

    e.   Maintaining NATO Artillery Terms, Terminology and Definitions.

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FUTURE CAPABILITIES PANEL (FCP)

INTRODUCTION

1.   The NAAG and MCLSB ICGIF Future Capabilities Panel is established under the ICG IF.

MISSION

2.   The NAAG and MCLSB ICGIF Future Capabilities Panel outlines the future capabilities of the Indirect Fire Support.

3.   The purpose of the work is to visualize the general direction for future activities along all lines of development, such as doctrine, training and materiel, in a way that will enhance interoperability and promote cooperation between Member and Partner nations.

COMPOSITION

4.   The panel will consist of a Chairman and national delegates from the NAAG and MCLSB ICGIF. The custodian Nation (currently ITA) will chair the panel. The Panel selects a Vice-Chairman who will lead the group in the absence of the Chairman. All Member and Partner nations of ICGIF may participate in the Panel work.

5.   A Secretary may be appointed from within the Panel at the discretion of the Panel Chairman.

SPECIFIC WORKING PRACTICES

6.   The Panel can meet up to 3 times a year, either in conjunction with the ICGIF Meetings or at a time and venue agreed by the Panel participants.

RESPONSIBILITIES

7.   The panel is responsible to the ICGIF for:

    a. Developing the Indirect Fire Capability Analysis Document (IFCAD). The IFCAD is the continuation of the previous work collected in the Alliance Co-ordinated Armaments Requirements document (ACAR) expanded to reflect all aspects of capabilities. The IFCAD is a living document, to be reviewed and updated on a yearly basis.

    b. Initiating and following up on future technologies and associated studies. This includes studies performed within the NIAG framework. The task is to be reported as conclusions for capability development to ICGIF.

    c. Facilitating requirements harmonization on specific systems for interested nations.

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INDIRECT FIRE INFORMATION EXCHANGE REQUIRMENTS (IER) PANEL

INTRODUCTION

1.   The NAAG and MCLSB ICGIF Indirect Fire Information Exchange Requirements Panel is established under the ICGIF in accordance with NSAP.

MISSION

2.   The NAAG and MCLSB ICGIF Indirect Fire Information Exchange Requirements Panel will develop, harmonize and validate fire support and effect automatic data transfer systems and interoperability systems IER proposals.

COMPOSITION

3.   The panel will consist of a Chairman and national delegates from the NAAG and MCLSB ICGIF. The custodian Nation of AArtyP-3 (currently FRA) will chair the panel. The Panel selects a Vice-Chairman who will lead the group in the absence of the Chairman.
The Information Exchange Requirements Panel currently consists of the following volunteer nations: BEL, FRA, DEU, NLD, and GBR, and is open to participation of all members of ICGIF.

4.   A Secretary may be appointed from within the Panel at the discretion of the Panel Chairman.

SPECIFIC WORKING PRACTICES

5.   The Panel normally meets 3 times a year, either in conjunction with the ICGIF Meetings or at a time and venue agreed by the Panel participants.

RESPONSIBILITIES

6.   The panel is responsible to the ICGIF for:

    a.   Developing Artillery procedures for Automatic Data Processing (ADP) System Interoperability. (e.g. AArtyP-3).

    b.   Initiating and developing new standardization proposals and preparing STANAGs and APs on Fire Support Interoperability. Each STANAG must contain an implementation paragraph which clearly defines how and when the STANAG is implemented by the ratifying nations.

    c.   Introducing emerging doctrine to all APs of the ICGIF.

    d.   Harmonising with other LAND and JOINT DOCTRINE APs (e.g. AJP-3.2).

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INDIRECT FIRE PROCEDURES PANEL

INTRODUCTION

1.   The NAAG and MCLSB ICGIF Indirect Fire Procedures Panel is established under the ICGIF in accordance with NSAP.

MISSION

2.   The NAAG and MCLSB ICGIF Indirect Fire Procedures Panel will develop, harmonize and validate fire support and effect procedure proposals, in support of operational requirements for the Land Standardization Board.

COMPOSITION

3.   The panel will consist of a Chairman and national delegates from the NAAG and MCLSB ICGIF. The custodian Nation of AArtyP-1 (currently NLD) will chair the panel. The Panel selects a Vice-Chairman who will lead the group in the absence of the Chairman.
The Indirect Fire Procedures Panel currently consists of the following volunteer nations: BEL, DEU, FRA, GBR and NLD, and is open to participation of all ICGIF members.

4.   A Secretary may be appointed from within the Panel at the discretion of the Panel Chairman.

SPECIFIC WORKING PRACTICES

5.   The Panel normally meets 3 times a year, either in conjunction with the ICGIF Meetings or at a time and venue agreed by the Panel participants.

RESPONSIBILITIES

6.   The panel is responsible to the ICGIF for:

    a.   Developing Indirect Fire Procedures (eg AArty P-1 NATO INDIRECT FIRE SYSTEMS PROCEDURES)

    b.   Initiating and developing new standardization proposals and preparing STANAGs and APs on Fire Support Procedures issues. Each STANAG must contain an implementation paragraph which clearly defines how and when the STANAG is implemented by the ratifying nations.

    c.   Introducing emerging doctrine to all APs of the ICGIF.

    d.   Harmonising with other LAND and JOINT APs (eg AJP-3.2).

ANNEX 5
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SUB-GROUP 2 PANEL ON
BALLISTICS, EFFECTIVENESS AND FIRE CONTROL SOFTWARE

1.   **AREA OF RESPONSIBILITY**

Sub Group 2 (SG2) Panel of NAAG and MCLSB Integrated Capability Group on Indirect Fire (ICGIF) is responsible, for ballistics technology, effectiveness, fire control software and interchangeability of all indirect fire ammunition (including accuracy and testing for artillery, mortars and rockets), and, where applicable, to support direct fire and naval gun ballistics.

2.   **MISSION**

SG2 Panel is to develop and maintain STANAGs and Allied Publications to standardise assessment of ballistic performance of munitions, to include accuracy and effectiveness, fire control systems, and the interchangeability of all NATO indirect fire ammunition.

3.   **TASKS**

Within its mission, SG2 Panel will concentrate work on three areas, as the following with focus on the development of the NATO Armaments Sharable (Fire Control) Software. All tasks and associated actions are monitored by ICGIF.

3.1   Ballistics Performance

      3.1.1   To keep under review all STANAGs pertaining to ballistics and to propose new STANAGs if required.

      3.1.2   To keep under review new techniques and advances in ballistics.

      3.1.3   To review ballistics testing procedures, test instruments and technical data with a view to making national tests acceptable to other NATO nations, if necessary through the medium of STANAGs, thereby avoiding duplication.

      3.1.4   To understand the contribution of ballistics performance to precision and accuracy of munitions and preparing, where necessary, the associated error budgets.

      3.1.5   To standardise the implementation of effectiveness information for shareable software.

3.2   Studies of Ammunition Interchangeability

    3.2.1   To compare the ballistics of indirect fire ammunition used by the NATO nations in order to determine the degree of interchangeability.

    3.2.2   To develop STANAGs, Allied Publications and databases that enables and formally promulgates the interchangeability of NATO indirect fire ammunition.

    3.2.3   To keep under review munitions developments within NATO, ensuring that interchangeability is maintained and, where possible, improved.

    3.2.4   To keep under review all international agreements (bilateral, quadrilateral, etc.) pertaining to indirect fire ammunition interchangeability and, if agreed by SG2 Panel in plenary session entering these into the appropriate Allied Publications and databases.

3.3   Standardised Firing Tables and Fire Control Software

    3.3.1   To maintain Standard Firing Table Formats.

    3.3.2   To develop and maintain the STANAGs and Allied Publications that supports the NATO technical and operational shareable fire control software.

    3.3.3   To maintain oversight of the technical aspects of SG2 fire control software.

    3.3.4   To develop and maintain the SG2 Shareable (Fire Control) Software Suite NATO Cooperative Programme.

    3.3.5   To develop and maintain the SG2 Shareable Platform (Operational) Software NATO Cooperative Programme.

    3.3.6   To maintain and ensure that sufficient meteorological technology is available for the efficient operation of NATO Firing Tables and ballistic fire control software.

4.   COMPOSITION AND ORGANISATION

4.1   SG2 is a permanent non-entitled Level 3 panel under ICGIF. Its composition and organisation will be in accordance with the guidelines set out in the MAG Handbook in particular in Section 4.

4.2   SG2 Panel is open to all Nations invited to participate in ICGIF, and to such nations as may be proposed by SG2 Panel, subject to approval by the appropriate NATO authority. SG2 Panel holds NATO-only sessions in its meeting, as appropriate.

4.3   As a non-entitled panel, SG2 receives no support from the International Staff, but refers to the ICGIF Staff Advisor and the Standardization Advisor for policy and administrative guidance.

4.4   SG2 Panel is organized into three areas, namely ballistic performance, the Shareable (Fire Control) Software and Shareable Platform (Operational) Software programmes and Interchangeability of Indirect Fire Ammunition.

5.   METHOD OF WORK

5.1   SG2 Panel will follow the procedures set out in the MAG Handbook, in particular those in Sections 5, 8 and 9.

5.2   The Panel should, wherever possible, meet just before ICGIF meetings: for such meetings, the Chairman shall report in person to all ICGIF meetings on the panel activities.

5.3   SG2 Panel will provide guidance to its subordinate structure on working methods, products, and requirement framework documents such as programme plans, terms of reference and procedures.

5.4   The SG2 Panel and its subordinate structures should be prepared to work up to an including the classification NATO SECRET, but should use the lowest security classification appropriate.

5.5   Liaison: SG2 Panel will develop and maintain good working relationship and liaison with other NATO groups working in the relevant areas in particular with MILMET of the Military Committee (MC) Meteorological Group, I-Ammo Working Group, AC/326 (CNAD Ammunition Safety Group), other relevant CNAD and MC groups, and also relevant bodies outside of NATO like the Joint Ballistics Management Board.

6.   STATUS
6.1.   SG2 Panel has an open-ended mandate and may be disbanded by ICGIF.