Non Lethal Capabilities Update

NDIA Joint Armaments Forum & Exhibition
Unconventional and Emerging Armaments Section

May 14, 2014

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Outline

• Non Lethal Capabilities within NATO
• NATO Process and Interactions
• Non Lethal Capabilities Focus Areas
Sub Group Non Lethal Capabilities in the NATO Structure

Conference of National Armaments Directors (CNAD)

Logisticians’ Conference
Consultation Command and Control Board
NATO Industrial Advisory Group
Life Cycle Management Group
Ammunition Safety Group
Group of National Directors on Codification

NATO Army Armaments Group
- JCBRNDCDG (6)
- JCGGBAD (3)
- JCGVL (1)
- ICGIF (5)
- LCGLE (4)
- LCGDSS (10) → SGNLC

NATO Air Force Armaments Group
NATO Naval Armaments Group
National Armaments Directors Representatives

MILITARY COMMITTEE ACO - ACT
Science and Technology Organization

NORTH ATLANTIC COUNCIL

NATO Procurement Agency
Projects
- Alliance Ground Surveillance CSC
- ALTBMD SC
- Missile Defence Project Group
- New NATO HQ.
- MSIAC
- FORACS
NAAG POW SOURCES

**Threats & Shortfalls**

- Top-Down Initiatives; Smart Defence Connected Forces
- Lessons Learned
- Defence Against Terrorism

**NDPP Targets and Requirements**

**Innovation**

**Bottom-up work (nations)**

**CNAD MANAGEMENT PLAN**

**Industry Reach-out**

**Capability Requirements**
NAAG CURRENT WORK ITEMS
(example work areas to meet requirements)

- Soldier Situational Awareness
- CBRN Forensics
- Countering IED
- Mobility Platforms
- Area Access Denial
- Precision and Low Collateral Damage Munitions
- Cruise Missile and UAS Defence
- Individual and Collective Protection
- Degraded Visual Environments
- Land Engagement
- Non-Lethal Effects
NAAG WORK METHODS & PRODUCTS

• Formal Meetings
• Informal Teams
• Documentation, Publications
  • Web Portal/Internet
• Liaison, Cross Fertilization with other Bodies/Organizations/Military Commands
  • Workshops/Seminars
• Trials/Demonstrations/Exhibits
  • Use of NIAG, STO

DECISION SHEETS
DOCUMENTS
STANDARDS (+/- 150 STANAG/STANREC(s))
COORDINATED REQUIREMENT DOCUMENTS
TRIAL, DEMO REPORTS
NAAG-SPONSORED INDUSTRIAL S&T PUBLICATIONS
Mission - Main Armament Groups

NATO Main Armament Group’s Handbook – 2012

- Foster exchange of Information
- Promote technical Standardization, Interoperability and Integration
- Identify and promote Technical advancements
- Plan/direct/coordinate subordinate groups
- Liaise with all relevant organizations
  - Within NATO
  - Outside – EU, NGOs, Industry, etc
Terms of Reference

- Focal point for all activities related to Non-Lethal Capabilities (NLC) in the NAAG.
- Responsible for NLC across the full spectrum of military operations and operating environments.
- Joint and three-service focus within Nations and CNAD.
- Supports all NATO Essential Operation Capabilities (EOC), in particular
  - “Force Protection” and
  - “Effective Engagement”.

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Near Term Objectives

• NATO Strategy - “Smart Defense”
• Active Engagement
• Building Capability Through Multinational Approaches
• Connected Forces Initiatives
• Even more Interoperability
• Lessons from Current Operations
NATO Non Lethal Capabilities Progression

- NATO Non Lethal Capabilities initiated under a Quick Reaction Team transitioned to Topical Group 3

- NATO supports
  - NATO’s Research & Organization (RTO), Systems Analysis & Studies Panel support to develop common, interoperability and standardization addressing Non Lethal Capabilities
  - NATO’s Emerging Security Concerns (ESC) Defense Against Terrorism initiates DAT 11 on Non Lethal Capabilities with focus on TRL 7-9 for ISAF
  - NATO NIAG draft proposal awaiting final rev. & release

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NLC Interoperability Recent Activities

**Updated**

Non Lethal Catalogue

**Completed**

STANREC 4729 & AEP 74
Performance of Non-Lethal Land vehicle Arresting Device

Captured vehicle (by vehicle arresting net)

NATO Multi National Approach Tier II effort highlight

**2 of 5 Chapters submitted**

STANREC 4744 & AEP 94
Non Lethal Kinetic Energy Methodology

- Blunt Trauma Experts
- SubGroup 1 – Skin Penetration
- SubGroup 2 – Head Impact
- SubGroup 3 – Chest Impact
- SubGroup 4 – Abdomen Impact
- SubGroup 5 – Accuracy
  - Leveraging US JNLWD Advanced Total Body Model
  - Additional Experts from Soldier CCIEP Group

Defence Against Terrorism Program of Work #11
Non-Lethal Capability

DAT 11 Catalogue
Version – 29 January 2011

DRAFT
High TRL 7-9 for ISAF

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Examples of Non Lethal Multi National Approaches

- FN 303®
- 40 mm Sponge
- Multi Pellets
- Lights/Dazzlers
- Long Range Acoustic Device

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Means of cooperation

- Information Exchange
- Materiel Standardization
- Requirement Harmonization
- Cooperative Programmes (Smart Defence)
- (Connected Forces)
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NATO Army Armaments Group,
Land Capability Group Dismounted Soldier System,
Sub Group on Non Lethal Capabilities

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