



### Non Lethal Capabilities Update

NDIA Armaments Systems Forum
Unconventional and Emerging Armaments Section

**April 27, 2016** 

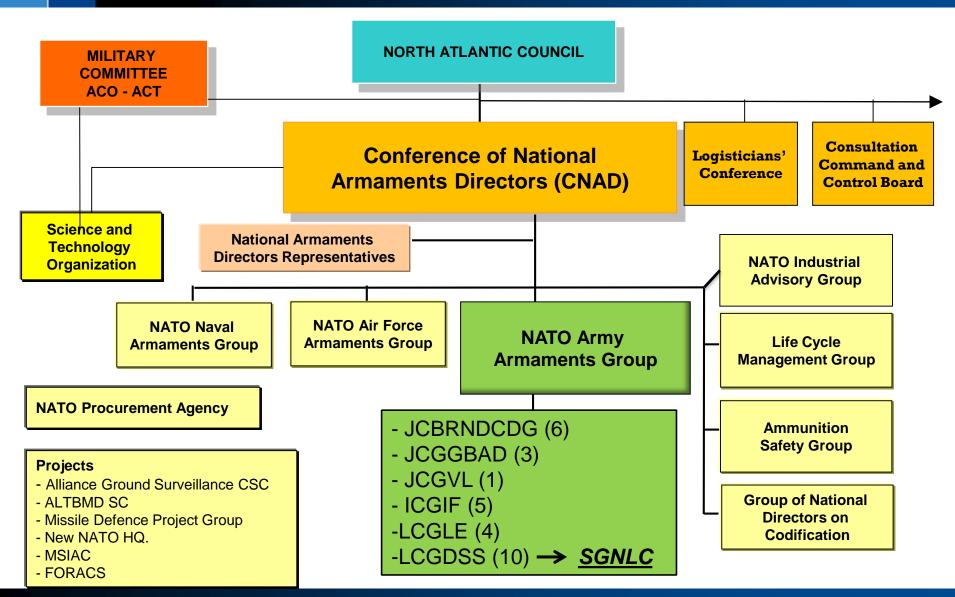


# Outline

- Non Lethal Capabilites within NATO
- NATO Process and Interactions
- Non Lethal Capabilities Focus Areas

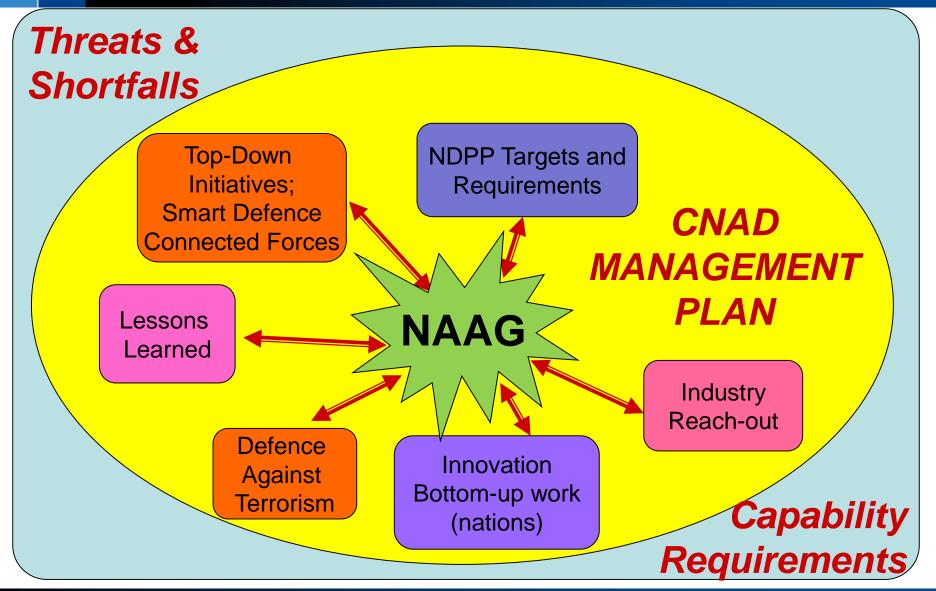


# Sub Group Non Lethal Capabilities in the NATO Structure





# OTAN NAAG POW SOURCES





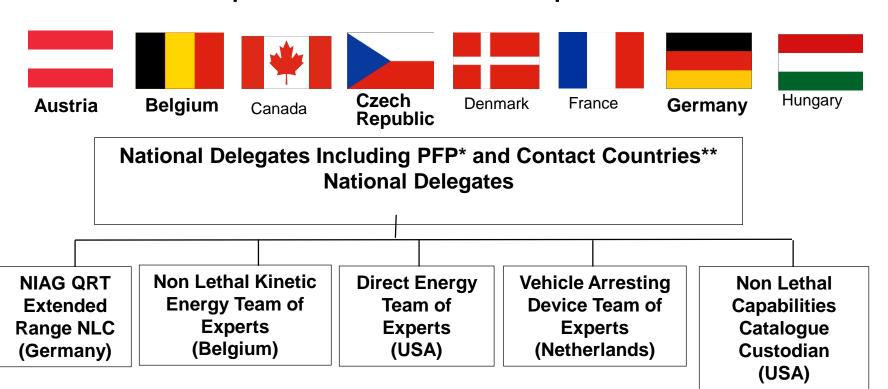
# Land Capability Group Dismounted Soldier Systems Sub Group on Non-Lethal Capabilities

#### **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".



### Sub Group on Non Lethal Capabilities Structure













Spain







**NATO/PFP UNCLASSIFIED** 



## SGNLC as Capability Group

#### **Doctrinal updates.**

- 5.1 Updates included
- AJP 3.2 Allied Joint doctrine for Land Operations
- AJP 3.2.1.1 Guidance for the Conduct of Tactical Stability Activities and Tasks
  - 5.2 Updates awaiting draft conclusion (monitoring)
- **AJP 3.2.1 Allied Land Tactics**
- AJP 3.4.4 Allied Joint Doctrine for Counterinsurgency (COIN)
  - 5.3 Updates on on-going
- AJP 3.2(C) Allied Joint Doctrine for the Conduct of Operations (Edition C) reported by the US JNLWD

NATO Non Lethal training collected in NLC Catolog.

### SGNLC Thrusts

#### STANDARDIZATION/Allied Engineering Publication (AEP)

- 3.1 STANREC 4729 Ed 2; AEP-74(B) Performance of Non-Lethal Land Vehicle Arresting Devices *Highlight -Tier 2 Smart Defense June 2012*
- 3.2 STANREC 4744 Ed 2; AEP-98 Precision Assessment of Non-Lethal Kinetic Energy Weapons and Ammunition
- ✓ STANREC 4744, AEP-94, Skin Penetration
- ✓ STANREC 4744 Ed 1, AEP-98, Accuracy
- > Future Revision STANREC 4744 Ed 3, AEP-99, Thorax (draft underway)
- > Future Revision STANREC 4744 Ed \_, AEP-xx, Head



## SGNLC Activities

NIAG Study 209 "Examination of long range delivery of Non-lethal capabilities (NLC)"

- 4.1 Nations formed Quick Reaction Team to support Study
- 4.2 13 Industry members participated in Kickoff meeting
- 4.3 NIAG Study 209 completion planned February 2017

Team of Experts on Non Lethal Millimeter Wave Directed Energy
White Paper for common understanding on non lethal millimeter wave
directed energy against personnel. Three assessment sections; Safety,
Effectiveness and Utility. Goal is a common lexicon across NATO.

Non Lethal Effectors against Low Slow Small UAVs Assessment



# Non Lethal Studies and Demonstrations supported within NATO

# NATO Science and Technology Organization Systems Analysis and Study Panel

SAS – 035 Non-Lethal Effectiveness Assessment Methodology

SAS - 040 Non-Lethal Weapons and Future Peace Enforcement Operations

SAS - 060 Non-Lethal Weapons Effectiveness Assessment Development and Verification Study

SAS - 078 NATO Non-Lethal Weapons Capabilities Based Assessment

SAS - 094 NATO Non-Lethal Concepts and Employments (on-going)

#### Emerging Security Challenges, Defense Against Terrorism

DAT – 11 Rapid Fielding of Non Lethal Weapons

DAT- NLC Defense Against Terrorism (on-going)



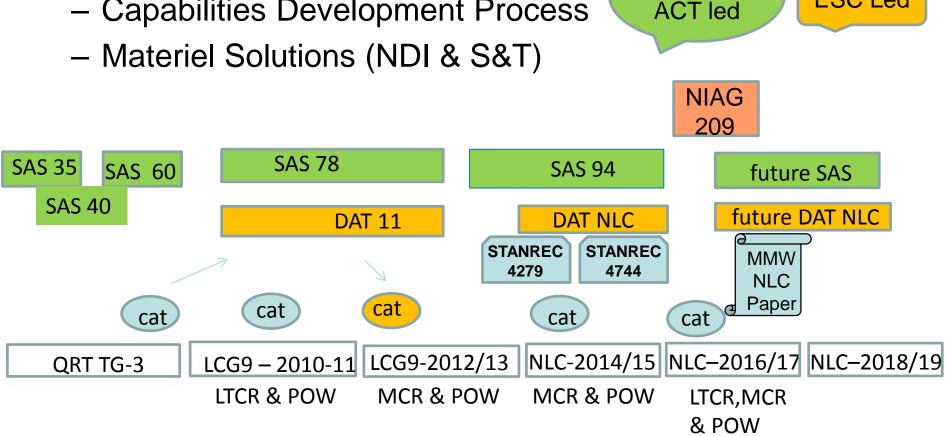
## NLC Notional Roadmap "Capabilities Culture"

STO &

**ESC Led** 



Capabilities Development Process





# SubGroup on Non Lethal Capabilities

## **NLC** role

- Focal point for all activities related to Non-Lethal Capabilities in NAAG & CNAD
- Open to PfP nations and other nations as may be approved by the CNAD
- Joint/three-service focus within Nations & CNAD
- Meets twice a year
- Transitioned to LCGDSS, March 2012
  - Topical Group 3 in 2008
  - LCG9 in Nov 2010



## NATO Non Lethal Capabilities

# THANKS FOR YOUR ATTENTION!

Name: John H. Edwards

Phone Number: (973) 724-3794

Organization Representing:
NATO Army Armaments Group,
Land Capability Group Dismounted Soldier System,
Sub Group on Non Lethal Capabilities

Parent Organization:

US Army Armament Research, Development and Engineering Center ATTN: RDAR-EIJ, Picatinny Arsenal, NJ 07806

Email: john.h.edwards7.civ@mail.mil