



NATO  
|  
OTAN



# Non Lethal Capabilities Update

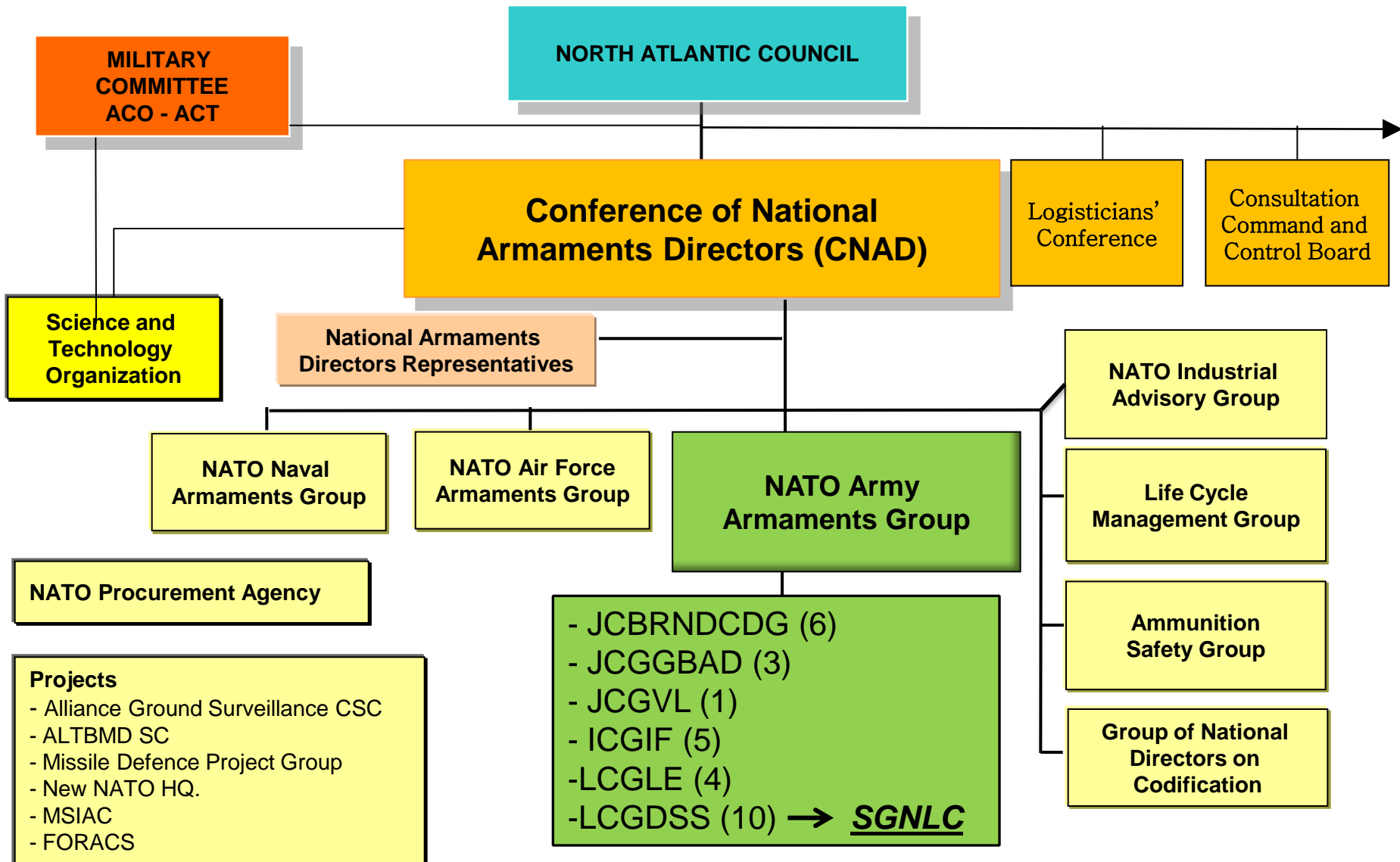
**NDIA Joint Armaments Forum & Exhibition**  
*Unconventional and Emerging Armaments Section*

**May 14, 2014**

# Outline

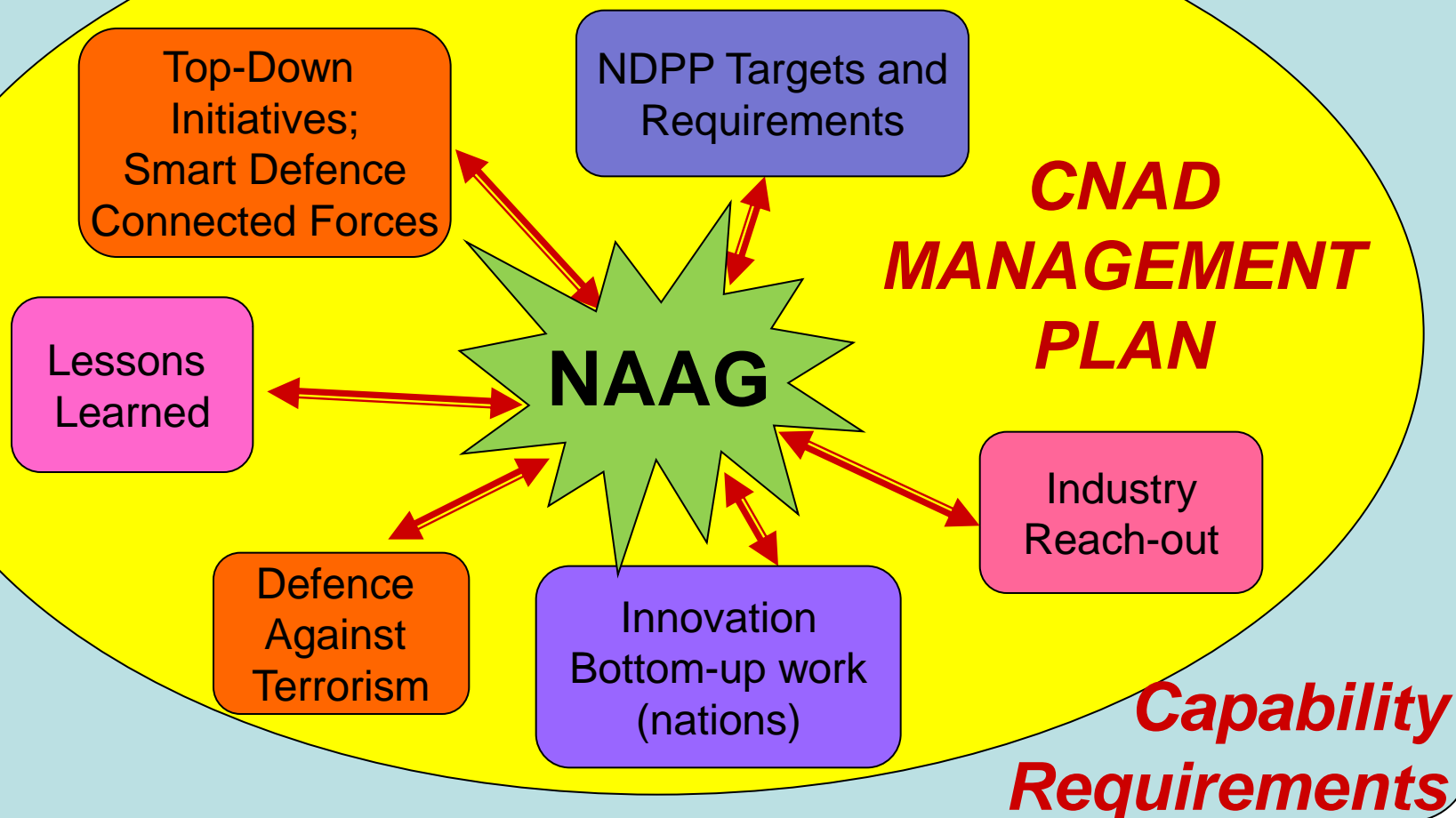
- Non Lethal Capabilities within NATO
- NATO Process and Interactions
- Non Lethal Capabilities Focus Areas

# Sub Group Non Lethal Capabilities in the NATO Structure

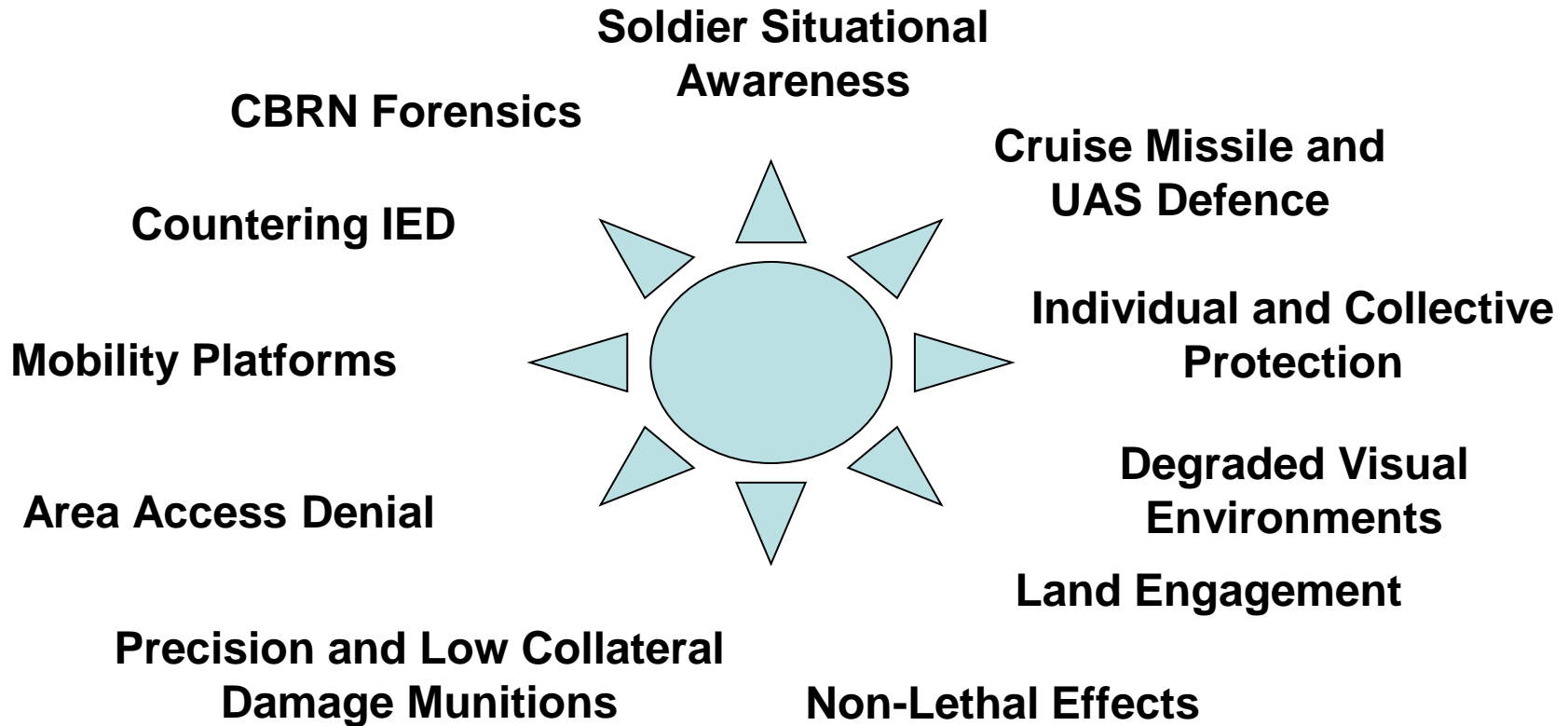


# NAAG POW SOURCES

## *Threats & Shortfalls*



# NAAG CURRENT WORK ITEMS (example work areas to meet requirements)

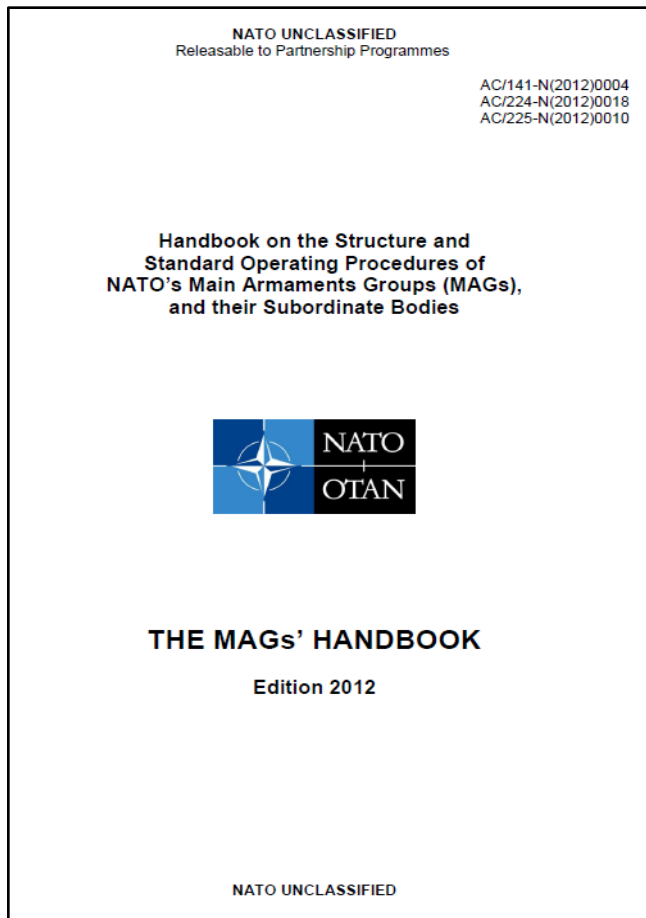


# NAAG WORK METHODS & PRODUCTS

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

- **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

## 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

## 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”.



# 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 initiated under a Quick Reaction Team transitioned to Topical Group 3

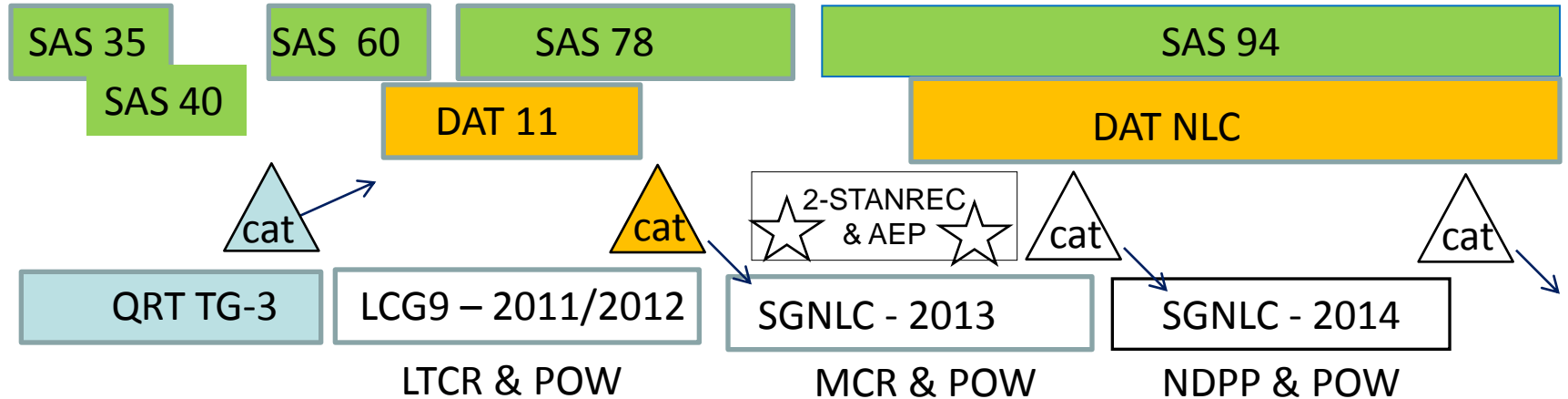
➤ NATO supports

➤ 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

NIAG NLC



**Updated**

**Completed**

**2 of 5 Chapters submitted**

## Non Lethal Catalogue

| Item ID | Item Name | Category | Manufacturer | Year | Weight (kg) | Length (cm) | Width (cm) | Height (cm) | Volume (L) | Power (W) | Energy (J) | Accuracy (m) | Range (m) | Notes |
|---------|-----------|----------|--------------|------|-------------|-------------|------------|-------------|------------|-----------|------------|--------------|-----------|-------|
| 1       | ...       | ...      | ...          | ...  | ...         | ...         | ...        | ...         | ...        | ...       | ...        | ...          | ...       | ...   |
| 2       | ...       | ...      | ...          | ...  | ...         | ...         | ...        | ...         | ...        | ...       | ...        | ...          | ...       | ...   |



Defence Against Terrorism Program of Work #11

Non-Lethal Capability



### DAT 11 Catalogue

Version – 29 January 2011

**DRAFT**

High TRL 7-9 for ISAF

## 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

## 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



# Examples of Non Lethal Multi National Approaches



FN 303®



Lights/Dazzlers



40 mm



Sponge

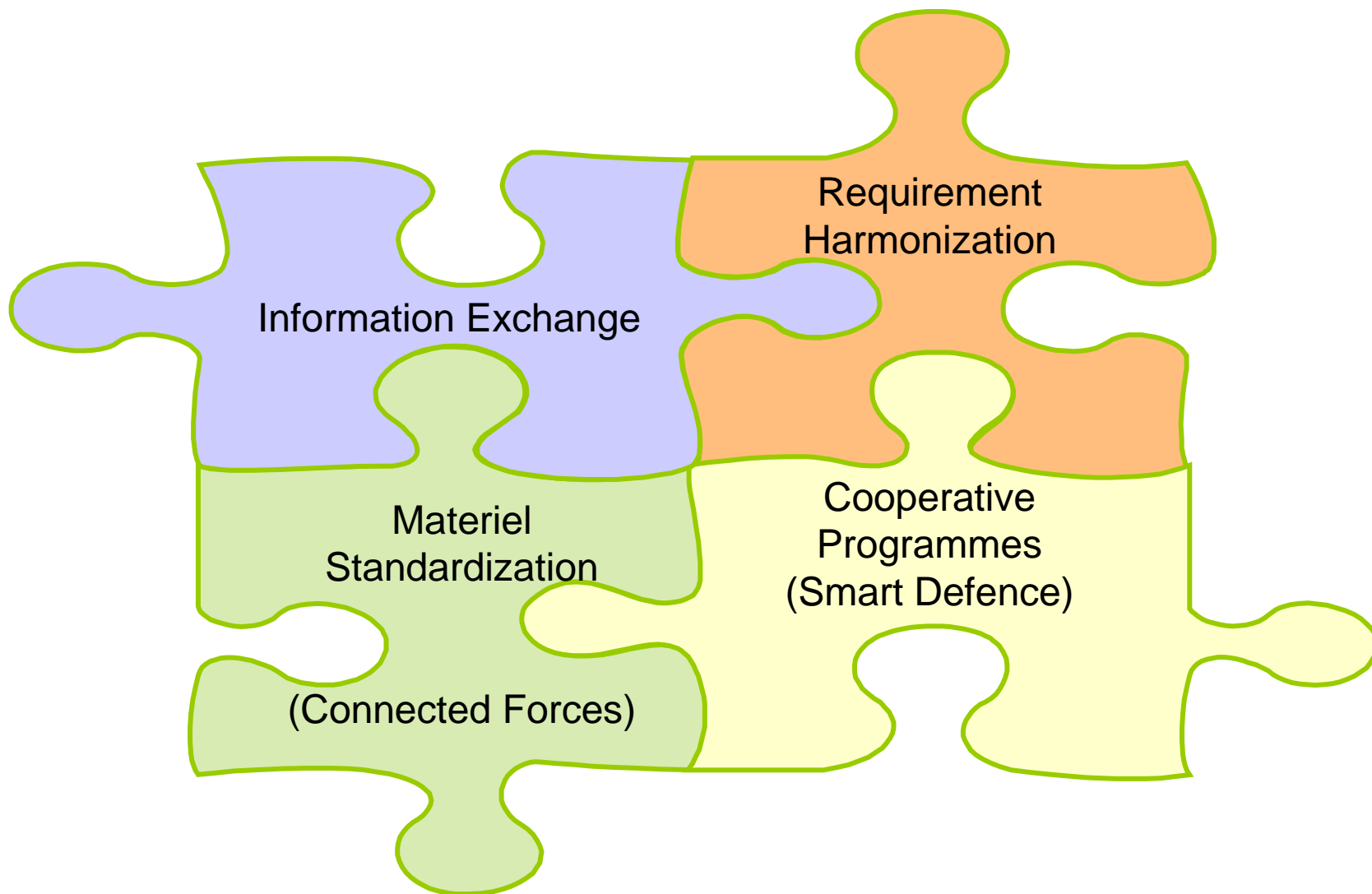


Multi Pellets



Long Range Acoustic Device

# Means of cooperation





# *NATO Non Lethal Capabilities*

**THANKS FOR YOUR  
ATTENTION!**

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