# NATO Industrial Advisory Group (NIAG)

Update for NDIA International Division

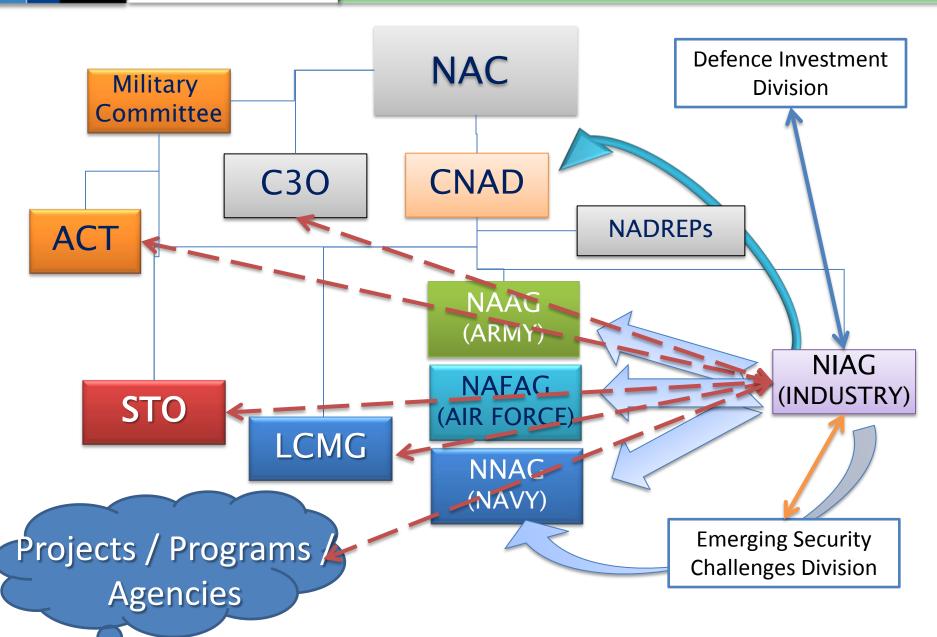


10 July 2013

#### Outline

- NIAG in broader NATO picture
- How NIAG operates
- Tasks and success stories
- Studies Projected for 2014
- Opportunities

#### **NIAG** in Broader NATO



## **Lisbon Critical Capabilities**

- Afghanistan Mission Network (AMN)
- C-IED Action Plan
- Strategic and Tactical Airlift
- Collective Logistics Contracts, including for Medical Support
- Expansion of Active Layered Theater Ballistic Missile Defense (ALTBMD)
- Protection against Cyber Attacks
- Comprehensive Approach/Stabilisation and Reconstructionrelated Capability Requirements
- Bi-Strategic Command Automated Information Systems (Bi-SC AIS)
- Air Command and Control System (ACCS)
- Joint Intelligence, Surveillance and Reconnaissance (JISR)
- Alliance Ground Surveillance (AGS)

## The Chicago Summit

- "Maintaining a strong defence industry in Europe and making the fullest possible use of the potential of defence industrial cooperation across the Alliance remain an essential condition for delivering the capability needed for 2020 and beyond" (\*)
- "The CNAD and its NATO Industrial Advisory Group have carried out studies in these areas and have offered recommendations for improvements in transatlantic defence industrial cooperation" (\*\*)
- "While NATO has no direct leverage on industry or market regulations, it has a role to play through the harmonisation of national and multinational capability requirements " (\*\*)

<sup>\*</sup> The Chicago Summit Declaration on Defence Capabilities – Toward NATO Forces 2020

<sup>\*\*</sup> The Chicago Summit Defence Package

- Missile Defence Activities
- Joint ISR
- **Alliance Ground Surveillance (AGS)**
- **Counter-IED**
- **Air Interoperability**
- **Aircraft Protection**
- **Airlift Assets Combat Service Support**
- **Harbour Protection**
- **Mission Modularity**
- **Cyber Defence**
- **TADIC**

## **High Level Advice**

- Trans-Atlantic Defence technology and Industrial Cooperation (TADIC)
  - Addressed implications of the Strategic Concept and opportunities to advance TADIC
  - Reviewed developments in US and Europe to reform export control process and discussed their implications
  - Reviewed TADIC issues (industrial view) in supporting NATO programmes and capabilities such as, AGS, Territorial Missile Defence and Cyber Defence
  - Identified lessons from Multinational R&D, MEADS, F-35, ALTBMD and AGS
  - Rec. 3: "Transatlantic requirement harmonisation and synchronised government procurement, based on common needs, are fundamental to develop economies of scale. This should be done in consultation with the other Allies within the context of NATO Defence Planning Process, in order to avoid critical shortages at Alliance level"

## High Level Advice (cont.)

- Industry contribution to NATO Ballistic Missile Defence Cooperation
  - Co-leadership US and Europe
  - 40 participating industries from 12 countries
  - 4 Teams on:
    - Sensors
    - BMC3I
    - Interceptors
    - Support Element
  - Report delivered in time for the Chicago Summit (2012)

## High Level Advice (cont.)

- NIAG Contribution to the design of the NATO Procurement Agency
  - 27 companies represented by Business Directors, Program Managers, Financial Managers
  - Opportunity for industry to influence the future of NATO procurement organization
  - Prompt reaction from industry 3 months from request to delivery of the report
- Industry contribution to NATO Cyber Defence
  - Study in 2012 on solutions for partnering with private companies
  - Follow on Study to be initiated in 2013 on actions in the case of Cyber Defence crisis, and participation in NATO Cyber Defence Exercise
- Achieving NATO Interoperability the Industrial Contribution

## Impact of NIAG studies

- ISR Intelligence, Surveillance and Reconnaissance; Unified Vision trial >> supports the Lisbon Capability Package and the future NATO JISR Capability
- UAV/UAS >> made the recommendations that resulted in AGS
- DGNSS PALS differential satellite navigation and approach and landing
   >> defined the next generation ALS for NATO
- GBAD ground based air defence
- Weapon/warhead performance
- **NUAI** universal armaments interface
- Cloud computing >> supported ACT to frame the issue
- DNBL distributed networked battle labs >> recommended the creation of the current facility operated by NATO C&I Agency
- MPA maritime patrol aircraft >> suggested procurement options for NATO MPAs
- DIRCM directed infrared counter measures >> recommended the solution for protecting NATO AWACS fleet

## Impact of NIAG studies (cont.)

- Mission Modularity >> currently Smart Defence project
- Missile Defence >> supports the Lisbon Capability Package and the NATO BMD Capability
- **TADIC** >> raised awareness, that can be traced to national legislation
- Interoperability >> supported NATO effort to improve overall interoperability
- NIAG work impacted the POW of ACT, ACO, NC3A, Emerging Security Challenges Division, and primarily of CNAD and its sub-structure

### Potential studies for 2014

Nr	Sponsor		Study Title							
	NAFAG – Air Force									
1	ACG/2	Pre Pla	cision Positioning Timing and Navigation (PNT) Technologies for Air tforms, Guided and Network Enabled Weapons							
2	ACG/2	Aff Sys	Affordable Qualification Certification Assurance (QCA) of Modular Fuzing Systems in a NEC environment (Workshop)							
3	ACG/3	NA <sup>-</sup>	TO Defensive Aid System (DAS) open architecture assessment							
4	ACG/5	NA <sup>-</sup>	TO Special Operations Aviation Battle Space Awareness							
5	JCGISR	Ind par	ustrial Contribution to demonstration of ISR Information Exchange as t of Joint ISR Trial "Unified Vision 2014"							

#### Potential studies for 2014 (cont.)

Nr	Sponsor	Study Title							
	NAAG - Army								
6	JCG- GBAD	GBAD Sensor Mix Optimization Study for Emerging Threats							
7	LCG/DSS	Examination of long range delivery of Non-lethal capabilities (NLC)							
8	LCG/LE	Technology Demonstration – Augmented Reality for Improved Situational Awareness and Survivability for Combat Vehicles							
9	LCG/LE	Vehicle evaluation with simulating technologies support							
10	JCBRND-CDG	Site Exploitation Laboratory (SEL)							

### Potential studies for 2014 (cont.)

Nr	Sponsor		Study Title						
NNAG - Navy									
11	SD-CG	Modula	rity Demonstration and Validation						
12	UWW-CG		ion mechanism and criteria for the Systems Life Cycle ement costs of different multi-national MPA approaches						
13	UWW-CG	USVs ar	nd emerging technologies that will affect MIW in the future						
14	SD-CG	Launch	and recovery						
15	AWWCG	Testing sensors	and validation of performance of maritime Radar and EW						
16	UWWWCG	Digital u	underwater comms						

Nr	Sponsor	Study Title				
Air Traffic Management Committee						
17	ATMC & C3B	Aeronautical surveillance study				

#### Potential studies for 2014 (cont.)

### NIAG Initiated Proposals in 2014, for Studies

DI(STR)(2013)0010 (CDS)

- HLA on Framework for NATO engagement with Industry (CNAD)
- Data-base driven semi-automated harmonisation process for requirements and projects (CNAD)
- Support DI in developing missions for NATO Procurement Agency (CNAD)
- Life cycle management perspective on product maturity assessment (LCMG)
- Standardisation of Missile Warning Systems Performance and Specification (NAAG, NAFAG, NNAG)
- Use of Unmanned Aircraft for Surveillance of the Arctic Region (NNAG/JUASCG)
- Dual Use Systems and products for Military operations (LCMG)
- Reference Communication Service platform to support operations and CIMIC in a heterogeneous networks environment (C3B)
- Navigation in GPS denied environment (NAFAG, NAAG, NNAG, C3B, ATMC)
- Hostile Fire Indication (HFI) System (NAAG)
- Maritime Surveillance with high performance Radar and AIS from space (NNAG, ATMC, C3B)

## Why Participate in NIAG?

- NIAG offers direct access to industry from NATO and PfP nations, both primes and small companies (SME)
- ➤ NIAG offers the opportunity to establish industry to industry and industry to academia relations
- NIAG supports NATO capability development and interoperability, NATO standards developments and testing
- NIAG supports Smart Defence, Connected Forces Initiative, NATO Defence Planning Process and multinational cooperation
- ➤ NIAG provides the opportunity to showcase industry and its capabilities

#### **Future Activities**

- October 2013
- November 2013

## October 2013

NATO

OTAN

- 21-22 Oct (T) Defense Ministerials
- 23 Oct Main Group Forum
- 24 Oct CNAD Meeting
- November 2013
  - NIAG Meetings (PfP and @28) (11-13 Nov, Istanbul)
  - NIAG Industry Forum (14 Nov, Istanbul)
- December 2013
  - 31 Dec = Wayne's Last Day as NIAG Chairman!!