



Framework for NATO - Industry Engagement

Athens 7 March 2017

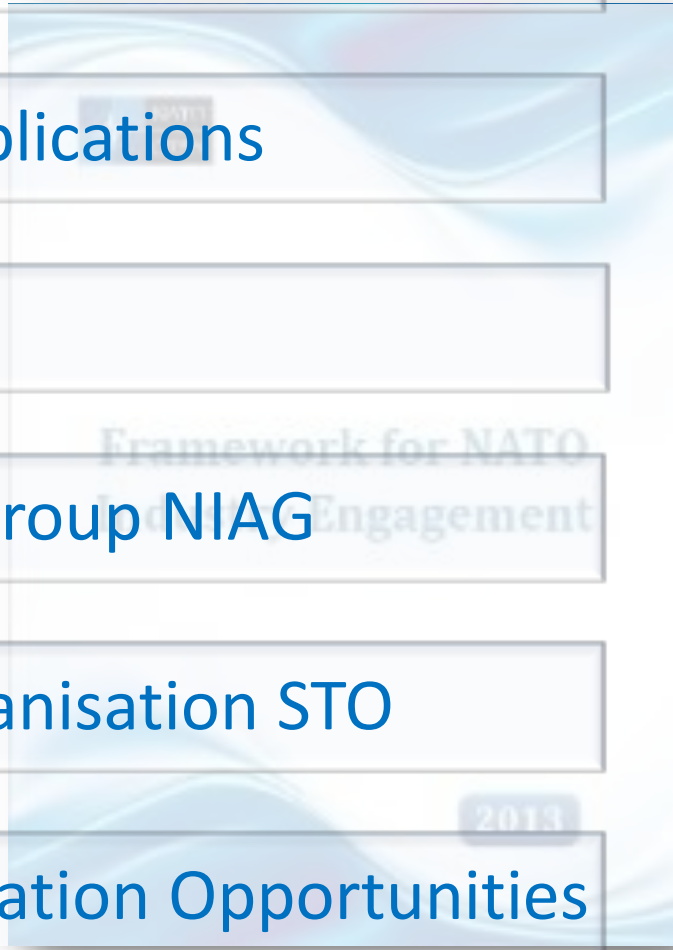
Mr. Liviu Lazar

NATO HQ - International Staff
Defence Investment Division
Strategy Directorate
Industry Relations Coordinator

Overall classification

NATO Unclassified, Releasable to PfP and IP

- Political declarations - practical impact
- FNIE: What is it, context, implications
- NATO-Industry Forum NIF
- NATO Industrial Advisory Group NIAG
- Science and Technology Organisation STO
- Enhanced Multinational Cooperation Opportunities





Political declarations - practical impact

FNIE: What is it, context, implications

NATO-Industry Forum NIF

NATO Industrial Advisory Group NIAG

Science and Technology Organisation STO

Enhanced Multinational Cooperation Opportunities



A stronger defence industry across the Alliance, which includes small- and medium-sized enterprises, greater defence industrial and technological cooperation across the Atlantic and within Europe, and a robust industrial base in the whole of Europe and North America, remain essential for acquiring needed Alliance capabilities.



A strong defence industry across the Alliance, including a stronger defence industry in Europe and greater defence industrial cooperation within Europe and across the Atlantic, remains essential for delivering the required capabilities.



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 capabilities needed for 2020 and beyond.

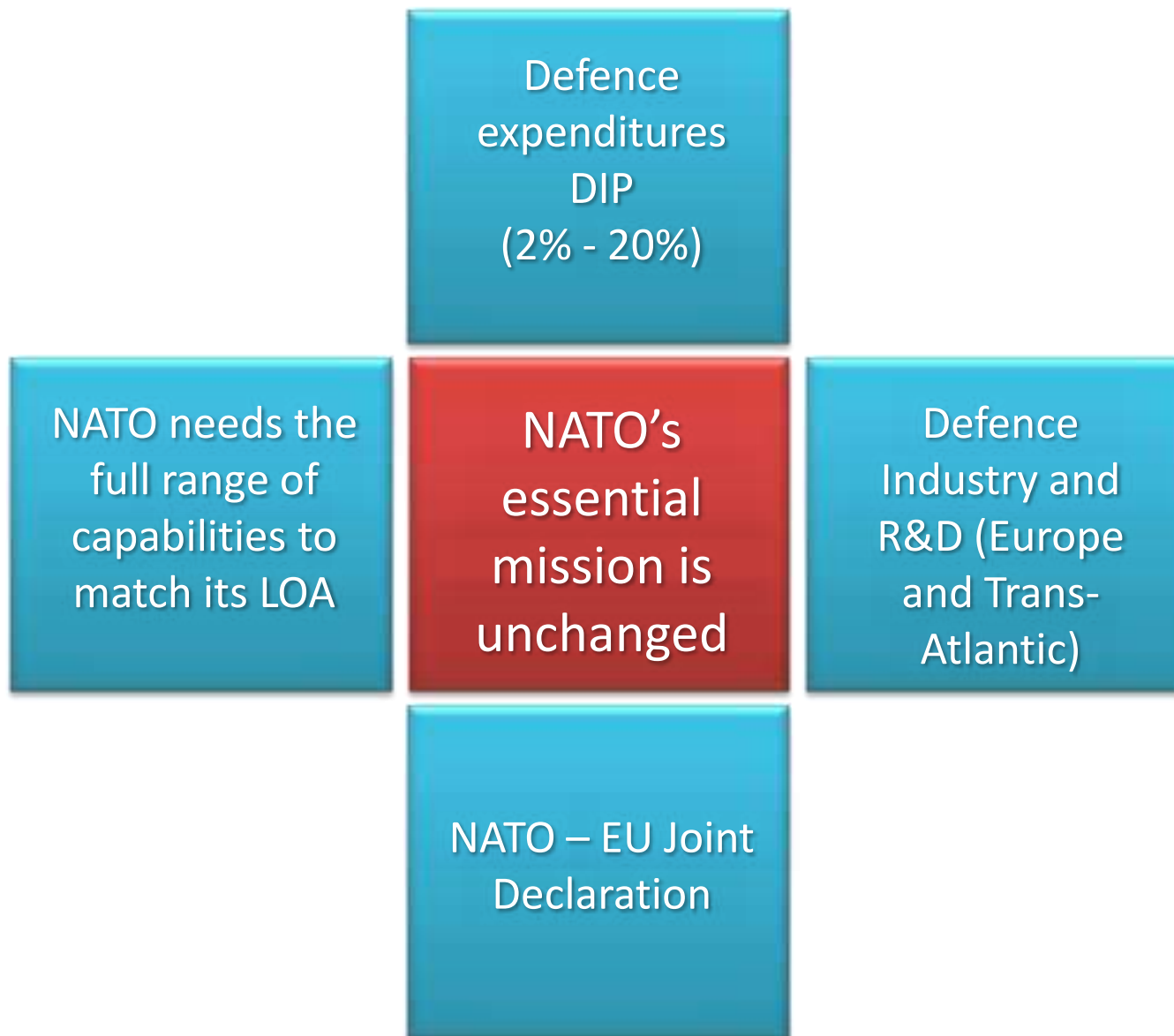
- 
- Strong Defence Industry
 - SMEs
 - Trans Atlantic Cooperation



Defence Investment

Investissement pour la Défense







Political declarations - practical impact

FNIE: What is it, context, implications

NATO-Industry Forum NIF

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Enhanced Multinational Cooperation Opportunities

NORTH ATLANTIC COUNCIL
FRAMEWORK FOR NATO-INDUSTRY ENGAGEMENT

Note by the Secretary General



Anders Fogh Rasmussen



Framework for NATO
Industry Engagement

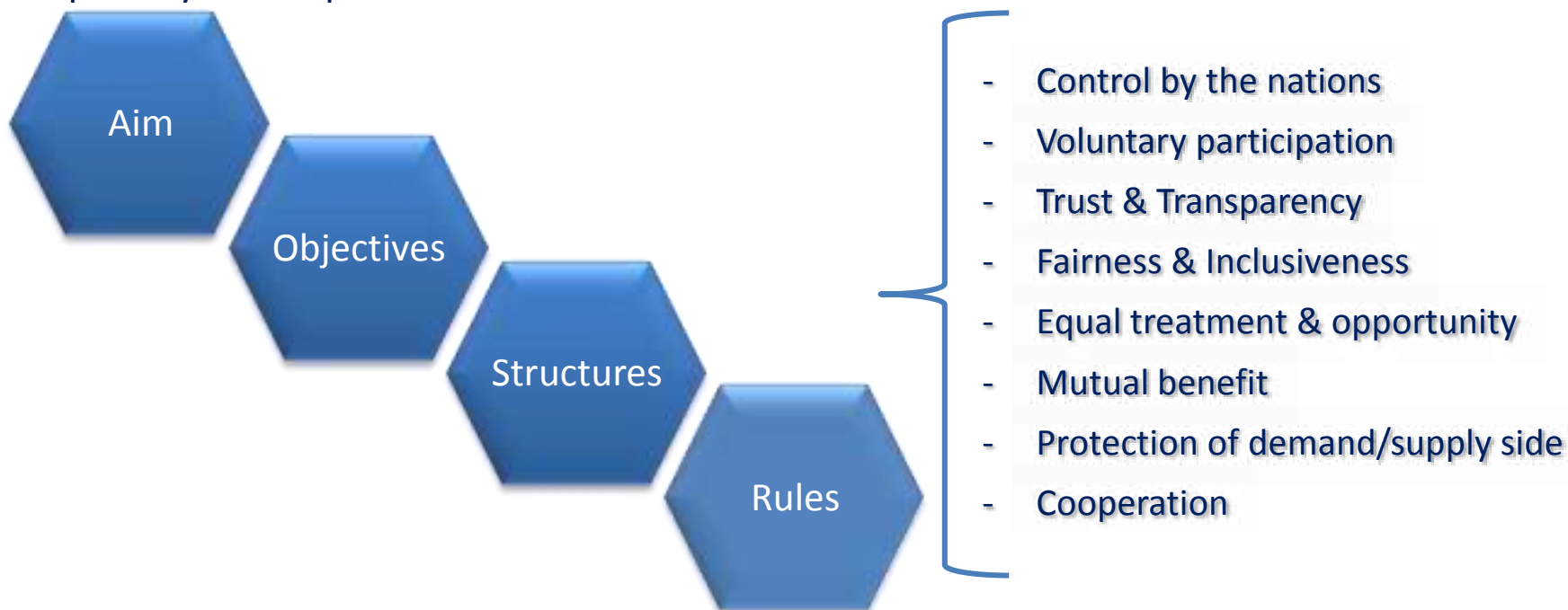
2013

[need for] “... **coherent and consistent** approach over the two areas of relationships:
Non-procurement and
Procurement”

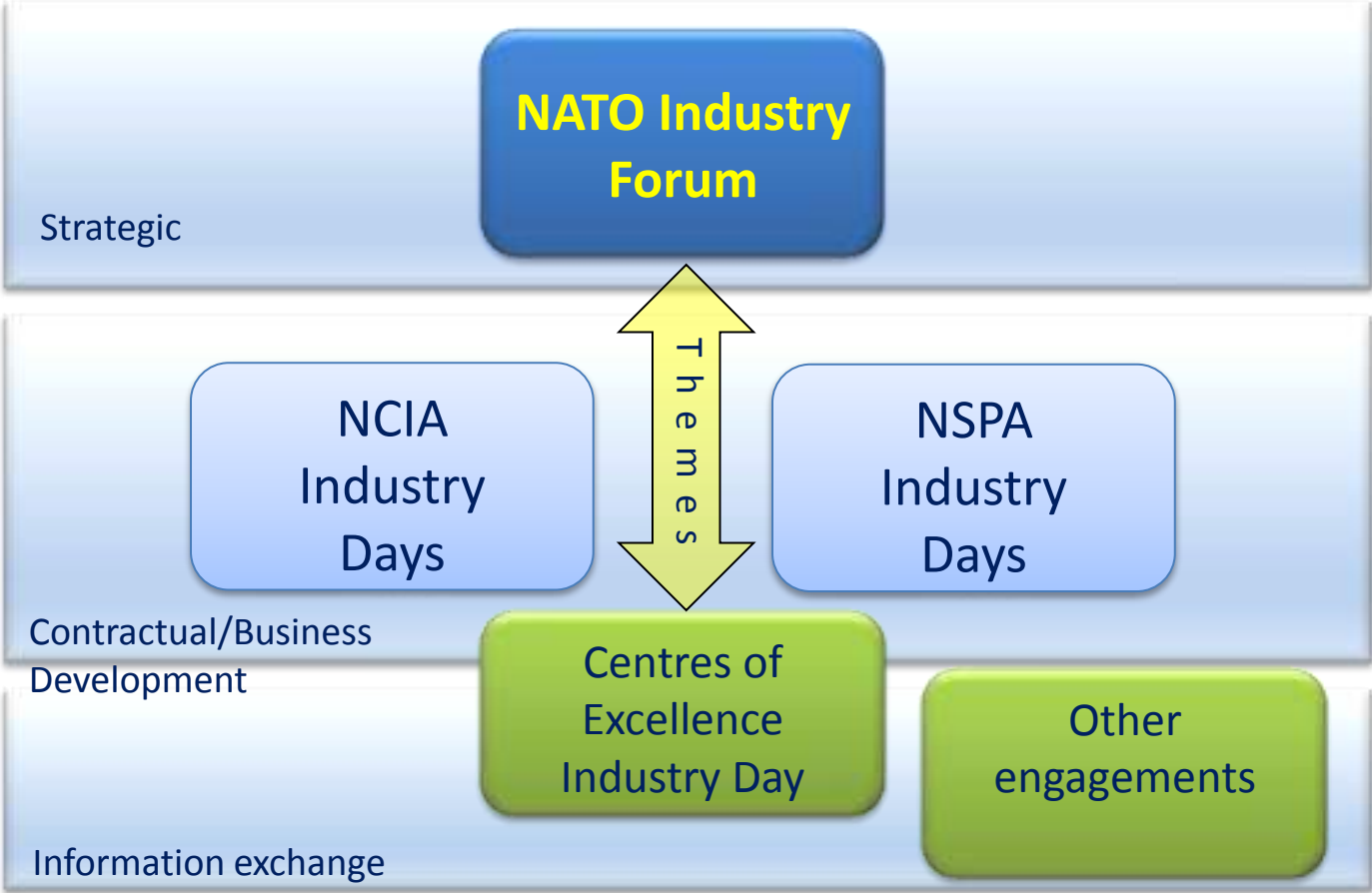
[to] “... contribute to the enhancement of **NATO Capability Development**”

“Industry involvement [...] throughout the **entire capability lifecycle**, from research to retirement”

[FNIE] ... “cover the **entire spectrum of relationships** between NATO and industry for capability development”







NATO - Industry FORUM





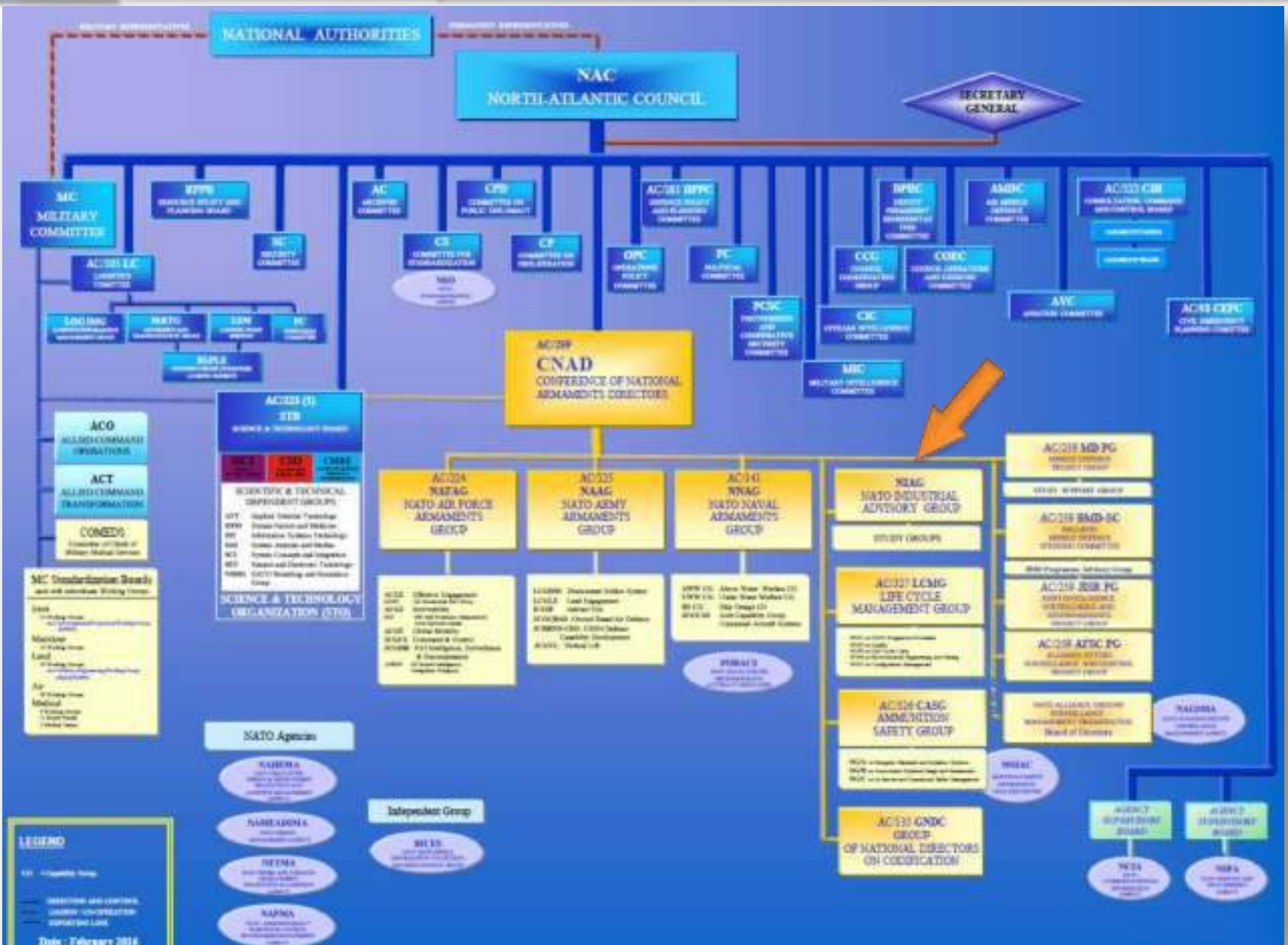
NATO-INDUSTRY
FORUM 2016
BRUSSELS BELGIUM
NOVEMBER 9



- Strategies for success
- Rising competition from outside NATO/EU borders
- Early involvement of industry in NATO Capability Development
- Industry participation in NATO Exercises (I3X)
- Industry = Defence + Security. Commercial ?
- Innovation
- The Defence Investment Pledge
- The Framework Nations Concept
- Evolved Multinational Approaches (Smart Defence)
- STEM (Science, Technology, Engineering, Maths) new force challenge

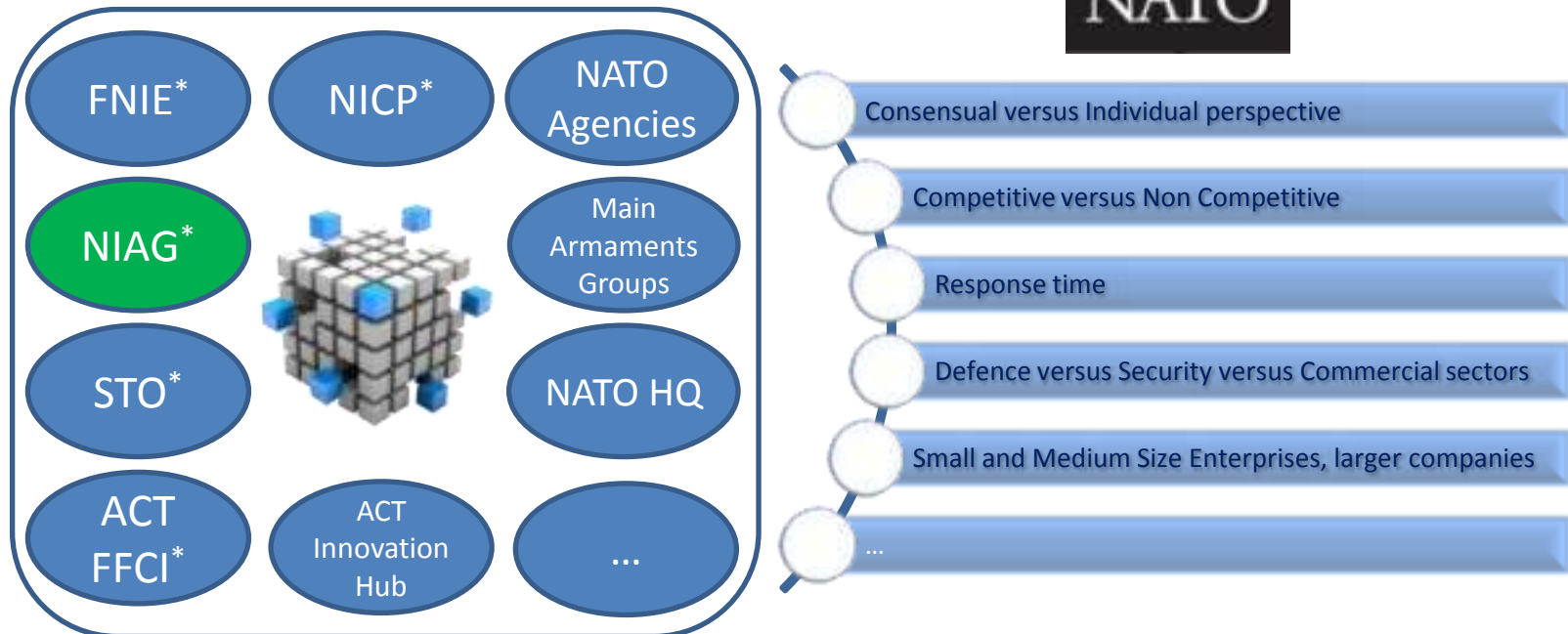








Various tools and frameworks,
addressing specific needs
& complementary



FNIE: Framework for NATO-Industry Engagement
 NICIP: NATO Industry Cyber Partnership
 NIAG: NATO Industrial Advisory Group
 STO: Science and Technology Organization
 FFCI: Framework For Collaborative Interaction

NATO Industrial Advisory Group (NIAG)



NIAG is a **high-level** consultative and advisory NATO body of **senior industrialists** from NATO/Partner countries, acting under the Conference of National Armaments Directors (CNAD), with the aims of:

– **Advising** National Armament Directors on industrial perspectives and issues –

High Level Advice

– Bringing industrial **know-how** and **ideas** to the work in CNAD and other NATO Bodies addressing NATO military capability requirements –

Technical Advice

*NIAG operates exclusively in the **pre-competitive** phase*

*Pre-competitive
Inclusive
Consensual*

More than 220 studies
conducted since 1972

Support to the Life Cycle Management
Group (AC/327) for more than 10 years



NIAG studies

- High level advice
- Technical Studies advice

NIAG Interface Groups

- Long-term sounding board
- Accelerated advice

Cyber

Alliance Future
Surveillance and
Control (AFSC)

NIAG is composed of industrial representatives **designated by each member country**. NIAG representatives are the voice of the Industry in their nations and **do not** represent the interest of any individual company.

NIAG Members adhere strictly to the **NIAG Moral Code** and do not take advantage of the privileged position in which they find themselves



Approx. 5,000
companies

80%
SMEs

| Nr | Cap. Group | Study Title | Open to PFP/IP |
|--------------|------------|---|----------------------|
| NAAG | | | |
| 1 | JCGVL | Airworthiness certification of rotorcraft Degraded Visual Environment Systems (DVES) and flight trials (Phase 4) | IP |
| 2 | JCGGBAD | GBAD Operations in the 21st Century | Australia and Sweden |
| 3 | JCGVL | Concepts for Operations and Equipment for next generation vertical lift operations (or "Next Generation Rotorcraft Capability") | IP |
| NAFAG | | | |
| 4 | JCGISR | Industrial Contribution to demonstration of ISR Information Exchange as part of Joint ISR Trial "Unified Vision 2018" | N |
| NNAG | | | |
| 5 | UWWCG | Maritime Multi-Mission Aircraft Support Centre (MMSC), Smart Defense (SD) 1.43, Specification Development | PFP or IP (tbc) |
| 6 | UWWCG | Validation of the proposed NATO standard on Multi-Static and Low Frequency Active Sonar Common Standards | PFP or IP (tbc) |

EG date

No EG

10/03

09/03

29/03

TBC

28/06

| | | | |
|---|------|--|-----|
| 7 | LCMG | Concepts and Rationale for Contracting for Logistics Capability on NATO Armaments and Support Programs | PFP |
| 8 | AVC | Performance Equivalence for Military Aircraft | IP |

Others

17/02

09/05

| | | | |
|----|---------------|---|-----------------|
| 9 | C3B | Big Data (continuation of SG208) | PFP or IP (tbc) |
| 10 | NAAG/ICGIF | Target Mensuration | IP |
| 11 | NAAG | Biological Containment Systems | IP |
| 12 | LCMG | System of interest (SOI) Maturity Assessment through NATO System Life Cycle Management (SLCM) perspective | PFP |
| 13 | NNAG UWWCG | The Utility of Unmanned Vehicles in NATO ASW Operations | PFP or IP (tbc) |

Reserve list



- ❑ NIAG Chairman – Mr. Martin HILL (THALES, UK)
Martin.Hill@thalesgroup.com
- ❑ NIAG Vice-Chairman – Mr. Michael LANGER (Diehl, DEU)
Michael.Langer@diehl.de
- ❑ NATO/IS - NIAG Secretary – Ms. Nathalie VAN DONGHEN
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- ❑ NATO/IS – Industry Relations – Mr. Liviu LAZAR
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- ❑ NATO/IS – NIAG Coordinator – Mr. Laurent FOISSEY
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NIAG Website – <https://diweb.hq.nato.int>
(password protected)



Political declarations - practical impact

FNIE: What is it, context, implications

NATO-Industry Forum NIF

NATO Industrial Advisory Group NIAG

Science and Technology Organisation STO

Enhanced Multinational Cooperation Opportunities



- Applied Vehicle Technology (AVT)
- Systems Concepts and Integration (SCI)
- Sensors and Electronics Technology (SET)
- System Analysis and Studies (SAS)
- Human Factors and Medicine (HFM)
- Information Systems and Technology (IST)
- NATO Modeling and Simulation Group (NMSG)



- Center for Maritime Research and Experimentation



GRC National Coordinator

Dipl. Eng. Marios LOUPOS

General Secretariat of Financial Planning and Defence Investments
General Directorate for Defence Industry and Research

Research Directorate

Fakinos Base Camp STG 1020 Papagou ATHENS GREECE

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- A full-time presence of the Chief Scientist and his Office at NATO HQ
[PoC @ OCS: ferraris.alberto@hq.nato.int, pos.nico@hq.nato.int]
- ***Your National Coordinator is the entry-point to the STO/CSO***
[PoC @ CSO: philippe.soete@cs0.nato.int]
- CMRE's capabilities can be used by single NATO nations as customers
[PoC @ CMRE: staveley@cmre.nato.int]





Political declarations - practical impact

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Enhanced Multinational Cooperation Opportunities

| No | Title of Smart Defence activity |
|-------|--|
| 1.4 | Immersive Training Environments (ITE) |
| 1.7 | Individual Training and Education Programme (ITEP) |
| 1.26 | Establishment of a Multinational Geospatial Support Group (GSG) |
| 1.37 | Multinational Approaches Towards Air-to-Ground Precision Guided Munitions |
| 1.47 | Shipborne radar-based detection of fast-flying low RCS objects. |
| 2.28 | NATO FAC/JTAC Training and Simulation |
| 2.33 | Maritime Situational Awareness – Multinational Maritime Information Services (MNMIS) Forum |
| 2.99 | Active Offboard Decoy Using Chaff Illumination (CHILL) |
| 3.137 | Distributed Training and Exercises (DTE) |
| 3.139 | Shared Scenarios |
| 3.142 | Naval Cooperative ESM Operations (CESMO) |
| 3.143 | Reusable Active Offboard Decoy |
| 3.144 | Naval Laser Warning Capability |
| 3.147 | Maritime Support Tankers |

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LOI signing ceremony

4 September 2014



Belgium and the Netherlands sign the LOI

8 October 2015



MOU signing ceremony

11 February 2016



Poland signs the MOU

26 October 2016



First LOA signature

TBD

Opportunity:

- Group would actively welcome additional participants
- Non-binding, no-cost framework for acquiring and exchanging full range of PGM-related equipment



**LOI signing
ceremony**

9 July 2016

Opportunity:

- Signatories would actively welcome additional participants with similar NDPP targets
- Lack of well-defined conceptual vision lends itself to cooperative approach
- Comprehensive effort beyond only material aspects



**LOI signing
ceremony**

24 June 2015



**Agreement on
common training
approach**

17 September
2016

Opportunity:

- Group might still be open to additional participants
- Cooperation model can be replicated by other groupings and/or for other capability areas



NATO Force Structure Command and Control



- Baltic Special Operation Component Command
- Composite Special Operations Component Command (BE-DE-NE)

Anti-Submarine Warfare



- Maritime Multi Mission Asset Capability (M3A)

Replacement for Legacy Systems



- Transport helicopters
- Armoured Personnel Carriers/
Infantry Fighting Vehicles

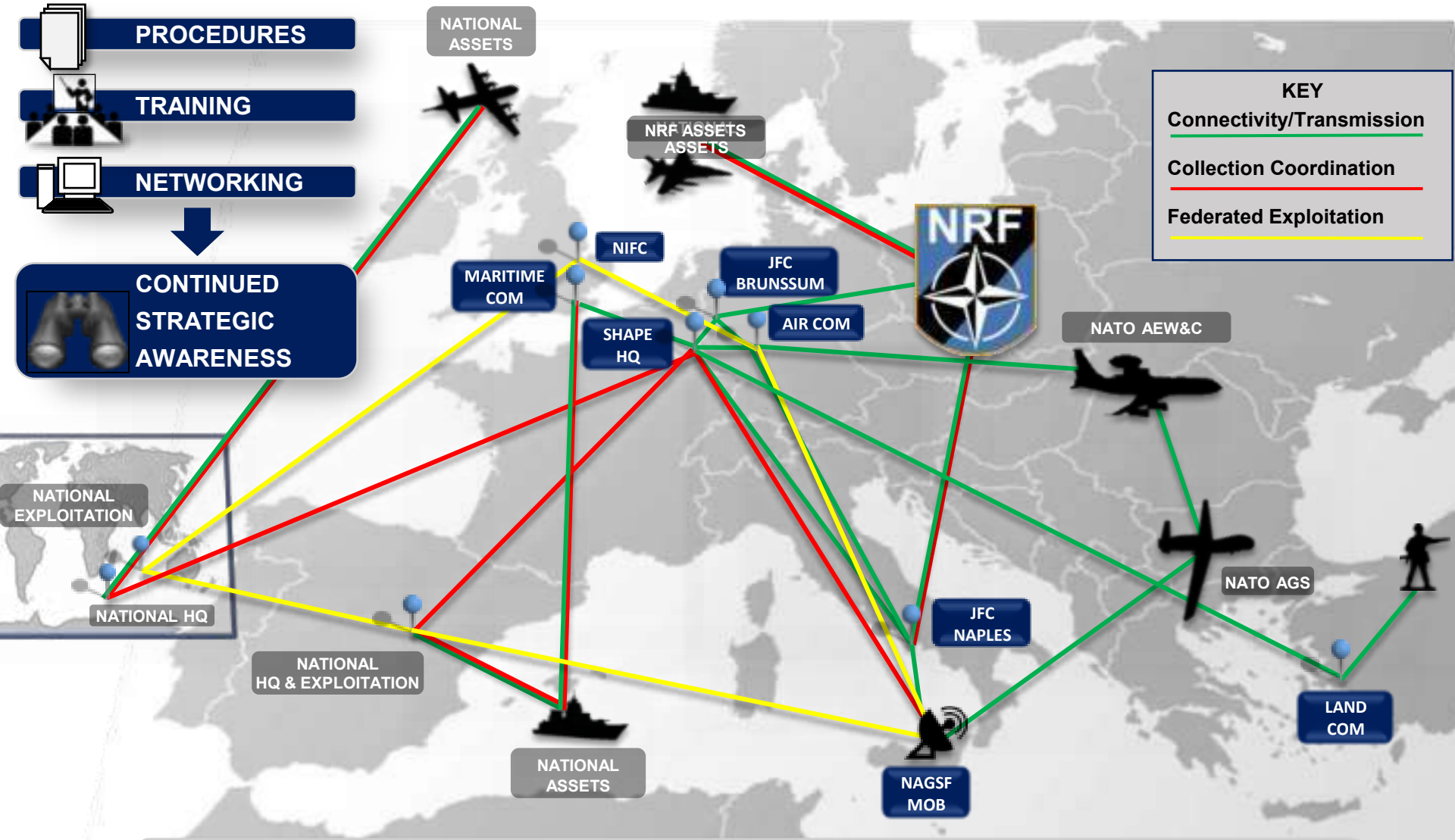
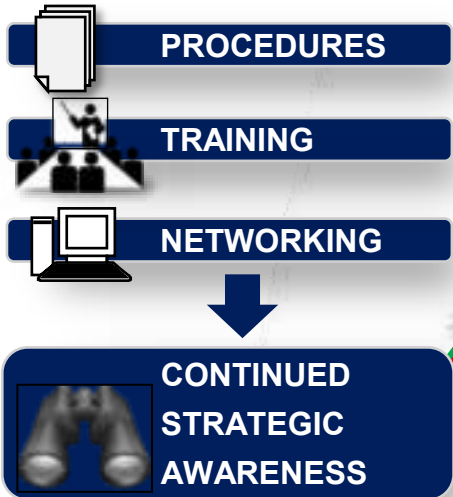
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Defence Investment Division

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KEY

- Connectivity/Transmission
- Collection Coordination
- Federated Exploitation

Making the best use of available capabilities to enhance NATO's strategic anticipation

Objective

- Deliver continuous enhancements to NATO JISR capabilities across all DOTMLPFI lines of development
- Ensure MAJIIC2 products are operationalised, coherent, and sustained within the Alliance

Status

- JISR IOC declared at February 2106 Defence Ministerial – informed by CNAD programmatic overview
- Capability requirements for next spiral approved by MC; capability development plan to be led by ACT; implementation plan by CNAD
- Planning started for UNIFIED VISION 18

Challenges

- Determination of MAJIIC2 operationalisation role and responsibilities
- Sustaining institutional adaptation in action

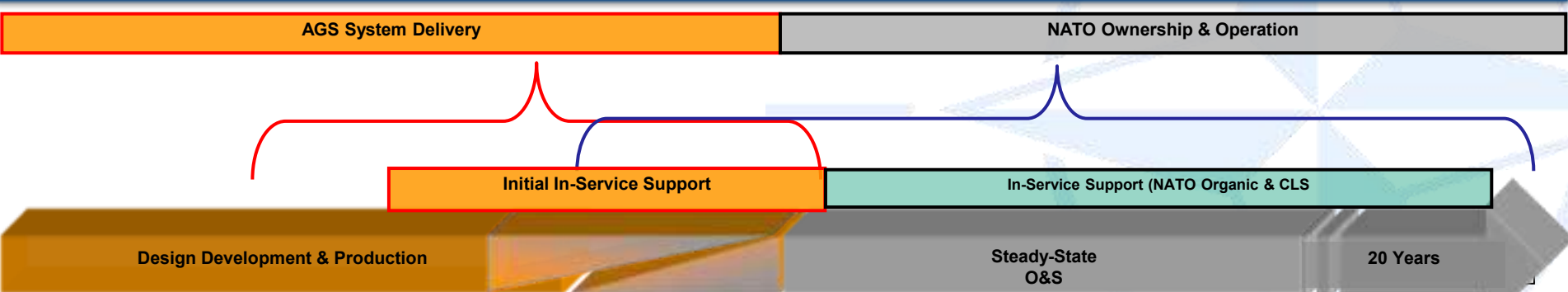


AGS Programme objectives

- To provide NATO-owned/operated persistent surveillance capability via five Global Hawk remotely piloted aircraft provided with the MP-PRTIP radar, support segments and ground exploitation segments.
- Initial Operational Capability (IOC) projected for end 2017
- Full Operational Capability (FOC) for 2018



Manpower: NATO International AGS Force (@28)



2016

2017

2018

← Transition →

Production
Test and Acceptance

Initial
In-Service Support

Acquisition
Close-out Activities

Ramp-up to In-Service Support

NSPA Life Cycle Management

Transition Plan

Delivery of 1st
Assets

IOC

FOC

LSIP

LCMP

AGS Support Partnership
Established

Start of NSPA In-Service Support

IOC = Initial Operational Capability
FOC = Full Operational Capability
LCMP = Life Cycle Management Plan
LSIP = Life Cycle Support Implementation Plan



Objective

- Sustaining NATO's organic Airborne Battle Management/C2 and air/maritime surveillance capability.
- Modernise NATO E-3A capability to meet evolving requirements and retain operational relevance.

Status

- Current programme, called the Follow On Upgrade Programme (FUP) concludes in 2018.
- Airframe viability ensured through 2030+ by meeting foreseen air traffic management requirements.
- Also provides next generation combat identification capability.

Challenges

- Flight testing has been delayed by more than six months – any further delays could profoundly impact retrofit schedule.
- FUP ends in Dec 2018 – all projects must be completed by that date in order to stay within authorised funding.

Attention Points

- Without further modernisation the NATO E-3A mission system will fail to meet operational requirements by 2025 and the fleet will be retired.

Objective

- Sustaining NATO's organic Airborne Battle Management/C2 and air/maritime surveillance capability.
- Modernise NATO E-3A capability to meet evolving requirements and retain operational relevance through 2035

Status

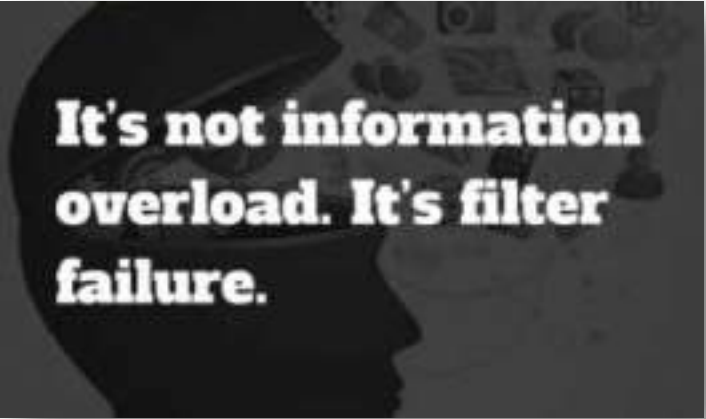
- NAPMO Nations must make decision on next mod effort called the Final Lifetime Extension Programme (FLEP) in very near future.
- FLEP to execute from 2019-2025.

Challenges

- Provide NTE Price, System Definition and Return of Investment Strategy by mid-2017 prior to MMoU signature.
- Nations must sign FLEP MMoU by mid-2018 in order to avoid severe impact on cost, schedule & risk.
- Radar upgrade & sustainment currently not part of FLEP due to affordability.

Attention Points

- Political support from NATO's highest level required in order to ensure success of \$1B mod programme.
- NAC declaration at Warsaw Summit in support of FLEP would be helpful.
- National staffing of FLEP package must begin NLT Oct 2016 – historically, two years required to gain all signatures.



**It's not information
overload. It's filter
failure.**

Where could you **get** all the **information**
you **need** at once?

NATO Business Portal



| ORGANIZATION | TOPICS | NEWSROOM |
|---------------------------------------|---|-----------------------------|
| What is NATO? | Encyclopedia of NATO Topics | Press releases |
| NATO on Duty | NATO-Russia : setting the record straight | Speeches & transcripts |
| Member countries | Transparency and accountability | News |
| Partners | NATO and Afghanistan | Events |
| Who's who? | Partnerships | Photos |
| Structure | Countering terrorism | Audio |
| History | Cyber security | Video |
| FAQ | Collective defence | Newsroom Archive (pre 2014) |
| Careers at NATO | NATO-Ukraine relations | Use of content |
| Business Opportunities | Women, peace and security | Press releases via e-mail |
| 10 things you need to know about NATO | NATO-Russia relations | RSS-feeds |

NATO BUSINESS PORTAL

This portal was designed to guide readers through the business opportunities offered by various NATO bodies and organisations. It is a gateway to more detailed information, accessible on the respective organizations' websites, which may require security credentials.

The importance of a stronger relationship with industry was acknowledged at recent NATO Summits in Lisbon and Wales. NATO has developed a [Framework for NATO-Industry Engagement \(PDF\)](#) which is currently guiding the development of initiatives for implementation.

To fulfill its mission NATO needs capabilities, which are primarily developed by industry; consequently the organisation has developed a spectrum of relationships with industry. At the non-contractual or pre-competitive level NATO interacts with industry through the NATO Industrial Advisory Group (NIAG), the Framework for Collaborative Interaction (FFCI), the NATO Industry Cyber Partnership (NICP) and the NATO-Industry Forum, as well as through conferences, symposia and seminars. At contractual level the relationship with industry is governed by NATO procurement rules and primarily managed by NATO Agencies.

≡ LINKS

- > [NATO Industrial Advisory Group \(NIAG\)](#)
- > [NATO Industry Cyber Partnership \(NICP\)](#)
- > [Allied Command Transformation \(ACT\)](#)
- > [Allied Command Operations \(ACO\)](#)
- > [Science and Technology Organisation \(STO\)](#)
- > [NATO Communications and Information Agency \(NCIA\)](#)
- > [NATO Support and Procurement Agency \(NSPA\)](#)
- > [NATO HQ Procurement Service](#)
- > [Defence Investment Division \(DI\)](#)



NATO Industrial Advisory Group (NIAG)

The NATO Industrial Advisory Group (NIAG) is a high-level consultative and advisory body of senior industrialists from NATO member countries, acting as a forum for free exchange of views on industrial, technical, economic, managerial and other relevant aspects of the research, development and production of defence and security equipment within the Alliance.

NATO Industry Cyber Partnership (NICP)

NATO is deepening its cyber defence engagement with industry to enhance the protection of the Alliance's networks as part of an open, transparent and mutually beneficial



NATO Industry Relations Portal



The screenshot shows the NATO Industry Relations Portal website. At the top, there is a navigation bar with the NATO logo and the text "IND. REL.". Below this, there is a search bar and a menu with various links. The main content area features a large banner with the text "Industrial Relations" and a welcome message: "Welcome to the NATO Industrial Relations website, designed with the purpose of supporting the defence and security companies in their attempt to identify business opportunities offered by NATO bodies and organisations." A red box highlights the URL <https://diweb.hq.nato.int>. Below the banner, there is a section titled "Are you representing a prime contractor, or a Small and Medium-sized Enterprise / Small Business, or a Defence Industry Association? Is your organisation located in one of the NATO nations? Are you willing to do business with NATO? If all the answers are positive to all check the **NATO Business Opportunities** website. To improve it please send your suggestions through email to 'Industrial.Bolton@nato.int'".

NATO Summits - references to industry

Wales Summit Declaration

14. We agree to reverse the trend of declining defence budgets, to make the most effective use of our funds and to further a more balanced sharing of costs and responsibilities. Our overall security and defence depend both on how much we spend and how we spend it. Increased investments should be directed towards meeting our capability priorities, and Allies also need to display the political will to provide required capabilities and deploy forces when they are needed. **A strong defence industry across the Alliance, including a stronger defence industry in Europe and greater defence industrial cooperation within Europe and across the Atlantic, remains essential for delivering the required capabilities.** NATO and EU efforts to strengthen defence capabilities are complementary. Taking current commitments into account, we are guided by the following considerations:

- Allies currently meeting the NATO guideline to spend a minimum of 2% of their Gross Domestic Product (GDP) on defence will continue to do so. Likewise, Allies spending more than 2% of their defence budgets on major equipment, including related Research & Development, will continue to do so.
- Allies whose current proportion of GDP spent on defence is below this level will:
 - halt any decline in defence expenditure;
 - aim to increase defence expenditure in real terms as GDP grows;
 - aim to move towards the 2% guideline within a decade with a view to meeting their NATO Capability Targets and filling NATO's capability shortfalls.
- Allies who currently spend less than 2% of their annual defence spending on major new equipment, including related Research & Development, will aim, within a decade, to increase their annual investments to 2% or more of total defence expenditures.
- All Allies will:
 - ensure that their land, air and maritime forces meet NATO agreed guidelines for interoperability and sustainability and other agreed output metrics;
 - ensure that their armed forces can operate together effectively, including through the implementation of agreed NATO standards and doctrine.

72. We will therefore continue to engage all Allies on cyber issues with relevant partner nations on a case-by-case basis and with other international organisations, including the EU, as agreed, and will intensify our

Q ?

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