

An Overview of the Network Centric Operations Industry Consortium



**For NDIA M&S
20 April 2011**

NCOIC is an international organization



- 80+ Member Organizations including leading IT and Aerospace & Defense companies, government organizations, non-governmental organizations and academic institutions
- Members from 18 Countries
- Advisors from 26 key stakeholders from Australia, EDA, France, Germany, Italy, NATO, The Netherlands, Sweden, UK and US



Working Group collaboration



Executive and Advisory Council joint meeting



Technical Council



Terry Morgan honors outgoing Advisory Council Chair, Keith Hall

And it is unique...

“NCOIC has four characteristics which make it unique.

- The organization is solely dedicated to network-centric operations and interoperability
- Its membership stimulates discussions about global interoperability
- It serves as a ‘vendor neutral’ forum
- And it has a cadre of industry’s top technical experts who are available to do its work.”

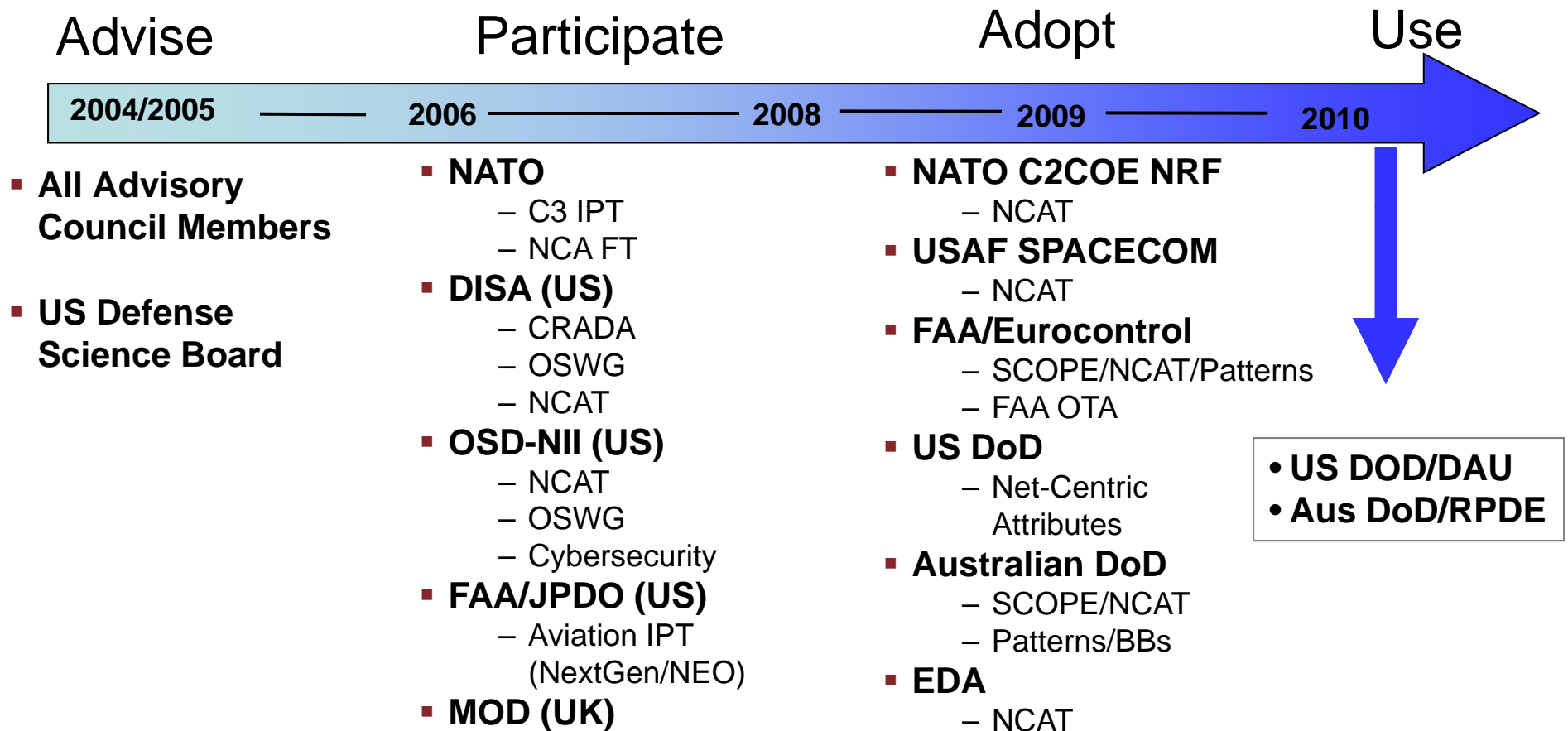


Jack Zavín, U.S. Office of the Assistant Secretary of Defense, Networks and Information Integration

In the photo: BrigGen Dieter Dammjacob (DEU AF)-J3 NATO Supreme Headquarters, Allied Powers Europe; Lt.Col. Danut Tiganus-CIS Directorate, EU Military Staff; Dr. Tom Buckman-NC3A Chief Architect; Gen Harald Kujat,-German AF (Ret.) former Chief of Staff of German Armed Forces & head of NATO Military Committee, Marcel Staicu-European Defense Agency NEC Project Officer .

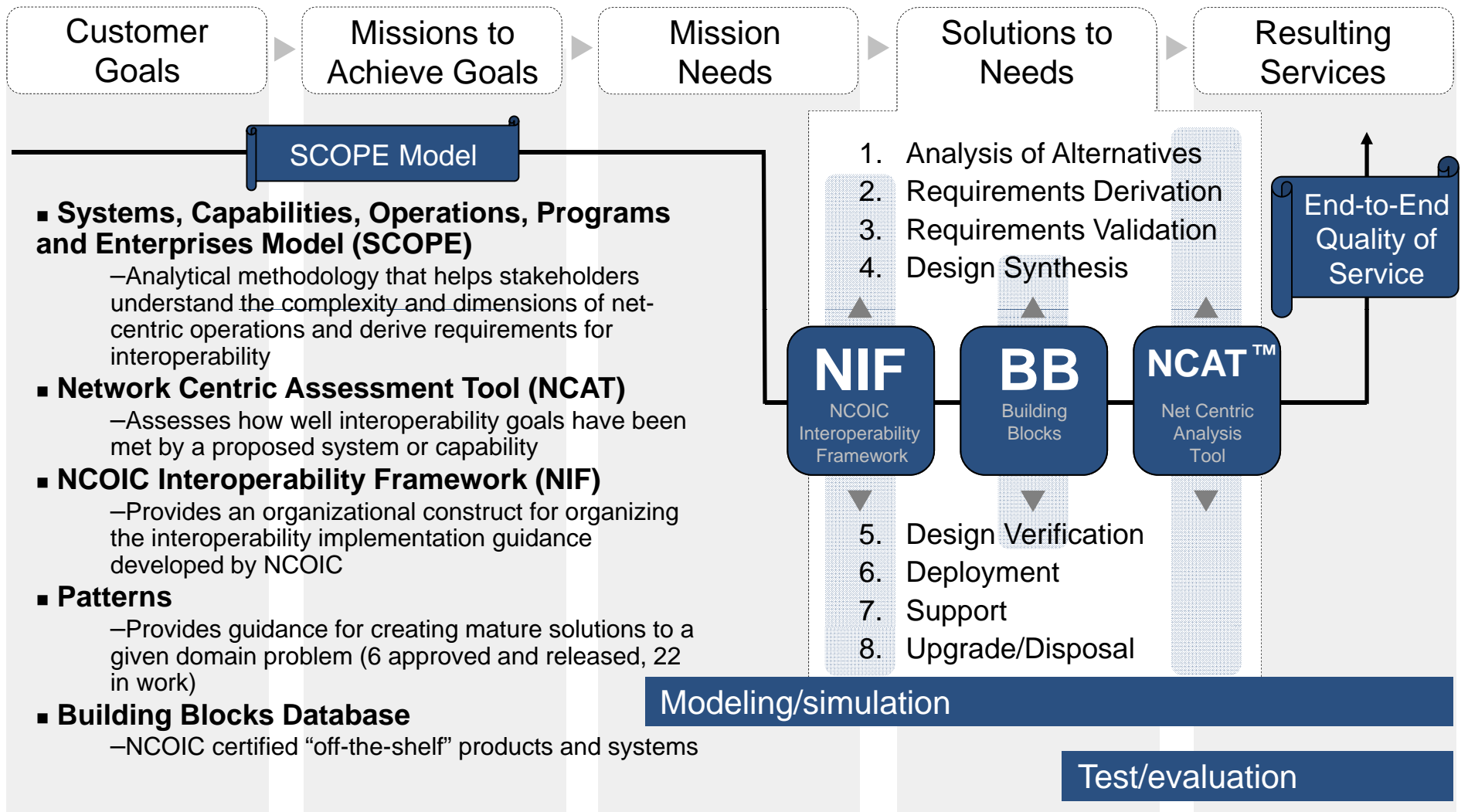
Sustained Effort to Make NCOIC Products Part of Procurement Process

Overarching Goal: NCOIC deliverables are adopted, utilized and required by customer agencies



NCOIC is Pursuing Plans to Further Increase Influence in Future Procurements

NCOIC Technical Approach



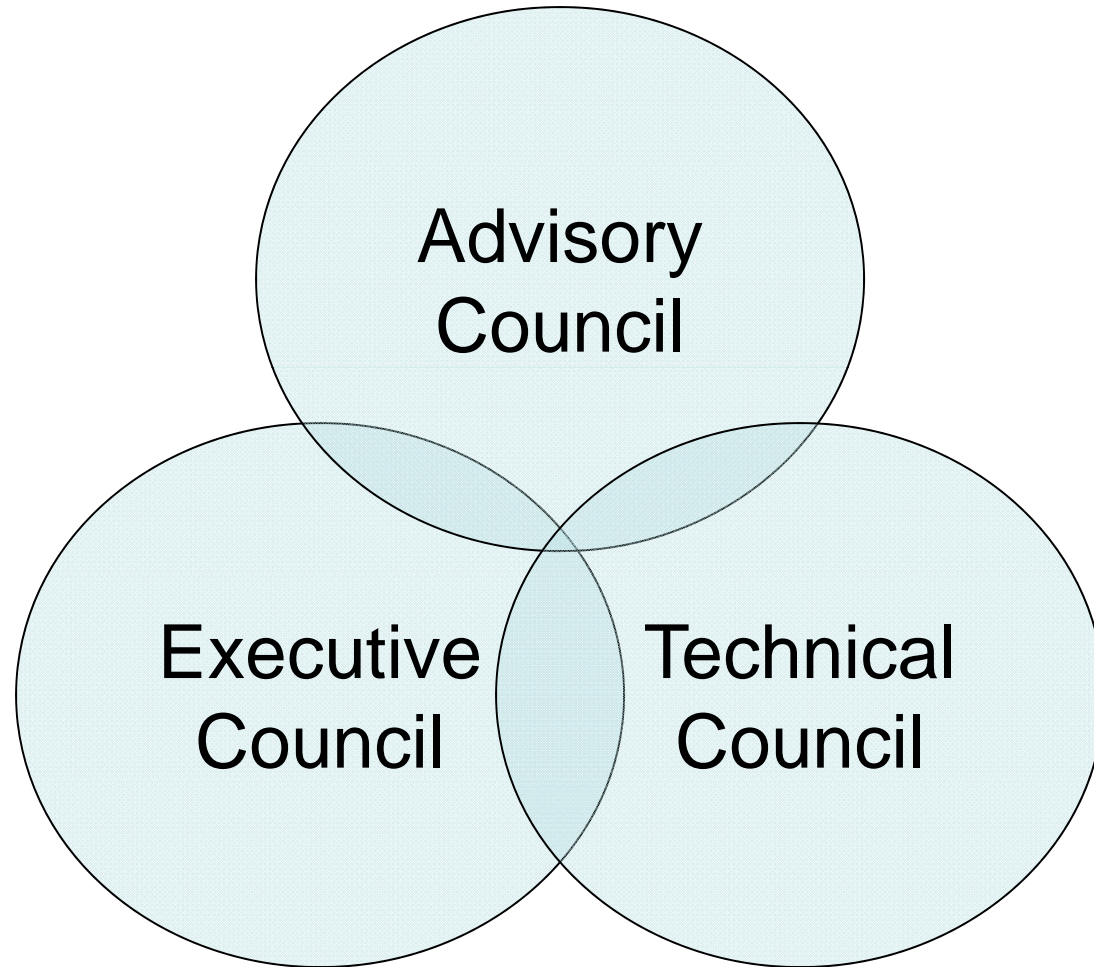
NCOIC products and services apply net-centric design principles across the development lifecycle

Net-Centric Patterns (vs Standards)

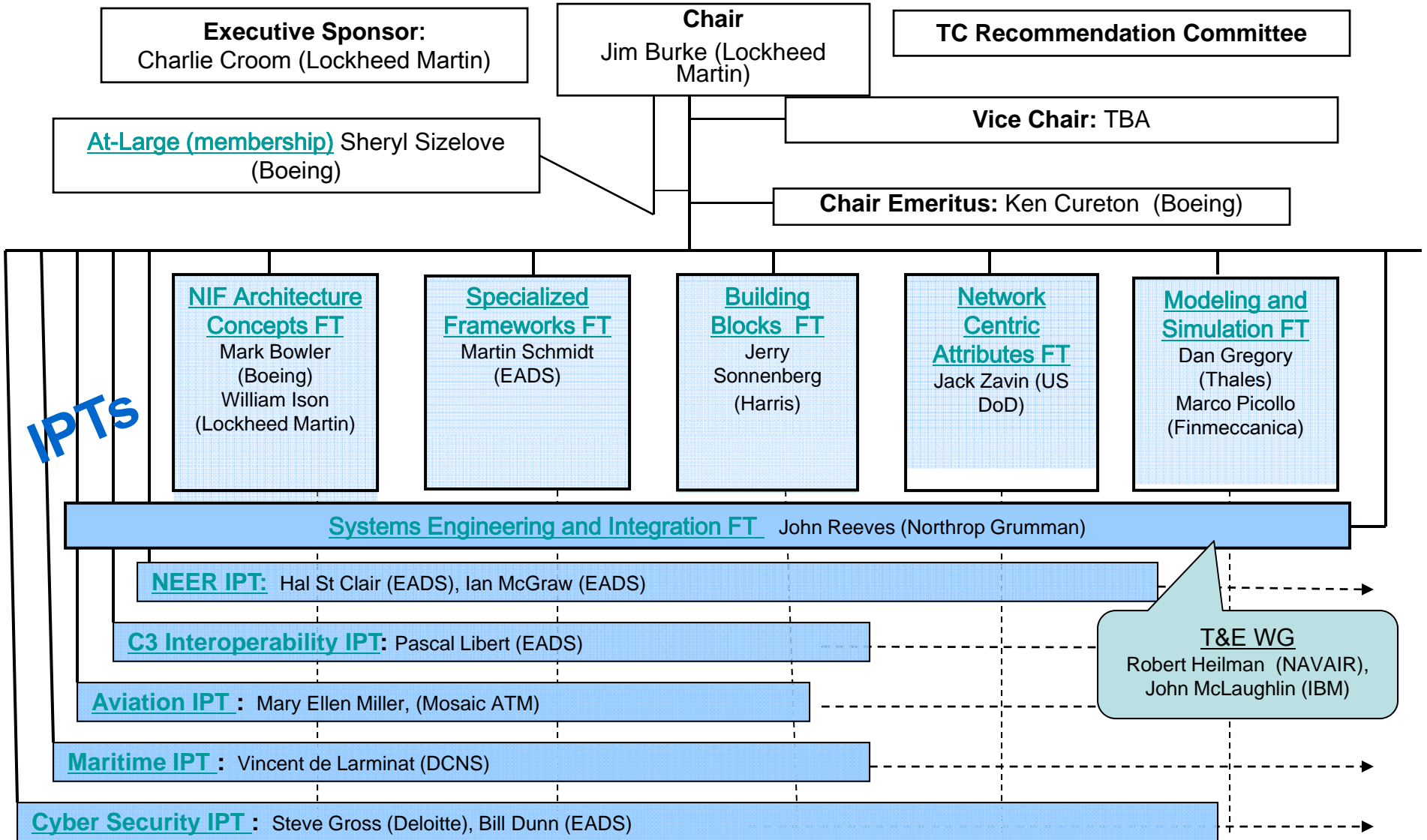


- Definition of a **Net-Centric Pattern**, as per the NCOIC Lexicon:
 - “A Net-Centric Pattern (NCP) provides expert practical **guidance** based on open **standards** for creating systems with desired Net-Centric **capabilities** in order to mitigate specific Net-Centric interoperability **problems**.”
- Patterns are:
 - Prescriptive guidelines for practical use by designers and implementers that can be tailored and re-used for solving interoperability problems
 - Sufficiently detailed to facilitate verification of vendor evidence of conformance to the pattern
 - Guidance for hardware, software, processes, and procedures (more than just traditional software patterns)

Structure



Technical Council/Team Structure



M&S Functional Team



- Interoperability of M&S with net-centric operational systems
 - E.g. LVC, stimulation, T&E...
- Application of net-centric principles to M&S.

SCOPE



- M&S FT maintains and reviews the SCOPE dimensions that relate to reality context coupling e.g.:
 - Geospatial location context flexibility
 - Time context

Test & Evaluation



- Provide support to T&E WG
 - Distributed T&E pattern
 - SCOPE model

SISO Relationship



- Roadmap review / de-confliction
- Reciprocal membership being defined

LVC-IME Pattern



- A Live, Virtual, and Constructive Integrated Middleware Environment (LVC-IME) helps reduce the time and risk of performing the integration of heterogeneous systems.
- Middleware environments developed using the guidance in the pattern handle protocol and data model translation and may provide security and exercise management services.

Lab Interoperability Project

- Reduce time and effort connecting labs
- Focus on VPN interconnectivity
- Demonstrations
 - NNEC
 - Brussels
- White paper



Next Steps



- Technical connectivity accounted for a proportion of time and effort involved connecting labs. Other factors include:
 - Legal
 - Commercial
 - Code of Connection
- Considering a generic equivalent of DNBL
 - Can be applied not only to NATO but also: other coalitions/civil organisations, government-government, company-government, company-company, intra-company
- Considering a technical pattern for VPN connectivity