

Command and Control Centre of Excellence

C2 COE & challenges of assessing C2 capabilities

Catalysing the Art of C²



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Security at and from the Sea...



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Disclaimer



This briefing is a product of the Command and Control Centre of Excellence (C2COE). It does not represent the opinions or policies of NATO and is designed to provide an independent opinion.

**This briefing is not classified
and
therefore releasable using open sources!**

1. COE's in general



Organization NATO A-Z Newsroom e-Library

— Homepage — NATO A-Z

Centres of Excellence



Centres of Excellence (COEs) are nationally or multi-nationally funded institutions that train and educate leaders and specialists from NATO member and partner countries, assist in doctrine development, identify lessons learned, improve interoperability, and capabilities and test and validate concepts through experimentation. They offer recognized expertise and experience that is of benefit to the Alliance and support the transformation of NATO, while avoiding the duplication of assets, resources and capabilities already present within the NATO command structure.

Coordinated by Allied Command Transformation (ACT) in Norfolk, Virginia in the United States, COEs are considered to be international military organizations. Although not part of the NATO command structure, they are part of a wider framework supporting NATO Command Arrangements. Designed to complement the Alliance's current resources, COEs cover a wide variety of areas, with each one focusing on a specific field of expertise to enhance NATO capabilities.

- COE activities open to all Allies
- No cost to NATO.
- No duplication or competition with existing NATO capabilities, but added value.
- Conform to appropriate NATO procedures, doctrines and standards.
- Clear relationships between Sponsoring Nations and Strategic Commands through Memorandum of Understanding (MOU) and Technical Arrangements (TA).

COE Resources



- Different numbers of Sponsoring Nations
 - From one to nineteen in a COE.
- Operating cost
 - Per position: 6-27K € , but per diem to be paid additionally!
 - Additional costs for Host Nation.
- Manned on a national or multinational basis
 - Approx. 740 billets for 18 accredited COE.
 - Approx. 240 non-Host Nation positions.
- Impact on NCS PE manning
 - Sponsoring nations are encouraged not to populate a COE at the expense of NATO billets in the NCS.

Current COE Status



1. Joint Air Power Competence Centre (JAPCC / DEU)
2. Defence Against Terrorism (DAT / TUR)
3. Naval Mine Warfare (NMW / BEL)
4. Combined Joint Operations from the Sea (CJOS / USA)
5. Civil Military Cooperation (CIMIC / NLD)
6. Cold Weather Operations (CWO / NOR)
7. Joint Chemical, Biological, Radiological & Nuclear Defence COE (JCBRN / CZE)
8. Air Operations Analysis and Simulation Centre (CASPOA / FRA)
9. Command & Control COE (C2 / NLD)
10. Cooperative Cyber Defense COE (CCD / EST)
11. Operations in Confined and Shallow Waters COE (CSW / DEU)
12. Military Engineering COE (MILENG / DEU)
13. Military Medicine (MILMED / HUN)
14. Human Intelligence COE (HUMINT / ROU)
15. Counter – Improvised Explosive Devices COE (C-IED / ESP)
16. Explosive Ordnance Disposal COE (EOD / SVK)
17. Modeling and Simulation COE (M&S / ITA)
18. Energy Security COE (ENSEC / LTU)

NATO Accredited

1. Crisis Management and Disaster Response (CMDR / BGR)
2. Military Police (MP / POL)

In Accreditation Process

1. Strategic Communications (STRATCOM / LVA)
2. Stability Policing (Vicenza / ITA)

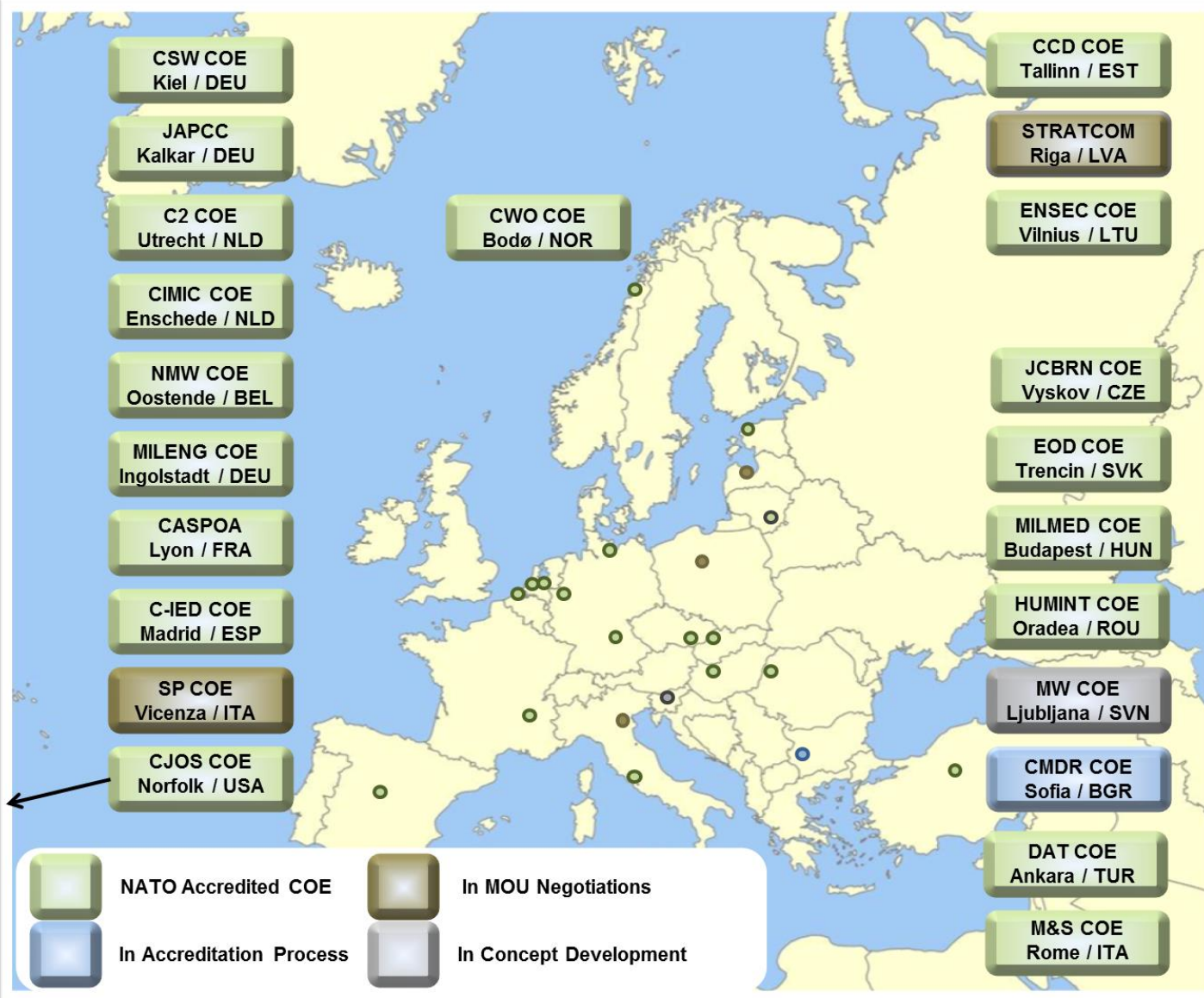
In MOU Negotiations

1. Mountain Warfare (MW / SVN)

In Concept Development

Total: 23

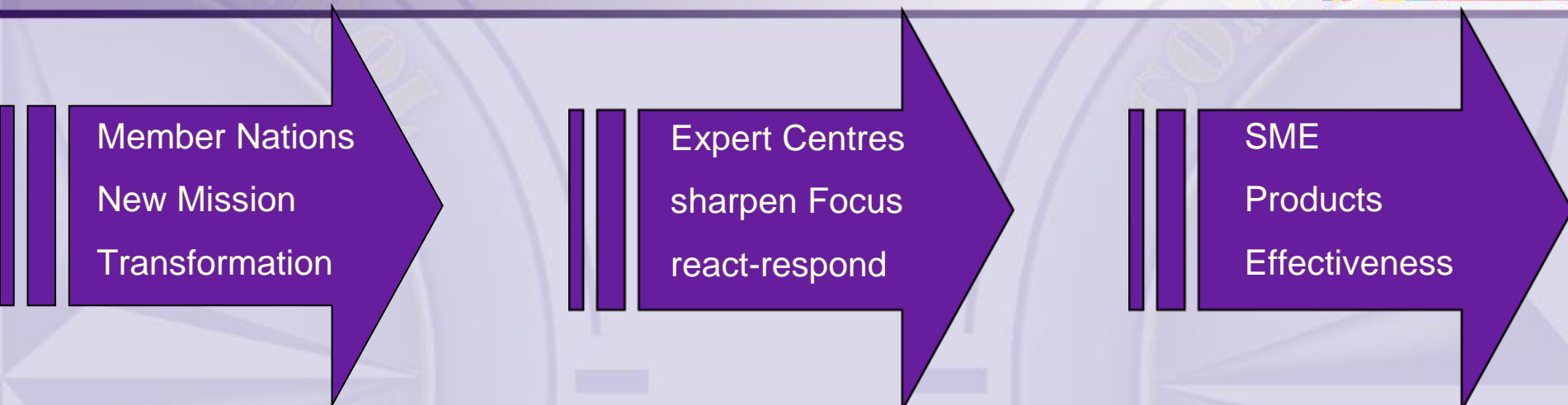
COE Locations



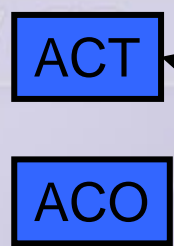
2. C2COE – Utrecht (NL)



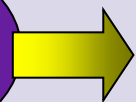
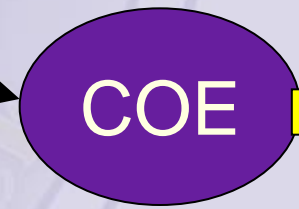
Timeline C2COE



Steering Board POW



Prague Summit



multinational

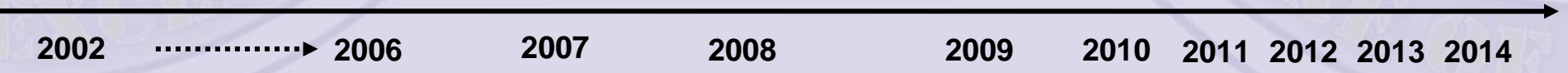
NOJ
USA

NOJ
EST

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MCM-236-03

Accreditation as IMO



Mission and Vision C2COE



MISSION STATEMENT

“To support NATO, nations and international institutions/ organisations by providing subject matter expertise on all aspects of the Command & Control process with a **focus on the operational environment.**”



VISION

“To become a national and international main source of expertise in the domain of C2 by networking with SNs, ACT and ACO and other international institutions/ organizations”



Community of Interest C2COE

NATO Member Nations



Multinational Steering Board



NATO preferred customer

ACO



ACT



Expertise

Expert centres
NATO nations

NATO agencies/schools

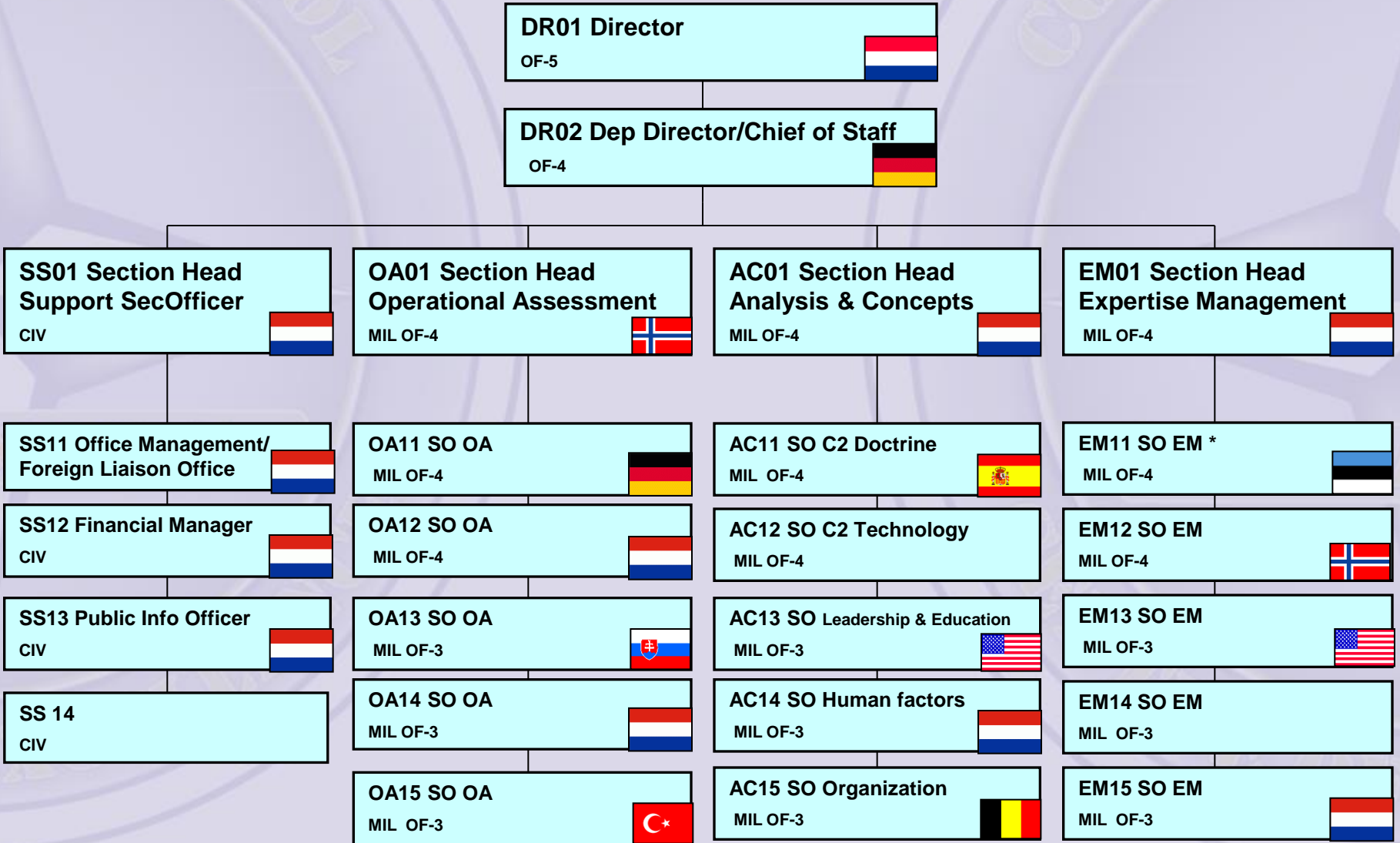
Other NATO CoEs

NCOIC

Academia/R&D centers

- Operational Control
- Operational Coordination
- Customer Coordination

Organization C2COE



Products C2COE



Expertise/Knowledge

Education and training

Lessons learned

Concept dev and exp

Doctrine development

C2COE

Sponsoring Nations

- SME Support (Operations, Exercises, Training, Conferences)
- Publications (Magazines, Handbook Best Practices)
- Briefings
- Website
- Webinar
- Seminar
- Studies (e.g. C2 Vision, C2 Agility)
- Advice/Analysis/Assessment

3. C2COE Main Challenges



of assessing C2 capabilities...

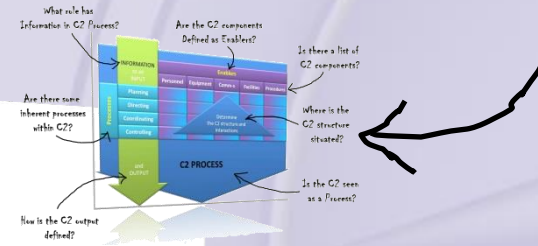
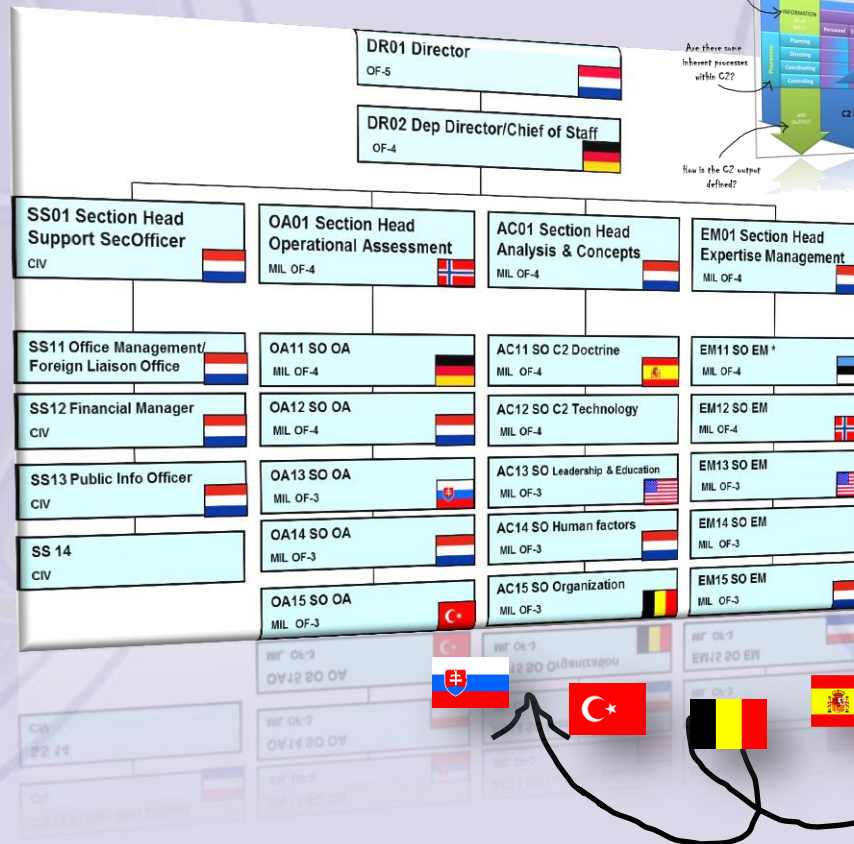
- A. Challenges derived from assessments
- B. Internal COE challenges
- C. No common understanding of C2

Internal C2COE challenges



9 different Nations =
X different approaches

No clear C2 definition -
difficult to focus



Constant rotation -
SME levels differ

No common understanding of C2



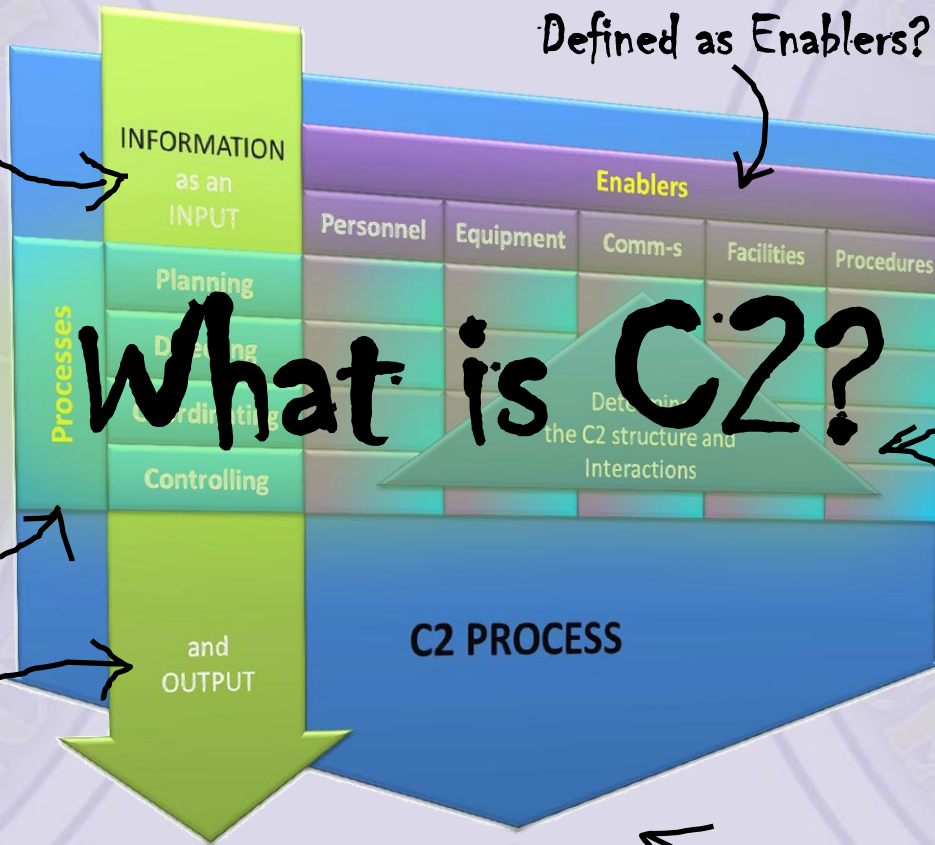
What role has Information in C2 Process?

Are the C2 components Defined as Enablers?

Is there a list of C2 components?

Are there some inherent processes within C2?

What is C2?



How is the C2 output defined?

Where is the C2 structure situated?

Is the C2 seen as a Process?

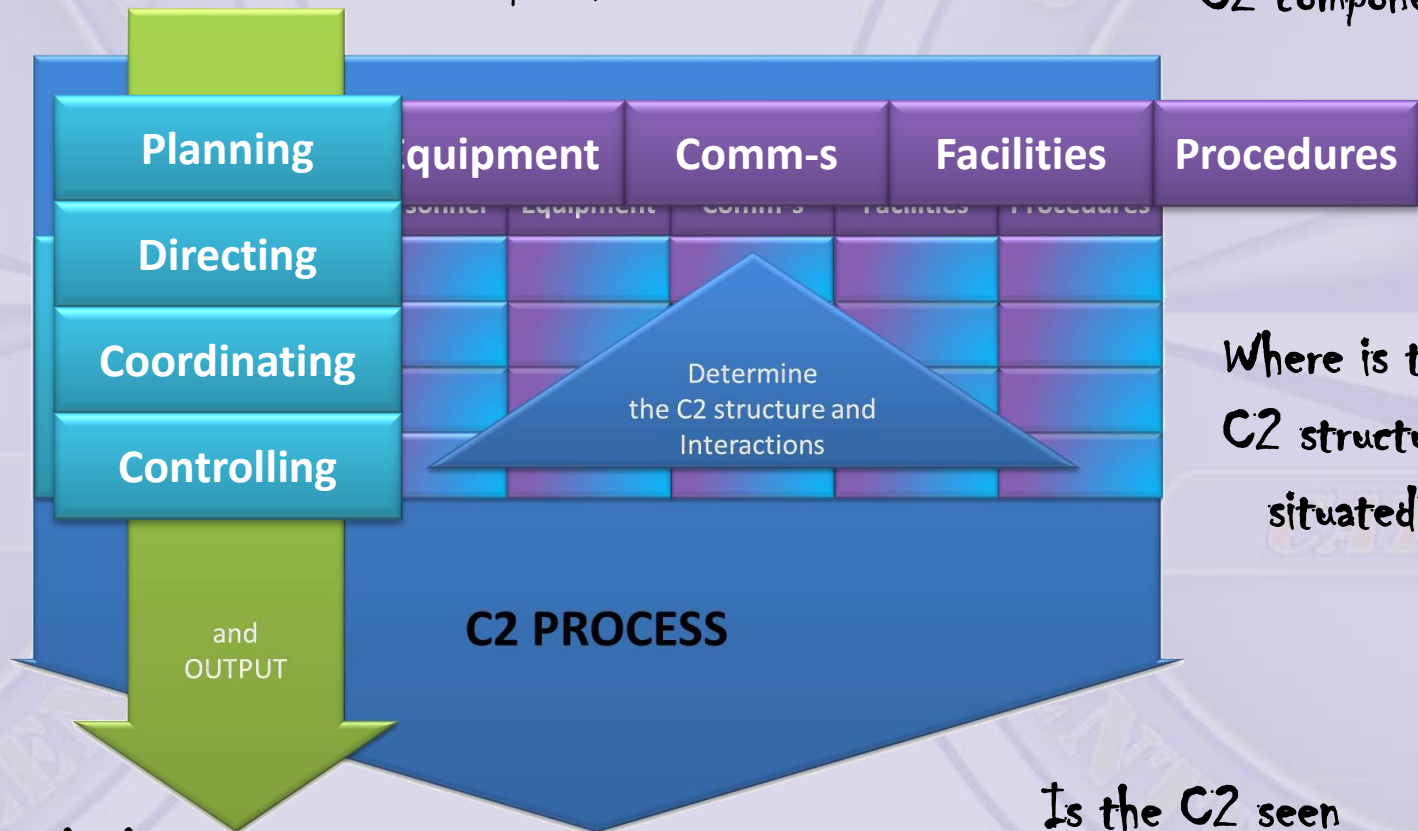
Model of C2: C2COE first steps



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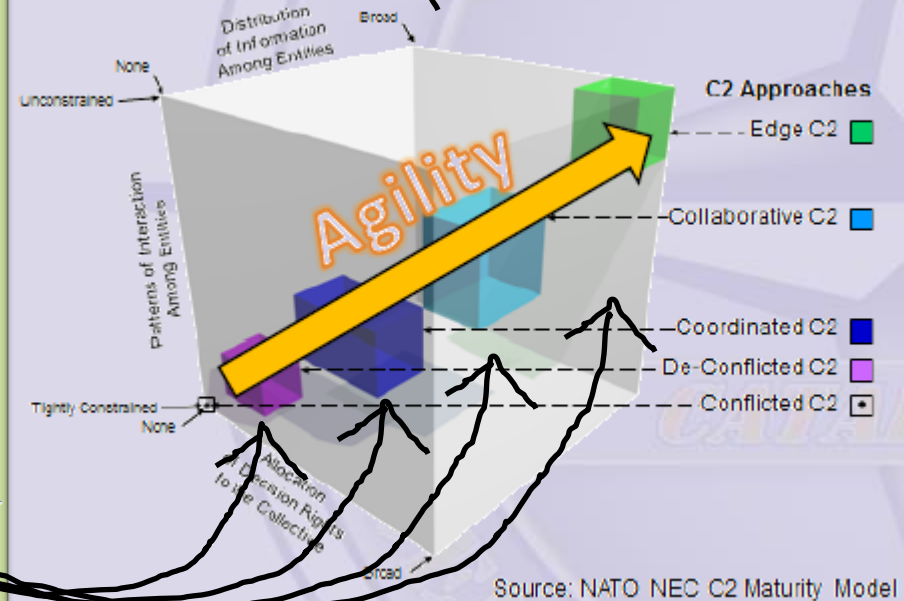
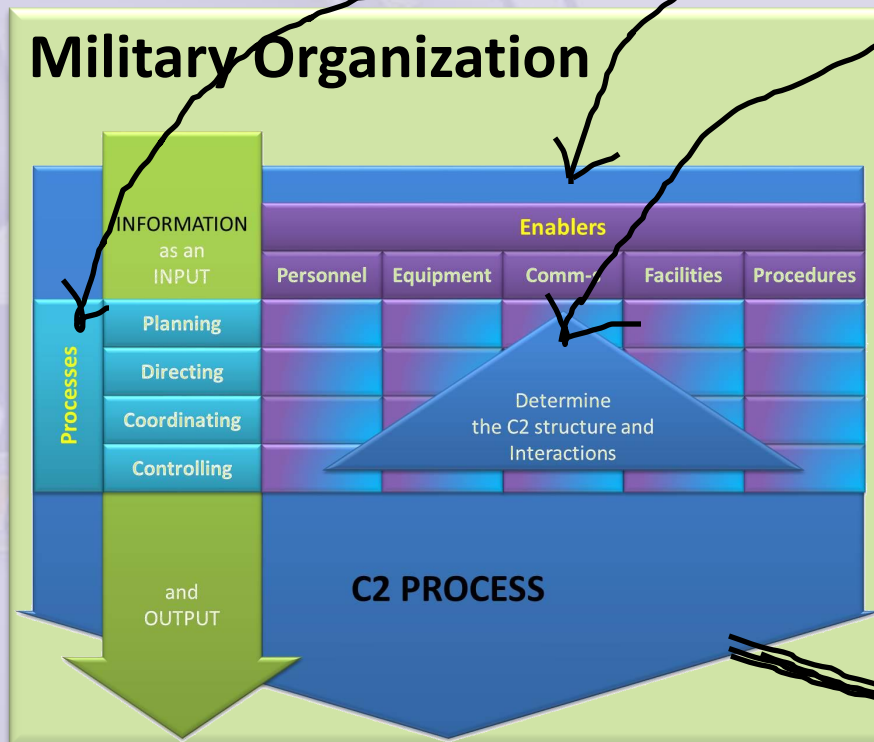
How is the C2 output defined?

Is the C2 seen as a Process?

C2COE and SAS-104



C2 Agility



Ability to move from one C2 approach to another

Questions ?

