

## Multi-Domain Operations & Wargaming?

Thomas Danger, Wargamer. [thda@fak.dk](mailto:thda@fak.dk)

Royal Danish Defence College

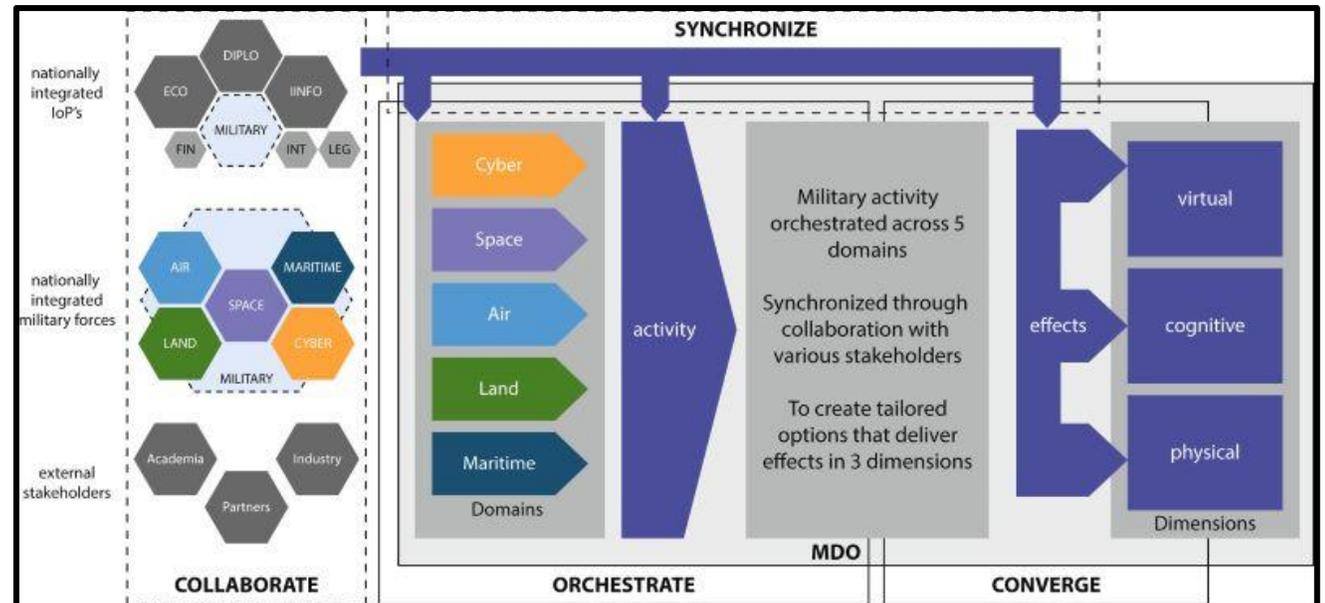
22 JAN 2026

# Multi-Domain Operations

- Evolution, not revolution.
- Weak somewhere? Create an effect somewhere else.

## Key differences:

1. Two "new" domains (Space & Cyber).
  2. Non-military actors & synchronisation.
  3. Relies on massive digital & network transformation.
- Important for NATO and Denmark (NATO MDO conference in Copenhagen, OCT 2023).





“Wargames are bespoke models designed to represent actual or potential events, which feature human players engaged in consequence-based decision making, which include mechanisms that immerse these players, and which possess adjudication procedures for choosing actions, determining outcomes and determining system dynamics in the wargame.” (David Banks, 2025)

## How to teach?

- How to integrate MDO in PME (you could also do the same for research)? How to teach MDO? How to make the next generation of officers “MDO ready”? Or at least familiarized enough...
- One possible solution: integrate “MDO wargames” in our education.

Possibilities offered by wargames for MDO:

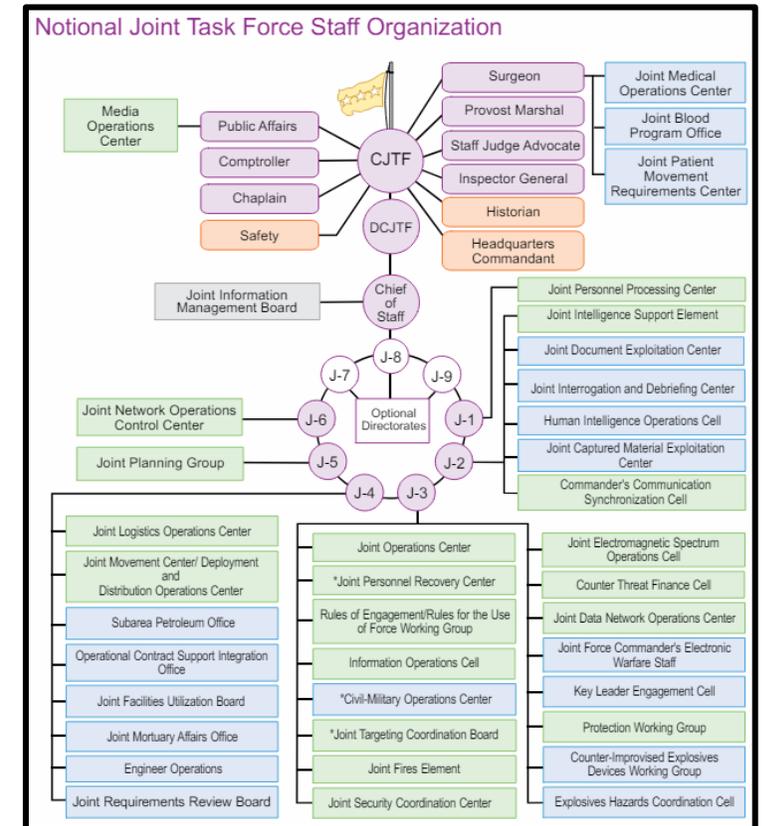
1. Shows the **complexity, easily**.
2. Flexible tool: integrate what you **need**.
3. **Orchestration** & **synchronization** was already a feature of wargames.
4. **Diversity**: tactical / operational / strategic level wargames. Procurement? Planning? Operations? Foresight?

# I. Complexity and Decentralised Execution?



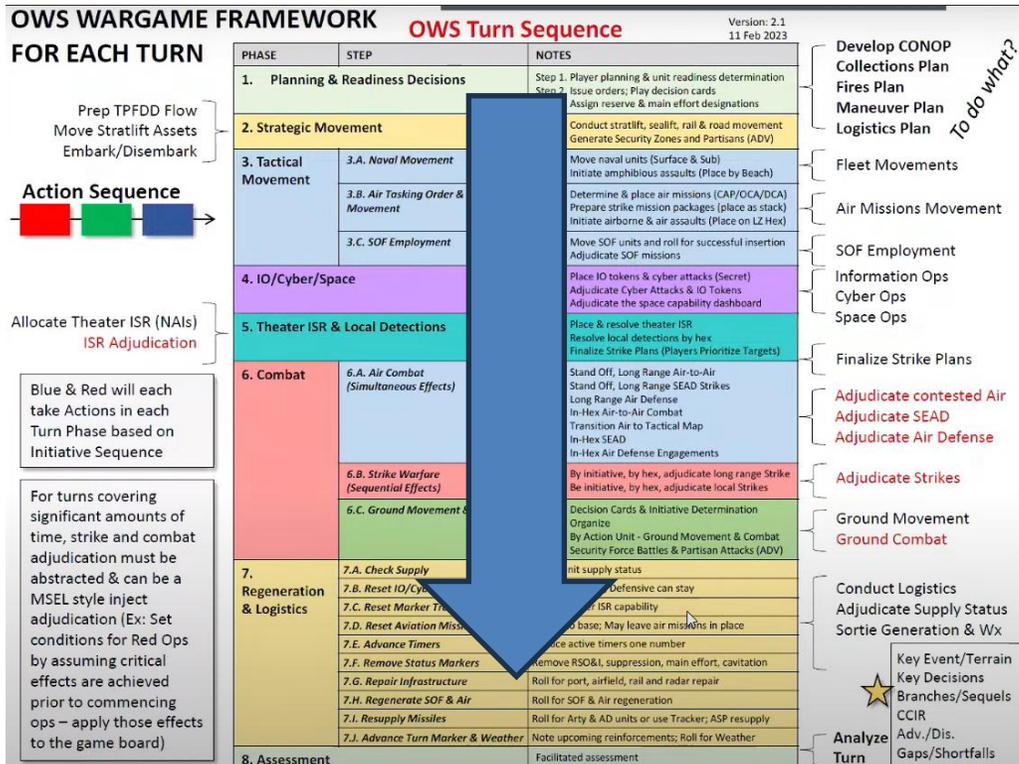
- Does wargames give you a God complex, opposite to the MDO philosophy?
- Having few players = false feeling of control. C2 as Control & Control (Søren Sjøgren).
- Also a false feeling of having a real-time picture?

-> How to represent your model to avoid those pitfalls?





# II. Synchronisation & Orchestration in Adjudication?

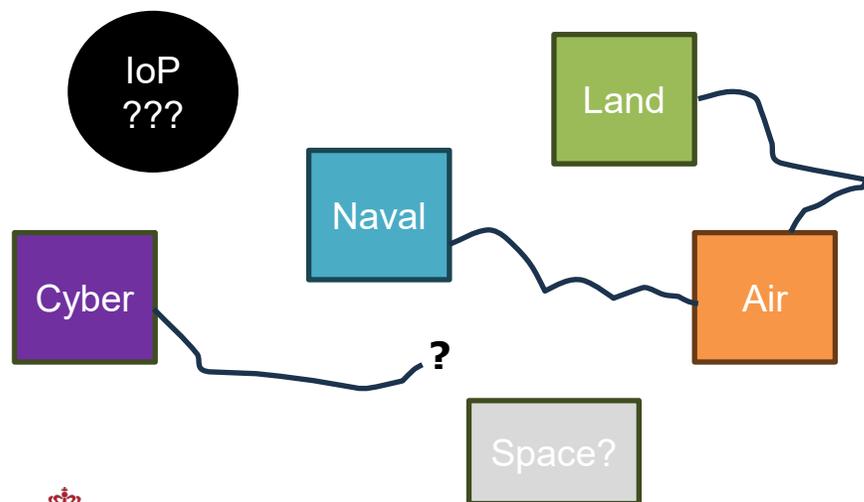


- From the player's perspective, they may be synchronising & orchestrating.
- But is the adjudication following the same philosophy? Should it be, or is it desirable at all?
- What impact on the outcomes of wargames?
- Weak understanding so far.

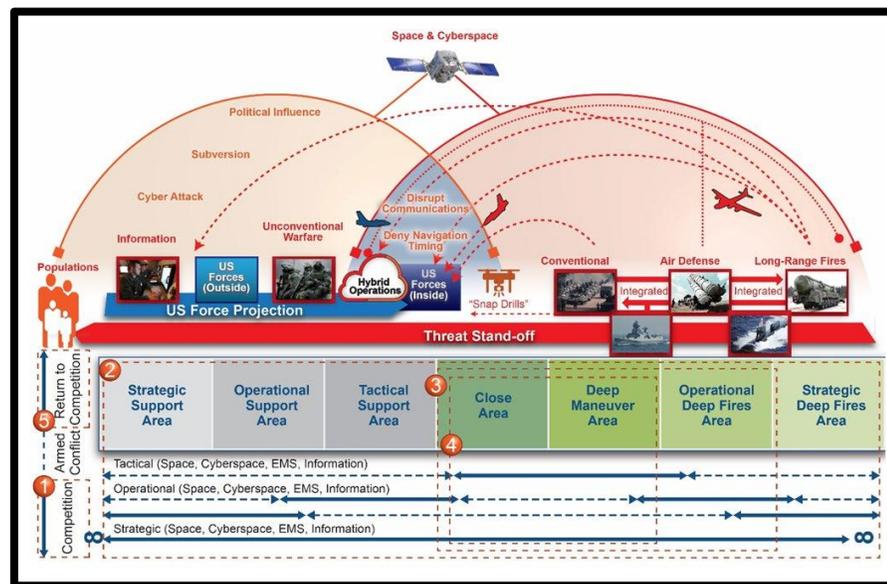
### III. "Well actually it doesn't work": the risk of having a perfect wargame?

- Implementation of MDO across NATO is uneven at best. Is this digital backbone with us yet?
- But wargames about "MDO" often represents a perfect vision of MDO, as it was already fully implemented.
- Ok for concept development... Not for analysis & teaching. Need to be explicit.

#### Reality:



#### Our model in "MDO" wargames:





## IV. Challenges: MDO is not just a slogan

- Have some cyber cards on top of a air, naval and land warfare wargames does not make it a "MDO wargame" automatically. Otherwise, we had MDO wargames since a long time!
- Not a dichotomy between "Is it MDO or not", rather a degree of MDO integration in your wargame.
- How to:
  - > Measure if a wargame is MDO enough for our purpose?
  - > How to compare MDO wargames on their ability to deliver MDO objectives?





# IV. Challenges: MDO is not just a slogan /2

- Colleagues working on indicators to define the degree of MDO implementation.
- I use the same indicators, translated into wargaming.
- Give us a view of what wargame is better at representing what.

| Category                                     | Indicator   |
|--|---|
| <b>Demonstrate an MDO Mindset</b>            | 1) Think critically and creatively  |
|  | 2) Understand system-of-system dynamics                                   |
|  | 3) Recognize national differences in MDO capabilities                     |
| <b>Orchestrate MIL Command</b>               | 4) Understand all five domains  |
|  | 5) Recognize the military role across the full spectrum of operations     |
|  | 6) Balance the Joint Functions from a command perspective                 |
| <b>Synchronize MIL &amp; Non-MIL Effects</b> | 7) Facilitate the role of non-military actors in military operations      |
|  | 8) Align military instrument with the other instruments of national power |
|  | 9) Appreciate effect of EDT on military operations                        |

(Crosbie & Lindhardtsen, to be published 2026)

(Danger, 2026/27, work in progress...)

| Indicator  | Weight Learning Priority | LC             | OWS            | Jaws           |
|--|--------------------------|----------------|----------------|----------------|
| <b>INDICATOR I.</b> Think critically and creatively.                     | 3                        | 0,725          | 0,6            | 0,65           |
| <b>INDICATOR II.</b> Understand system-of-system dynamics                | 4                        | 0,65           | 0,5            | 0,35           |
| <b>INDICATOR III.</b> Recognize national differences in MDO capabilities | 2                        | 0              | 0,275          | 0,4            |
| <b>Average "Demonstrate an MDO Mindset"</b>                              | <b>9</b>                 | <b>0,53056</b> | <b>0,48333</b> | <b>0,46111</b> |



## Summary

- Wargaming is an awesome tool to work with MDO!
- Yet, our weak understanding of wargaming (methodological, epistemological) may be in the way. Namely:

I. The representation of **complexity** and **decision-making**?

II. The impact of **adjudication techniques** on outcomes of wargames: synchronisation & orchestration. Are we actually doing it?

III. Representing **bad implementation** of MDO. We should do it more.

IV. How to know when a wargame is MDO? **Evaluating** and **comparing** wargames on what they can provide.