

C2 AGILITY

EVALUATING A NEW BRIGADE STANDARD OPERATING PROCEDURE FOR INFORMATION MANAGEMENT & COORDINATION

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OUTLINE

Background

NHIM & NHC

Method

Results

Discussion



BACKGROUND

- Growing Complexity of the operational Environment
- Increasing capacity of information technology
- Common Requirements



A BIT OF HISTORY.....

Team Collaboration Experiment (TCX)

Mar 2005



Experiment on Parallel Planning

Mar 2006



Ex Elicit

Oct 2007



NHIM Experiment

Jan 2009



SELF-SYNCHRONIZATION



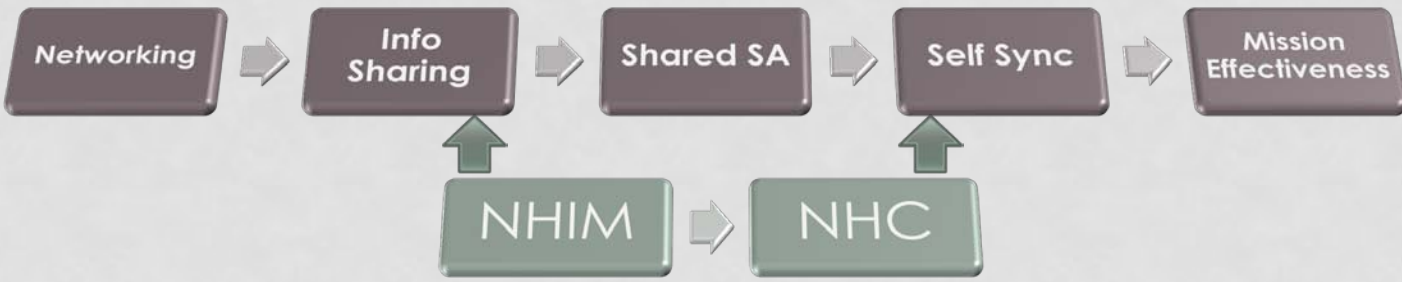
Purest Form - Flat Organization

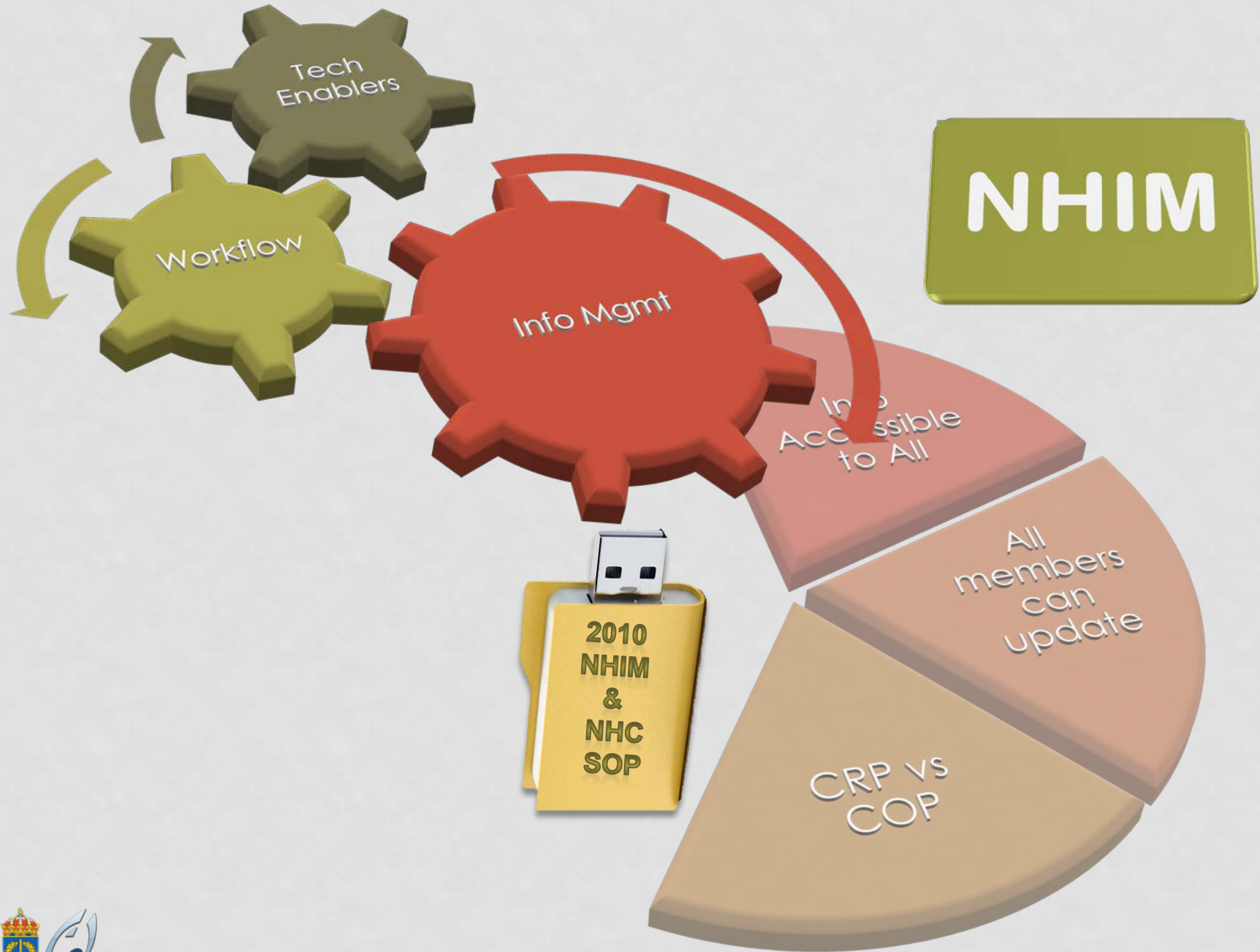
Learned Procedure

Along the seams of physical boundaries between units with overlapping tasks

Shared Common Goal and higher HQ intent







NHC

Conflict Resolution

Criteria Based Routine for Coord

2010 NHIM & NHC SOP

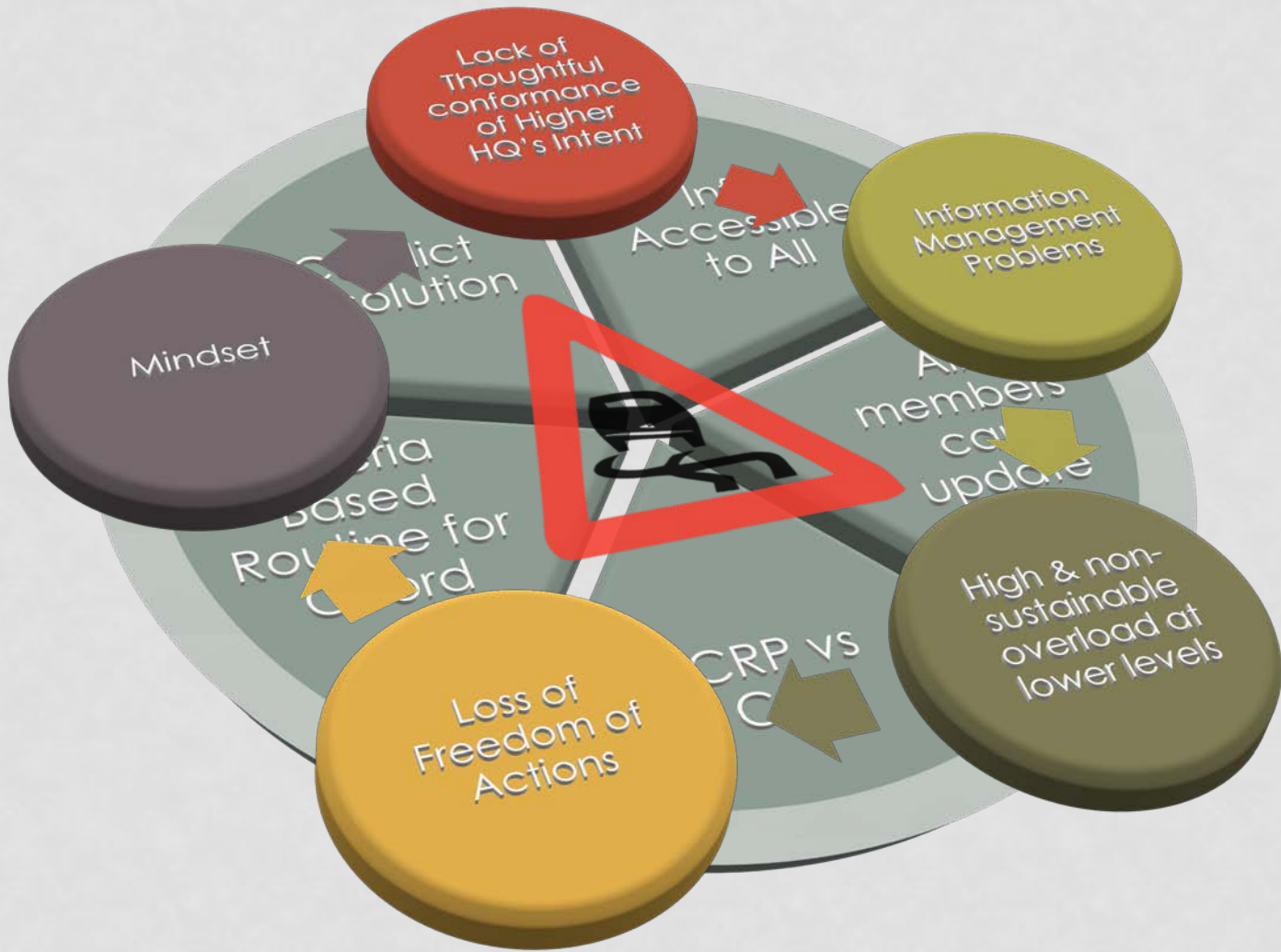
Comdr's Intent
• Suggested Routines

Basic Rule
• NHC is Default

NHC Guidelines
• Conditions
• Bn Self Coord Procedure
• 5W&H

HC Guidelines





WHAT IS "NEW" IN THE SOP?

- The SOP is an operationalization of a way to organize info flow **non-hierarchically** and a way to **self-coordinate with Non-hierarchical coordination as default.**

The SOP is described in terms of:

- A **C2 hierarchy** (1 Bde, 4 Bns)
- **Systems** (SWECCIS ++)
- **Information flow** within the C2 chain
- **Coordination** within the C2 chain (during execution but not during planning!)

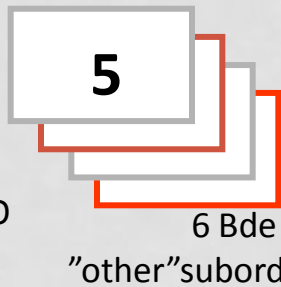


Experiment Audience - Organisation

"White cell"
Higher Control
Gaming



7 Bde
Enemy
GO NGO

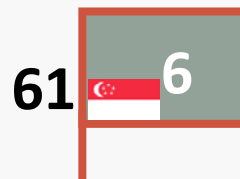


X



Com/plan
TOC

II



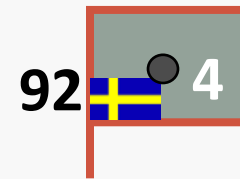
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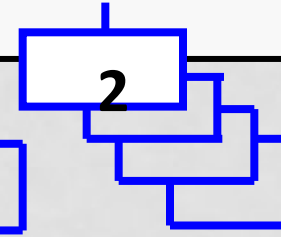
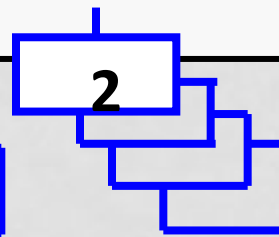
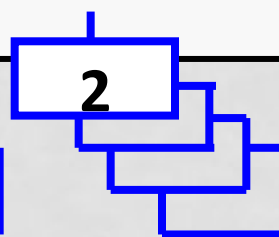
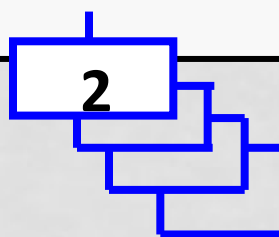
II



II



Lower Control
Subordinates
Gaming



6.BDE

KASURIAN

MIDA ENCLAVE

KAS "Battlegroups"



Lidingsö

ZOS/
SFL

KASURIAN ENCLAVE

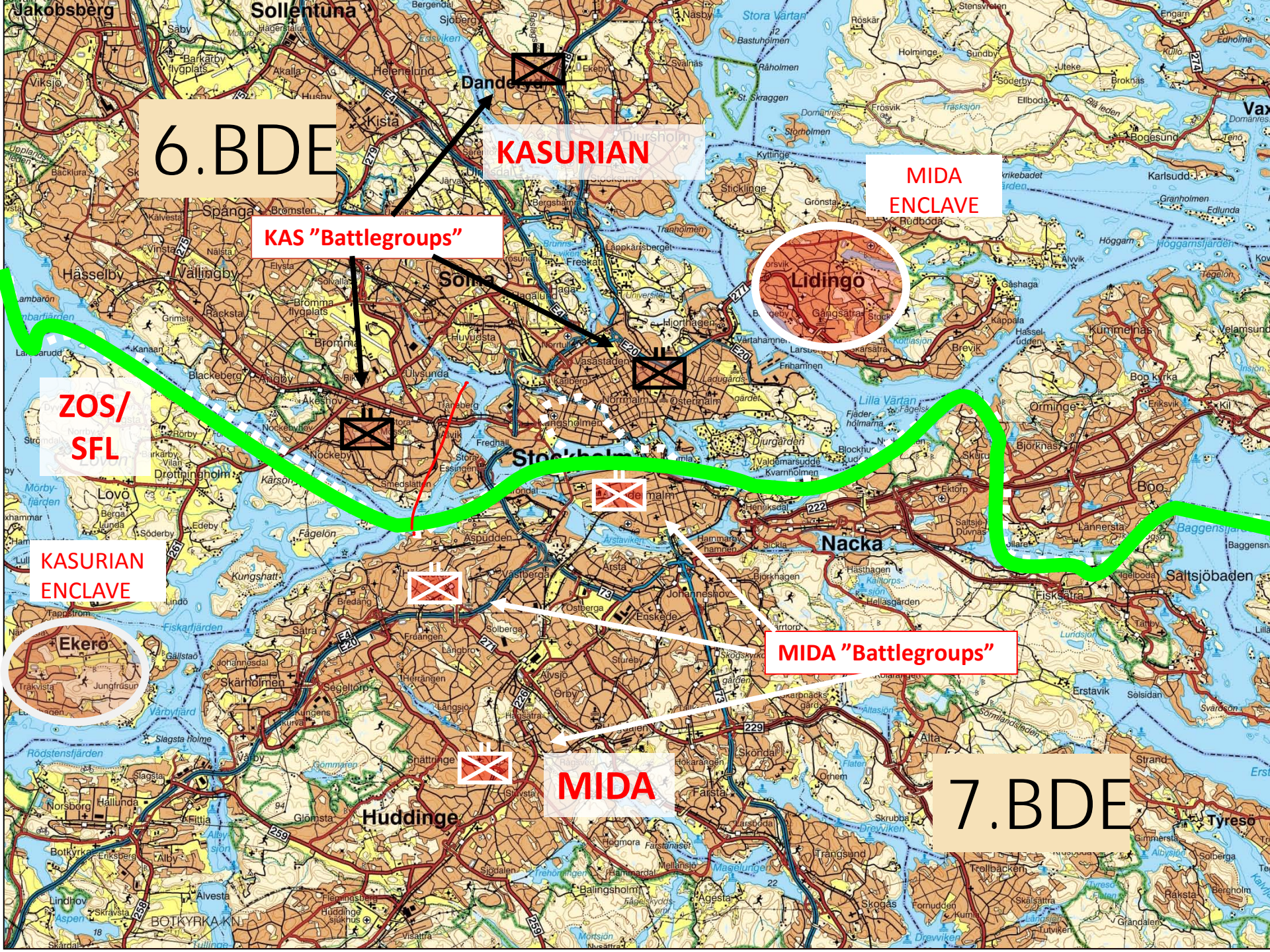


Ekero

MIDA "Battlegroups"

MIDA

7.BDE

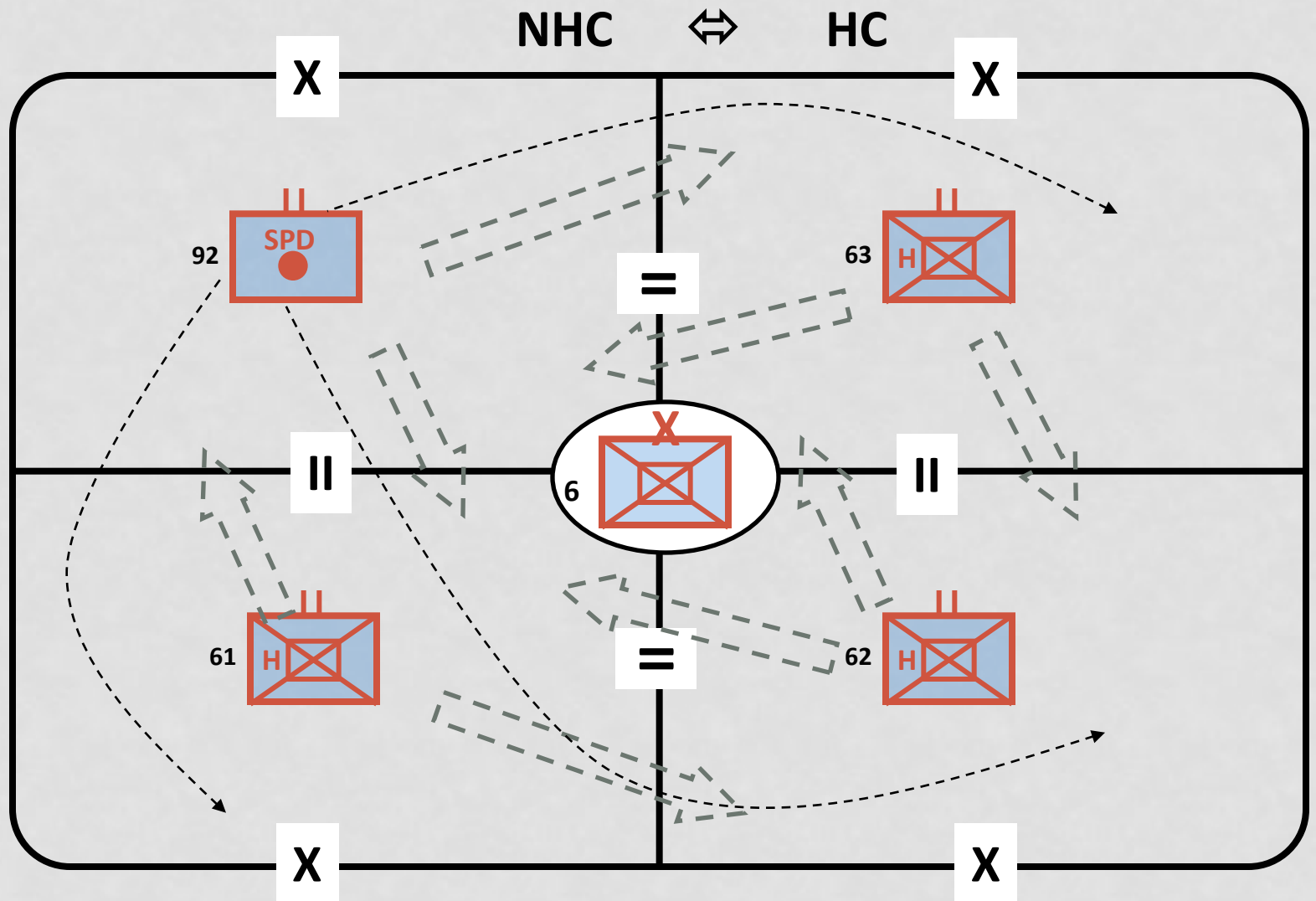


MEASUREMENTS AND PROCEDURE

- Questionnaires (Lime-survey, on-line)
- Observer protocols
- Quality ratings NHC Actions and Fragos
- The experiment covered **3 days** of **5 separate 3 hour runs** in a continuous and gradually escalating scenario



COLLABORATION "SET UP"



RESULTS

- The participants followed the SOP
- They found it easy to apply the criteria for HC and NHC to different situations.
- Self coordination resulted in appropriate actions implemented in a timely manner.
- Shared access to situation maps and documents enabled self-coordination between the Battalions



OPINIONS ON SOP

5=STRONGLY AGREE, 1= STRONGLY DISAGREE

- *The SOP is an efficient procedure for a realistic field setting*
 - $M=2,93$, $Sd=0,829$. (61 Bn and 6 Bde <3)



SUGGESTED IMPROVEMENTS TO SOP

All functions need to be included

Changes in the **Coordination procedure**

- Bde is asking if current BN staff has the capacity for NHC?
- 61 Bn is providing a flow chart for HC/NHC criteria

Changes in **systems**

- 61 Bn is requesting **guidelines when to use each comms system** and for what type of information.
- Bde remarks that **text chat works very well**, and that email should be cc to everyone for NHIM to work well.

Changes in **information flow**

- Bde suggests a **better structure of overlays**. And **only 1 chat room** should be used.



OPINIONS ON SOP

5=STRONGLY AGREE, 1= STRONGLY DISAGREE

- The criteria list in SOP for selecting HC and NHC is clear and realistic guideline
 - $M=3,67$, $Std=1,177$. (61 Bn <3)
- NHC according to SOP is an improvement compared to traditional hierarchical coordination
 - $M=3,67$, $Std=0,961$. (Bde < 3.5)
- NHC saves time in the coordination process and contribute to more timely implemented actions
 - $M=3,74$, $Std=0,712$. (Bde < 3.5)
 - * 92 Bn low (<3.5) on all, caused by one "negative" participant



POSSIBLE UNINTENDED CONSEQUENCES WITH NHIM/NHC

- Lack of correspondence between Bn NHC actions and Bde Cdr intent?
- Loss of Freedom of action at the Bde level?
- Info management problems caused by delays and misunderstandings?
- Too high workload at the Bn level?

Did not occur!



CONCLUSION

- The criteria for NHC and HC proved to be useful guidelines for selecting the appropriate type of coordination during execution.
- We also think that in the current environment where PS/PE is the rule rather than the exception for our troops, the NHC criteria can be valuable.
- Our NHC/HC criteria can actually be seen as a means to guide command in a way that will make it more flexible or agile. Our criteria developed for use with the NHC concept (which can be viewed as a kind of mission command) and HC concept (which can be viewed as more centralized command) could provide clearer and hence more effective guidelines on when NHC or HC should be adopted in an operational context.

