ENHANCED TRAINING BY A SYSTEMIC GOVERNANCE OF FORCE CAPABILITIES, TASKS, AND PROCESSES

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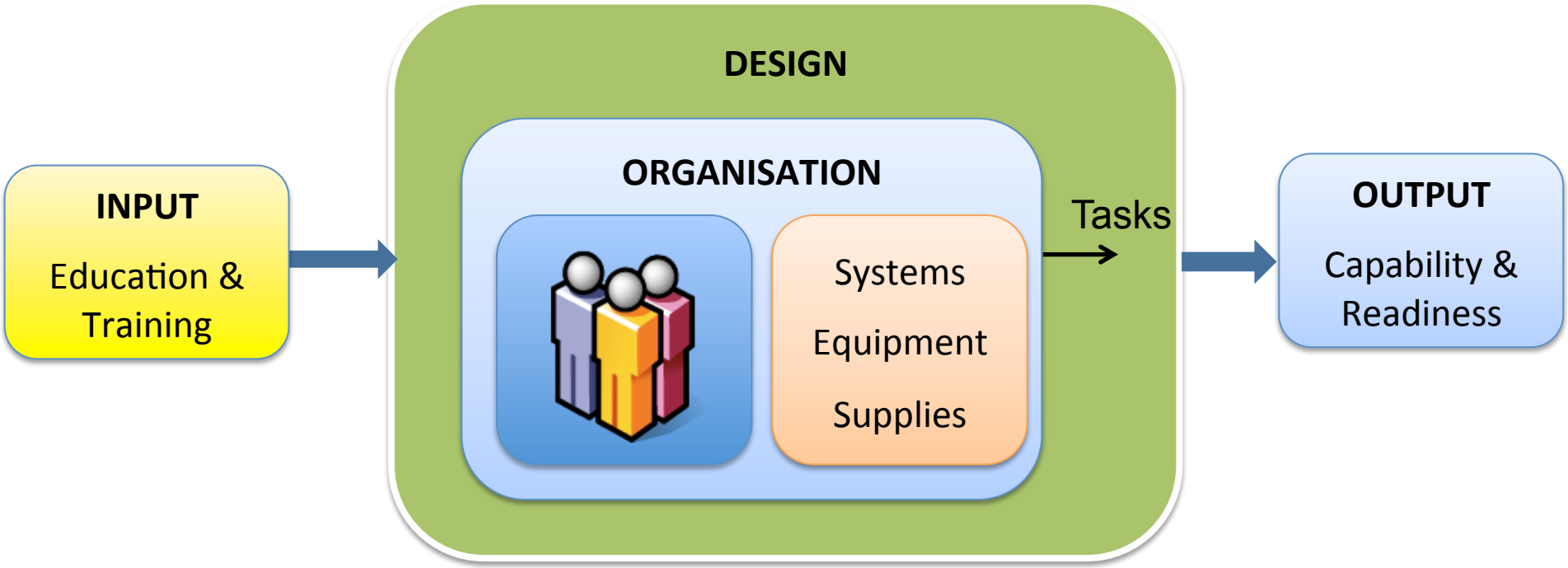
18TH ICCRTS 19 JUNE 2013

The Ultimate Goal



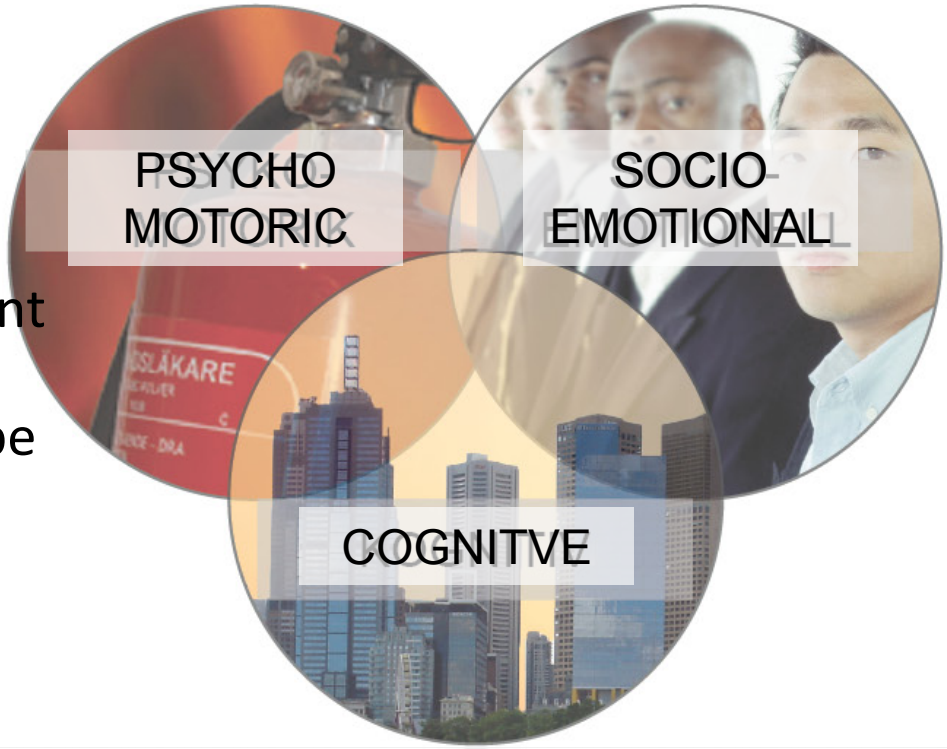
Experience Based Learning
Kolb's Learning Cycle

- Train in realistic scenarios
- Feedback
- Add to experience
- Train again

Learning

THE THREE BASIC COMPONENTS FOR LEARNING

- **PSYCHOMOTORIC**,
  ability to use tools and equipment
- **SOCIOEMOTIONAL**,
  ability to work with others and be part of teams
- **COGNITIVE**,
  ability to comprehend and cope with changing situations



These three are the tools for the end goal to acquire EXPERIENCE – the basis for all decision making.

Training Steps

BASIC SKILLS TRAINING

Technical

Individual basic knowledge

Induction

&

Foundation

ADVANCED TRAINING

Methods

Individual

Advanced

knowledge

or

Advanced

Foundation Training

TEAM-TRAINING

Procedures

Group level operating procedures

and

Individual

Operating

Procedures

COLLECTIVE TRAINING

Tactics

SOP

Scenario based Training

Individual

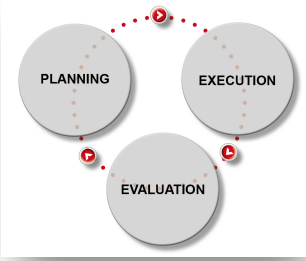
& Group

JOINT COLLECTIVE TRAINING

Staff

Multiple Scenarios

Stress of all functions and processes



Development Philosophy

Analysis
- Collect job/task data
- Compile task list
- Identify critical tasks
- Target group description

Design
- Learning analysis on each task
- Behavioral objectives
- Test criteria
- Sequence the instruction

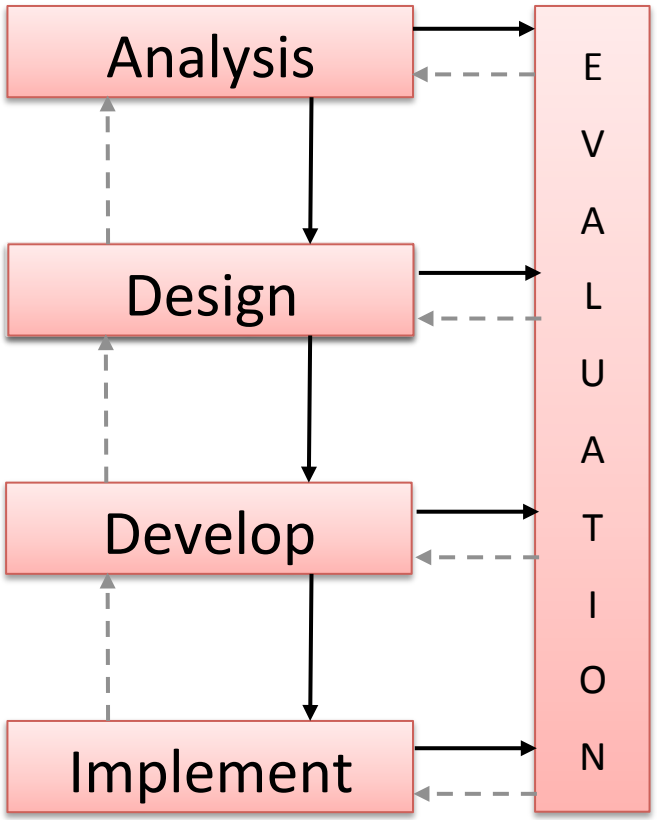
Development
- Specify learning events/activities
- Select methods/media
- Develop course materials
- Validate course materials
- Develop Instructional Management Plan

Implement
- Implement Instructional Management Plan
- Conduct Instruction

Evaluation

Training Needs Analysis

Instructional Design



Putting Theory Into Practice

MISSION:

Model the interrelation between Abilities, Tasks and Activities for the Core Battalion in Nordic Battle Group 2015 for the European Union Response Forces

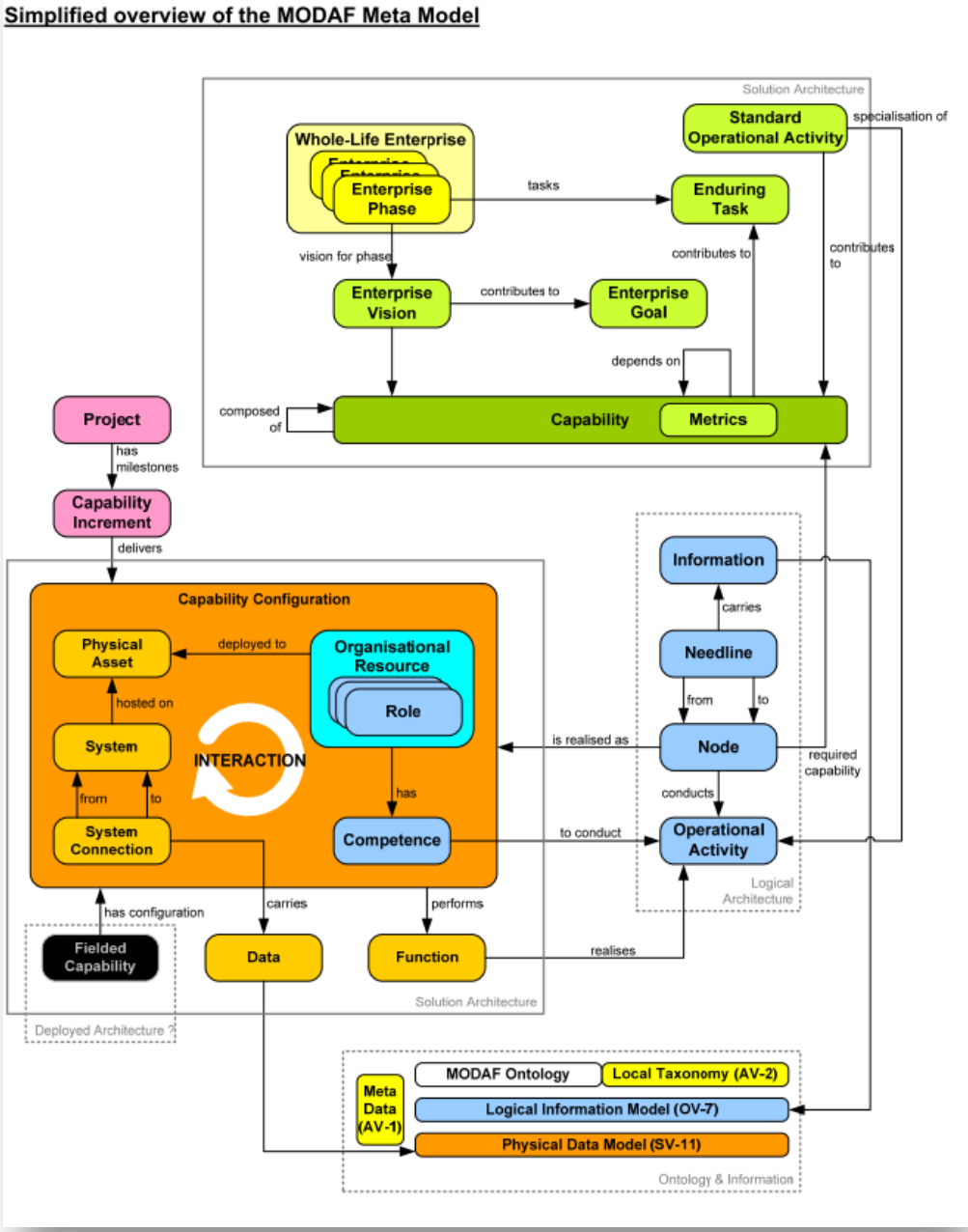
- Compilation of Abilities
- Compilation of Tasks
- Compilations of Activities and Processes

MoDAF
Minsitry Of Defense Architectural Framework

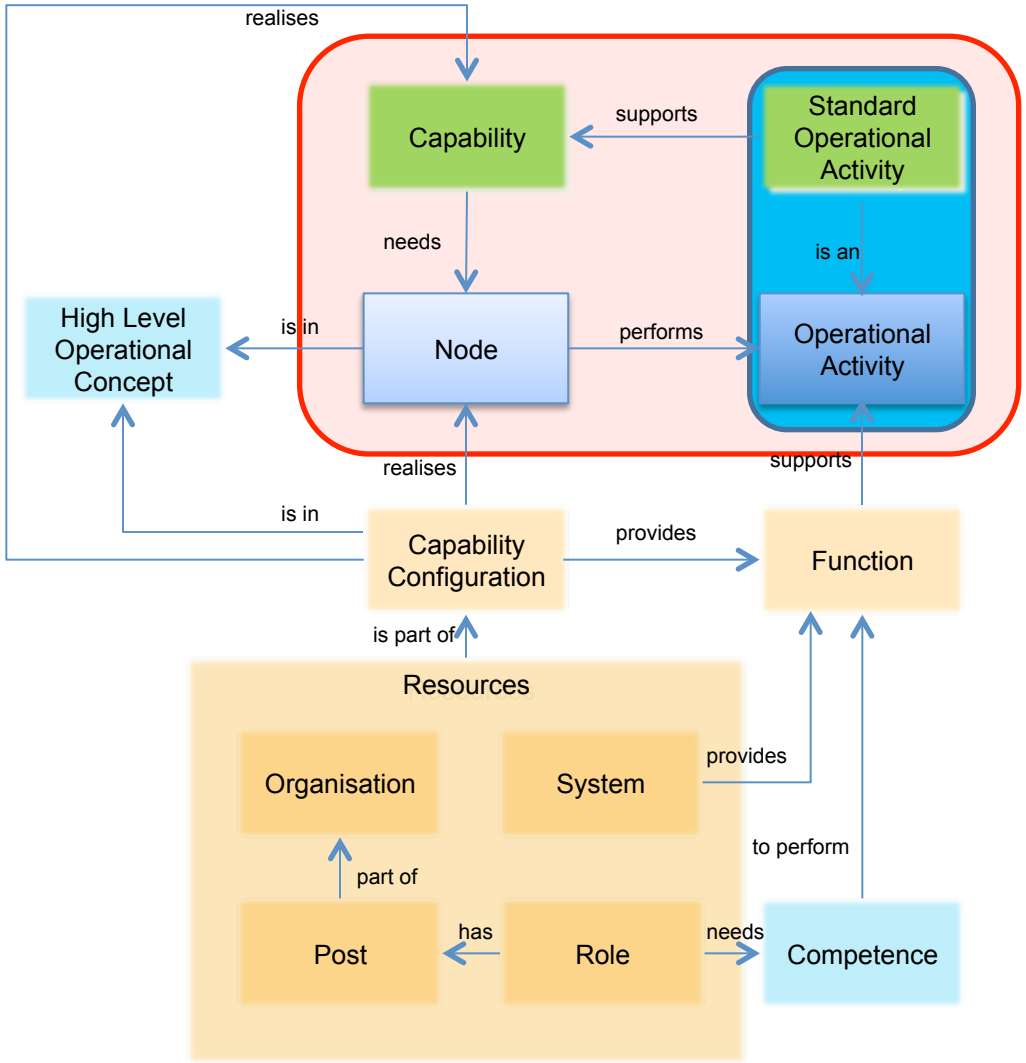
- The **MoDAF** is an **enterprise architecture framework** that is developed to support activities of defence planning and change management. The MoDAF provides a rigorous, coherent and comprehensive way to capture and present information.
  - **Strategic Viewpoint (StV)** defines the desired business outcome, and what capabilities are required to achieve it;
  - **Operational Viewpoint (OV)** defines (in abstract rather than physical terms) the processes, information and entities needed to fulfill the capability requirements;
  - **Service Orientated Viewpoint (SOV)** describes the services, (i.e. units of work supplied by providers to consumers), required to support the processes described in the operational Views;
  - **Systems Viewpoint (SV)** describes the physical implementation of the Operational and Service Orientated Views and, thereby, define the solution;
  - **Acquisition Viewpoint (AcV)** describes the dependencies and timelines of the projects that will of deliver the solution;
  - **Technical Viewpoint (TV)** defines the standards that are to be applied to the solution;
  - **All Viewpoint (AV)** provides a description and glossary of the contents of the architecture.
- The relationships between the viewpoints are described in a meta-model called M3.

MoDAF

- Military business is Complex
- Relations enables a traceable way to represent **relations** between **business, organization and systems** cohesively
- A Model based approach enables that changes cna be handled the lifecycle – ”AS IS”, ”TO BE” analysis
- Information can be extracted for various purposes.
- However a model based approach will still need to link the model to the actual
- The approach taken for this work is a **combined tool-based approach**



Modelling Unit, Capability and Activities Using MoDAF
Swedish Defence Material Administration (FMV)



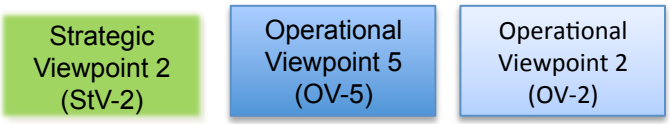
Modelling Unit, Capability and Activities Using MoDAF

Reduced view of the M3.

The core is the logical model with the Unit and Activities, and the solution architecture comprising Capabilities.

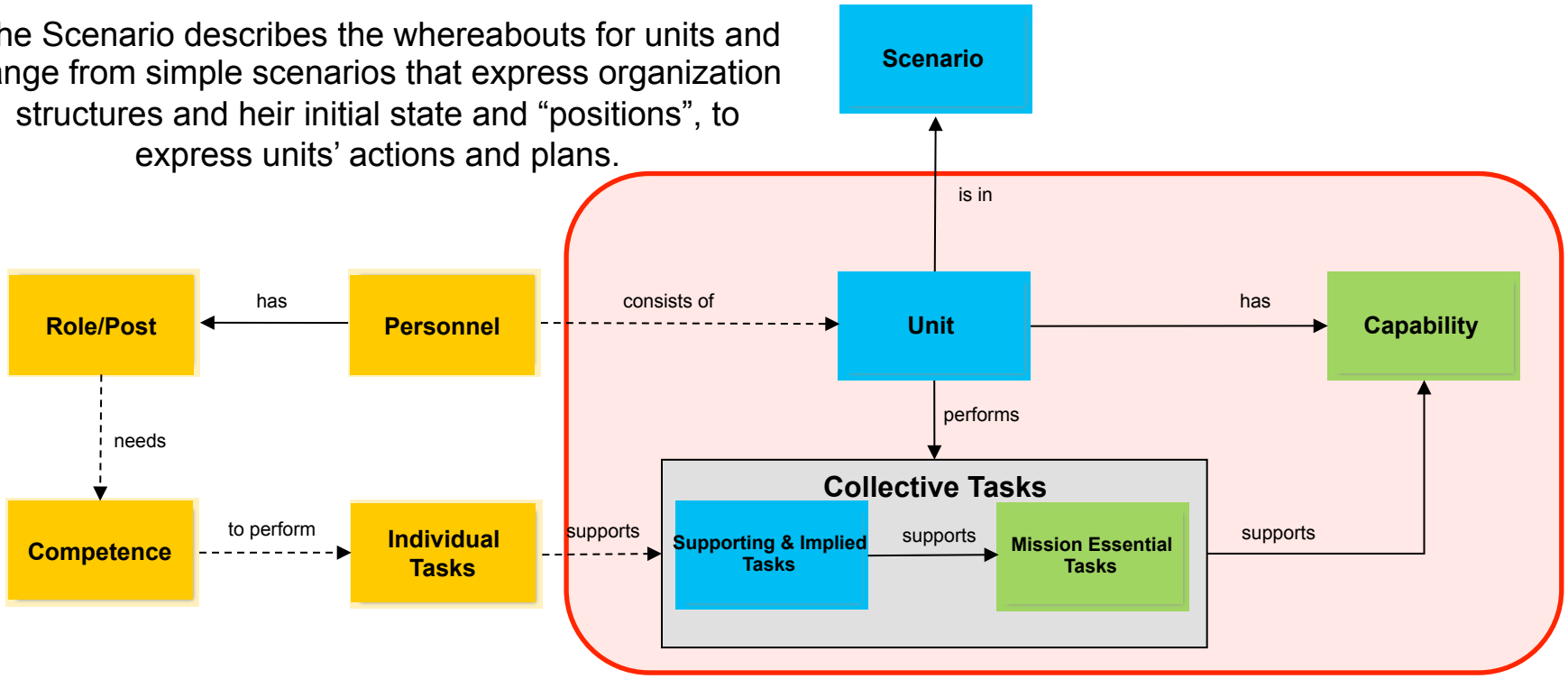
- **Capability** Has metrics attached to it. A Capability can be composed of Capabilities and depend on Capabilities.
- **Node** is a Unit within the Battalion. A unit has Capabilities and performs Operational Activities (OA).
- **Activities** support a capability of a Unit.
- A Standard Operational Activity (SOA) is an OA.

With this simple model a Battalion and its unit can be modeled.



Training Architecture Approach

The Scenario describes the whereabouts for units and range from simple scenarios that express organization structures and heir initial state and “positions”, to express units’ actions and plans.



Individual task

An individual task is a **task or activity conducted by an individual** within the frame of his role or assignment. An individual task supports one or more collective tasks and can also support other individual tasks.

Collective task

A Collective task is **the tasks or activity conducted by an organization or unit** that leads to that a mission or function is conducted. For a collective task to be accomplished it is important that the supporting individual and collective tasks are conducted.

Mission Essential Task List (METL)

MET →

CT ↓

Task	Bekämpa	Försvara
Underrättelser		
Genomföra steg 2 i PUT	x	x
Genomföra inhämtning av underrättelser och information		
Rekognosera		x
Spana		x
Ytövervaka		
Övervaka		
Genomföra fast spaning		x
Upprätta postering		x
Genomföra rörlig spaning		x
Genomföra stridsspaning	x	x
Patrullera		
Genomföra innästling/infiltration		
Genomföra urnästling/exfiltration		
Genomföra samverkan (passiv HUMINT)		
Genomföra inhämtning med understödjande inhämtningsresurser		x
Genomföra inhämtning med underställda inhämtningresurser		x
Bidra till lägesbild motståndare, parter och civilläge	x	x

Mission Essential Task;

Support from combat position

Supporting Task;

Framrycka

Leda från ledningsplats

Direct fire

Inderect Fire

Conduct CBRN protection actions

Supporting Individual Task;

Give Order

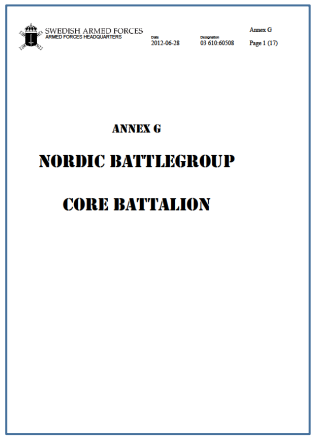
Smallarms skills

Supporting arms skills

Fire Control Requests

- Mission Essential Tasks (MET) are tasks that a unit must be able to perform on the basis of the assignment. A MET is performed in a dialogue with senior management to ensure that they support the higher managerial assignments. Platoon and troop / group performing Critical Tasks.
- Collective Task (CT) and activities are those that a unit can perform based on the current organization and provided equipment. A CT is in relation to a MET is unspoken / implied or supportive.
- With some more work -> Mission Training Plan (MTP), Exercise Synchronisation Matrix, and a plan for trainingsupport in C2 Staff Trainers, Live Exercises etc.

Implementation– NBG Requriment Specification To METL


SWEDISH ARMED FORCES
ARMED FORCES HEADQUARTERS

Date 2012-06-28 Reference 03 610 60508 Annex G Page 1 (17)

ANNEX G

NORDIC BATTLEGROUP

CORE BATTALION

Task filtering

Markstridsreglemente 1:3

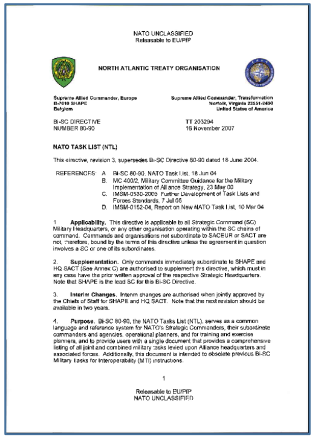
Ledning

Förhandsutgåva 4
2012

MSR 1.3 Task mapping

MET

Requirement filtering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NORTH ATLANTIC TREATY ORGANISATION

Supreme Allied Commander, Europe
B-7010 SHAPE
Belgium

Supreme Allied Commander, Transformation
Norfolk, Virginia 23511-2090
United States of America

BI-SC DIRECTIVE
NUMBER 80-90

TT 203294
15 November 2007

NATO TASK LIST (NTL)

This directive, revision 3, supersedes BI-SC Directive 80-90 dated 18 June 2004.

REFERENCES: A. BI-SC 80-90, NATO Task List, 18 Jun 04
B. MC 400/2, Military Committee Guidance for the Military Implementation of Alliance Strategy, 23 May 00
C. IMSM-0150-2003, Further Development of Task Lists and Forces Standards, 7 Jul 05
D. IMSM-0152-04, Report on New NATO Task List, 10 Mar 04

1. **Applicability.** This directive is applicable to all Strategic Command (SC) Military Headquarters, or any other organisation operating within the SC chains of command. Commands and organisations not subordinate to SACEUR or SACT are not, nevertheless, bound by the terms of this directive unless the agreement in question involves a SC or one of its subordinates.

2. **Supplementation.** Only commands immediately subordinate to SHAPE and HQ SACT (See Annex C) are authorised to supplement this directive, which must in any case have the prior written approval of the respective Strategic Headquarters. Note that SHAPE is the lead SC for the BI-SC Directive.

3. **Interim Changes.** Interim changes are authorised when jointly approved by the Chiefs of Staff for SHAPE and HQ SACT. Note that the next revision should be available in two years.

4. **Purpose.** BI-SC 80-90, the NATO Tasks List (NTL), serves as a common language and reference system for NATO's Strategic Commanders, their subordinate commanders and approved operational planners, and for training and exercise planners, and to provide users with a single document that provides a comprehensive listing of all joint and combined military tasks levied upon Alliance headquarters and associated forces. Additionally, this document is intended to obsolete previous BI-SC Military Tasks for Interoperability (MTI) instructions.

1

Releasable to EUPRP
NATO UNCLASSIFIED

NATO Task Lsit mapping

Markstridsreglemente 1:3

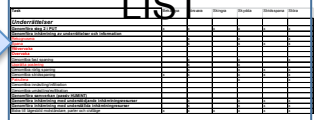
Ledning

Förhandsutgåva 4
2012

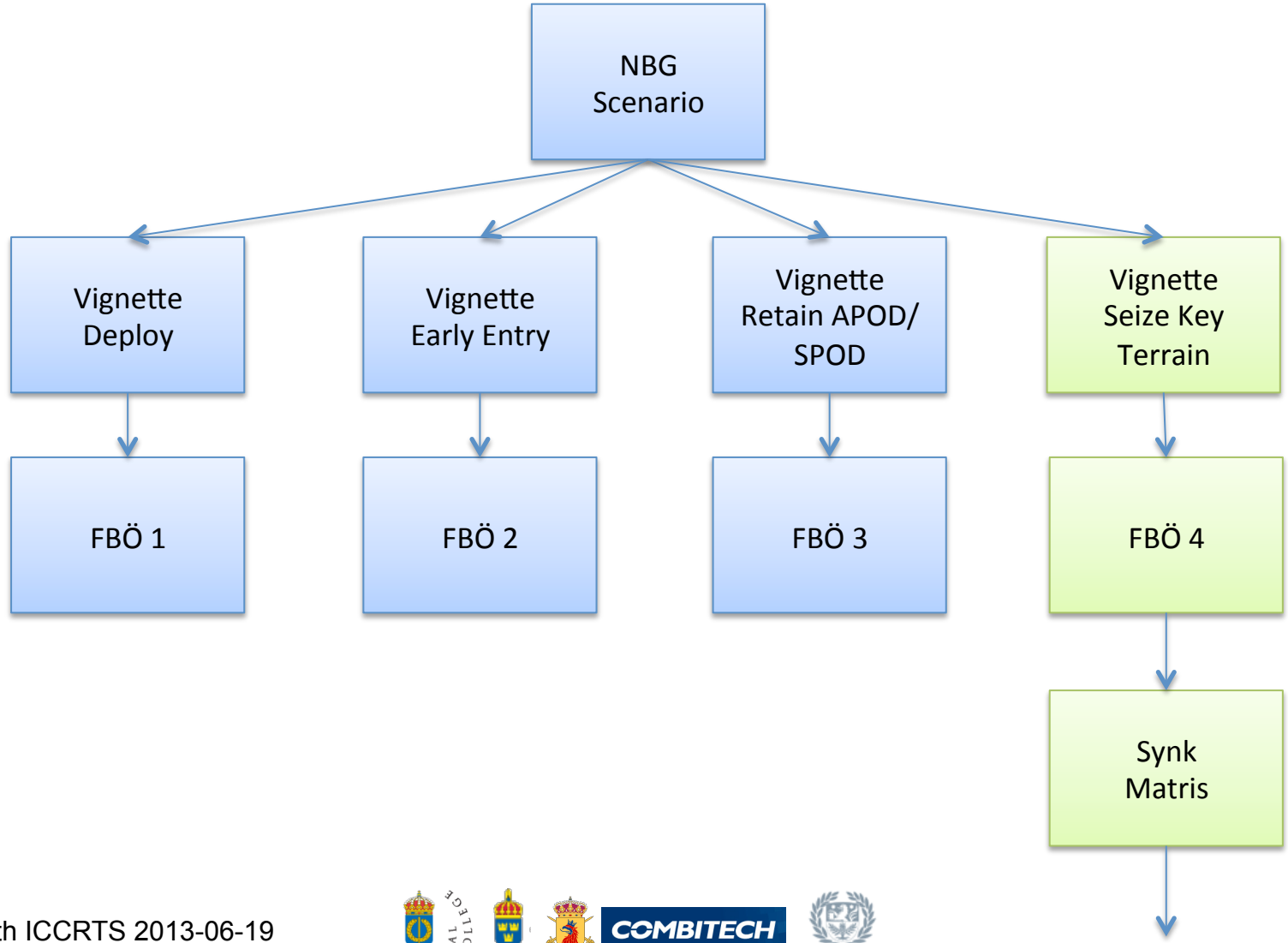
MSR mapping

CT

UNIT TASK LIST



Mission Training Plan



Mission Training Plan
Exercise Syncronisation Matrix FBÖ 4

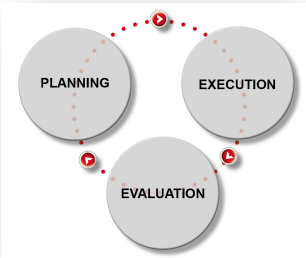
	Måndag	Tisdag	Onsdag	Torsdag	Fredag
VK	Marsch	Ta	Fsv	Öppna väg	Skydda
PK	Marsch	Ust	Ust	Ust	Ust
KK	Spana	Luftlandsätt	Spana	Spana	Spana
AK	Marschunderställ	Ust	Ust	Ust	Ust
QK	Marsch	Ta	Ta	Reserv	Skydda
RK	Marsch	Stridsspana	Ust	Minspana	Undsätta
QO	Marsch	Ta	Fsv	Ta	Försvara
XK	Marsch	Ust	Ust	Ust	Ust

Mission Training Plan
Training Objectives FBÖ 4

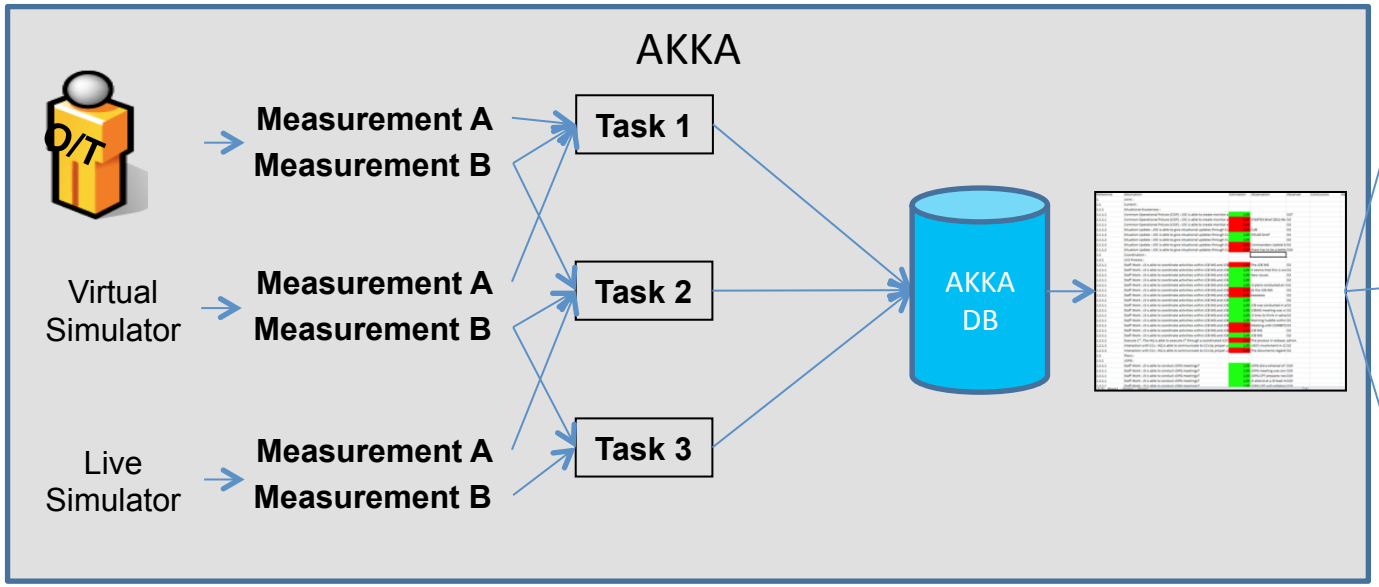
	A	B	C	D	E	F
1	Task	H1 - Försvars	H1 - Skydda	H1 - Ta	H1 - Oppna v	Marschera
87	Leda från stabsplats med sektionsindelning	FF	FF	FF	FF	FF
88	Motta och leda underställda resp understödjande förband	FF	FF	FF	FF	FF
89	Luftrumssamordna	GF	GF	GF	GF	GF
90	Genomföra uppföljning av pågående uppdrag med stöd av uppföljningspla	FF	FF	FF	FF	FF
91	Genomföra rapportering till högre chef	FF	FF	FF	FF	FF
93	Genomföra personaltjänst	FF	FF	FF	FF	FF
95	Ta emot och distribuera förnödenheter	FF	FF	FF	FF	FF
96	Hantera farligt gods	FF	FF	FF	FF	FF
97	Genomföra förebyggande materielunderhåll	FF	FF	FF	FF	FF
98	Genomföra avhjälpande materielunderhåll	FF	FF	FF	FF	FF
99	Genomföra reservmaterielförsörjning	FF	FF	FF	FF	FF
100	Genomföra omhändertagande av materiel	FF	FF	FF	FF	FF
101	Genomföra driftstöd	FF	FF	FF	FF	FF
102	Genomföra skadeklassning	FF	FF	FF	FF	FF
104	Genomföra daglig sjukvård och hygienåtgärder	FF	FF	FF	FF	FF
107	Omhänderta och evakuera skadad personal	FF	FF	FF	FF	FF
108	Logistikrapportera i LOGREP-tool/LIFT/RSF	FF	FF	FF	FF	FF
110	Genomföra riskanalys och utforma anvisningar för skyddsåtgärder	FF	FF	FF	FF	FF
111	Genomföra maskering av personal, fordon och materiel med multispektral materiel	FF	FF	FF	FF	FF
112	Genomföra skenmålsarbete med tillfällig materiel	VF	VF	VF	VF	VF
116	Genomföra åtgärder mot telekrigföring (avlyssning, störning, falsksignalering)	FF	FF	FF	FF	FF
117	Genomföra optisk övervakning av luftrum	GF	GF	GF	GF	GF
118	Etablera och upprätthålla operationssäkerhet (OPSEC)	FF	FF	FF	FF	FF
119	Hantera och skydda egen information upp till H/S	FF	FF	FF	FF	FF
120	Uppfylla krav på kommunikationssäkerhet	FF	FF	FF	FF	FF
121	Uppfylla krav på informationssäkerhet	FF	FF	FF	FF	FF
122	Förstöra egen hemlig information	FF	FF	FF	FF	FF
123	Genomföra combat identification	FF	FF	FF	FF	FF
127	Genomföra skyddsåtgärder mot CBRN och TIH	GF	GF	GF	GF	GF
128	Förbereda för CBRN-attack eller TIH-utsläpp	GF	GF	GF	GF	GF
129	Genomföra CBRN-detektion längs väg eller inom område	GF	GF	GF	GF	GF
130	Genomföra varning och rapportering av CBRN och TIH	GF	GF	GF	GF	GF
131	Spärra av och märka ut kontaminerat område	GF	GF	GF	GF	GF
132	Utgöra CBRN-sub collection centre	VF	VF	VF	VF	VF
133	Framrycka genom/ur kontaminerat område	VF	VF	VF	VF	VF
134	Genomföra taktisk sanering	VF	VF	VF	VF	VF

	A	L	M	N	O	P	Q	R	S	T	U	V	W
1	Task	Avlösa	Bevaka	Eskortera	Evakuera	Framrycka	Genomsök	Gruppera	Luftlandsätt	Patrullera	Reserv	Undsätta	Upprätt posterir
3	Genomföra steg 2 i PUT	x	x	x	x	x	x	x	x	x	x	x	x
19	Bidra till lägesbild motståndare, parter och civilläge	x	x	x	x	x	x	x	x	x		x	x
22	Genomföra planering av lufttransport hkp								x				
25	Genomföra förberedelser för lufttransport hkp								x				
36	Transportera								x				
38	Genomföra lufttransport med hkp								x				
46	Genomföra val och utmärkning av hkplandningsplats		x	x	x		x	x	x	x		x	x
73	Luftlandsätt								x				
80	Planera enligt PUT	x	x	x	x	x	x	x	x	x	x	x	x
81	Förbereda planering	x	x	x	x	x	x	x	x	x	x	x	x
82	*Förstå uppdraget*	x	x	x	x	x	x	x	x	x	x	x	x
83	*Uppfatta situationen*	x	x	x	x	x	x	x	x	x	x	x	x
84	*Skapa en plan*	x	x	x	x	x	x	x	x	x	x	x	x
85	*Spela på planen*	x	x	x	x	x	x	x	x	x	x	x	x
86	*Besluta*	x	x	x	x	x	x	x	x	x	x	x	x
87	Hantera insatsregler/ROE i planeringen	x	x	x	x	x	x	x	x	x	x	x	x
88	Utforma och delge order	x	x	x	x	x	x	x	x	x	x	x	x
89	Genomföra förövning		x	x	x	x	x	x	x	x	x	x	x
90	Samverka med andra org (sidoordnade, civila, parter och media)	x	x	x	x	x	x	x	x	x		x	x
91	Upprätta och vidmakthålla kommunikationer	x	x	x	x	x	x	x	x	x	x	x	x
92	Upprätta och vidmakthålla informationsnätverk	x	x	x	x	x	x	x	x	x	x	x	x
93	Upprätta och vidmakthålla ledningsstödssystem	x	x	x	x	x	x	x	x	x	x	x	x
94	Bidra till gemensam lägesbild egna	x	x	x	x	x	x	x	x	x	x	x	x
95	Leda från ledningsplats	x	x	x	x	x	x	x	x	x	x	x	x
96	Utbyta geografisk information	x	x	x	x	x	x	x	x	x	x	x	x
97	Motta och leda underställda resp understödjande förband	x	x	x	x	x	x	x	x	x	x	x	x
98	Genomföra rapportering till högre chef	x	x	x	x	x	x	x	x	x	x	x	x
100	Genomföra personaltjänst	x	x	x	x	x	x	x	x	x	x	x	x
105	Hantera farligt gods	x	x	x	x	x	x	x	x	x	x	x	x
106	Genomföra förebyggande materielunderhåll	x	x	x	x	x	x	x	x	x	x	x	x
107	Genomföra avhjälpande materielunderhåll	x	x	x	x	x	x	x	x	x	x	x	x
108	*Genomföra bogsering*	x	x	x	x	x	x	x	x	x	x	x	x
109	*Genomföra bärgning*	x	x	x	x	x	x	x	x	x	x	x	x
110	Genomföra daglig sjukvård och hygienåtgärder	x	x	x	x	x	x	x	x	x	x	x	x
111	Omhänderta skadad	x						x	x		x		
113	Evakuera skadad	x						x	x		x		
114	Logistikrapportera genom PEDARS	x	x	x	x	x	x	x	x	x	x	x	x
122	Genomföra åtgärder mot telekrigföring (avlyssning, störning, falsksignalering)	x	x	x	x	x	x	x	x	x	x	x	x
126	Etablera och upprätthålla operationssäkerhet (OPSEC)	x	x	x	x	x	x	x	x	x	x	x	x
127	Hantera och skydda egen information upp till H/S	x	x	x	x	x	x	x	x	x	x	x	x
128	Uppfylla krav på kommunikationssäkerhet	x	x	x	x	x	x	x	x	x	x	x	x
129	Uppfylla krav på informationssäkerhet	x	x	x	x	x	x	x	x	x	x	x	x
130	Förstöra egen hemlig information	x	x	x	x	x	x	x	x	x	x	x	x
131	Genomföra combat identification	x	x	x	x	x	x	x	x	x	x	x	x
135	Genomföra skyddsåtgärder mot CBRN och TIH	x	x	x	x	x	x	x	x	x	x	x	x
136	Förbereda för CBRN-attack eller TIH-utsläpp	x	x	x	x	x	x	x	x	x	x	x	x
137	Genomföra CBRN-detektion längs väg eller inom område	x	x	x	x	x	x	x	x	x	x	x	x
138	Genomföra varning och rapportering av CBRN och TIH	x	x	x	x	x	x	x	x	x	x	x	x
139	Spärra av och märka ut kontaminerat område	x	x	x	x	x	x	x	x	x	x	x	x
140	Utgöra CBRN-sub collection centre	x	x	x	x	x	x	x	x	x	x	x	x
141	Framrycka genom/ur kontaminerat område	x	x	x	x	x	x	x	x	x	x	x	x
142	Genomföra taktisk sanering	x	x	x	x	x	x	x	x	x	x	x	x
143													

RECON PLATOON - AIRDROP



Ecxecution



Exercise

- What's the next event?
- What's the exercise trend?

AAR

- What was planned?
- What was executed?
- **What was right/wrong?**
- Next time?

Evaluation

- What interoperability, capability, readiness do they have?

Realtime information building up reporting during the training event

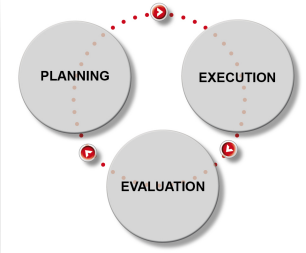
Exercise(s)
Operational & Tactical

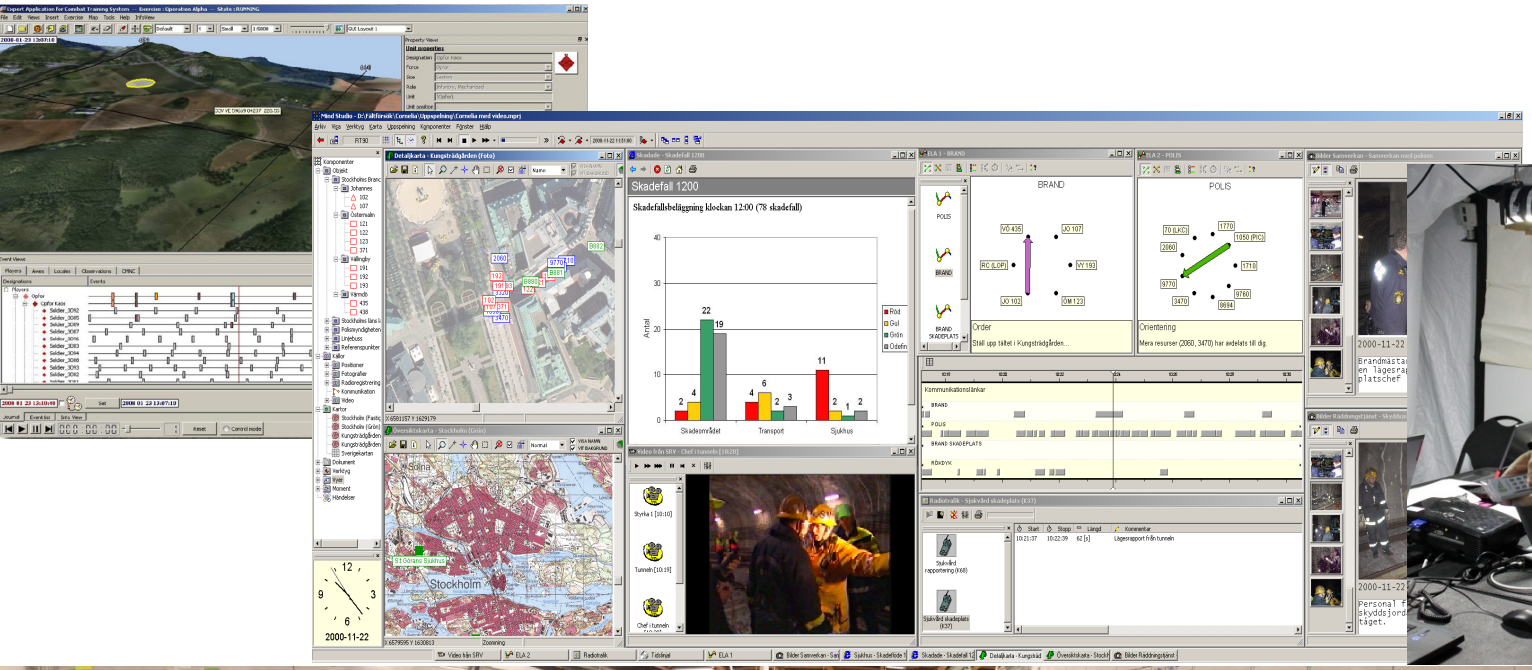
NATIONAL DEFENCE COLLEGE

COMBITECH

HÖGSKOLAN I SKÖVDE

After Action Review





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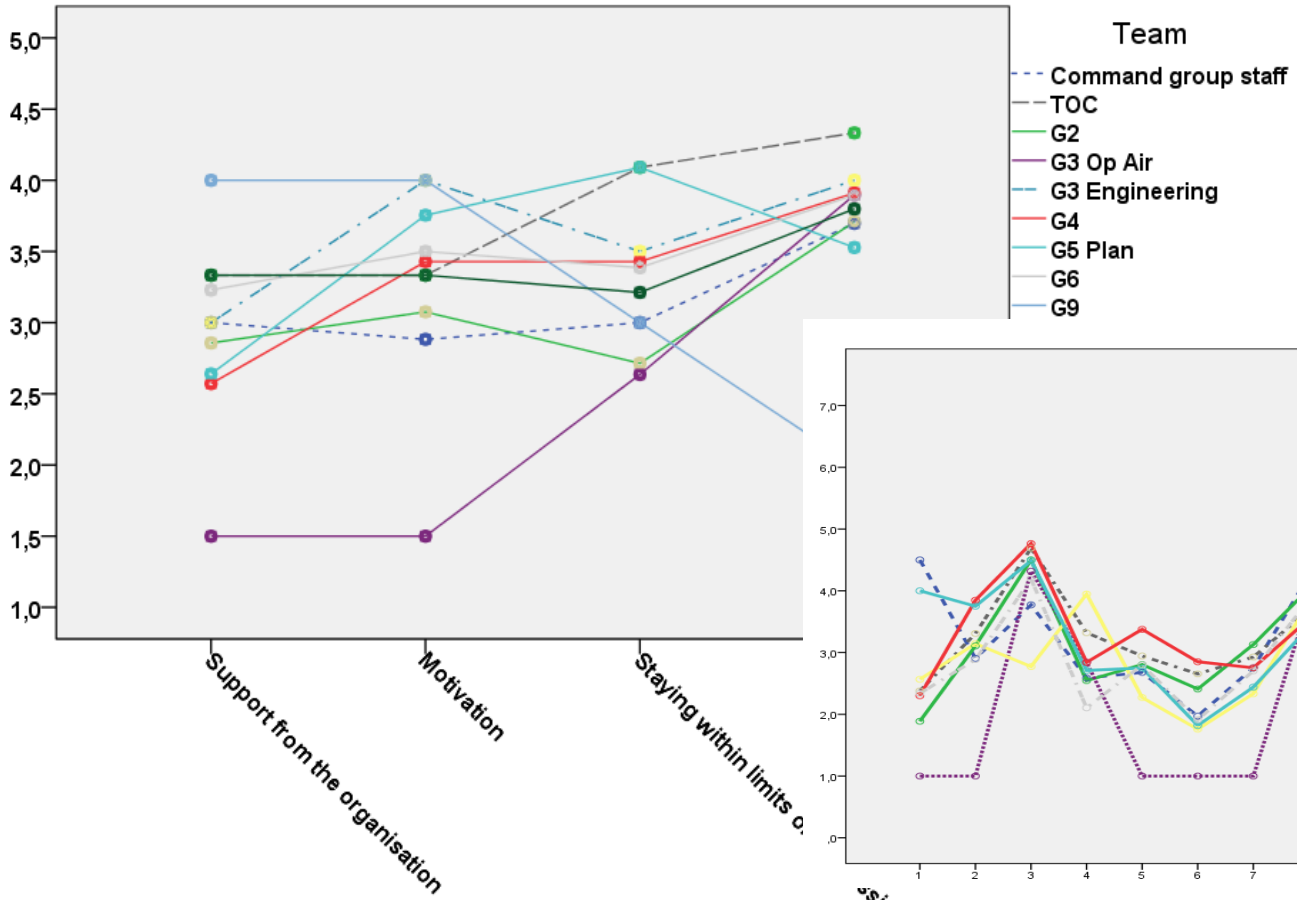
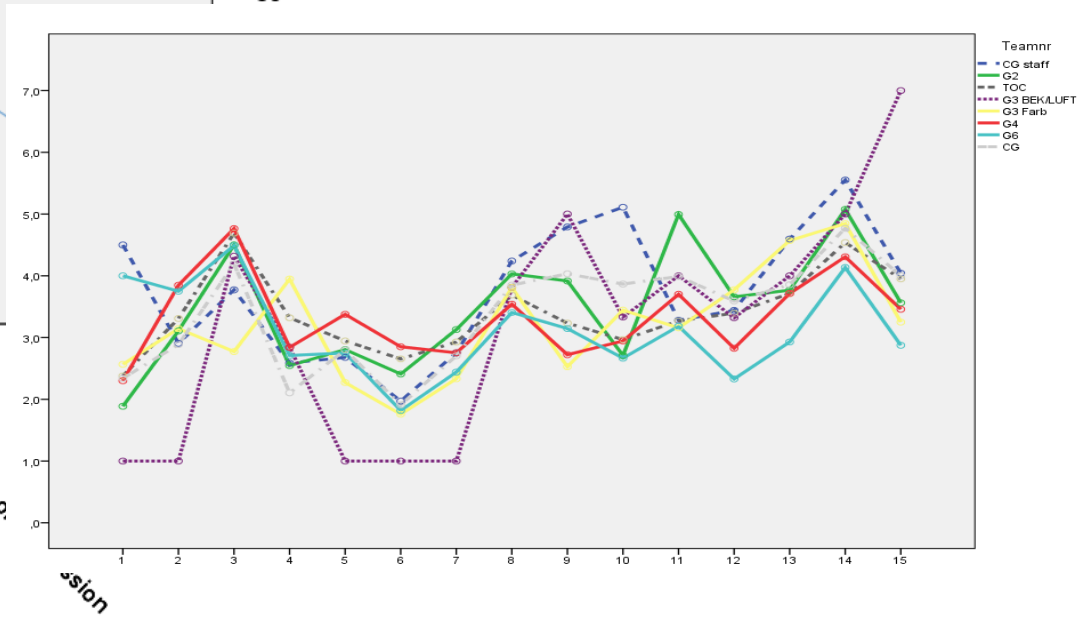
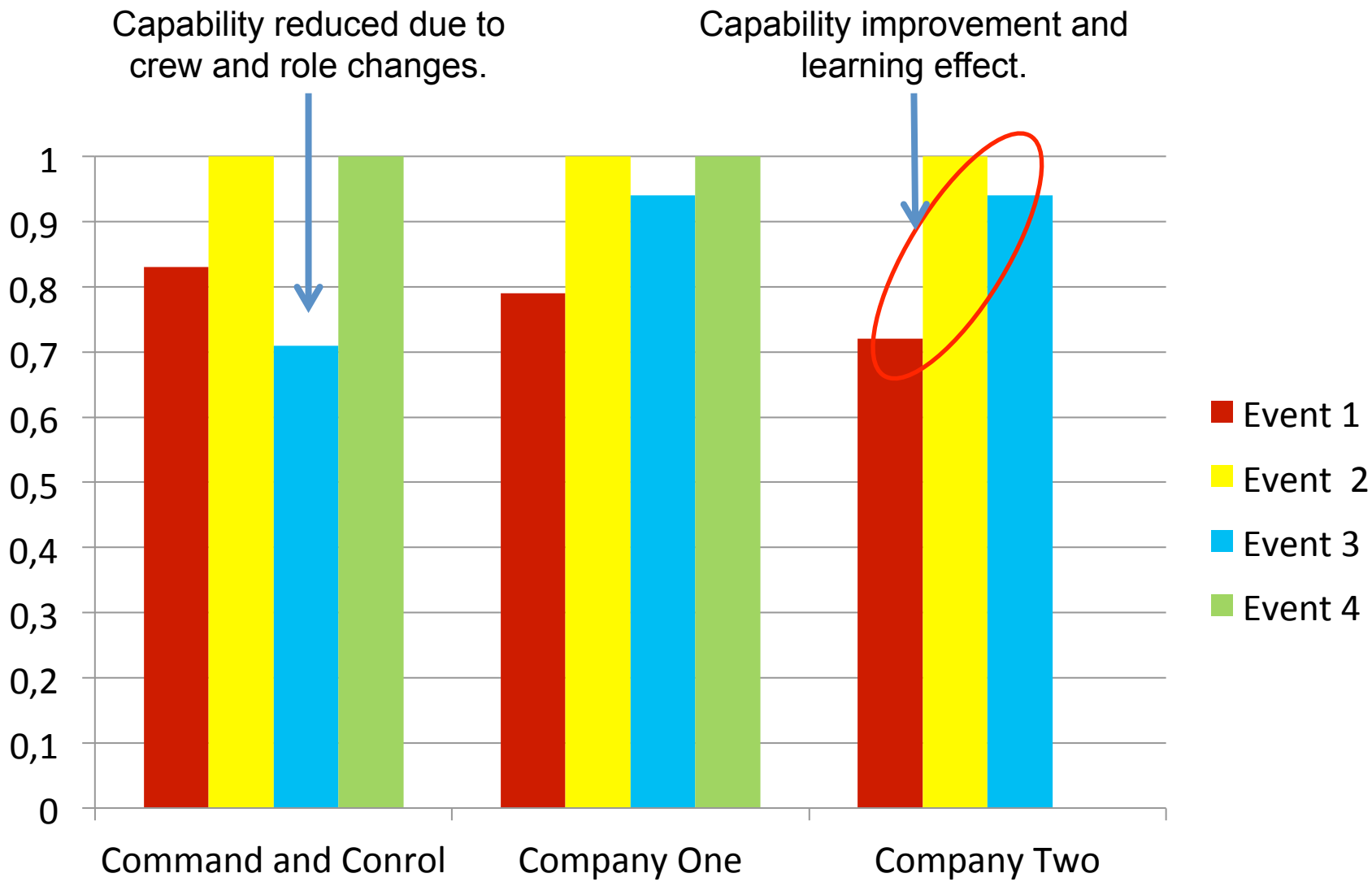
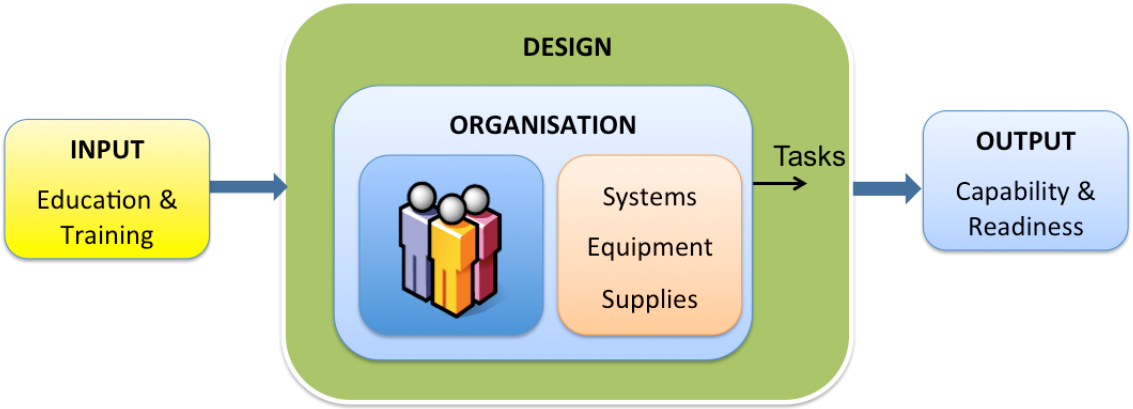
Results
Core Team Effectiveness / Agility





Results – Performance





- Model Based Approach to derive the MET and CT for the NBG ***works***
- The structure of the collected data makes it possible to assign different evaluation methods (CREVAL, CTEF, MARTA …)
- An ***aid*** to the commander and staff to plan, execute, and evaluate training.
- The next step → continue to be used in the force development of the Core Battalion in Nordic Battle Group 2015.

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