

# ADL in Exercises - Guidance in a new Annex to the NATO ADL Handbook

Major  
Tohmas Ax

Swedish Armed  
Forces

Major  
Niclas Ljung

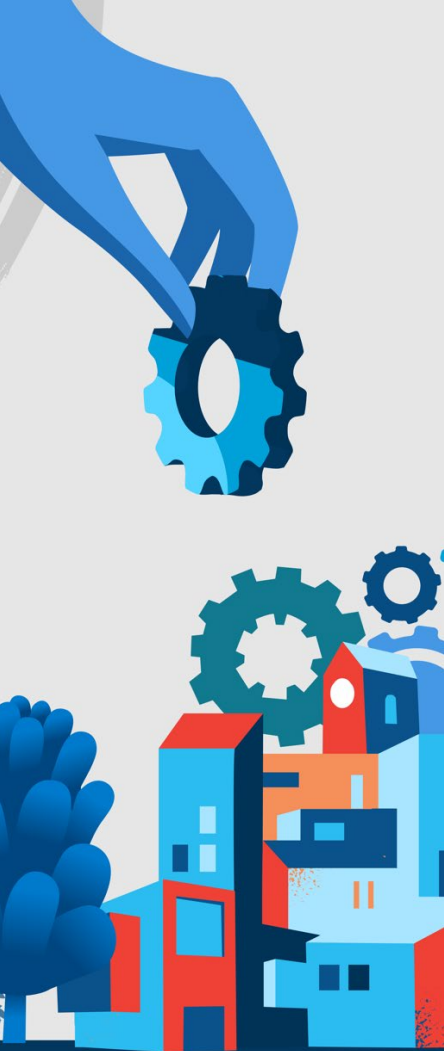
Swedish Armed  
Forces

Aaron  
Presnall, Ph.D.

Jefferson  
Institute

Paul  
Thurkettle

NATO ACT





FÖRSVARSMAKTEN

# ADL in Exercises

## Guidance in a new Annex to the NATO ADL Handbook

### Agenda

- Background
- Deliverables - Annex to NATO ADL Handbook and Dashboard
- Results from using ADL in exercises
- ADL and Learning Analytics in future exercises



# **ADL in Exercises**

## **Guidance in a new Annex to the NATO ADL Handbook**

Major Tohmas Ax, Swedish Armed Forces



# Background ADL in Exercises

Starting point; How do we make better use of our ADL capacity?

- Formal training, Yes
- Exercises, No

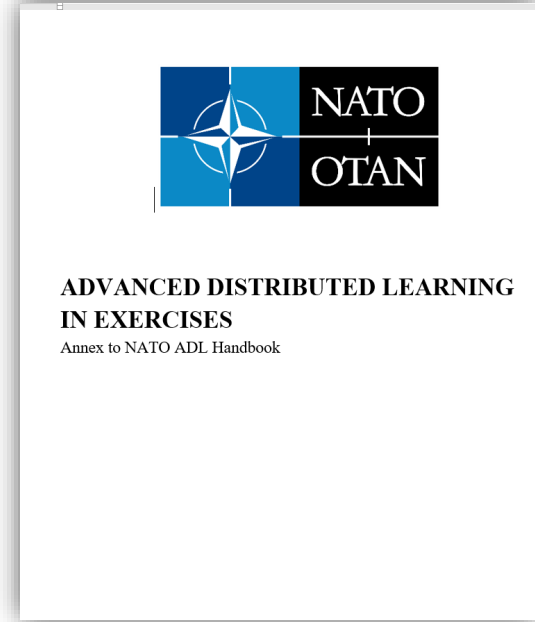
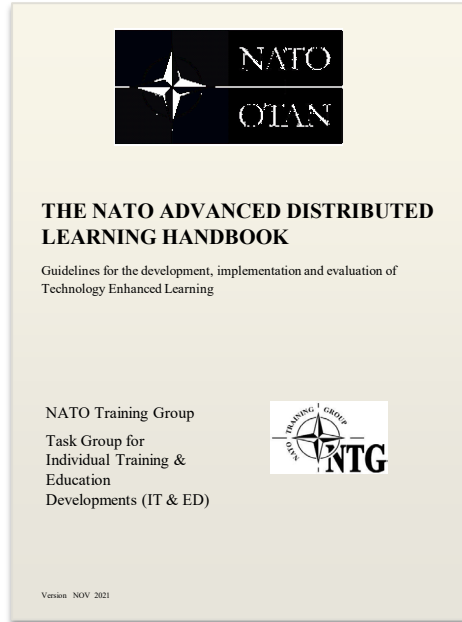
Why exercises? Scope, Time and Training Objectives!

SWE-US bilateral initiative. US DoD project called MADLx

Led to a task in NATO Training Group IT&ED



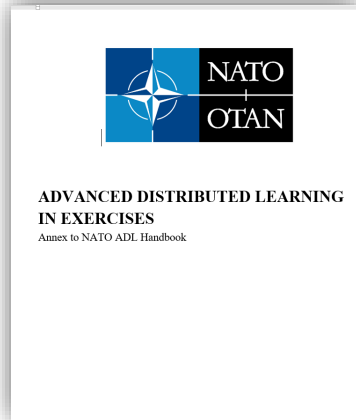
# Guidelines & Best Practice for ADL in Exercises



<https://adlnet.gov/publications/2019/07/The-NATO-Advanced-Distributed-Learning-Handbook/>



# ADL IN EXERCISES - Table of Content



## **1 Executive Summary** 2

### **2 Introduction** 3

#### **2.1 General** 3

#### **2.2 Purpose** 4

#### **2.3 Scope** 4

#### **2.4 Initial Steps** 4

#### **2.5 Return on Investment** 5

#### **2.6 Research and Development** 5

#### **2.7 Use Case Studies** 6

#### **2.8 References** 6

#### **2.9 Contributors** 7

### **3 Exercise Framework** 8

#### **3.1 Planning and Execution Process** 8

#### **3.2 Exercise Planning Cycle and Products** 9

#### **3.3 Timeline for ADL in Exercises** 10

#### **3.4 Step One: Strategic Guidance** 12

#### **3.5 Step Two: Design** 13

#### **3.6 Step Three: Prepare** 15

#### **3.7 Step Four: Execute** 17

#### **3.8 Step Five: Evaluate** 19

#### **3.9 Step Six: Analyse** 21

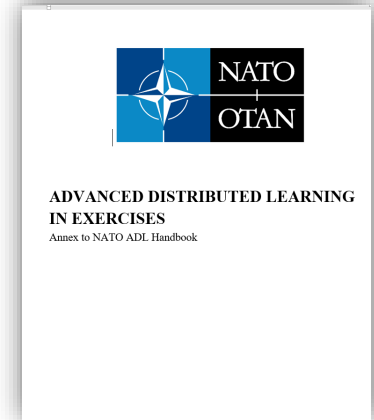
#### **3.10 Checklist** 22

### **4 Case Studies: ADL Use in Exercises** 24

#### **4.1 VIKING** 18 24

#### **4.2 NATO Standards Exercise, Ukraine** 29

#### **4.3 Bold Quest** 32



# Exercise Planning and Execution Process



## Best Practice:

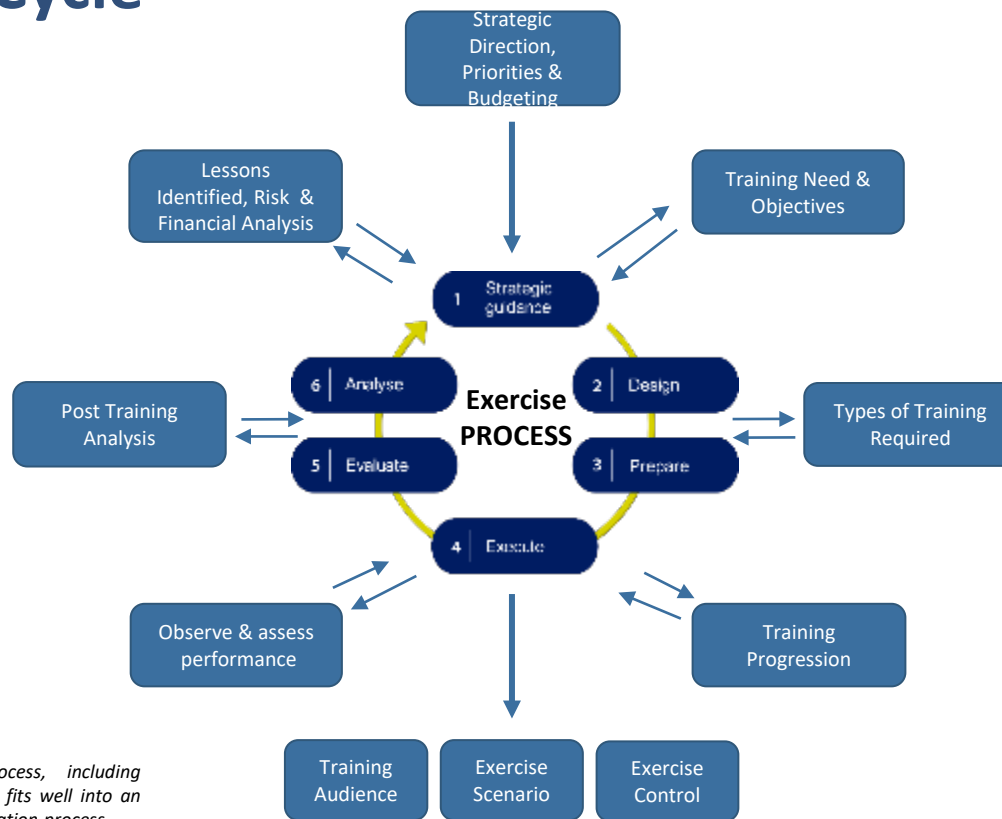
- This is a planning process, based on twenty years of experience, developed from NATO Bi-SC 75-3 to fit into major multinational distributed exercises. Planning for ADL in such exercises fits well into the process and will be a major contribution to reach the process outcome and exercise objectives.

## References:

- NATO Bi-SC Education & Training Directive 75-2
- NATO Bi-SC Collective Training & Exercise Directive 75-3
- NATO Bi-SC Education & Individual Training Directive 75-7
- NATO AMSP-05, CAX Best Practices
- Guidelines Methods in CAX VIKING
- NATO ADL Handbook



# Exercise Cycle

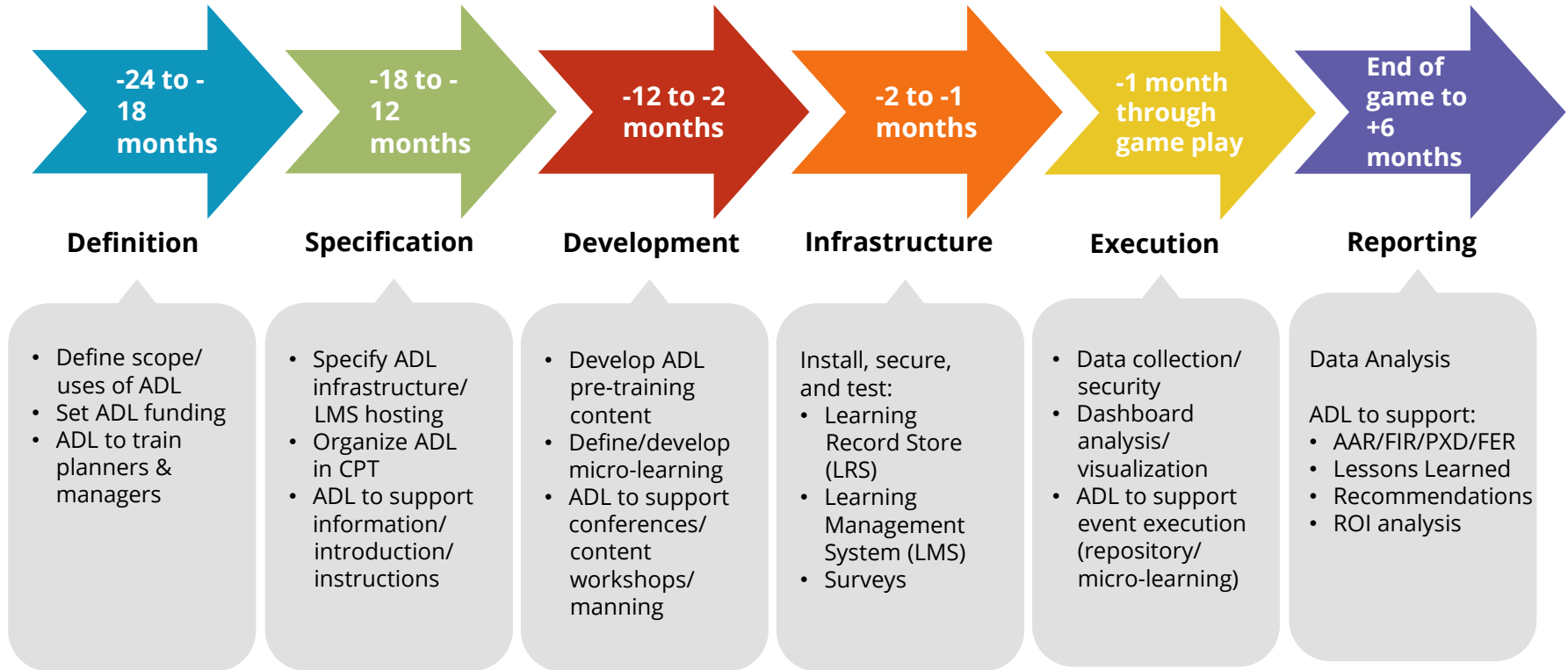


## Transparency:

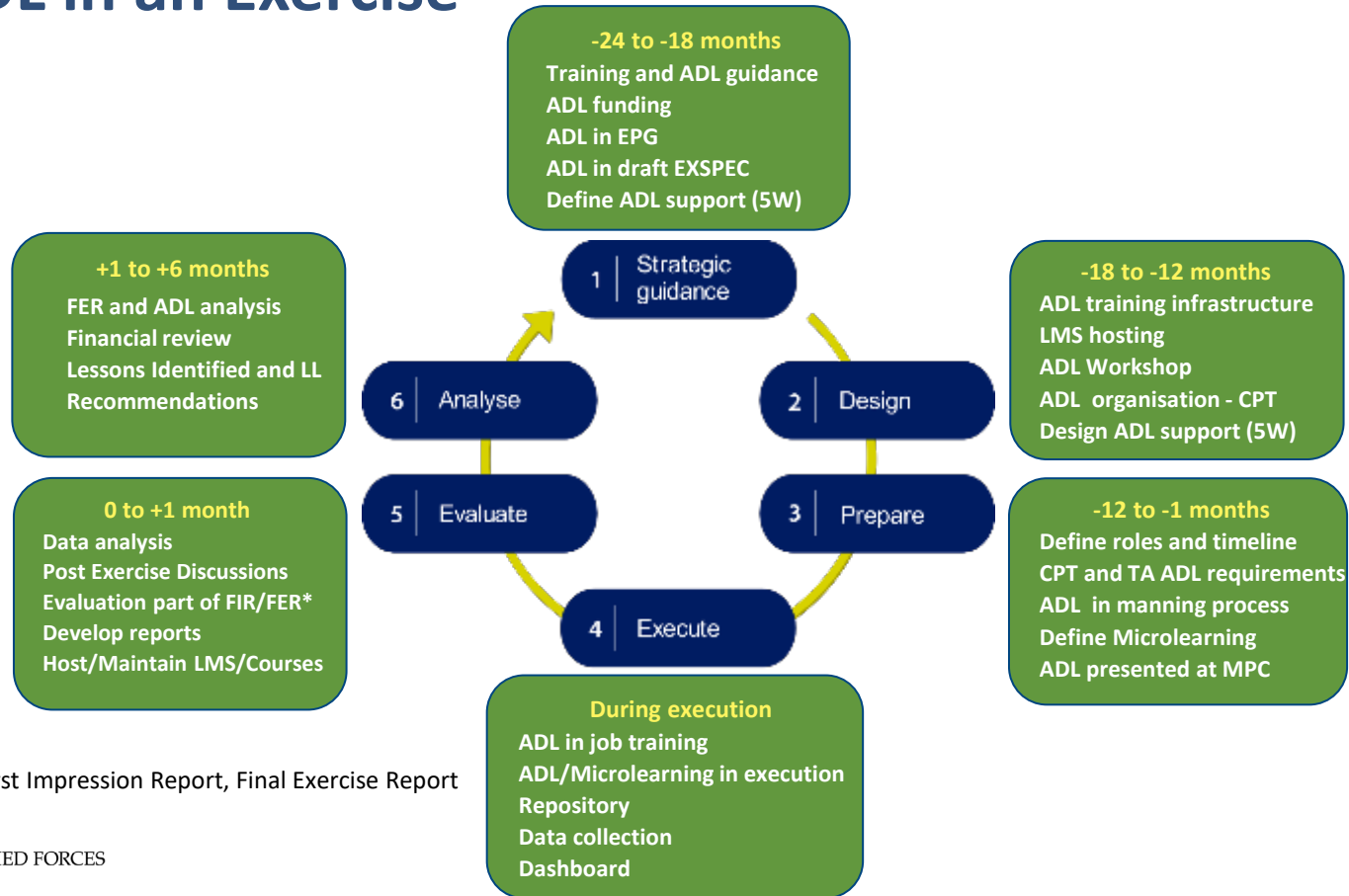
- This general developed planning process, including deliverables over time in the different steps, fits well into an ADL in exercise planning, execution, and evaluation process.



# Timeline: ADL in Exercises



# ADL in an Exercise



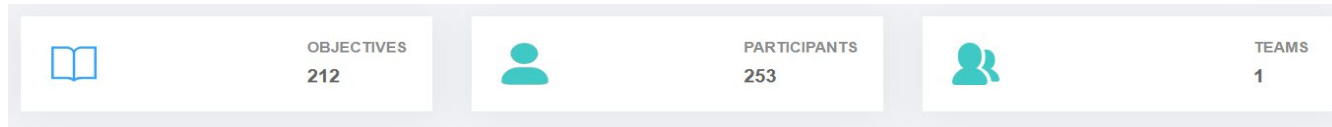
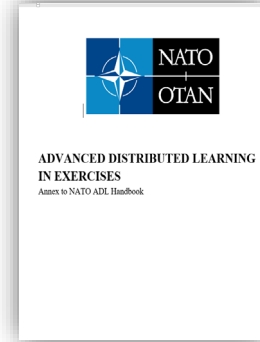
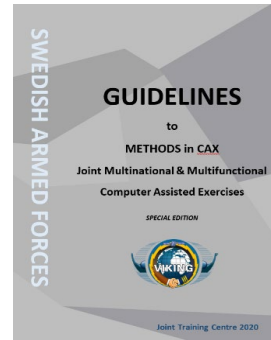
\*FIR/FER=First Impression Report, Final Exercise Report



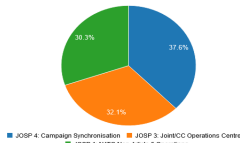
# Results: Example from the Viking 22 Exercise

- Pre-execution: Pre-training
- During execution: Microlearning
- After execution: Analysis

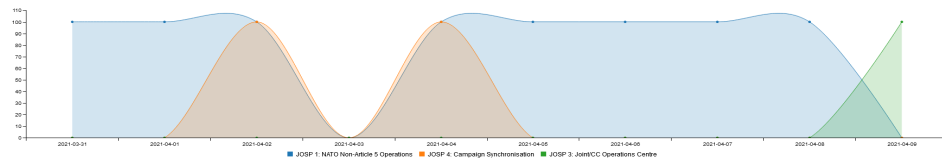
Dashboard for Excon and Exeval



WHAT ARE THE MOST POPULAR COURSES?



NUMBER OF ATTEMPTS WITH MAXIMUM RESULT





# WELCOME TO VIKING 22

CRISIS RESPONSE OPERATION EXERCISE

MANDATORY COURSE

WATCH AN INTRODUCTION TO THE EXERCISE

SUPREME COMMANDER'S WELCOME VIDEO





Search courses



VIKING 22 Scenario: UN Mission in Midland

Viking 22

## UN Mission in Midland

Mandatory course that covers the scenario of Viking 22 from a UN perspective.



Target audience: TA and EXCON in the UN structure

What you will learn:



VIKING 22 Scenario: NATO Crisis Response Operation (NFOR)

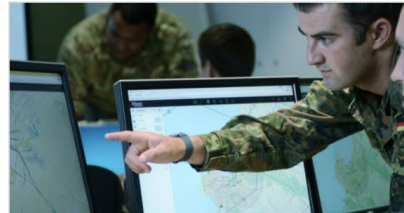
Viking 22

## NATO Crisis Response Operation

Mandatory course that covers the scenario of Viking 22 from a NATO perspective.



Target audience: TA and EXCON in the NATO structure



Sitaware HQ Overview

Viking 22

## Sitaware

This course covers the basic functions of the Sitaware HQ version 6.10.

Target audience: All staff personnel

What you will learn:

- Basics (ex. Sitaware HQ roles)
- Current Ops
- Information structure & tools
- Object interaction and



Exonaut

Viking 22

## Exonaut

This course demonstrates how to create observations, add an objective assessment, and add an activity assessment in [Exonaut](#) Compliance and Performance Manager (CPM), and it provides an overview of [Exonaut](#) Training and Exercise Manager (TEM) and the [Exonaut](#) dashboard.

Target audience: OTM and other





### Observer Trainer Mentor (OTM)

Viking 22

## Observer Trainer Mentor

This course covers the OTM overall mission, pre-event preparation, event execution and post-event evaluation.

Target audience: OTM

What you will learn:

- TM Mission
- Pre-event Preparation
- Event Execution
- Post Event Evaluation



### CAX Method with ADL

Viking 22

## CAX Method with ADL

This course gives the background of ADL integration in exercises and an overview of exercise planning.

Target audience: Exercise planners

What you will learn:

- Preparation and learning
- Exercise Planning Basics
- CAX Method



### NATO ELTEC II

Viking 22

## NATO ELTEC II Course

This is a NATO developed English language micro-learning training for staff officers covering writing skills for staff work in a NATO environment.

Target audience: Mainly for staff personnel in the NATO structure

What you will learn:

- Direct and Concise Language
- Gender Neutral Language
- Common Phrases



### Exercise Management

Viking 22

## Exercise Management

This course provides an overview of how EXCON is organized, staffed, and functions, and it explains the basics of the gaming method, including the roles of OTMs, SITCEN PLANS, and SITCEN CURRENT.

Target audience: EXCON and OTM

What you will learn:

- Excon Organization
- Gaming Method
- Planning and Current



818  
Total Statements

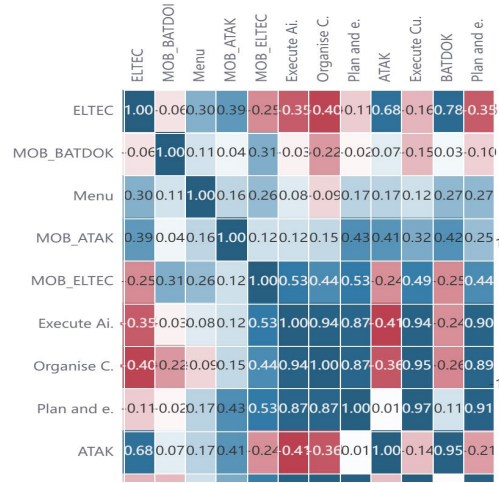


3  
Sources



22  
Users

OBJECTIVES CORRELATION MATRIX



OBJECTIVES CORRELATION INPUT

Actor Name	Object Definition Name Und	Score All
Ameer Humphries	ELTEC	100
Mara Baldwin	ELTEC	100
Jayden-Lee Watson	ELTEC	100
Ayra Christensen	ELTEC	100
Ameer Humphries	MOB_BATDOK	100
Mara Baldwin	Menu	100
Jayden-Lee Watson	MOB_ATAK	100
Ayub Cowan	MOB_ELTEC	100
Jolie Hogan	MOB_ELTEC	100
Ayub Cowan	Execute Airspace Control	100
Ayra Christensen	Execute Airspace Control	100





# First Impression Report ADL V22

## Observations:

- The use of the platform varied a lot (minutes to many hours)
- Coherent positive views about the value of the learning content
- The platform could be used to a larger extent
- The dashboard was mainly used for EXEVAL purposes

## Recommendations:

- Add additional materials (Battle wheels, SOPs, checklists e.t.c.)
- Define minimum requirements for pre-training and Work Up Staff Training
- Create an Exercise Data Strategy

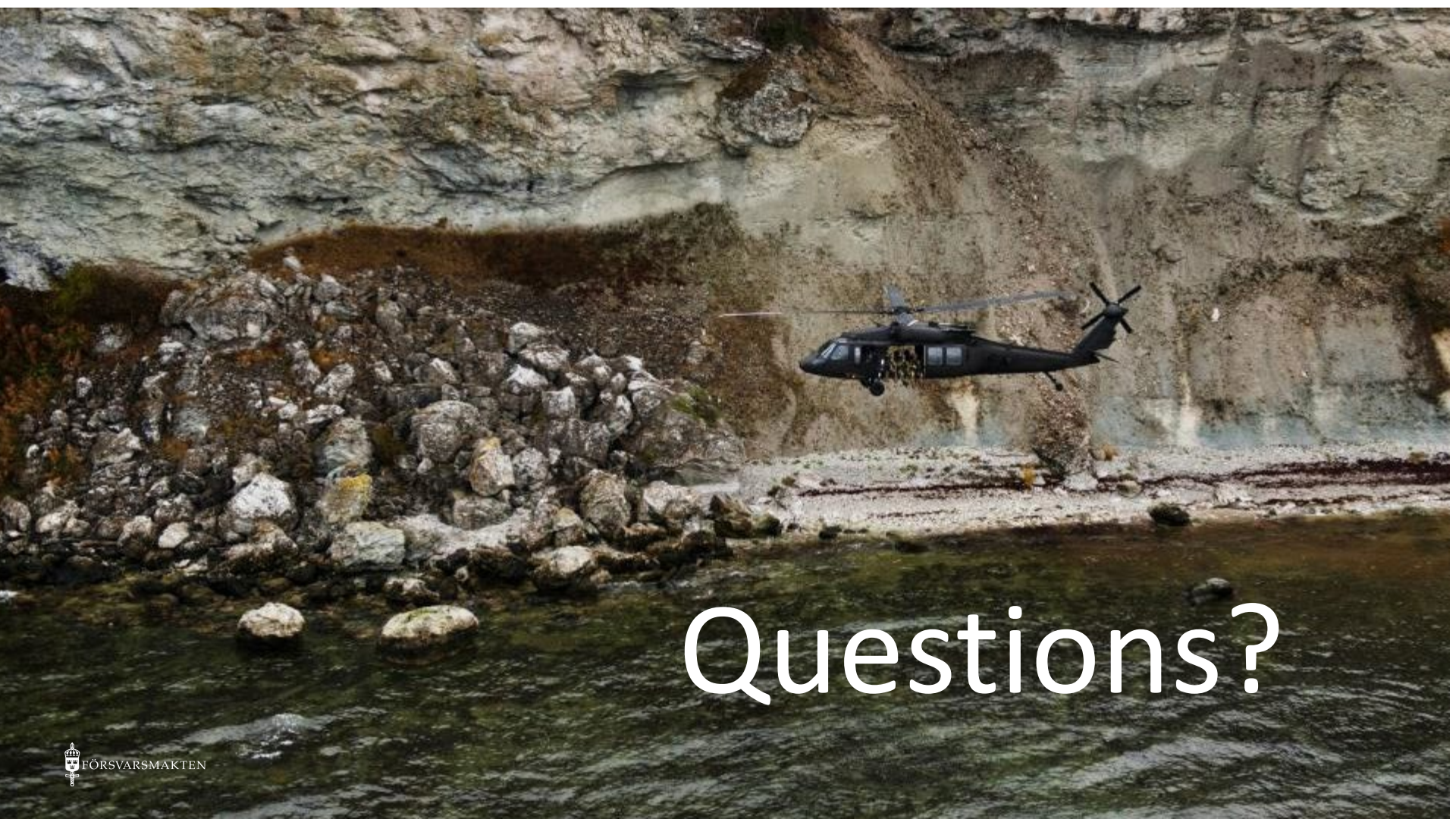


## ADL & Learning Analytics in Future Exercises

Next steps in coming exercises:

- Stakeholder inputs to tailor make dashboard UI
- Collect data from multiple sources
- Collect more granular data
- Collect data in real time (or as close as possible)
- Connect with competency frameworks
- Add recommender (future effort)
- Common content repository
- Develop a persistent ADL Platform





Questions?

# ADL in Exercises

## Guidance in a new Annex to the NATO ADL Handbook

Major Tohmas Ax, Swedish Armed Forces

[tohmas.ax@mil.se](mailto:tohmas.ax@mil.se)

+46 708 594 901

