

IGNITE! PRESENTATIONS  
ADL—IT'S MORE THAN THE TECHNOLOGY



# Operational Integration of Advanced Distributed Learning into Exercises

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FÖRSVARSMAKTEN

# Operational Integration of ADL into Exercises

## Agenda:

- The Viking 18 and CJSE 19 exercises
- The basic concept
- Lessons Identified
- Summary
- Way ahead - MADLx



# The Viking 18 Exercise

- Computer Aided Exercise
- Started 1999 (US-SWE MOU), held roughly every three years (8th time)
- + 2000 participants
- + 60 countries
- + 80 organizations
- 5 remote sites, 4 sites in Sweden
- Its aim is to train and educate participants – civilian, military and police – to operate together for multidimensional crisis responses and peace operations



# The Combined Joint Staff Exercise 2019

- Computer Aided Exercise
- Conducted yearly
- + 1000 participants
- + 10 countries
- Its aim is to train military personnel in staff procedures





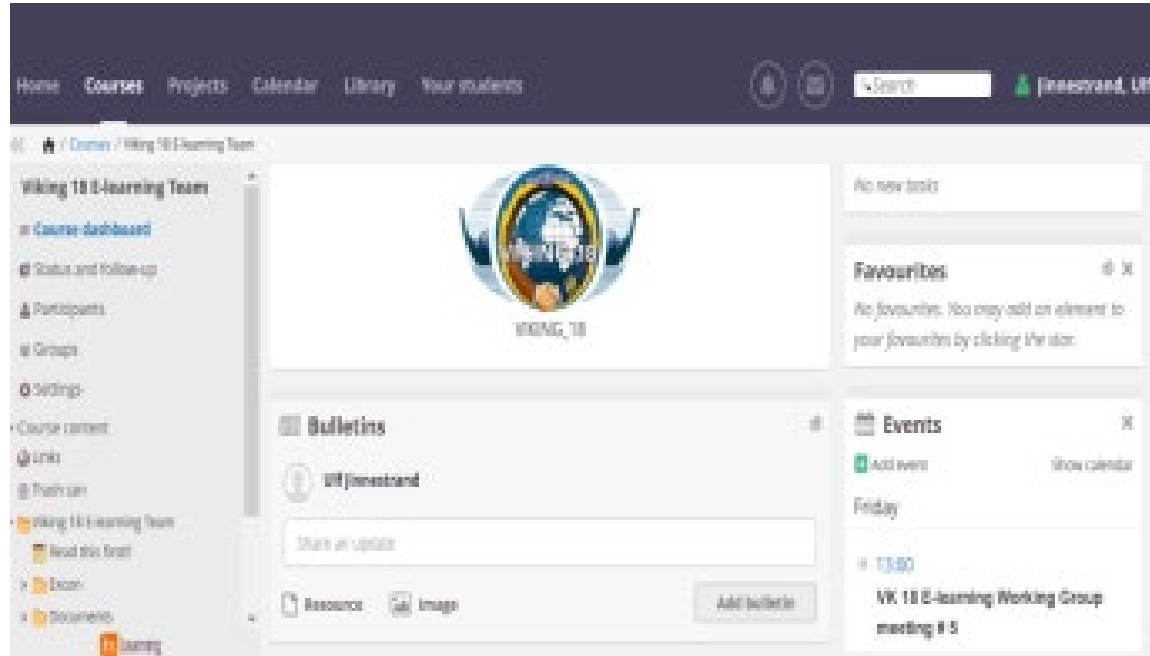
# Operational integration of ADL in Exercises so far...



The ADL effort in Viking 18 and CJSE 19 was the first steps in integrating and maturing these sorts of capabilities throughout multinational exercises. The project involved three main goals:

- **e-Learning:** Provide e-learning resources to enhance pre-training, just-in-time and after-action learning
- **Learning Analytics:** Connect pre-training data with performance data from the execution phase
- **Roadmap:** Identify lessons for further development of the basic concept, to inform a roadmap

# e-Learning - Basic Concept



**Level 1:** Mandatory course(s)

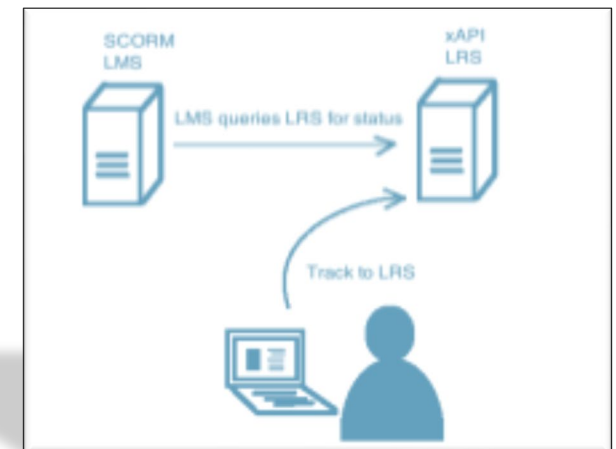
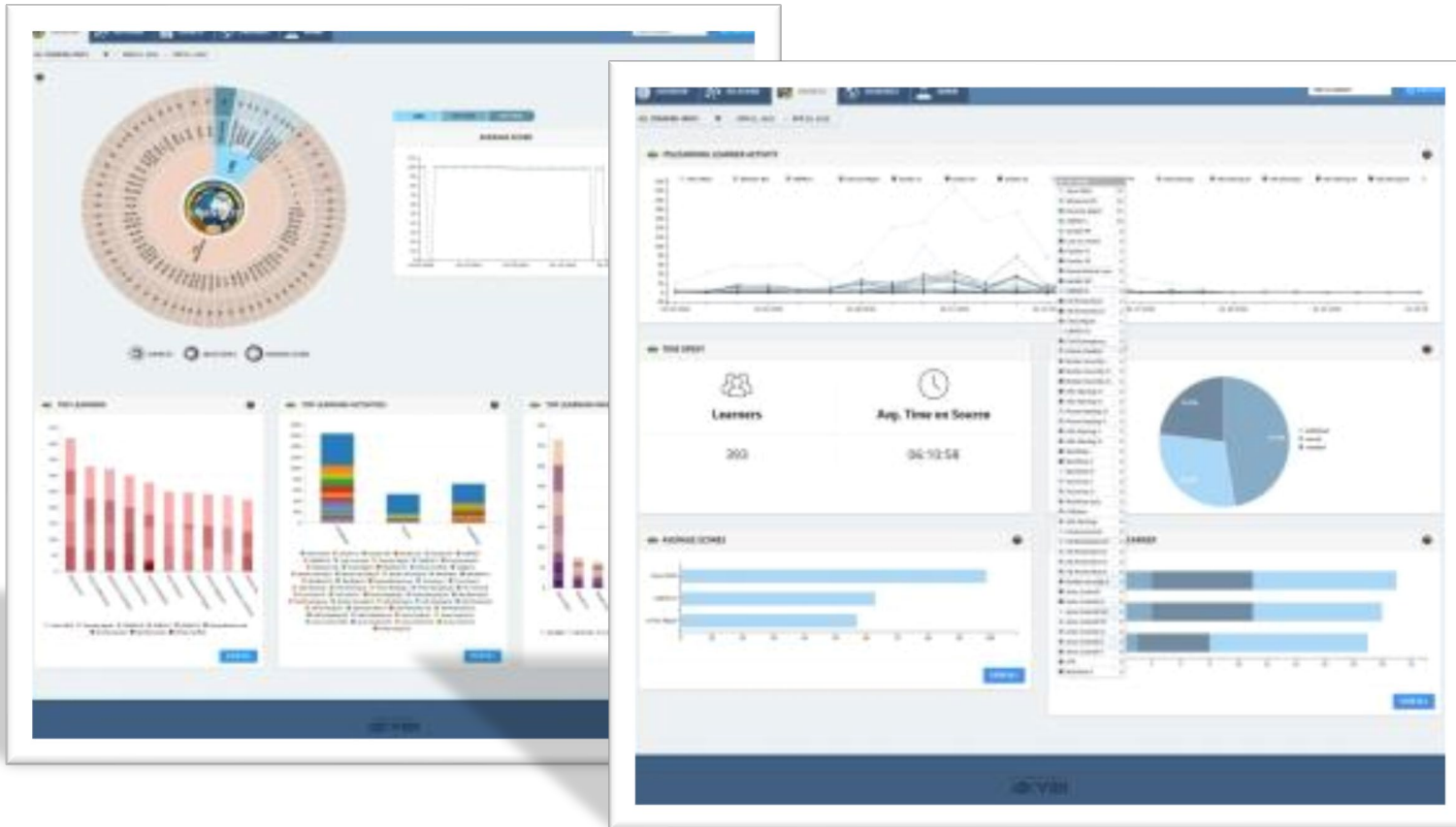
**Level 2:** Recommended courses

**Level 3:** Course repository available to all

**International e-Learning Working Group**

# Learning Analytics- Basic Concept

Comparing learning and exercise objectives using xAPI, a Learning Record Store, and a dashboard solution.





# Roadmap - Data Collection

**Exercise management  
system**

**The Viking LMS**

**e-Learning  
working  
group**

**Exercise  
evaluation  
form**

**FIR/FER**



**Designated ADL-  
evaluator**

**Interviews**

**Exeval**

# Lessons Identified – General areas

**Formalize**

**Learning resources**



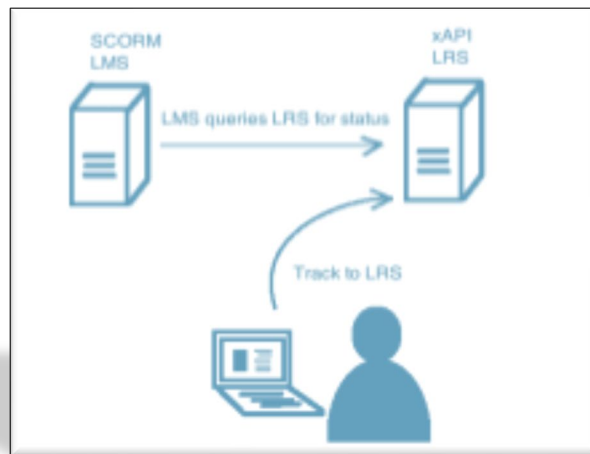
**Strategic Communication**

**Access**

**Evaluation**

# Lessons Identified – xAPI and Learning Analytics

- xAPI is ready for timely secure implementation at scale in a complex multinational system of legacy systems.
- Learning analytics should be driven by stakeholder demand signals: learners, operators, planners, and strategic actors.



# Summary

- **E-learning:**

We put together a wide range of resources that helped meet learning objectives and was considered relevant and useful by the participants

- **Learning Analytics:**

We were able to successfully connect results from the pre-training phase with performance data from the execution phase

- **Roadmap:**

By working collaboratively, the e-learning team and partners have identified a lot of different lessons during the whole process



# I/ITSEC Papers 2018

- Integrating Advanced Distributed Learning into Multinational Exercises  
(I/ITSEC: Ljung et al.)
- Learning Analytics with xAPI in a multinational Exercise  
(I/ITSEC: Presnall&Radivojevic)

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# Maturing ADL in Exercises

**An international project led by the ADL Initiative**

**Five year roadmap: High-level actions and milestones**

- Strategic communication
- Learning content
- Delivery systems
- Data analytics and visualizations
- Possible implementation targets (exercises)

**MADL**   
**Setting foundations to measure ROI**



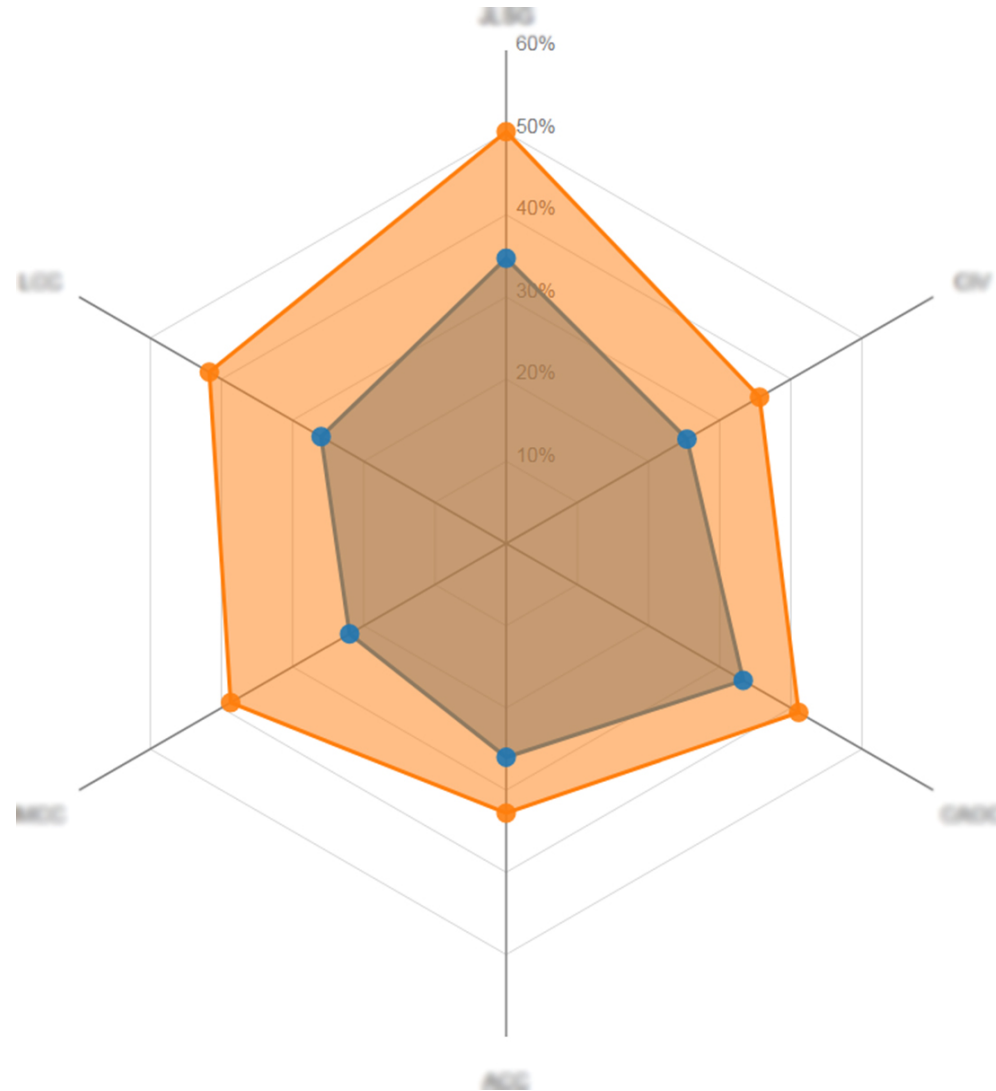
# Project Main Goal

Enhance military training and education by integrating ADL capabilities with joint and coalition training exercises



**Setting foundations to measure ROI**

# Desired Outcomes





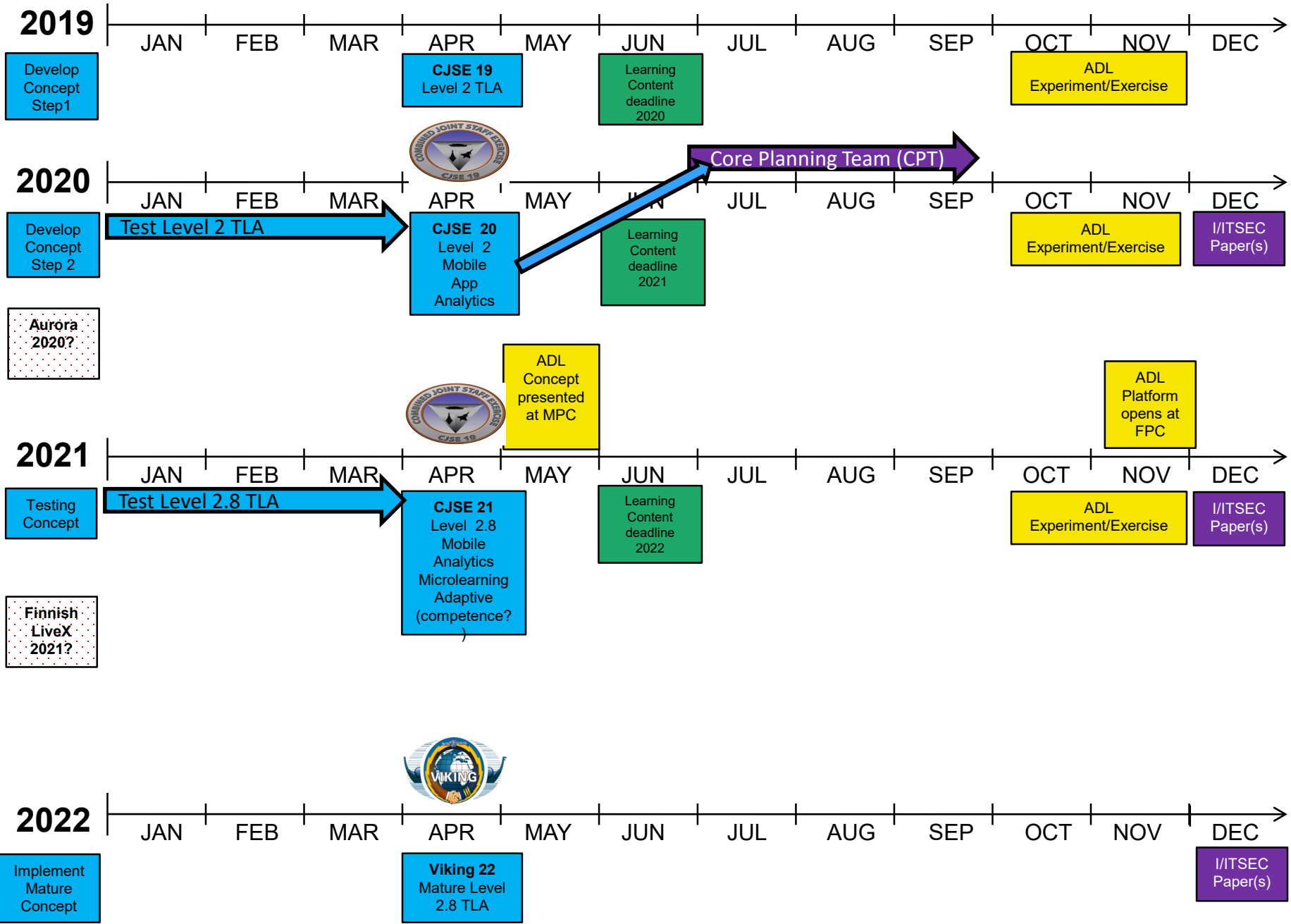
# Solution

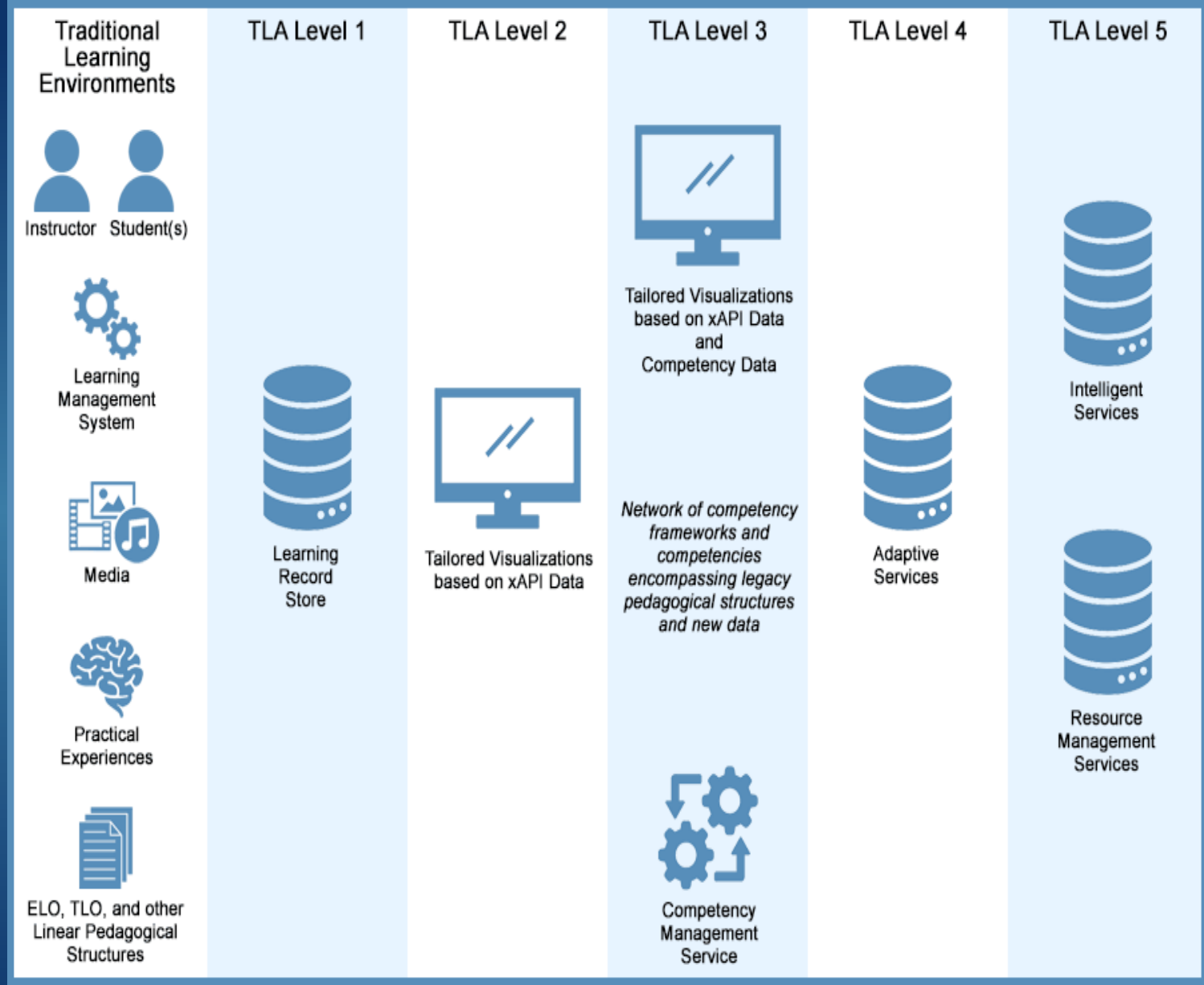
Research prototypes will be tested in **several multinational exercises**. Each of the target exercises will serve as event milestones to rapidly test, evaluate and promote or discard solutions for core ADL objectives.



# TIMELINE ADL in Exercises

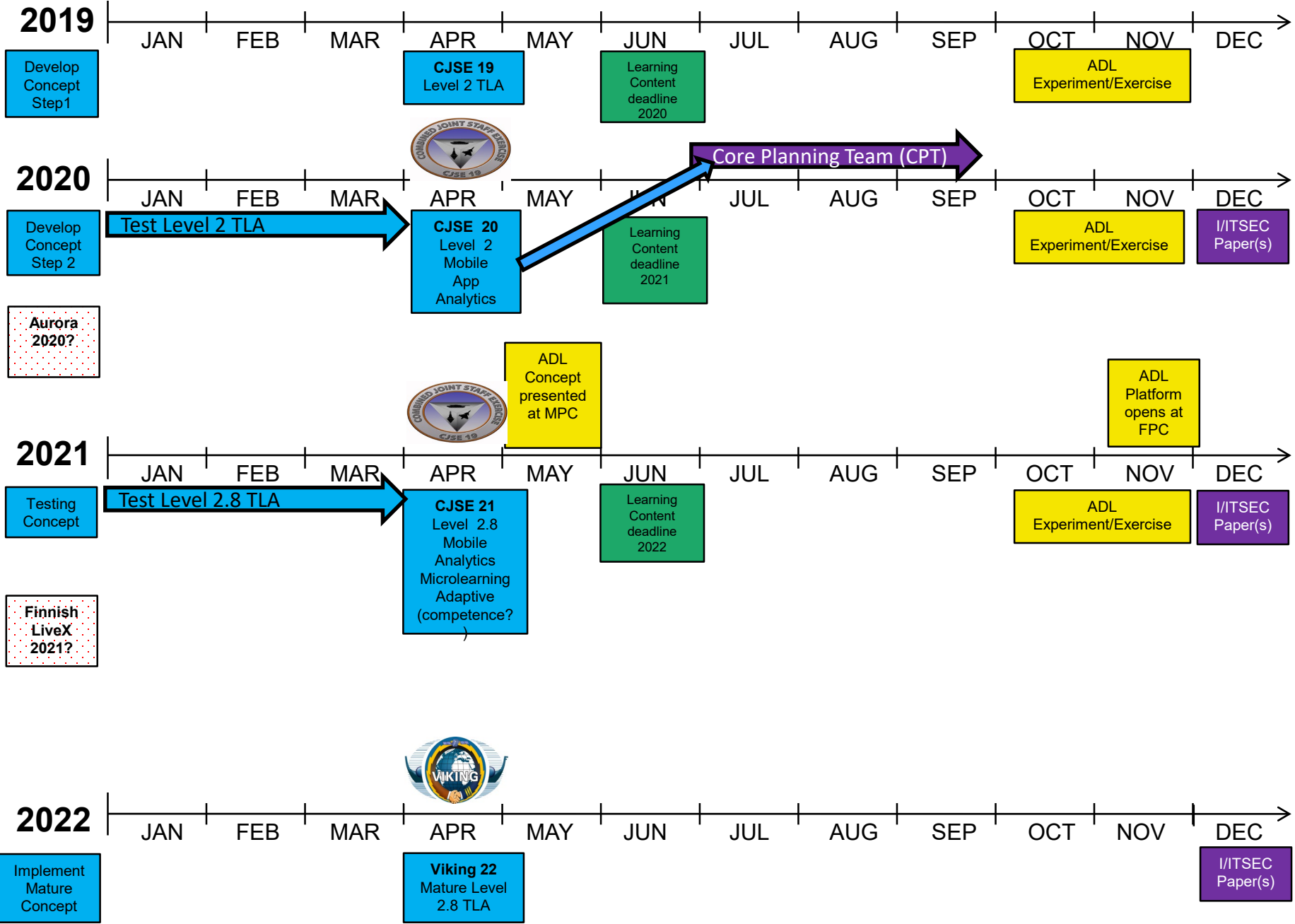
ADL WG – Develop ADL Concept towards TLA Level 2.8

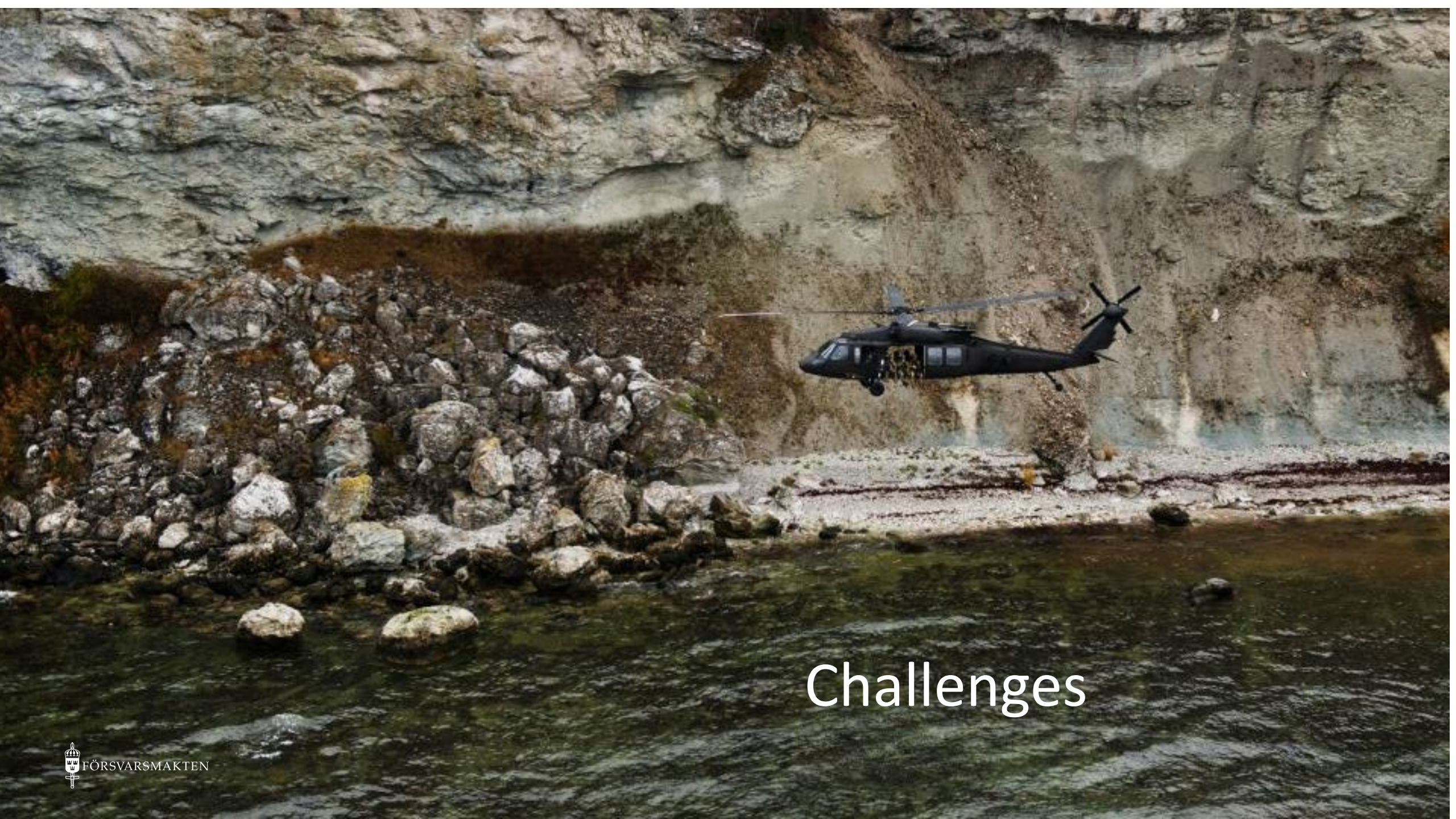




# TIMELINE ADL in Exercises

ADL WG – Develop ADL Concept towards TLA Level 2.8





# Challenges