

Operational Impact of Unmanned Combat Systems with Autonomous Functions. Preliminary Observations and Challenges

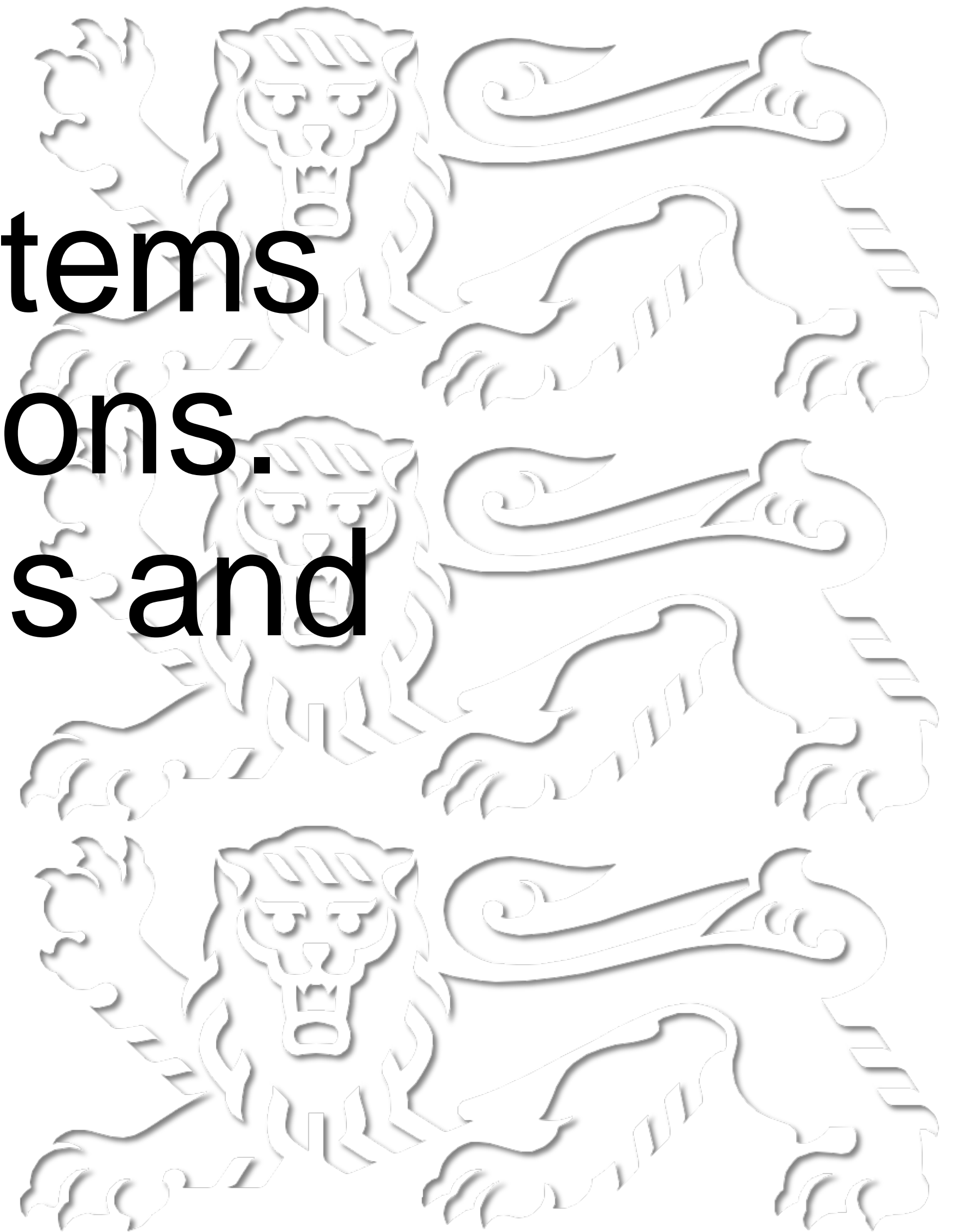
LTC Sten Allik

NATO OR&A Conference 2019, Ottawa

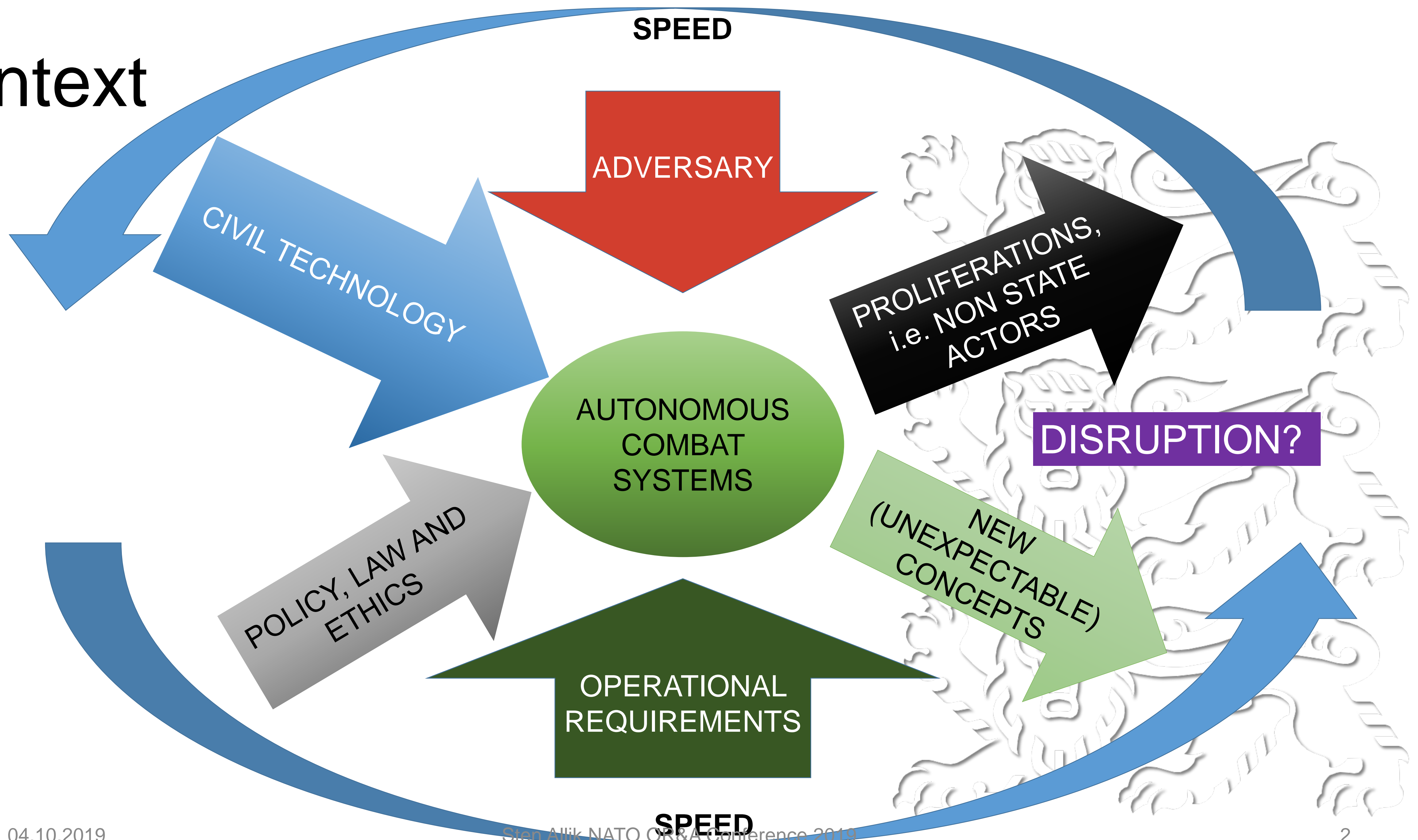
sten.allik@mil.ee

04.10.2019

Sten Allik NATO OR&A Conference 2019



Context



Scope and methods

UCSAF
ISTAR

UCSAF
WEAPON

UCSAF
LOG

WARGAMING SEMINARS

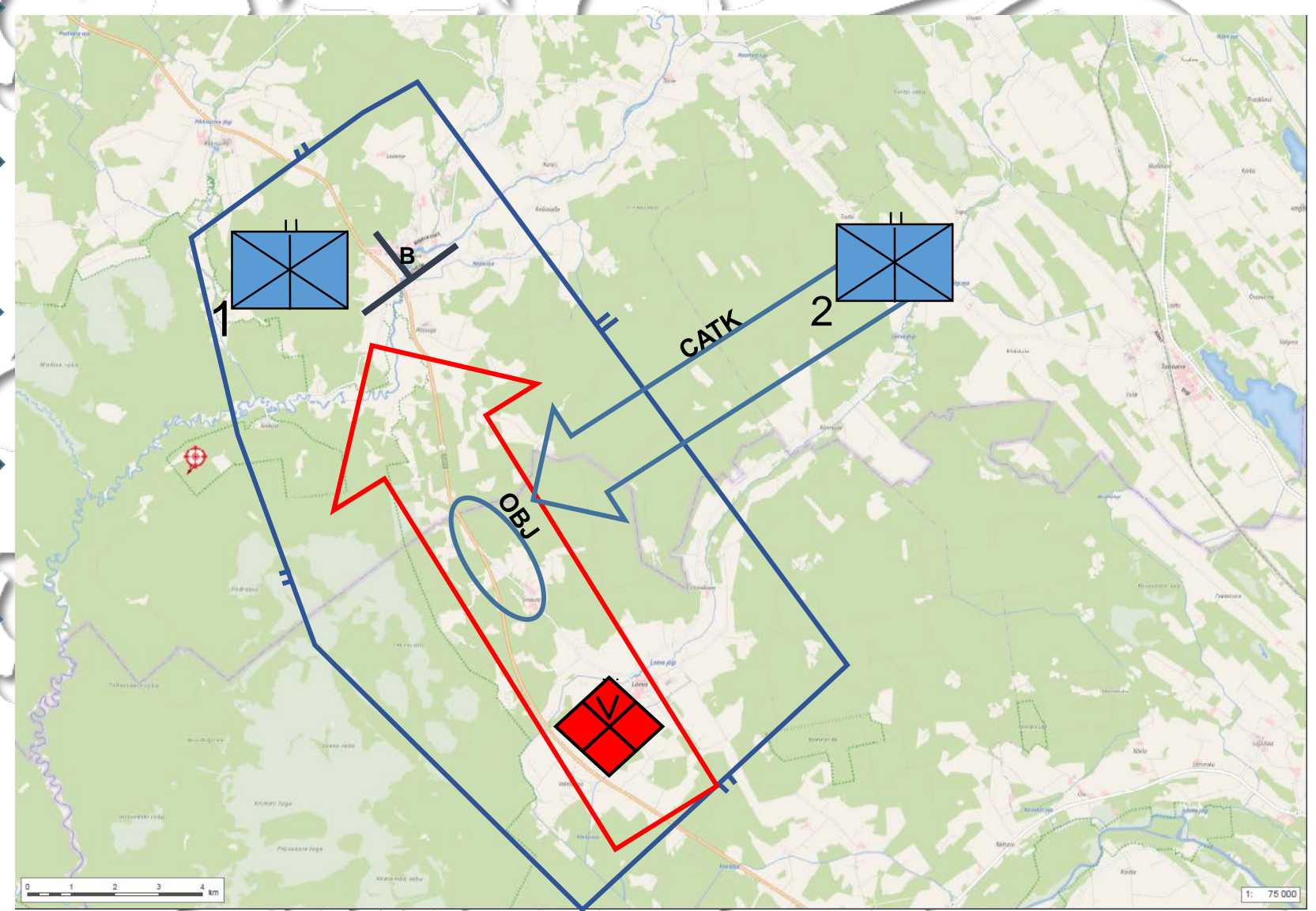
EXPERT ASSESSMENTS

INTERVIEWS

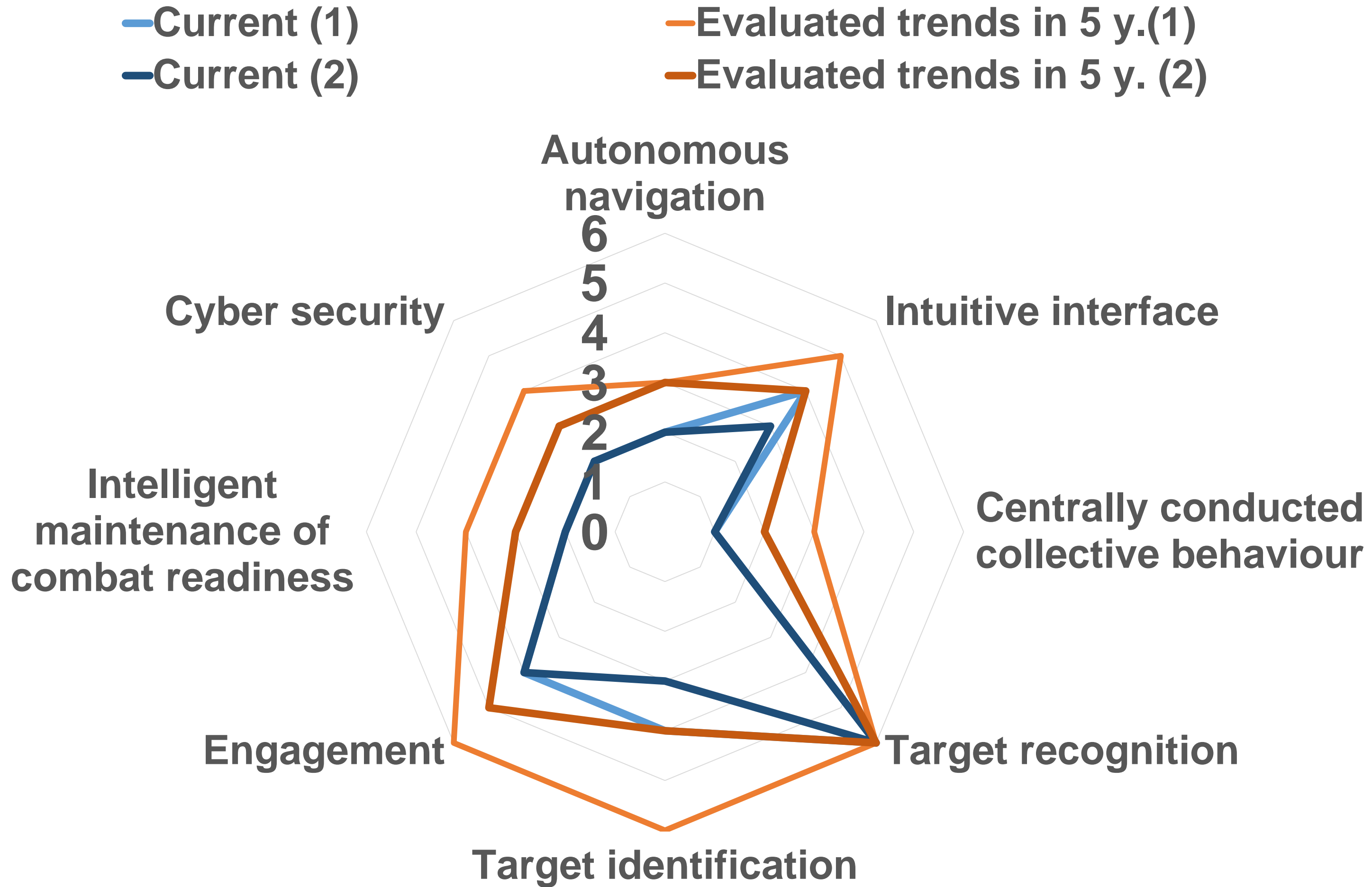
FIELD EXPERIMENTS



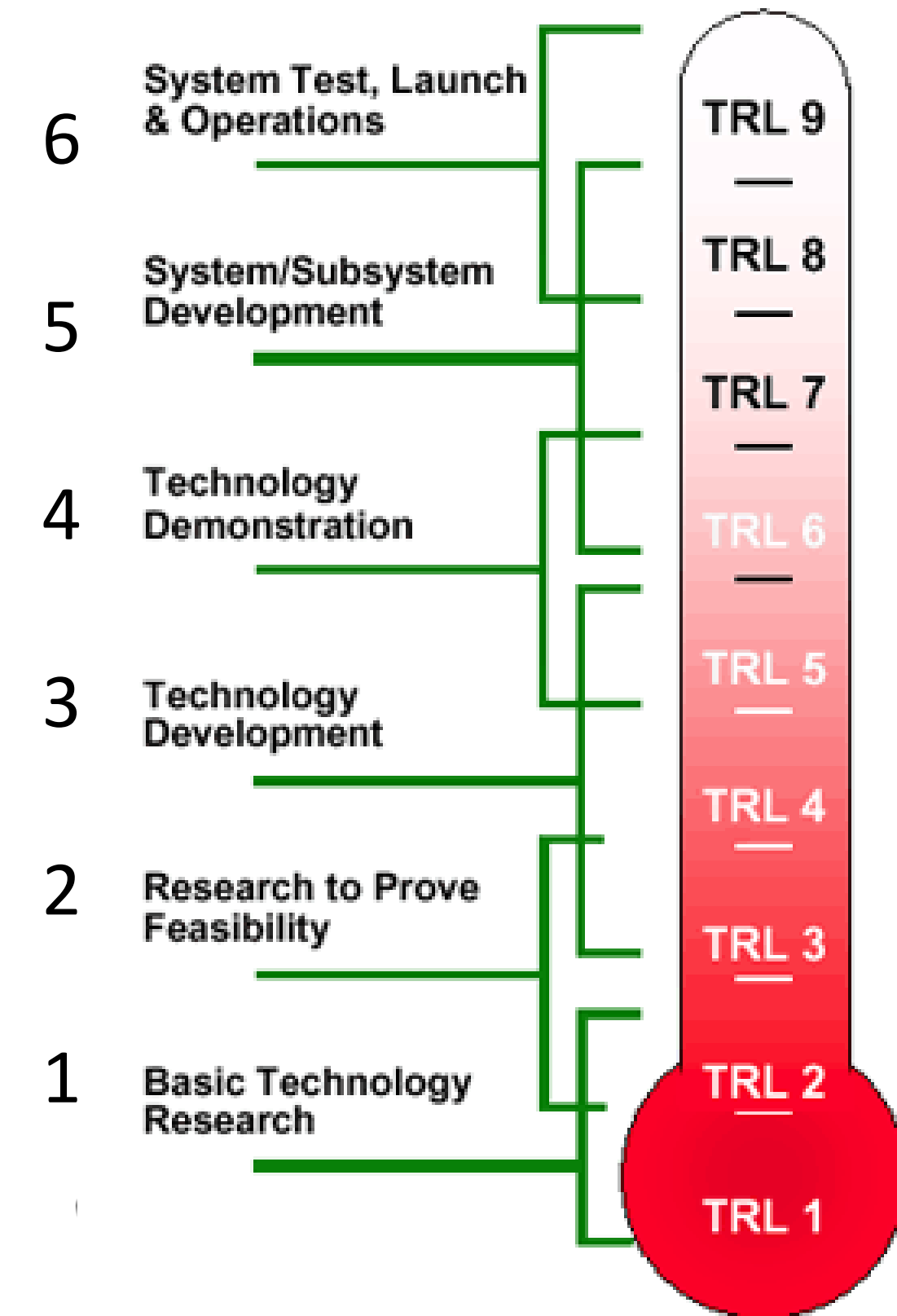
IMPACT ON THE BATTLEFIELD?



Technology trends for autonomous ground systems

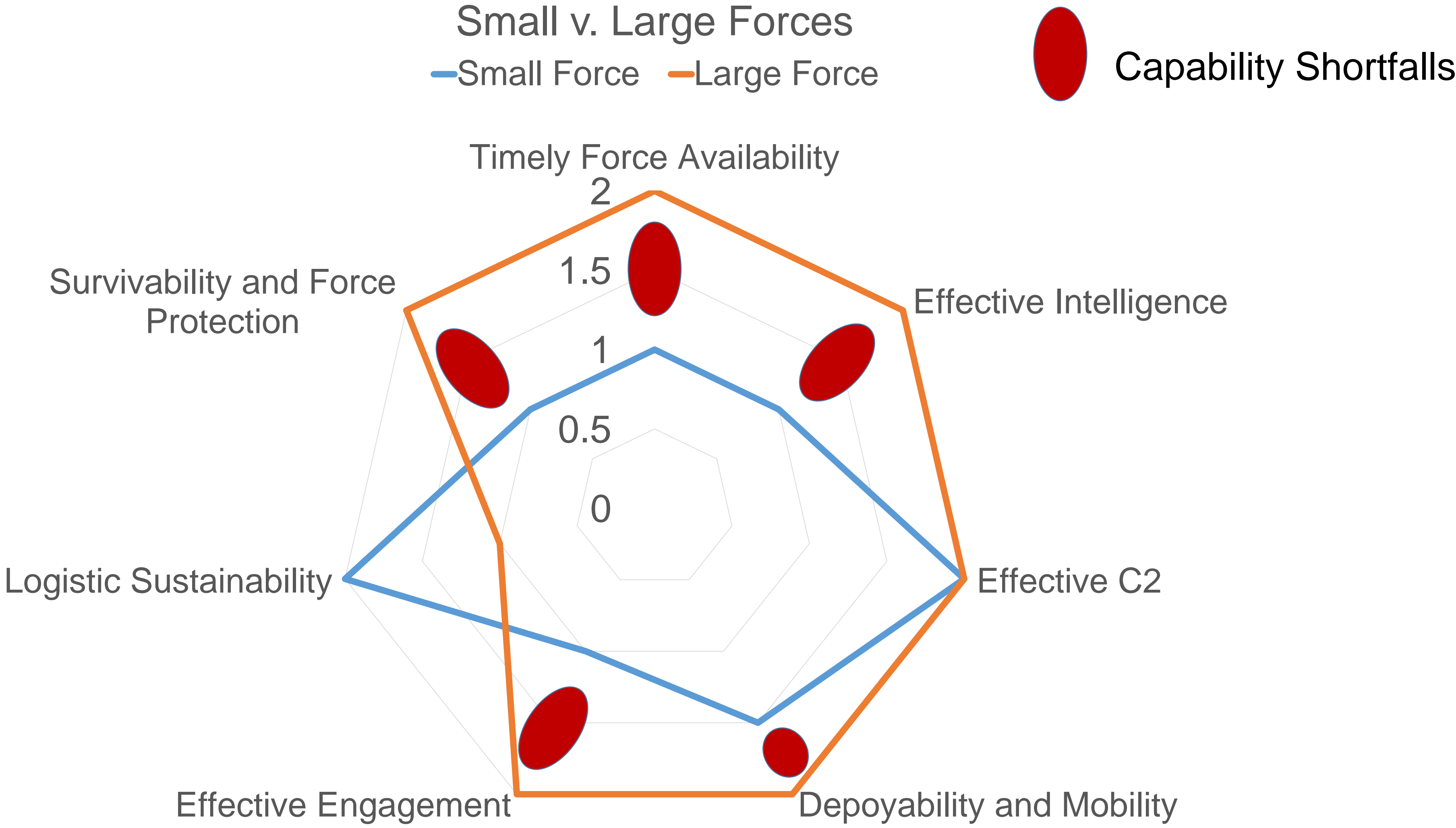


Scale for evaluation

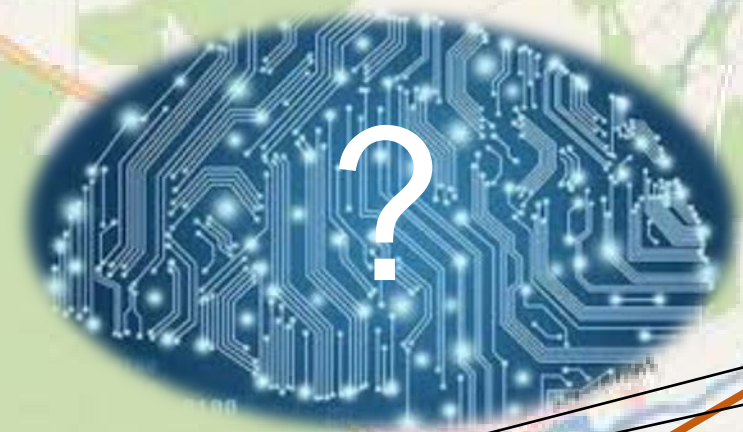


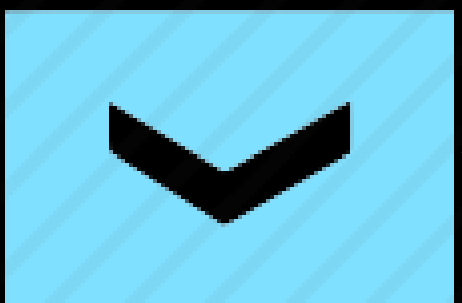
*Graphic illustrates generic trends. For type of environment semi-closed terrain is taken as bases for evaluation.

Small Forces *versus* large Forces



Preliminary observations of Unmanned Combat Systems with Autonomous Functions on light infantry capabilities and operations




Systems with
Autonomous
Functions

UGV

*Timely Force
Availability*

*Effective
Intelligence*

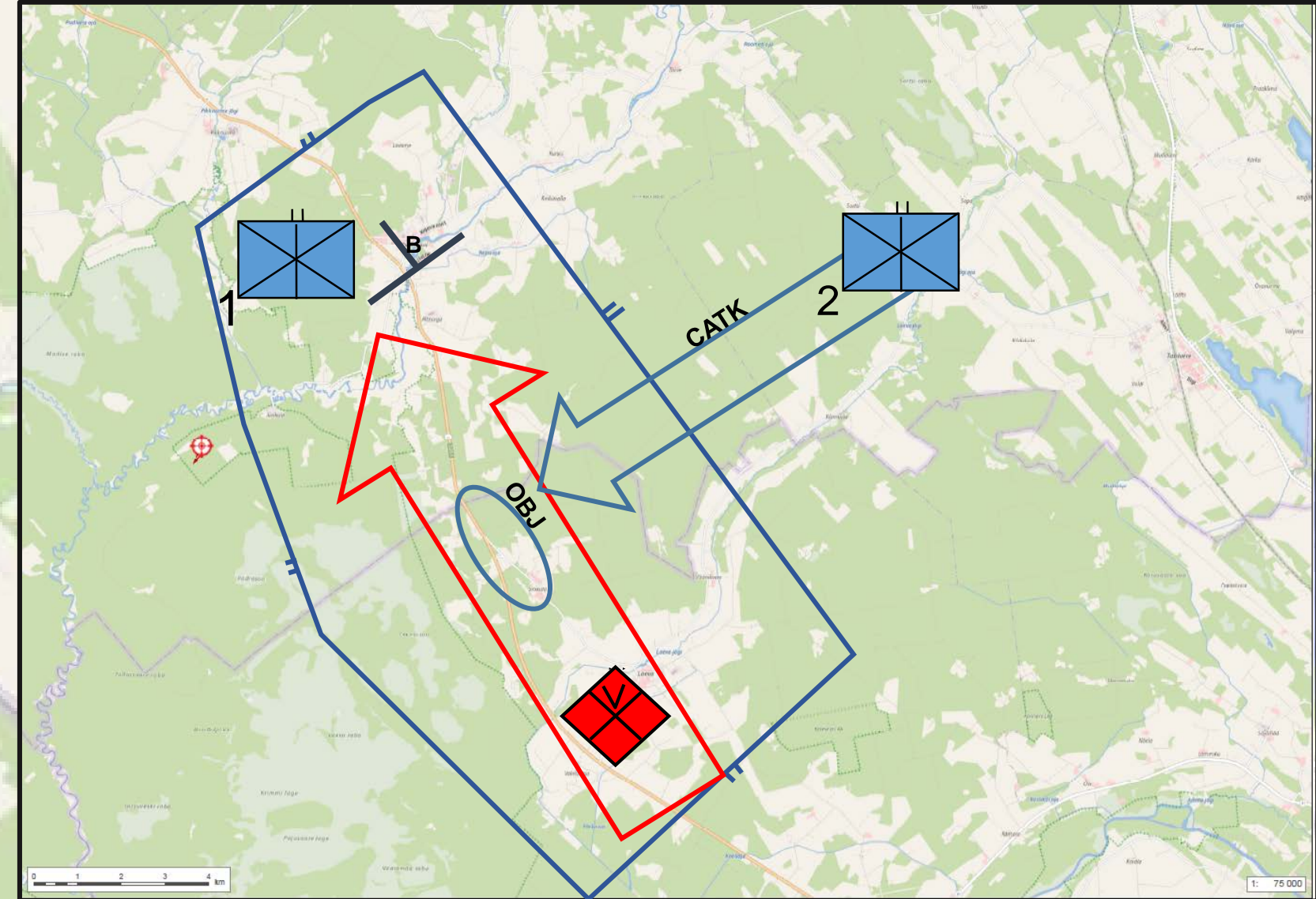
*Deployability and
Mobility*

Effective Engagement

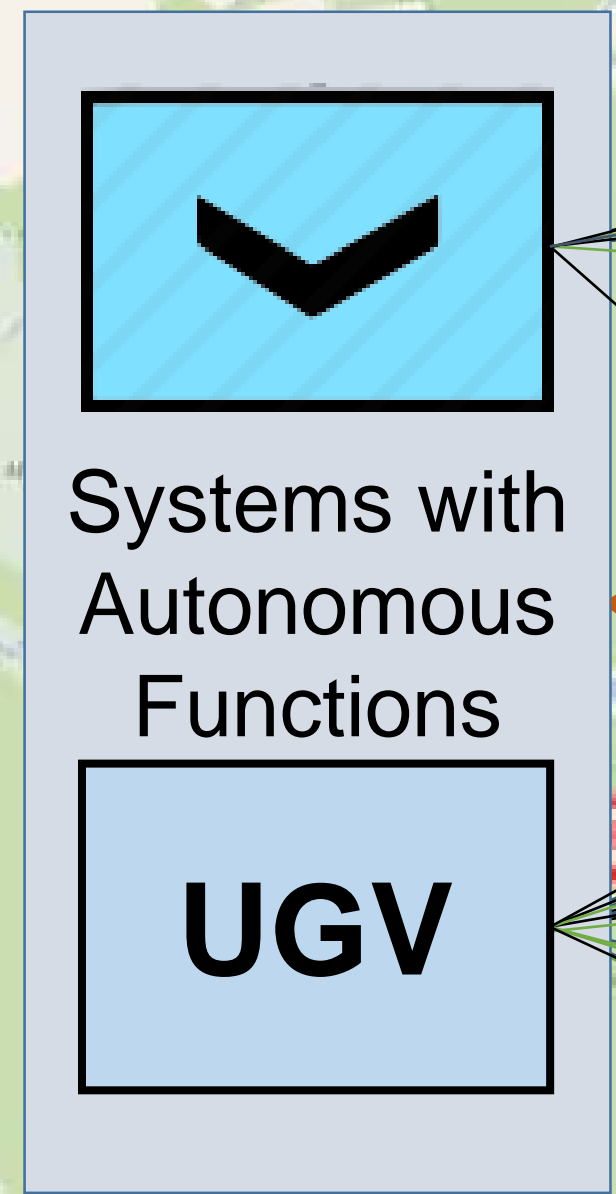
Effective C3

*Logistics
Sustainability*

Survivability and FP



Preliminary observations of Unmanned Combat Systems with Autonomous Functions on light infantry capabilities and operations



Timely Force Availability

Effective Intelligence

Deployability and Mobility

Effective Engagement

Effective C3

Logistics Sustainability

Survivability and FP

Increased Operational Tempo

Increased level of risk taking

Survivability

Endurance

Thank You!

