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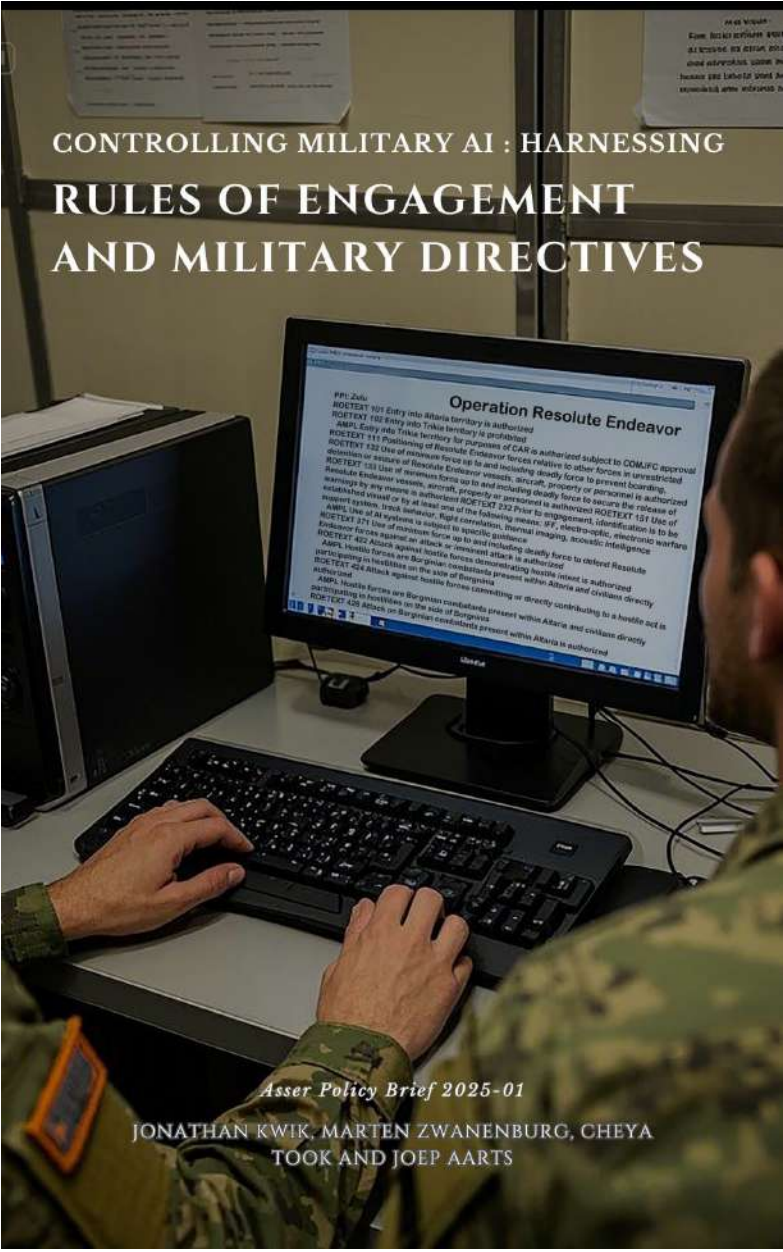


**ELSA LAB
DEFENCE**

Risks to IHL Compliance - A Technical, Operational and Institutional Perspective

Dr Jonathan Kwik

Centre for the Study of Military Law and the Law of Armed Conflict
Brussels, 25 June 2026



LEGAiD

[Grant award] LEGAiD: A Critical Study of AI Legal Assistants in the Military Domain

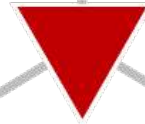
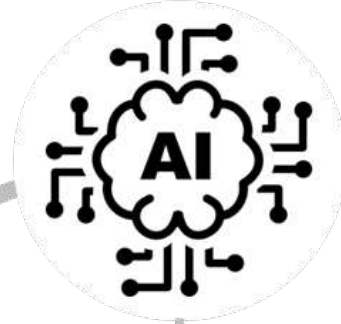
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COMPLIANCE RISK FRAMEWORK FOR EVALUATING THE LEGAL ACCEPTABILITY OF MILITARY AI SYSTEMS

JONATHAN KWIK AND MARTA BO

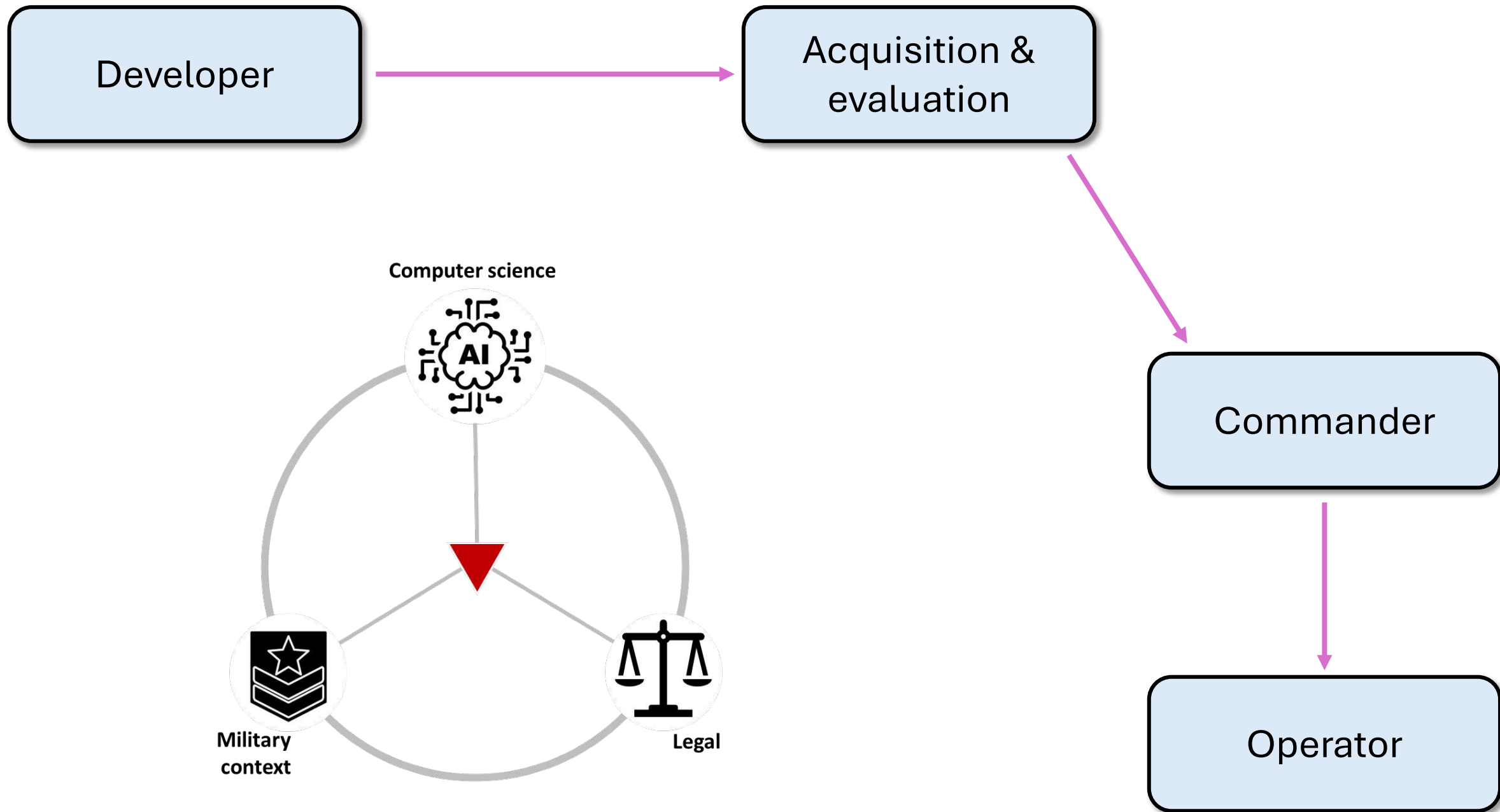
Computer science



Military
context



Legal



Problem 1: Abstract norms



Abstract norms for
technically-
complicated systems



What
technical/operational/
institutional factors to
consider?



Maladaptive reviews,
overlooking factors,
poor decisions,
bad communication

tension



Abstract principles,
many lack legal
expertise

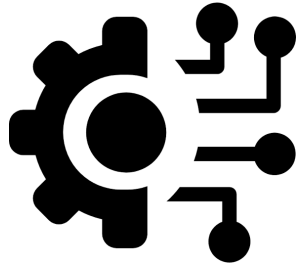


Difficulties in
translating IHL into
concrete specifications



Poor investments,
difficulty planning,
IHL-noncompliant
features/specifications

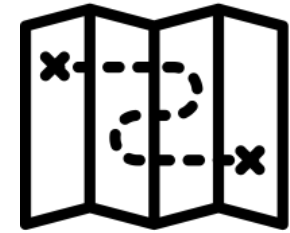
Problem 2: Context-dependence



Performance metrics
AI model training process
Data used
Interface design
Updating, modifications



Objective
Type of operation
Operator conditions
Doctrine, procedure
Institutional culture

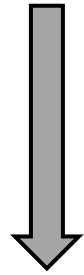


Type of environment
Rate of change
Presence of civilians
Interconnectivity
Adversary activity

Problem 2: Context-dependence

Statement:

If an AI-system cannot distinguish, it is unlawful



Counterpoint:

BUT IF... it is used in a desert?



Developer

What factors might become requirements set by your customer?

Acquisition &
evaluation

What factors should you evaluate?
How do you communicate this to your developers?
What limitations should you set for your operators?

Commander

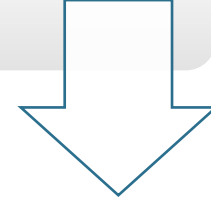
Operator

What factors should you take into consideration when making an operational decision?

Provide an **accessible, common frame of reference** on factors relevant for legal compliance, and provide a **shared vocabulary and understanding** of complicated technical and operational concepts.

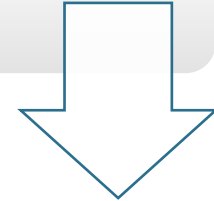
Norms

- What are the high-level norms that govern conduct?



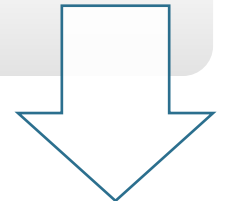
Variables

- What legally-relevant factors can be identified?



Evaluation

- How to you evaluate them?



Relationships

- How do they relate to other variables?

A large, bold, red capital letter 'D' with a slight 3D effect and a shadow.

distinction

A large, bold, brown capital letter 'C' with a slight 3D effect and a shadow.

civilian harm

A large, bold, purple capital letter 'E' with a slight 3D effect and a shadow.

**epistemic,
process-based**

ENVIRONMENT



Civilian
Presence



Changing
Environment



Environment
Complexity



Adversarial
Threat

TARGETS & ID



False
Positive



False
Negative



Confidence
Threshold



Target
Proxy



Bias



Civilian
Detection



Status
Fluidity

AWARENESS



Contextual
Awareness



Feedback
Loop



Understand
-ability



Technical
Knowledge

SAFETY



Input Data



System
Security



System
Safety

EFFECTS



Intended &
Likely Effects



Possible & In-
direct Effects



Unpredict-
able Effects

INTERACTION



Intervention
Ability



Out-of-
Scope Use



Modification

DEVELOPMENT



Training
Data



Engagement
w/ Developer



Repurposing



RISK

RISK

RISK

D

Causes **performance drop**

- Reduces reliability in **distinguishing targets** from protected persons/objects
- Violates **Principle of Distinction**



C

Causes **performance drop**

- Reduces reliability in **identifying collateral concerns**
- Violates **Principle of Proportionality**



E

Becomes **difficult to foresee** when major behaviour/performance shift is induced

- **Prevents reasoned & informed decisions** from being made
- Violates **Precautionary Principle**

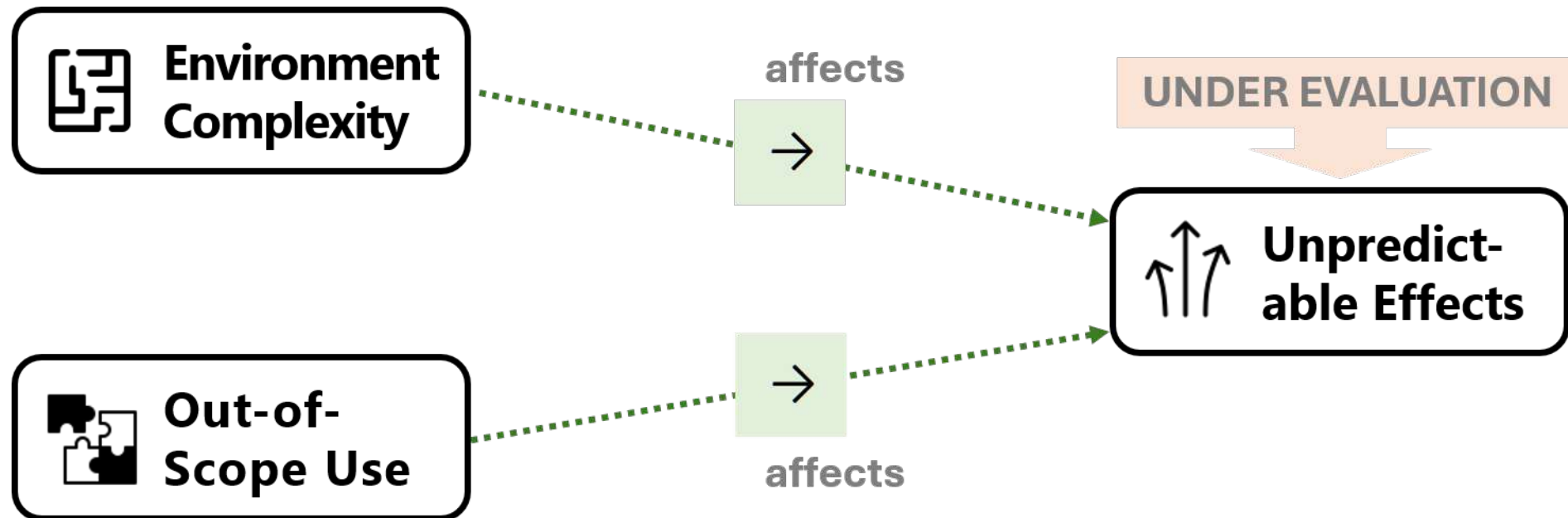




<i>Reporting structures</i>	Comprehensive	Relatively comprehensive	Partial	Minimal	None
AND					
<i>Reporting frequency</i>	Constant	Frequent	Often	Rare	Never
AND					
<i>Reporting promptness</i>	Instant	Short delay	Moderate delay	Long delay	Significantly delayed

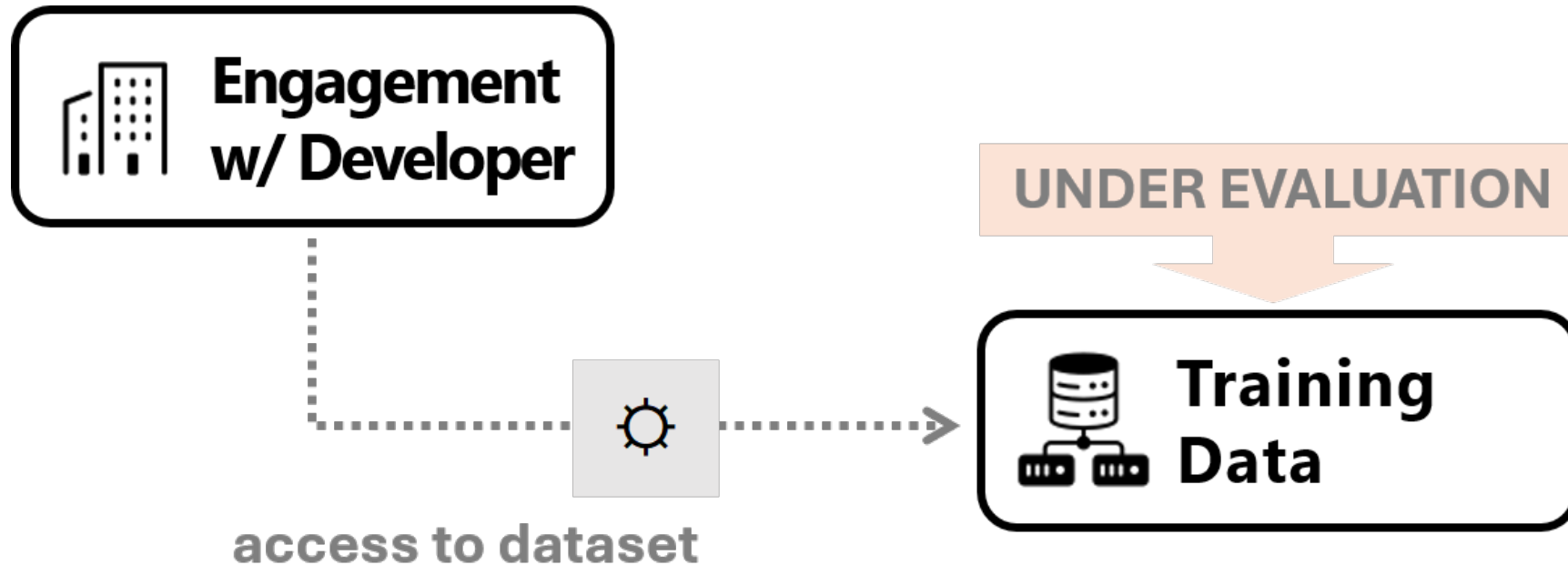
Relationships 1

Correlation & causation



Relationships 2

Necessary to be able to evaluate



Relationships 3

Dangerous combinations



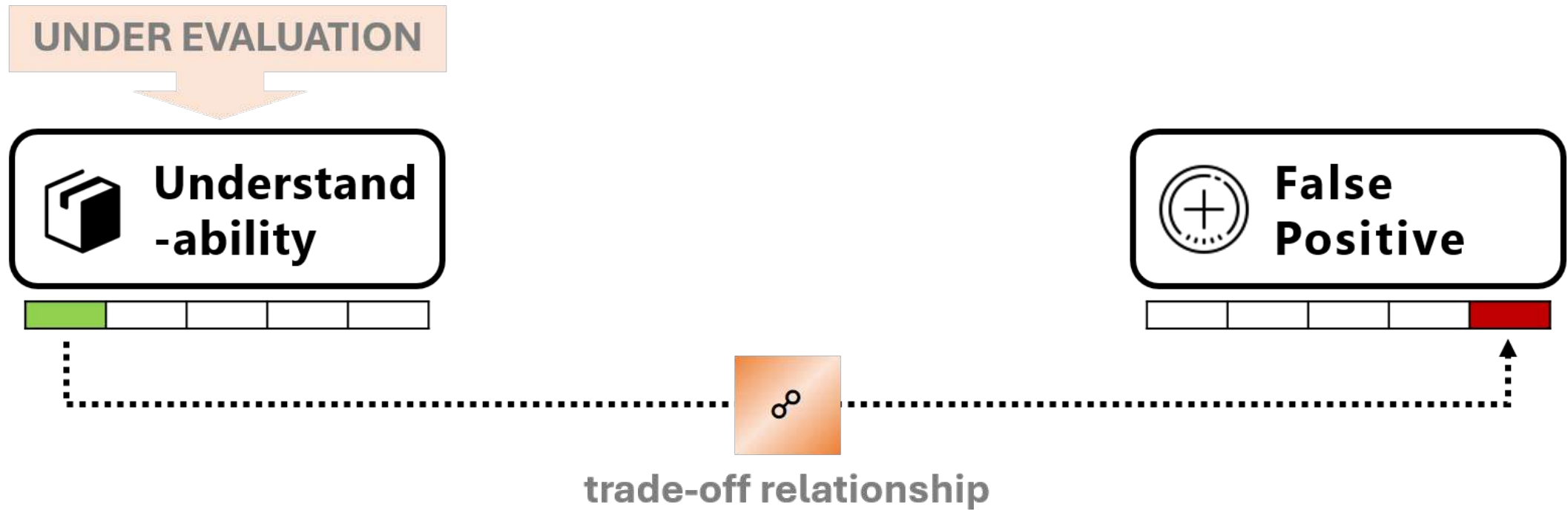
Relationships 4

Critically dangerous combinations



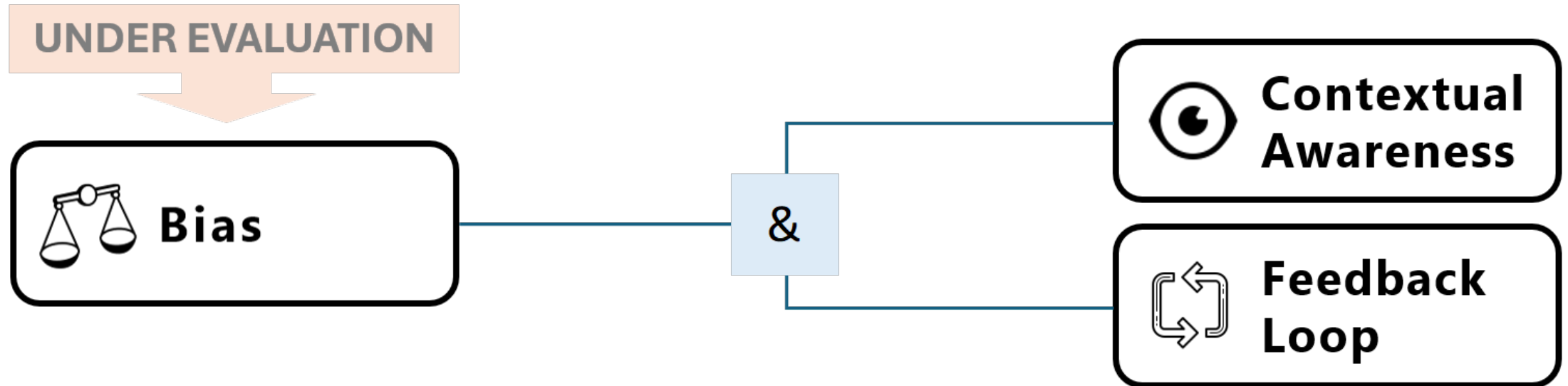
Relationships 5

Trade-offs



Relationships 6

Complementary variables



You can also access via

extranet.asser.nl/elsalab/SEC.aspx



System Security

-  Civilian Presence
-  Environment Complexity
-  Intended & Likely Effects

MITIGATIONS

?

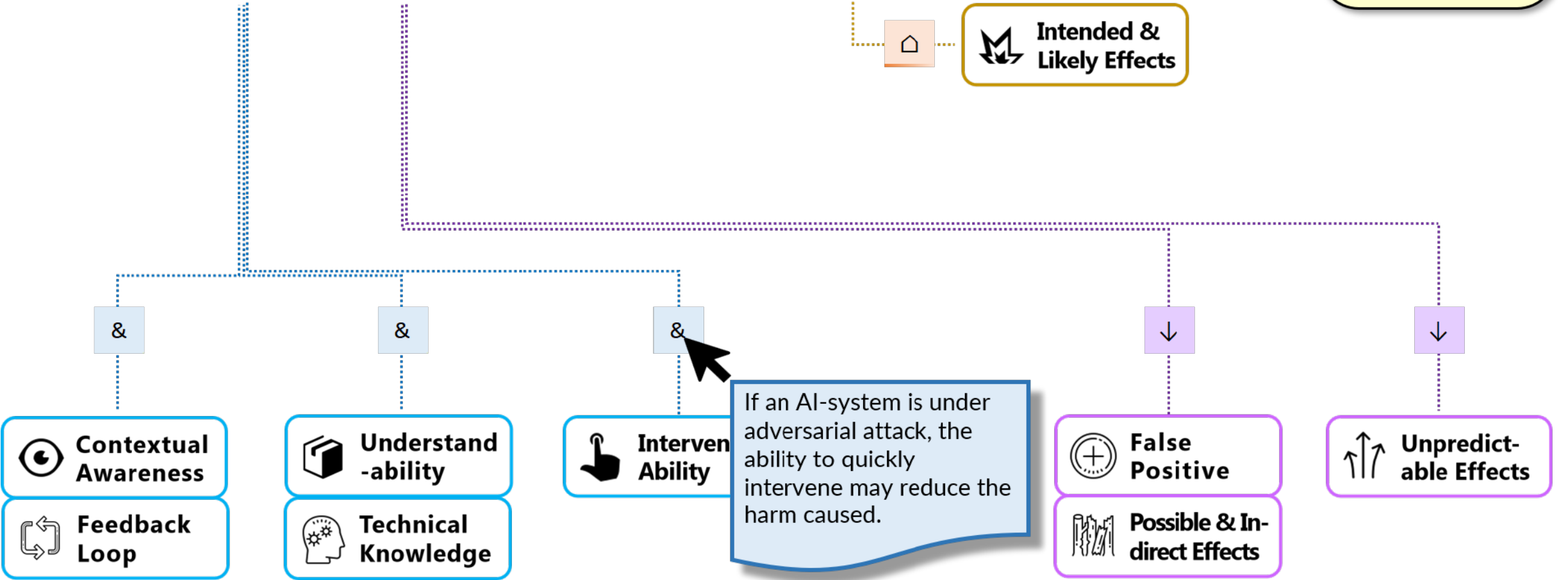
Model/data security

?

Comms security

?

Rapid response



Reporting structures

Comprehensive	Relatively comprehensive	Partial	Minimal	None
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AND

Reporting frequency

Constant	Frequent	Often	Rare	Never
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AND

Reporting promptness

Instant	Short delay	Moderate delay	Long delay	Significantly delayed
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How significant the delay is between the impact and users being able to notice this impact. May also depend on the technical structure of the reporting process. See ¶4.

Discussion & feedback

- Any **questions** about the toolkit?
- Any feedback you can provide?
 - **Additional features/functionalities** you think might assist in your work
 - What could **improve the usefulness** of the toolkit further?
- Would **MOD be potentially interested** in using this?
 - Launch open access: Q4 2026
 - How can we facilitate this?

Thank you!

Dr Jonathan KWIK

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