University of HUDDERSFIELD

Spanning the gap between crime, terrorism and security – developing a toolkit for complex stations

ECCA 2018 Elche, Spain

Paul Ekblom & Andrew Newton (presenters)

Applied Criminology & Policing Centre,
University of Huddersfield, UK

Full project team: Rachel Armitage, James Bray, Kris Christmann, Paul Ekblom, Eloise Keating, Leanne Monchuk, Andrew Newton, Simon Parkinson, Michelle Rogerson and Daiyaan Shreef

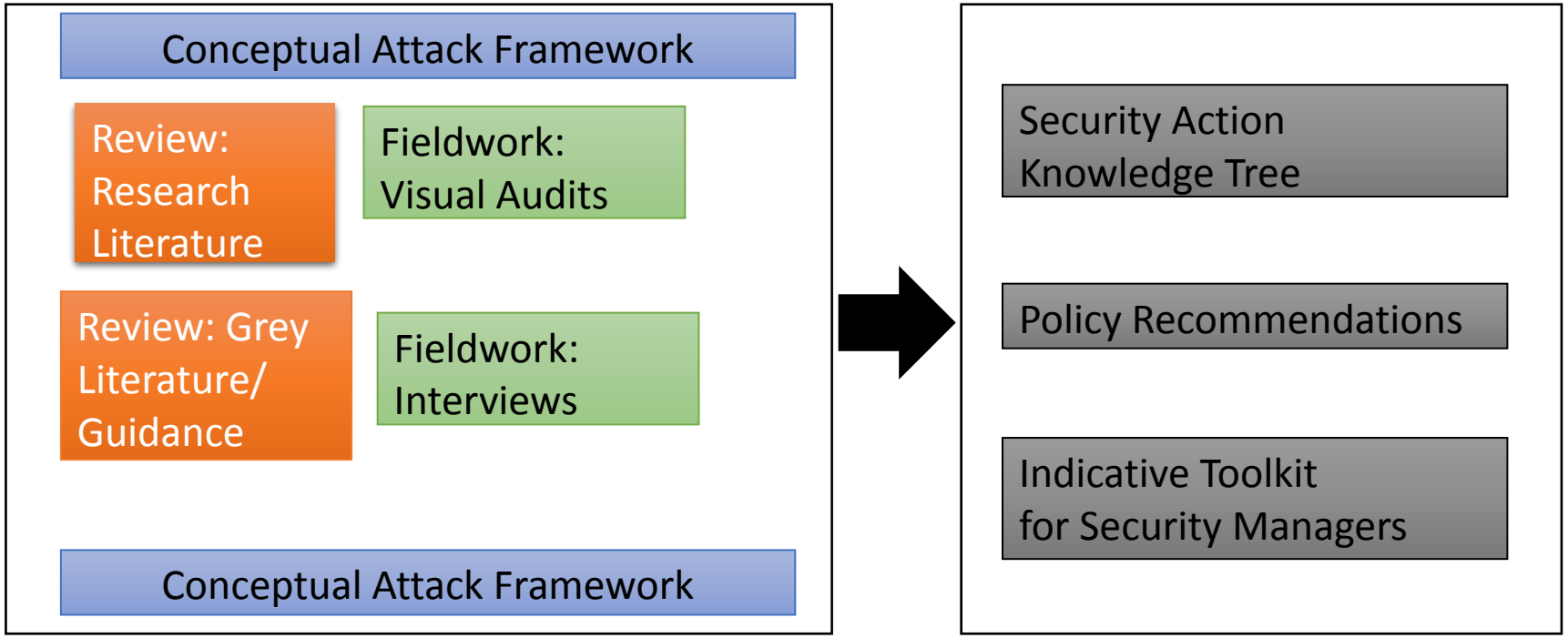
History: Project Pre-Empt 1

- In 2014, EU DG Mobility & Transport asked us to identify ‘best practice’ solutions to secure complex stations from terrorist attacks and serious crime
- Developed an approach based on Mixed Methods and a practically and Scientifically Realistic approach to knowledge

Conceptual Attack Framework

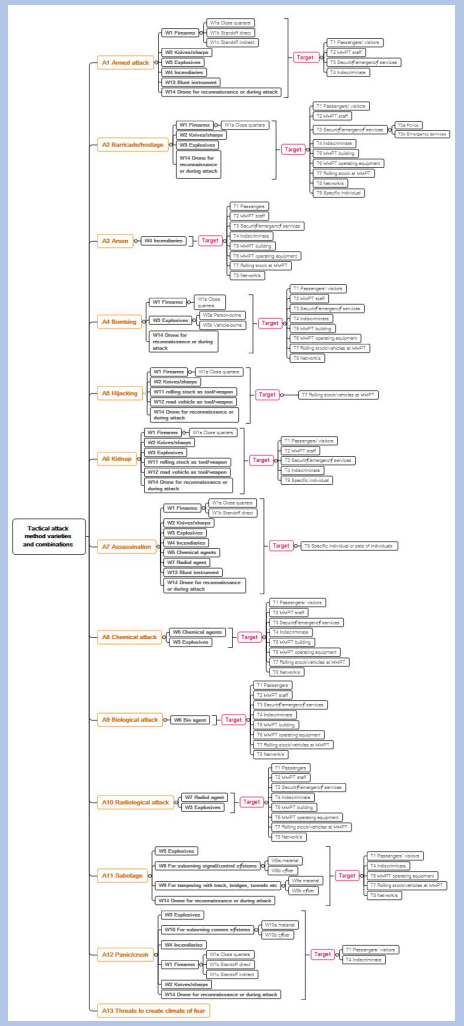
University of HUDDERSFIELD

- Mapped out theoretically plausible **attacks:** ***Methods – Weapons – Targets – Scripts***
- Mapped theoretically plausible **security responses**
- Organised detailed **findings** from literature, fieldwork on **knowledge trees**
- All brought together under a **conceptual attack framework**

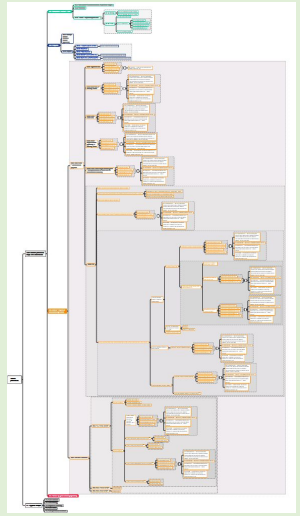


Conceptual Attack Framework – based on CCO and 5Is

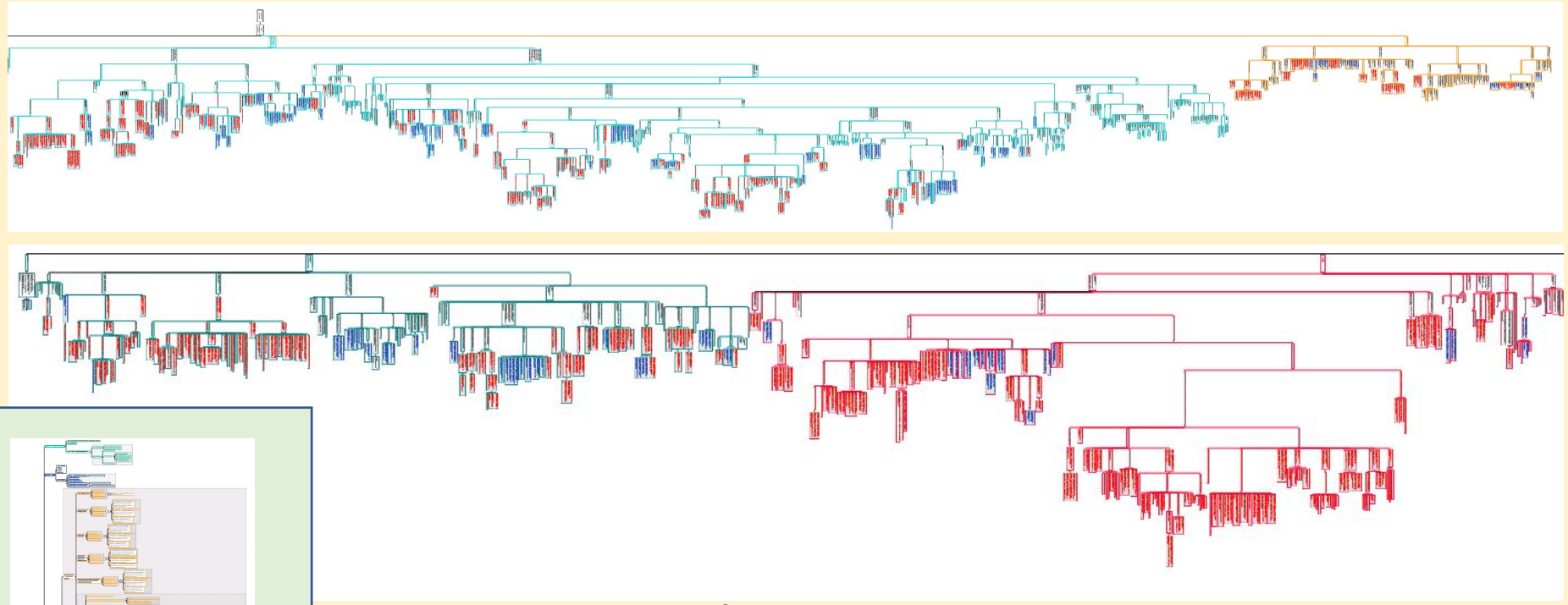
University of HUDDERSFIELD



Tactical Attack Methods



Attack Procedure



Research/Practice Findings:
130+ from Fieldwork and 200+ from Realist Review

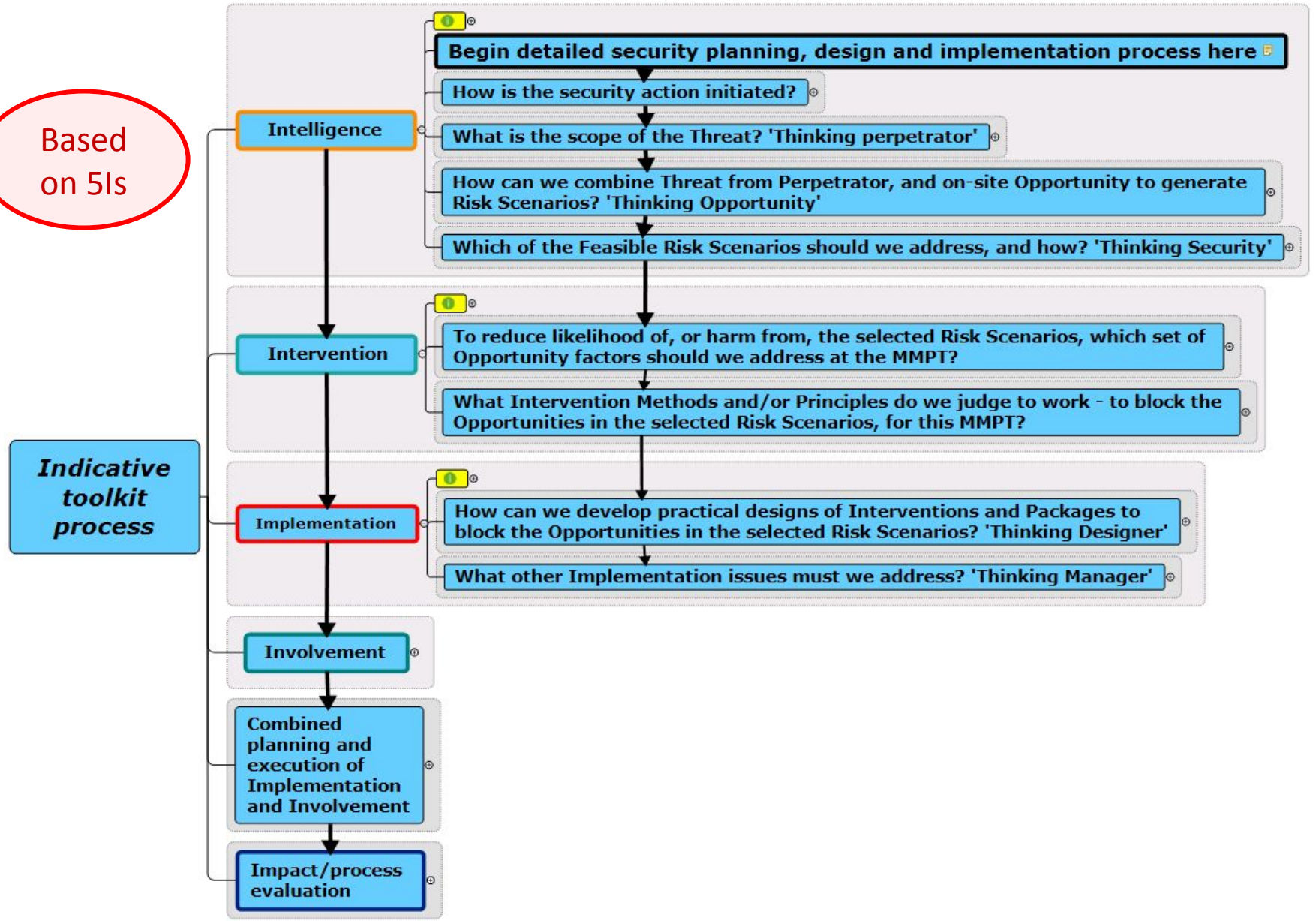
Toolkit approach

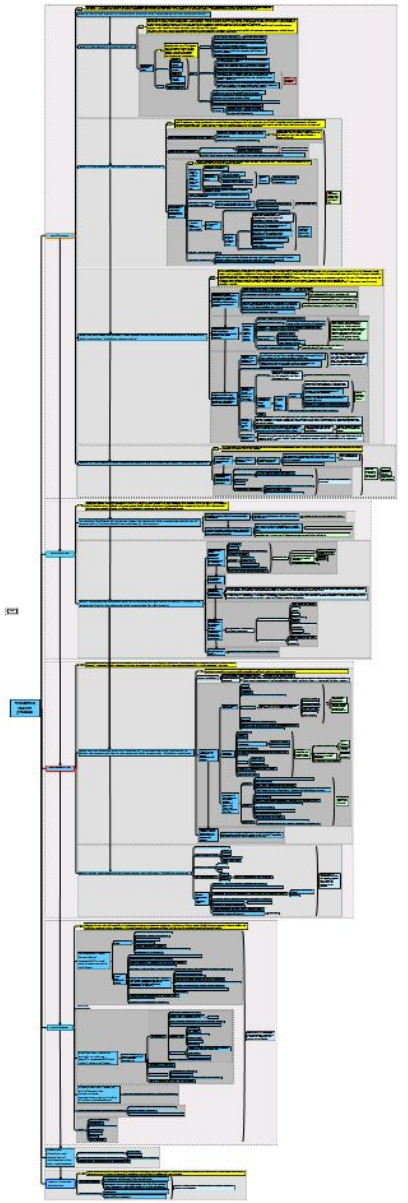
- **The approach to the toolkit was to develop a process which empowers users to:**
  - Think **perpetrator**, and think **threat**
  - Think **risk** for terrorism/crime, generated by design and operation of the station
  - Think **security** – prevention and first response (Protect and Prepare)
  - Think **designer**, and the wider requirements for business, users and society
  - Think **manager**
  - Think **future** – resilience and adaptability in the longer term
- Toolkit had to be adaptable to diverse user levels, contexts, functions

Indicative Toolkit – where Phase 1 ended

University of HUDDERSFIELD

Based on 5Is





Pre-Empt 2 (2017-18) – Toolkit Realisation

University of HUDDERSFIELD

- As per Indicative Toolkit but:
  - Fully interactive
  - Terrorism PLUS multiple crime types
  - In 15 EU languages
  - Adding local regulatory context
  - In 11 months
- FFS!!!

At the Heart of the Toolkit - work in progress

University of HUDDERSFIELD

Reducing **risk** by matching **security actions** to the **threat**

At the Heart of the Toolkit - work in progress

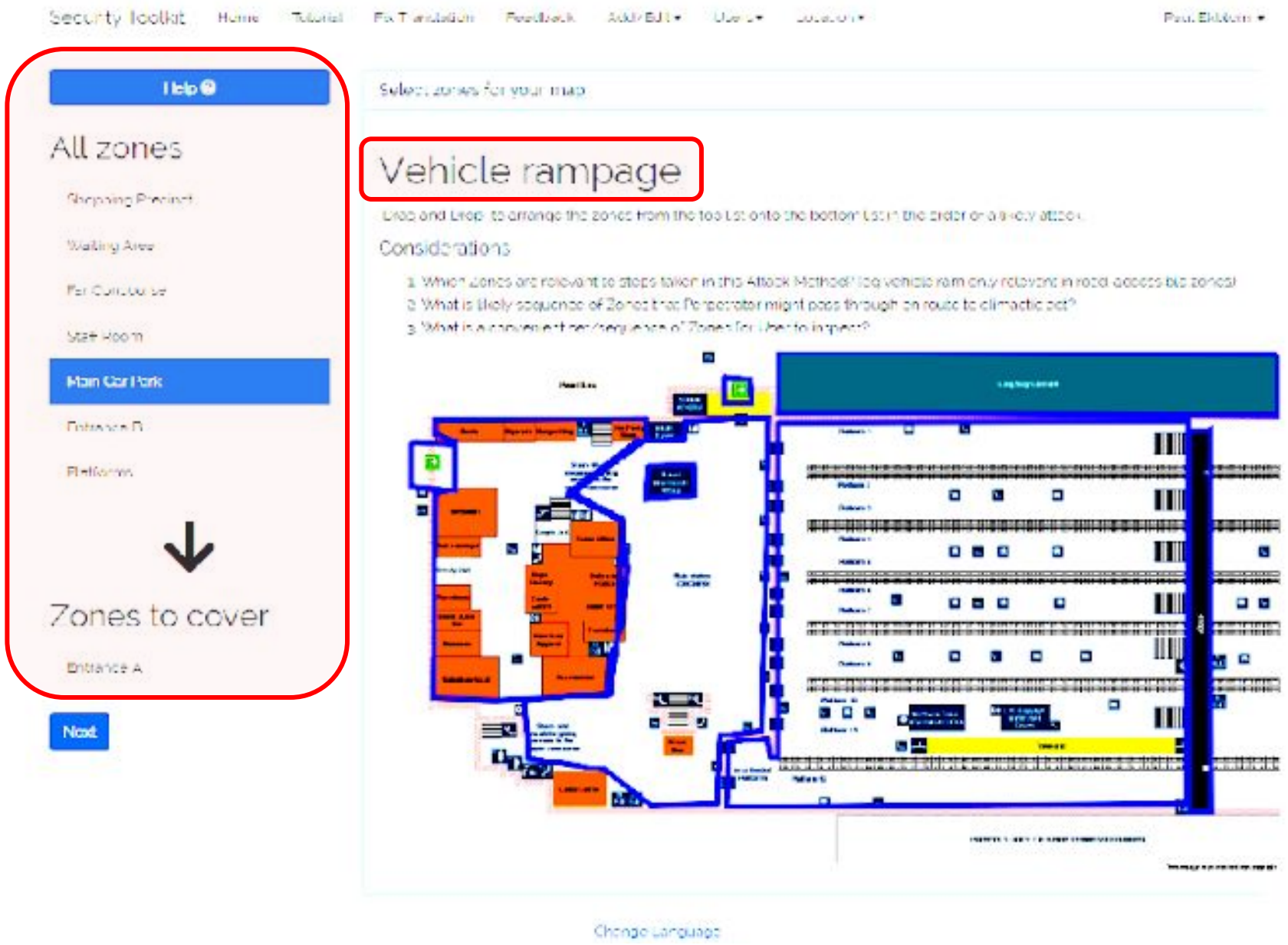
University of HUDDERSFIELD

Reducing risk by matching security actions to the threat

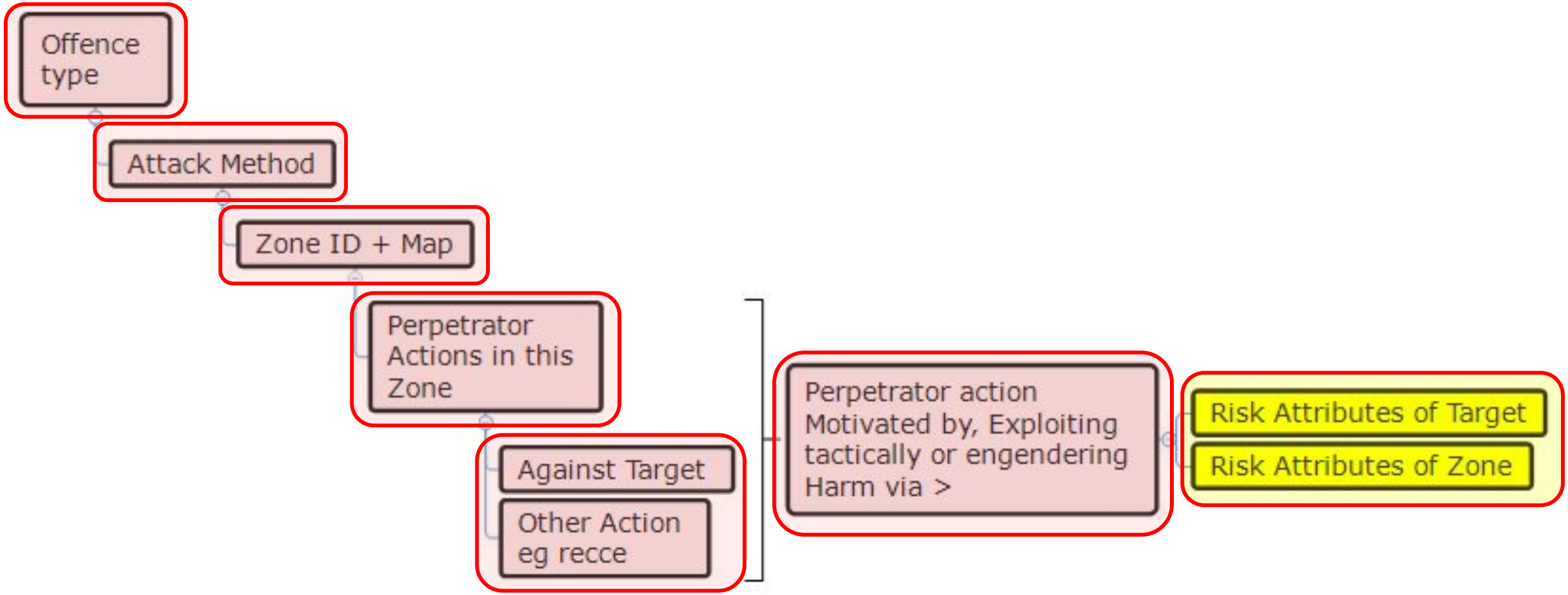
Done on an **Attack Method** x **Zone-by-Zone** basis across station

University of HUDDERSFIELD

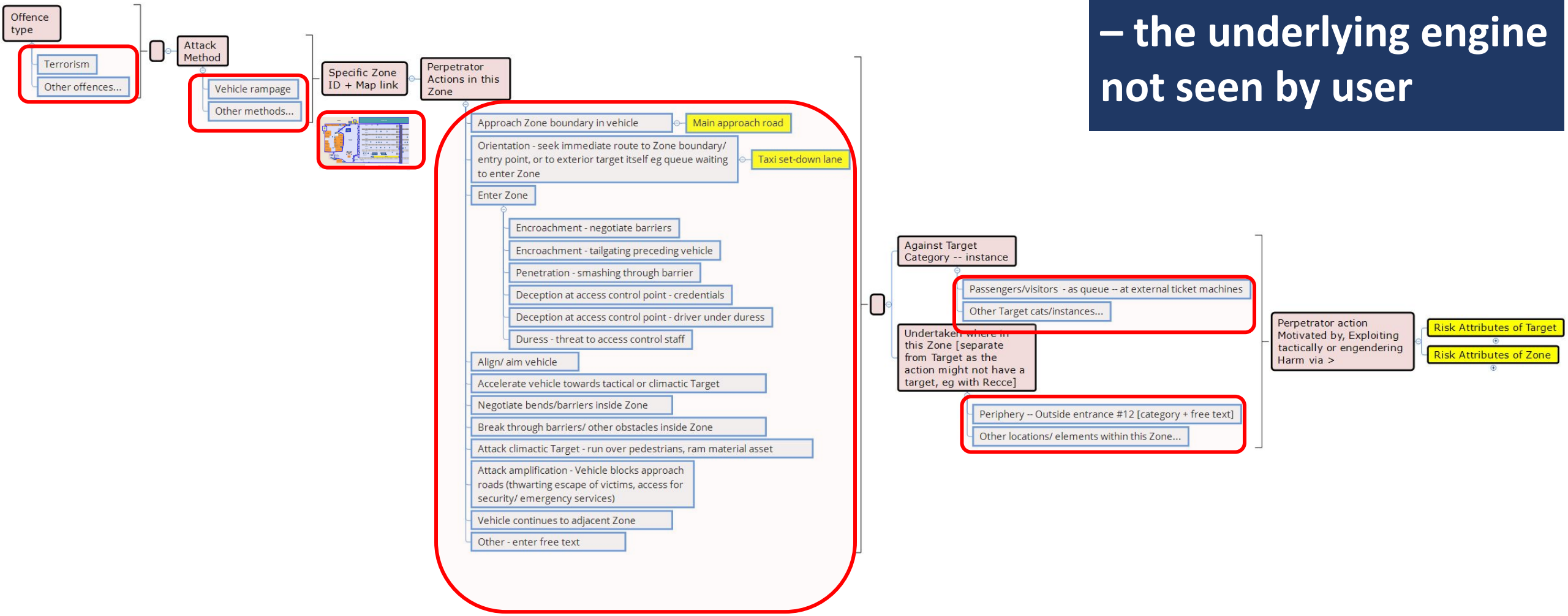
- Users focus on a single **Attack Method** at a time
- Users can create **Zones** within the station that are relevant to this Attack Method, and work through these in sequence



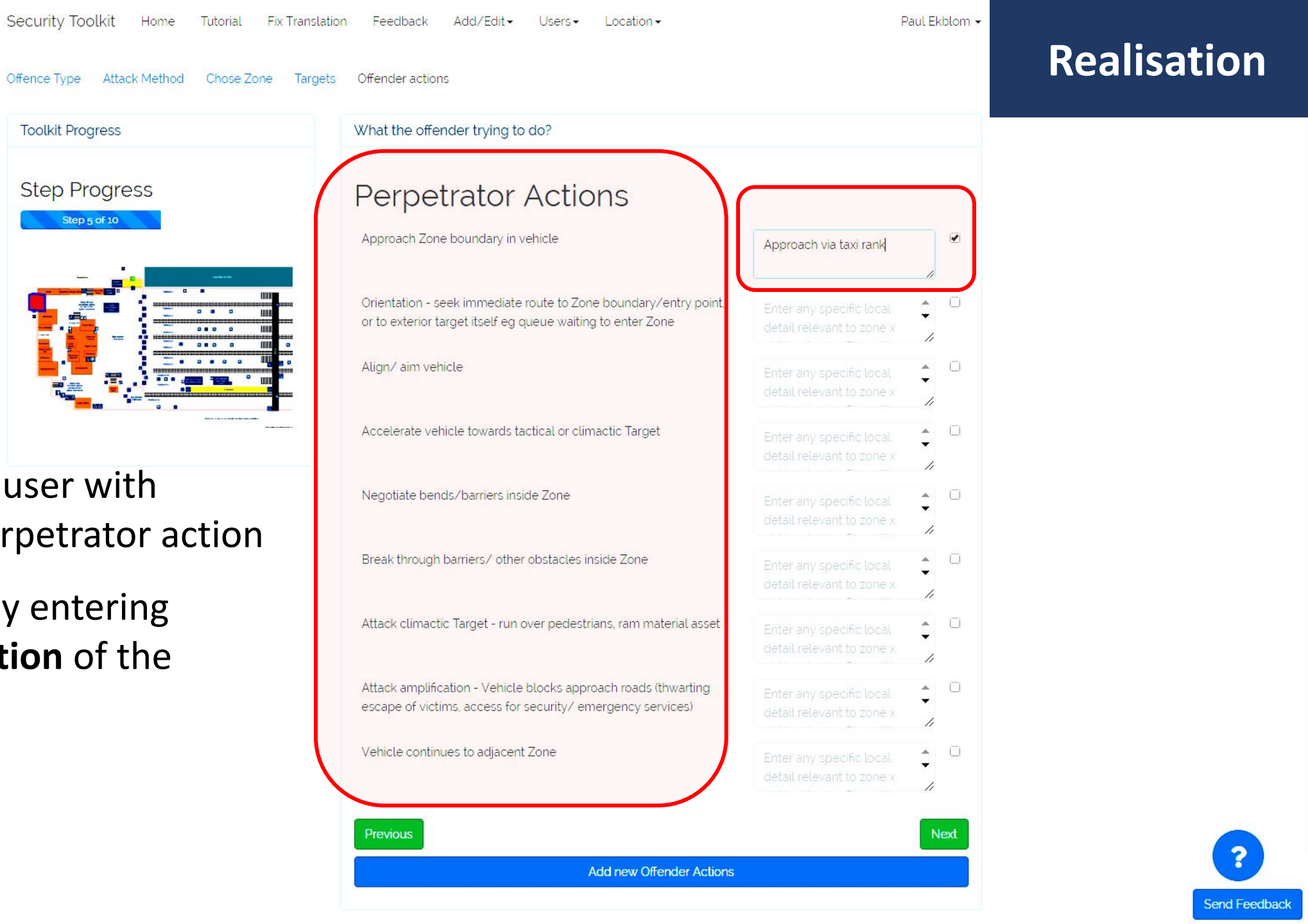
What is the Threat? Think Perpetrator



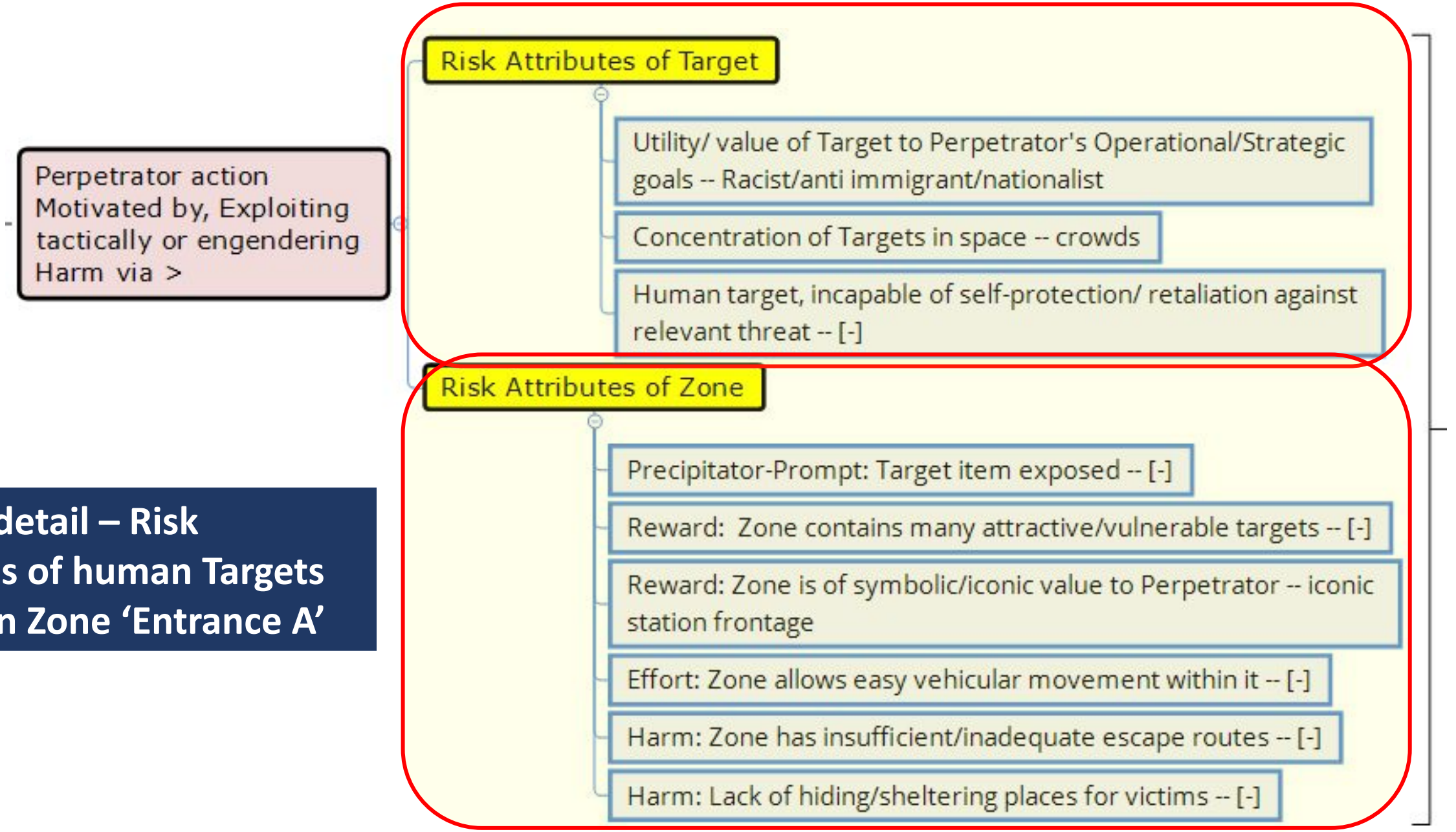
In more detail – Threat – the underlying engine not seen by user



Realisation



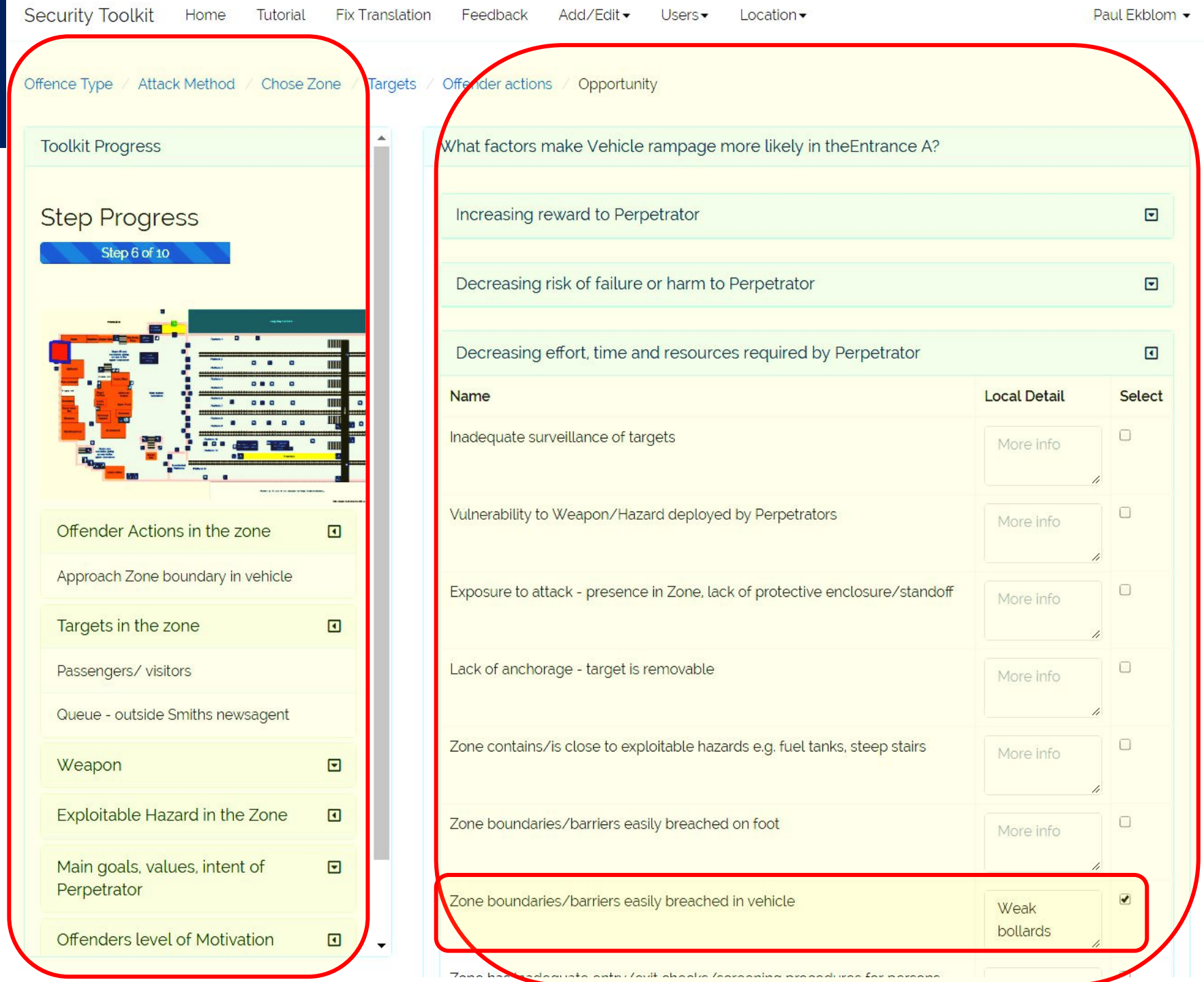
- Toolkit prompts user with **categories** of Perpetrator action
- User responds by entering a local **instantiation** of the action



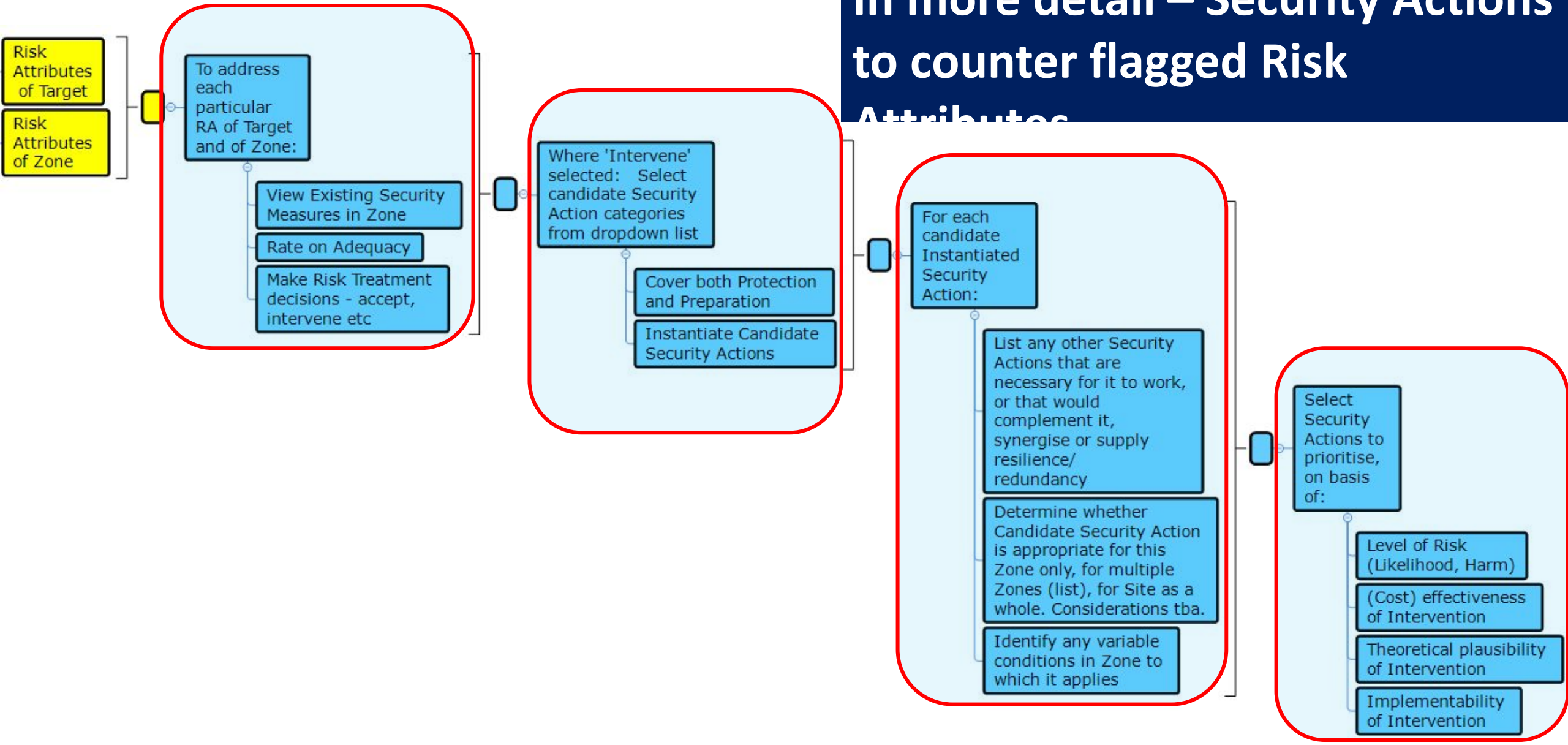
In more detail – Risk attributes of human Targets located in Zone 'Entrance A'

Realisation – Zone Risk Attributes

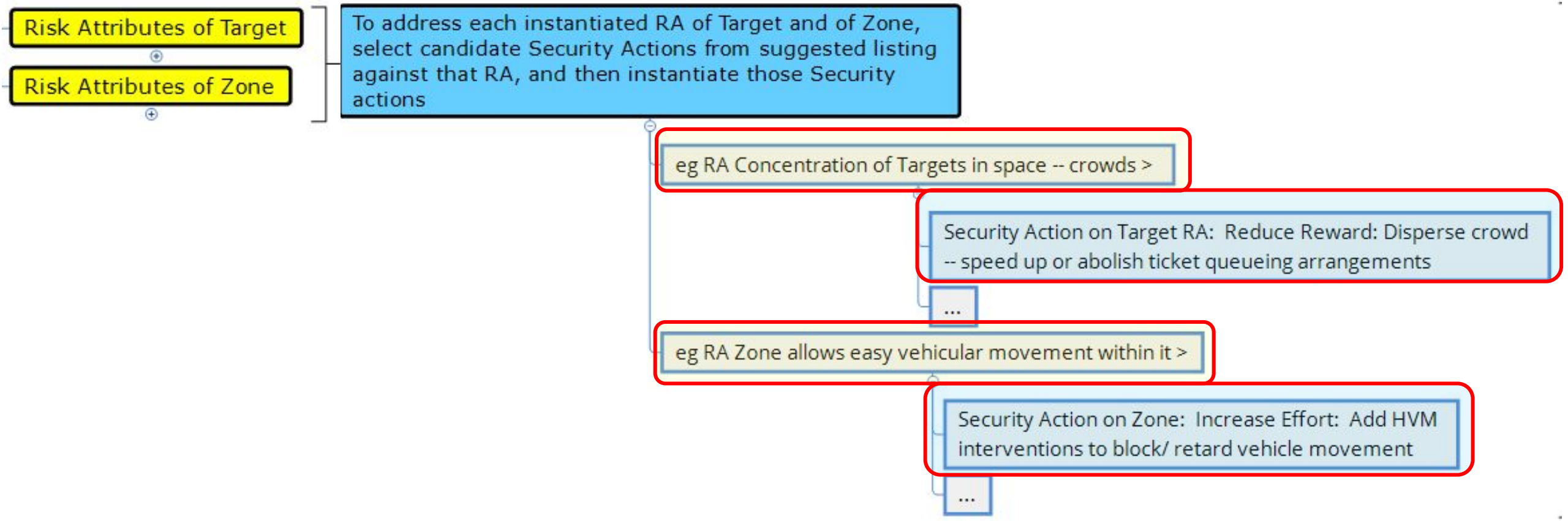
- This records user's choices in **planning for Offender's actions, targets, weapons, exploitable hazards; intent and level of motivation**
- This presents list of pre-prepared **risk attributes of Target & Zone**, for the **Attack Method** in question – user checks those which apply and fills in box with local detail



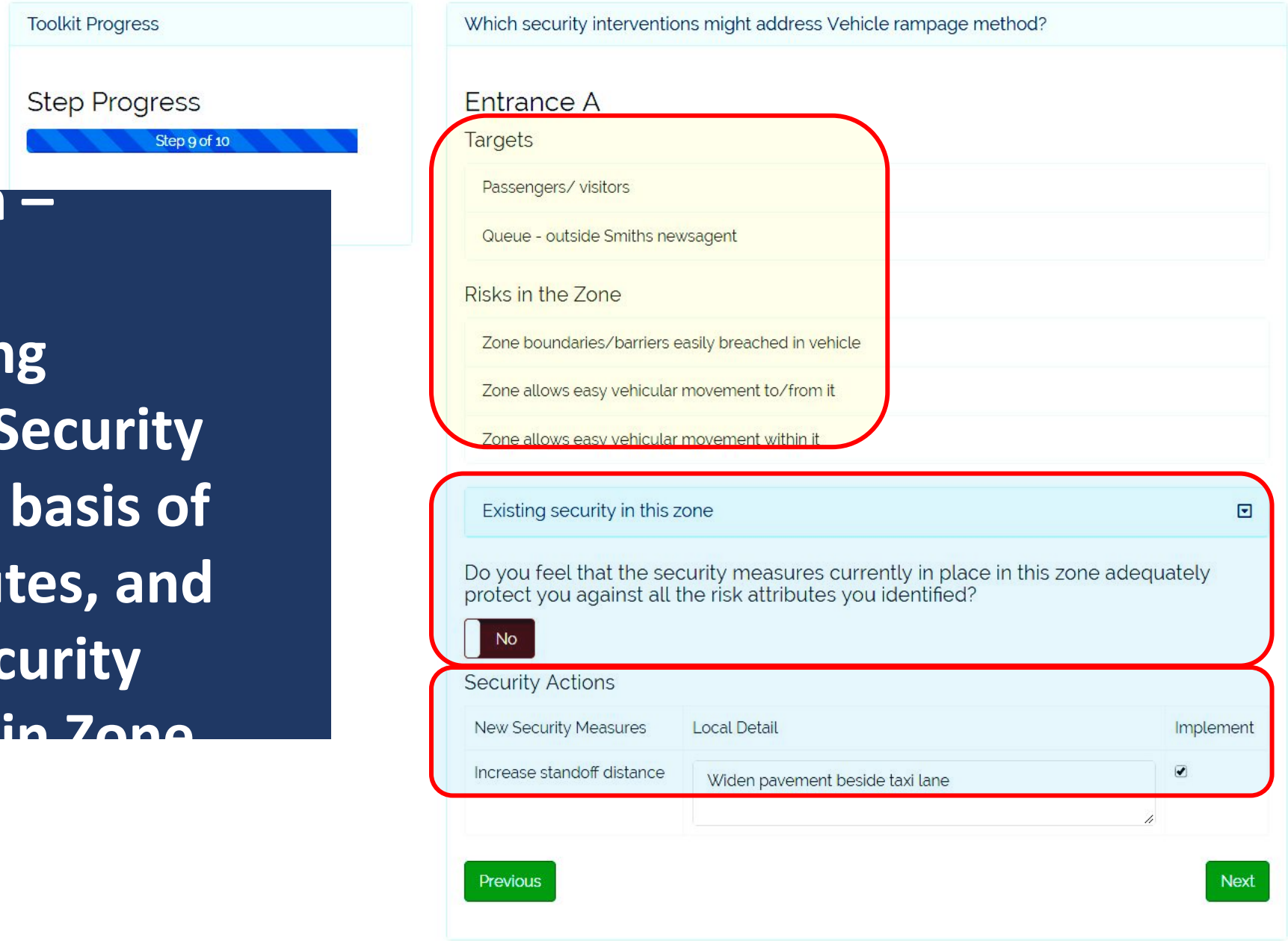
In more detail – Security Actions to counter flagged Risk Attributes



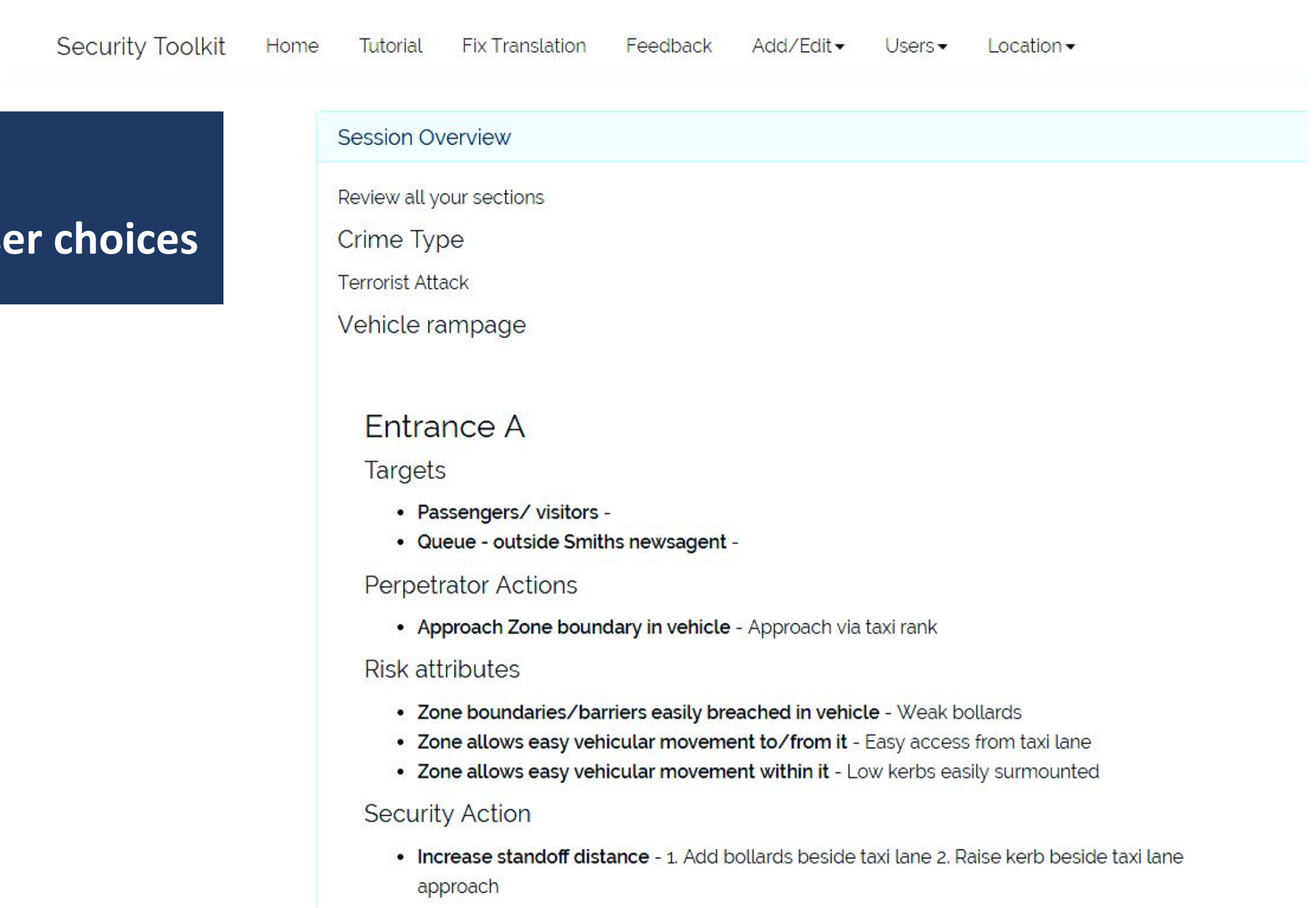
Example – Instantiated Security Actions to counter instantiated Risk Attributes



Realisation – Selecting/ instantiating candidate Security Actions on basis of risk attributes, and existing security measures in Zone



Realisation – Summary of user choices



Issues still to develop

- Selecting candidate security actions
  - Effectiveness, Evidence, Harm, Prioritisation, Cost
- Which is us when project finished?

Selecting security actions to implement

Selecting security actions to implement