

Counterterrorism and Crime Prevention at Complex Stations

Key relationships in the Glossary

2016

Inspiring tomorrow's professionals



The need for a Glossary

- An area as complex, detailed and technical as security has to define terms and develop a **controlled vocabulary**:
 - To aid learning and comprehension by end users
 - To aid communication and collaboration in a multidisciplinary, multiagency and multilingual context
 - For efficient storage and retrieval of information
 - For developing future applications that are mutually consistent and build on the current one
 - To help synthesise information acquired during research and to coordinate the teamwork
- Two considerations have amplified this requirement
 - The deliberately conceptual approach taken in the current project given the dearth of rigorous empirical studies
 - The sheer diversity of terms encountered, and of meaning assigned to each term, in the literature and in practice

Security Glossaries: prior art

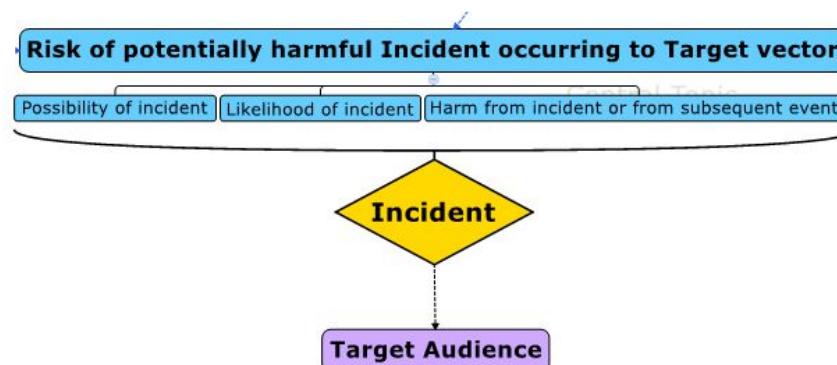
- Several well-developed glossaries exist.
 - The most developed one is the Risk Lexicon of some 60 terms by the Department of Homeland Security (DHS) at www.dhs.gov/xlibrary/assets/dhs_risk_lexicon.pdf
 - The very recently published British Standard on Security Management (BS 16000) <http://shop.bsigroup.com/ProductDetail/?pid=00000000030285866> contains a glossary drawing on/consistent with earlier British Standards and ISO 31000 – the more general international Risk Management Standard
 - Other glossaries/definitions consulted include
 - The Securestations report www.securestation.eu/documents/securestation_d3_1.pdf
 - The Haddon Matrix for injury prevention e.g. <http://injuryprevention.bmj.com/content/4/4/302.extract>
 - UK CT strategy, CONTEST
www.gov.uk/government/uploads/system/uploads/attachment_data/file/97994/contest-summary.pdf
- Drawing on prior art is preferable, but
 - These existing glossaries differ from one another in significant ways, e.g. over 'hazards' or 'risk assessment'
 - None extends to cover the concepts we have imported from crime science and which we consider vital to understanding what works in what context, and how to implement it
 - We have not (yet) incorporated any specialised terminology for land transport, though this is subject to review

A new Glossary

- We have therefore developed our own glossary:
 - Which links as much as possible to these prior ones
 - But which endeavours to resolve differences and inconsistencies between them and also to connect security with crime science concepts, theory and research
- The crime science connection – which we think is the first of its kind – is principally via two frameworks:
 - The Conjunction of Terrorist Opportunity (CTO: Roach et al. 2005), which covers the immediate causes of terrorist incidents and principles of intervention in those causes in the service of protection and preparedness
 - 5Is, a process model originating in crime prevention but extending to security
- Our definitions have been developed in parallel with the Realist Review of the literature and the fieldwork for this project, and with the Conceptual Attack Framework (CAF) which covers Tactical Attack Methods, Attack Procedures and Security Action to protect against terrorist and criminal incidents, and to prepare to respond should incidents happen
- The definitions have been incorporated as far as possible within the Indicative Toolkit
- We have endeavoured to create 'definitions in depth', i.e. to ensure that when a particular definition refers to subsidiary concepts, those are defined too; and the whole suite of definitions is intended to be mutually consistent

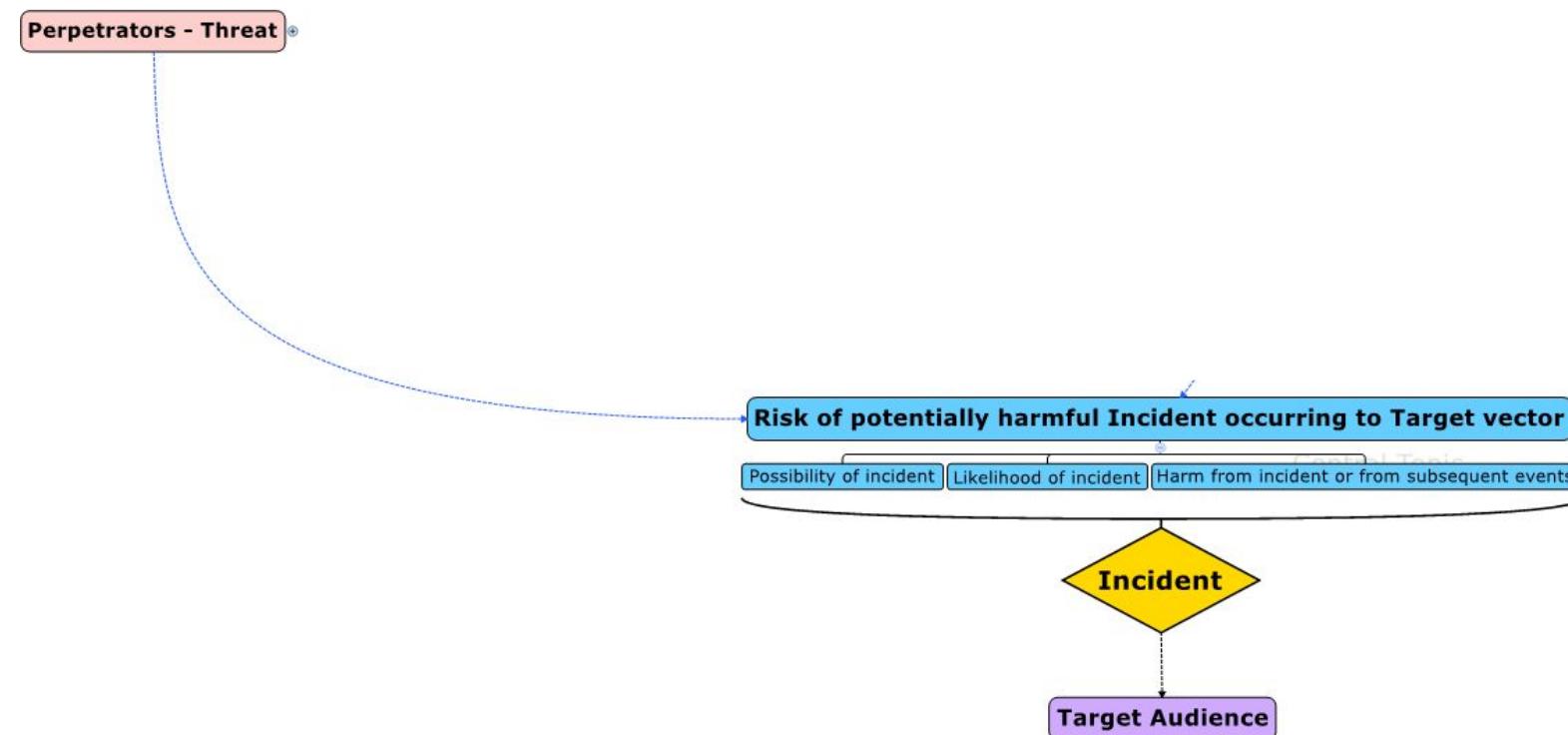
Key terms

- In order to define and demonstrate the relationships between key terms we produced a diagram showing main entities such as Perpetrator and Situation, and how Threat from the former engaged with Opportunity from the latter to generate Risk of terrorist or criminal incidents
- The diagram reflects quite complex interactions between Perpetrator and Situation, so it is more easily communicated by building it in stages
- One important distinction is between the **Target Vector** and the **Target Audience**
 - **Target Vector** – the person or assets that are harmed in order to deliver the terrorist message or deliver an operational gain to the Perpetrator
 - **Target Audience** – the individuals, groups or institutions which are intended to be influenced by the attack on the Target Vector, for example the government, a community or a private company



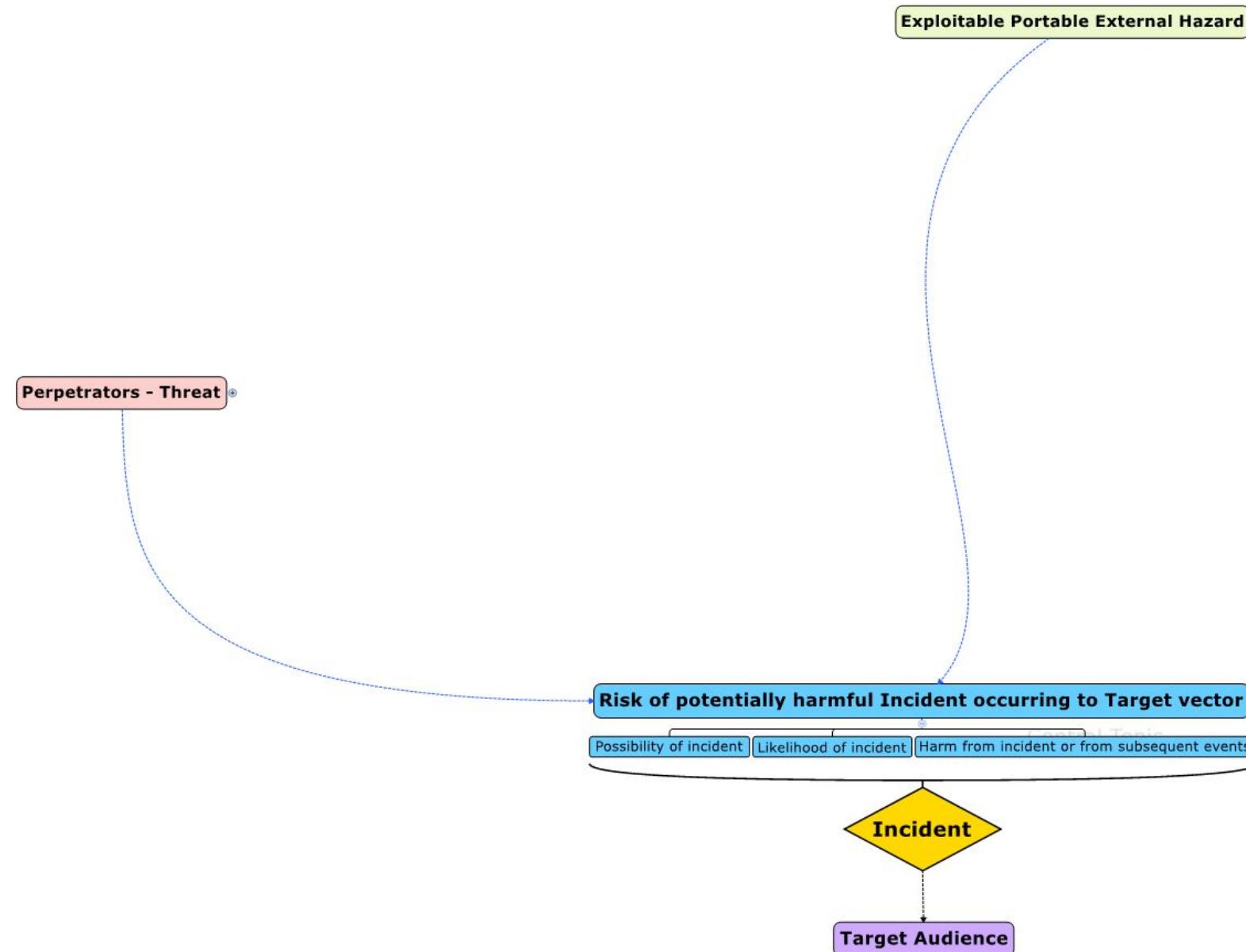
- The Threat from Perpetrators combines with Opportunity factors in the form of any external Hazards they can bring with them such as bombs, and in the Immediate attack Situation, to generate the Risk of terrorist or crime Incidents directed against the Target Vector (people, assets, network). This influences the Target Audience – government, public etc

Overview



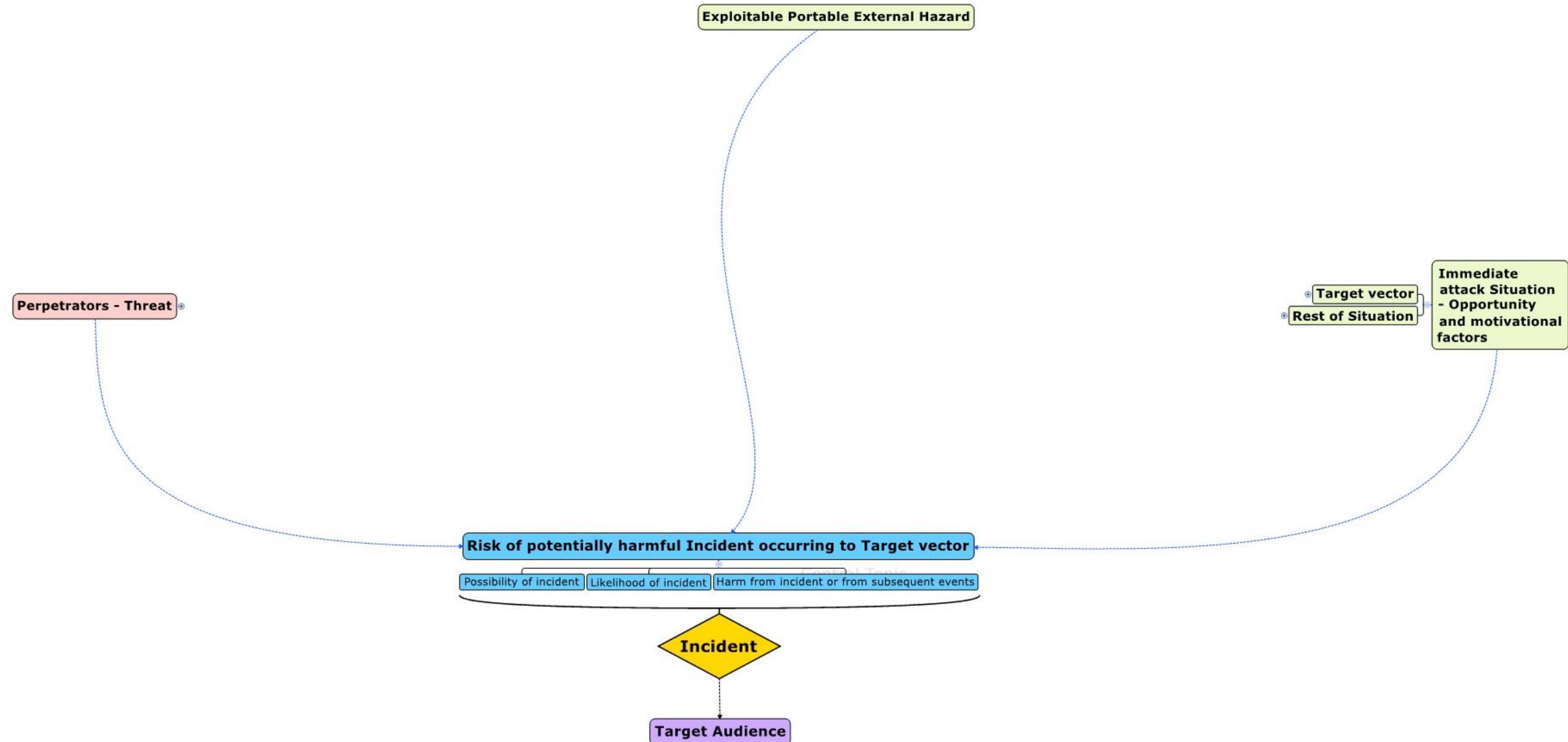
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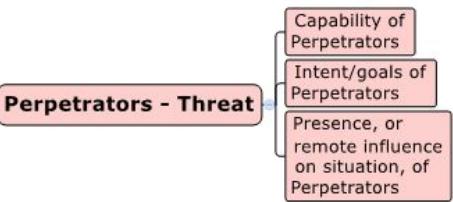
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Threat

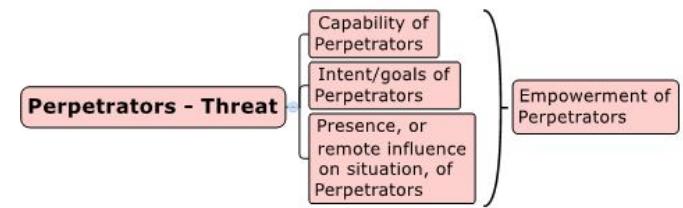
Perpetrators - Threat 

- We start with Threat from the Perpetrators

Threat



- We start with Threat from the Perpetrators
- This comprises their
 - Capability
 - Intent and Goals
 - Presence which could be physically in the Situation, or with some kind of remote access and influence on it, including via the Internet, or drones



- These factors empower the Perpetrators to deploy particular Tactical Attack Methods involving various Attack Procedures

Situation

**Immediate
attack Situation**
- Opportunity
and motivational
factors

- On the Situational side the MMPT supplies not only various Opportunity factors, but also motivating influences on the Perpetrators

Situation

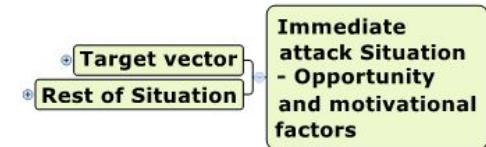
Exploitable Portable External Hazard

Immediate
attack Situation
- Opportunity
and motivational
factors

- There are also exploitable, portable, external Hazards which the Perpetrators can bring to bear in carrying out their Attack Procedure

Situation

Exploitable Portable External Hazard



Central Topic

- The main division in the Immediate Attack Situation is between the Target Vector (people, assets or network the Perpetrators wish to attack) and the rest

Situation

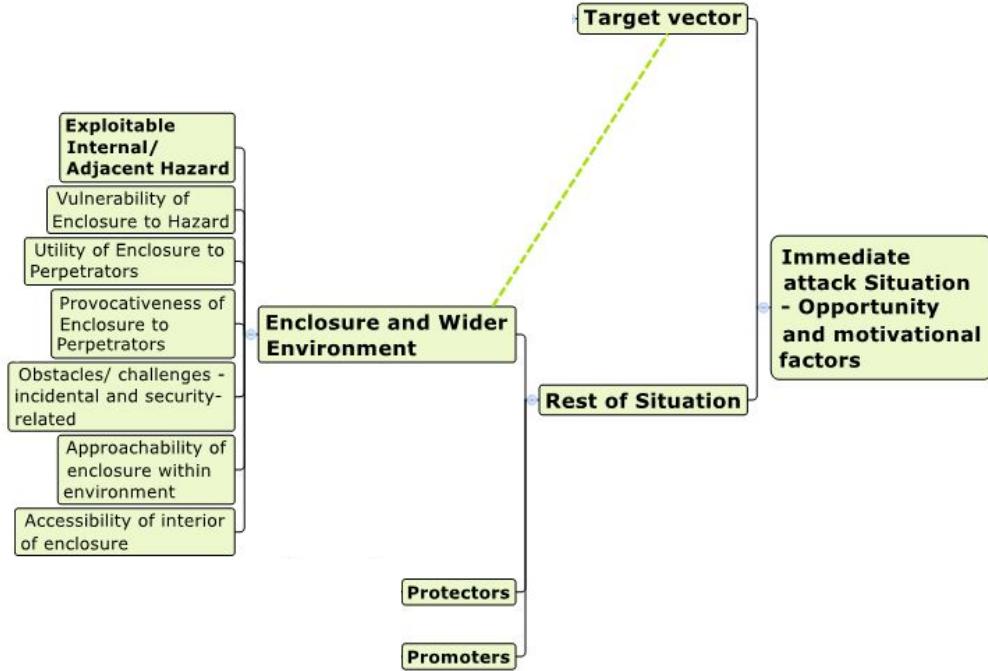
Exploitable Portable External Hazard



- The rest of the Situation includes
 - One or more Enclosures (including the main MMPT building but also subsidiary enclosures within it) and the Wider Environment within which the Enclosure sits
 - Two sets of roles – Protectors (Police, security employees or others who reduce the risk of Incidents; and Promoters who accidentally, carelessly or intentionally increase the risk
 - Note that sometimes the Enclosure itself may be what is targeted for attack, rather than who or what is inside it – hence the line linking these

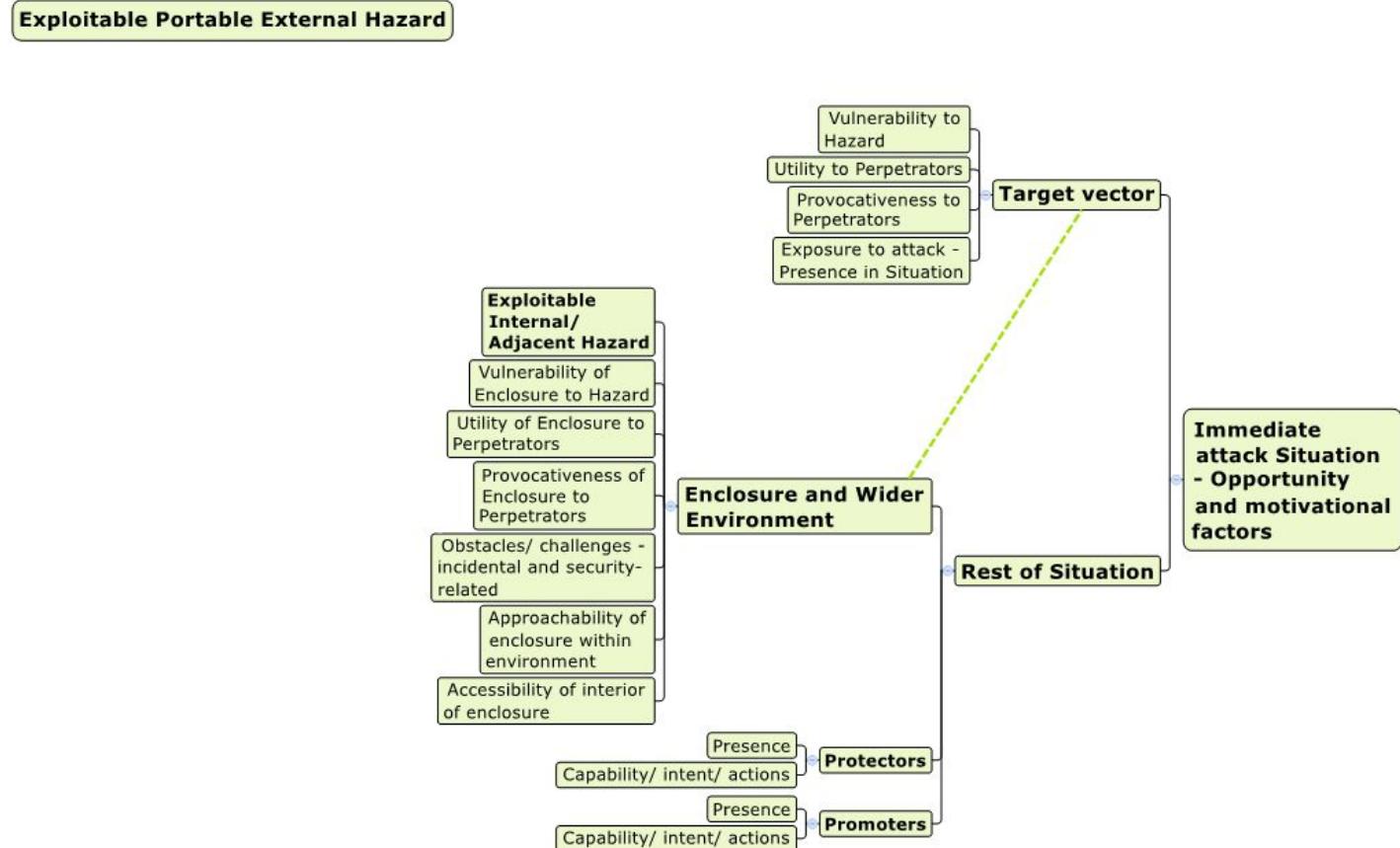
Situation - Enclosure

Exploitable Portable External Hazard



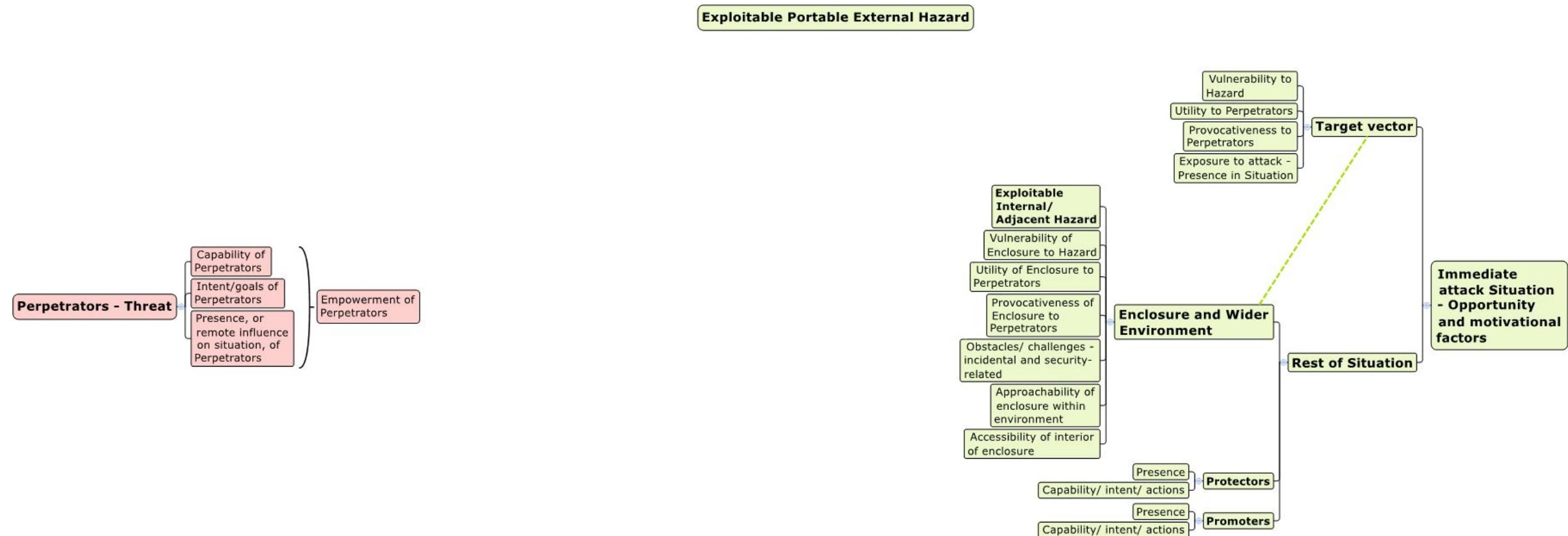
- The Enclosure, in more detail, may contain one or more exploitable internal Hazards (e.g. a fuel store, or a steep escalator); as may the adjacent wider environment (e.g. a flood, fire or landslip could be precipitated whose effects spread to the MMPT)
- The Enclosure has various attributes including its own Vulnerability to the various Hazards, motivating influences, approachability and accessibility

Situation: Additional detail



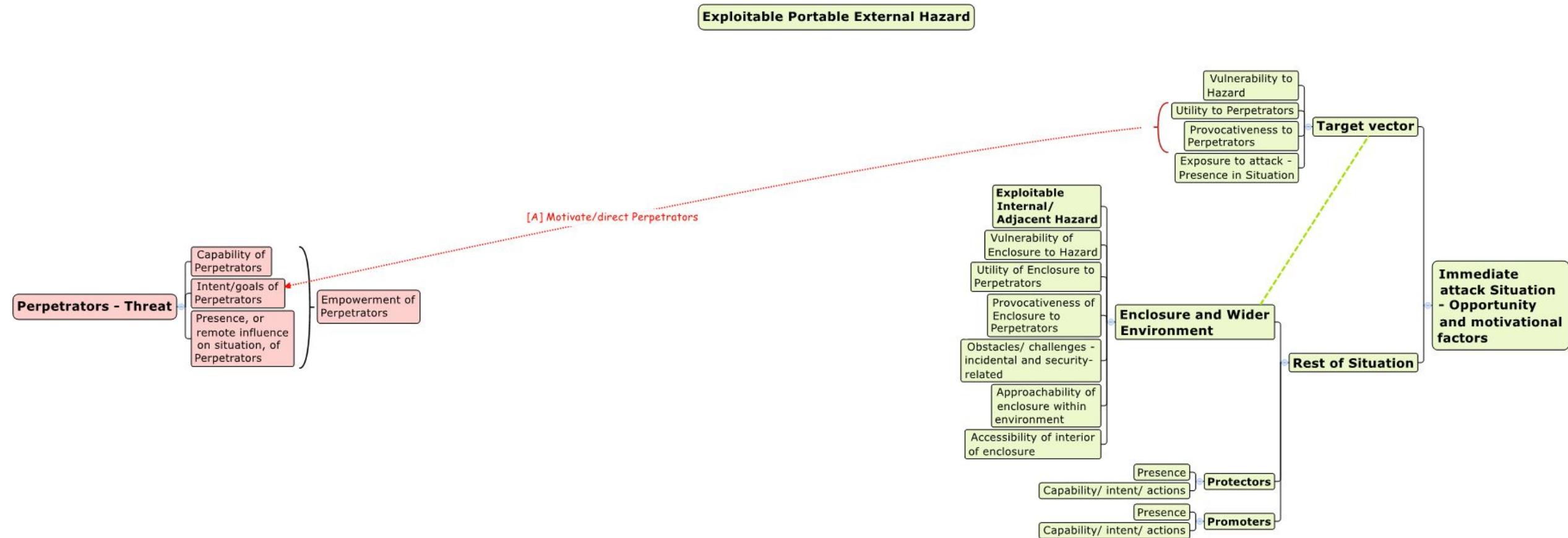
- The Target Vector's attributes include Vulnerability to particular Hazards, utility and provocativeness to Perpetrators, and some level of exposure to attack – they are present in the situation and in some way accessible
- Like Perpetrators, Protectors and Promoters have attributes of presence, capability and intent; they also undertake various actions which may increase or decrease risk of incidents

Dynamics



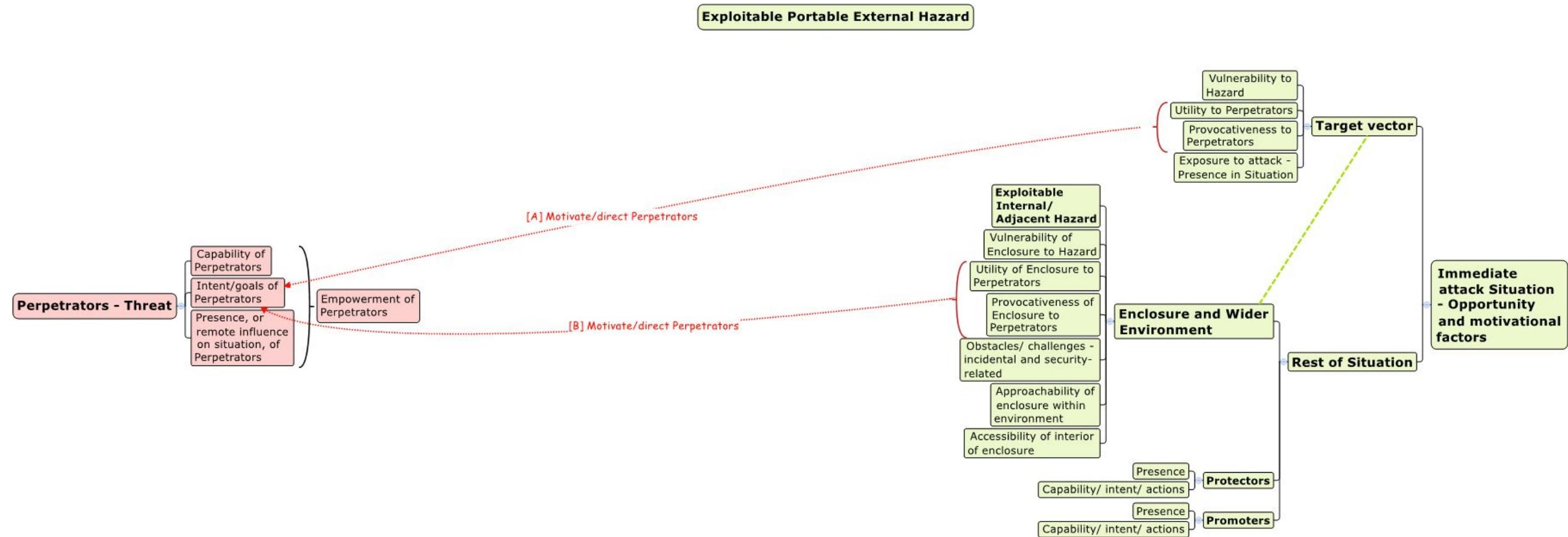
- We now move on to the Dynamics of interactions between these elements, starting with Situational influences on Perpetrators, of a motivational kind

Situational influences on Perpetrators



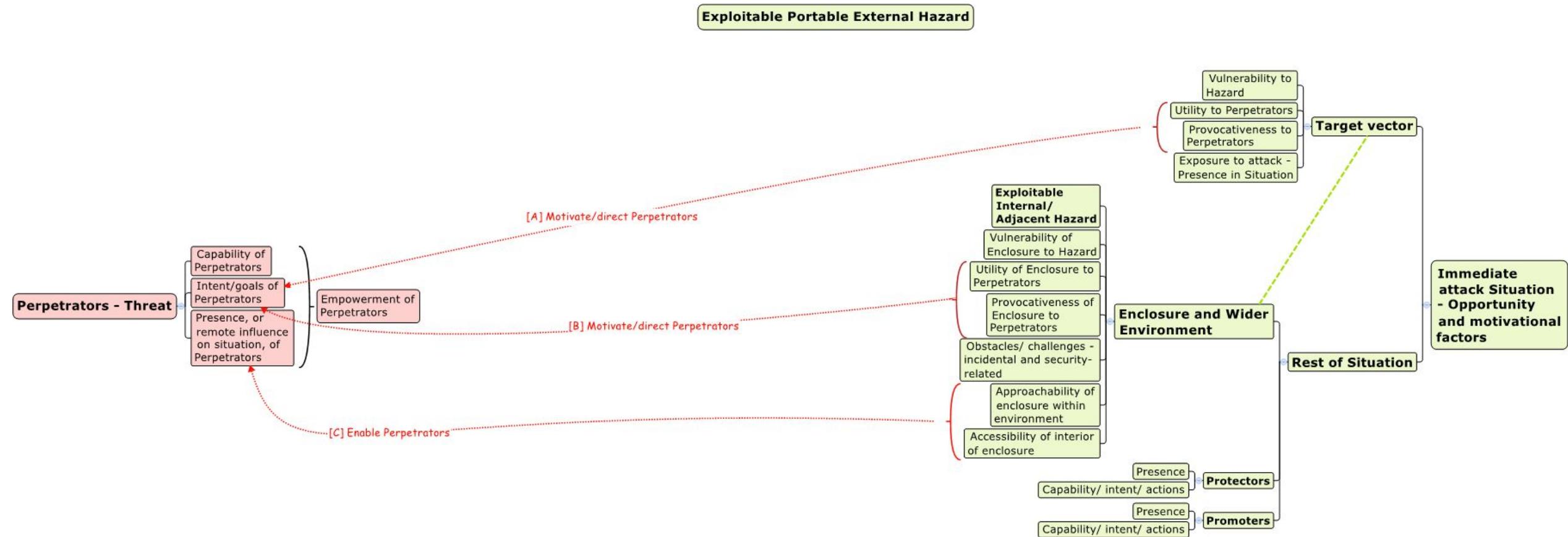
- Attributes of the Target Vector which motivate or direct the intentions of Perpetrators include their utility and their provocativeness

Situational influences on Perpetrators



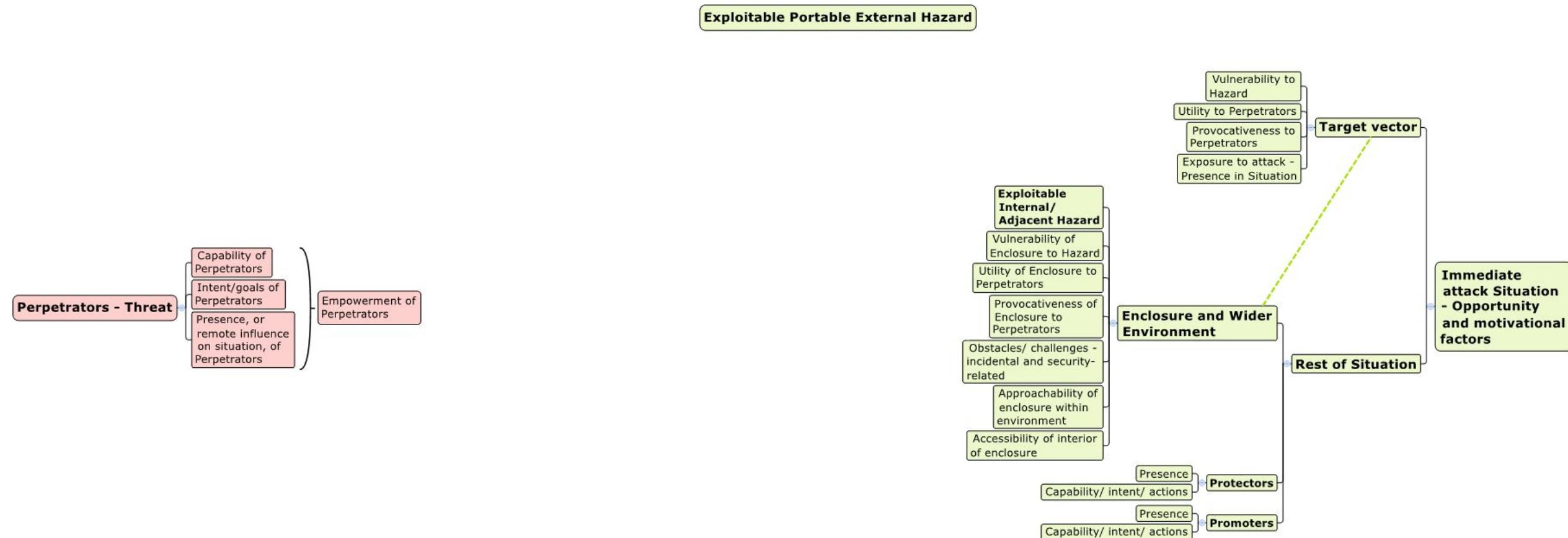
- The Enclosure may have similar attributes with similar effect

Situational influences on Perpetrators



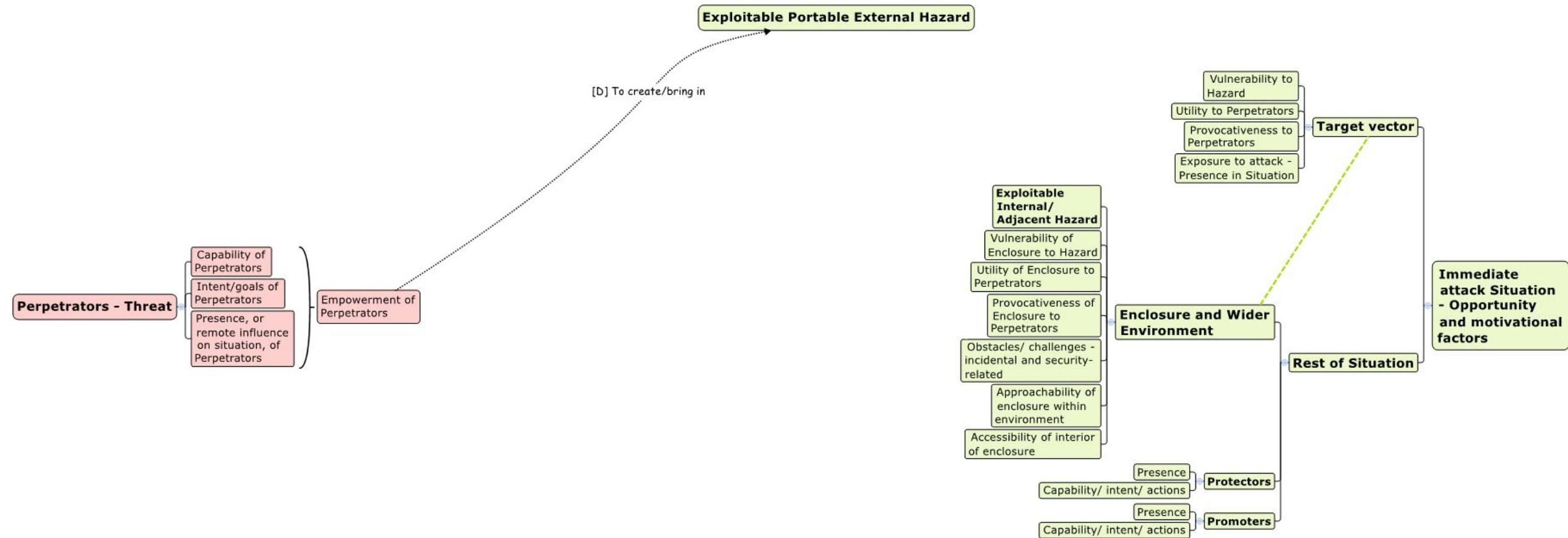
- The approachability of the Enclosure and accessibility of its Interior enable the Perpetrators' presence or remote influence

Influences from Perpetrators on Situation



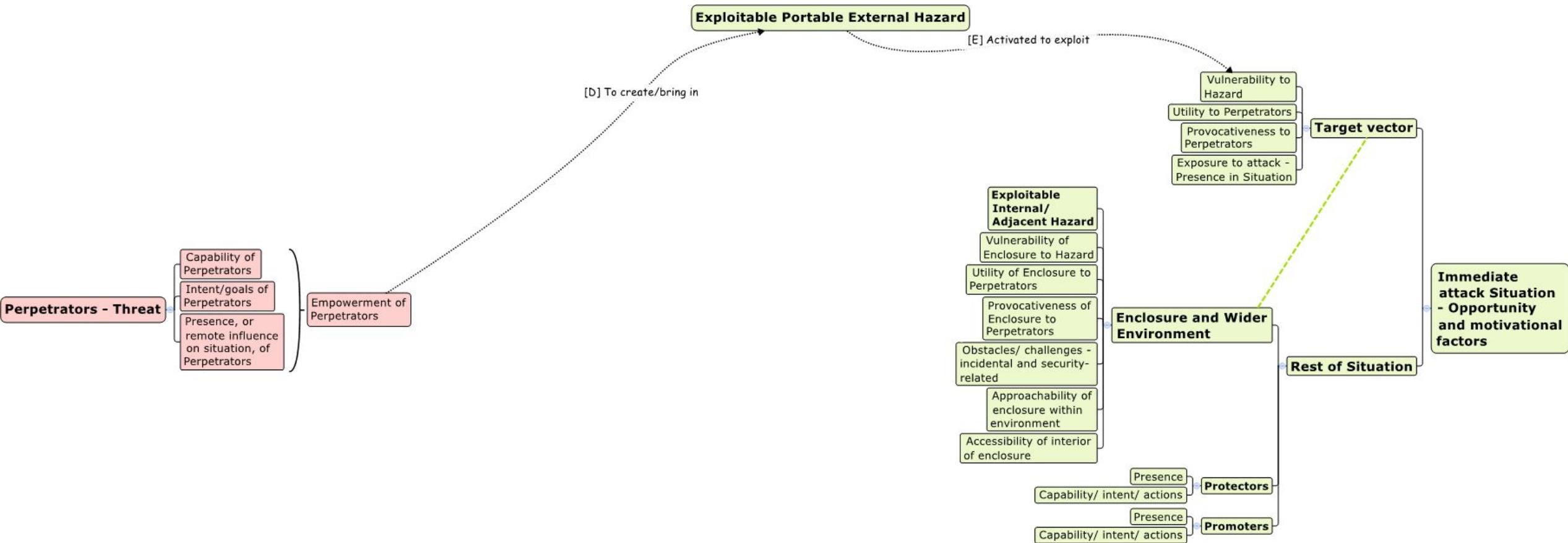
- Influences from the Perpetrators on the Situation act via several routes, which may map onto different tracks in the Attack Procedure:
 - They may bring in *External Hazards* which *directly* exploit the Vulnerability of the Target Vector; or act *indirectly*, via damaging the Enclosure to penetrate it from outside, to gain access to Target Vectors in the interior
 - They may misuse *internal Hazards* which *directly* exploit the Vulnerability of the Target Vector; or act *indirectly*, via damaging the Enclosure to penetrate it from inside, to enable outside access to Target Vectors in the interior

External direct – importing weapons to directly attack target



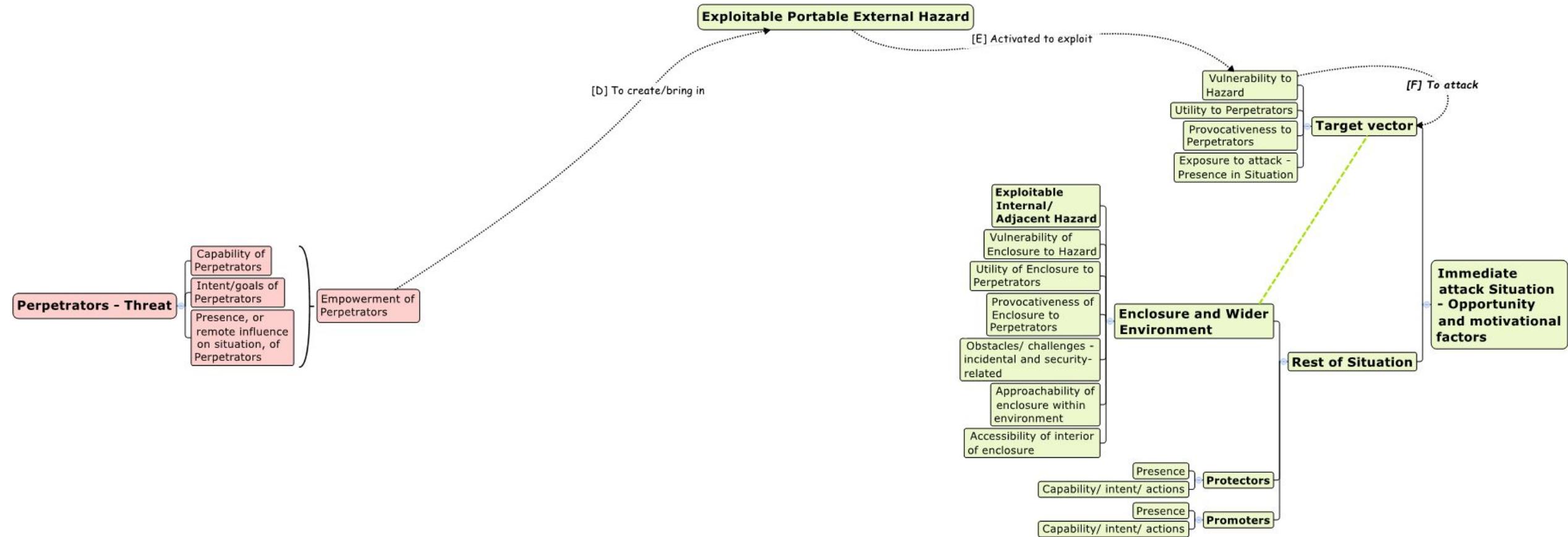
- Perpetrators' Capability, Intent and Presence empower them to acquire, create and bring in some exploitable and portable external Hazard e.g. a bomb [D]

External direct – importing weapons to directly attack target



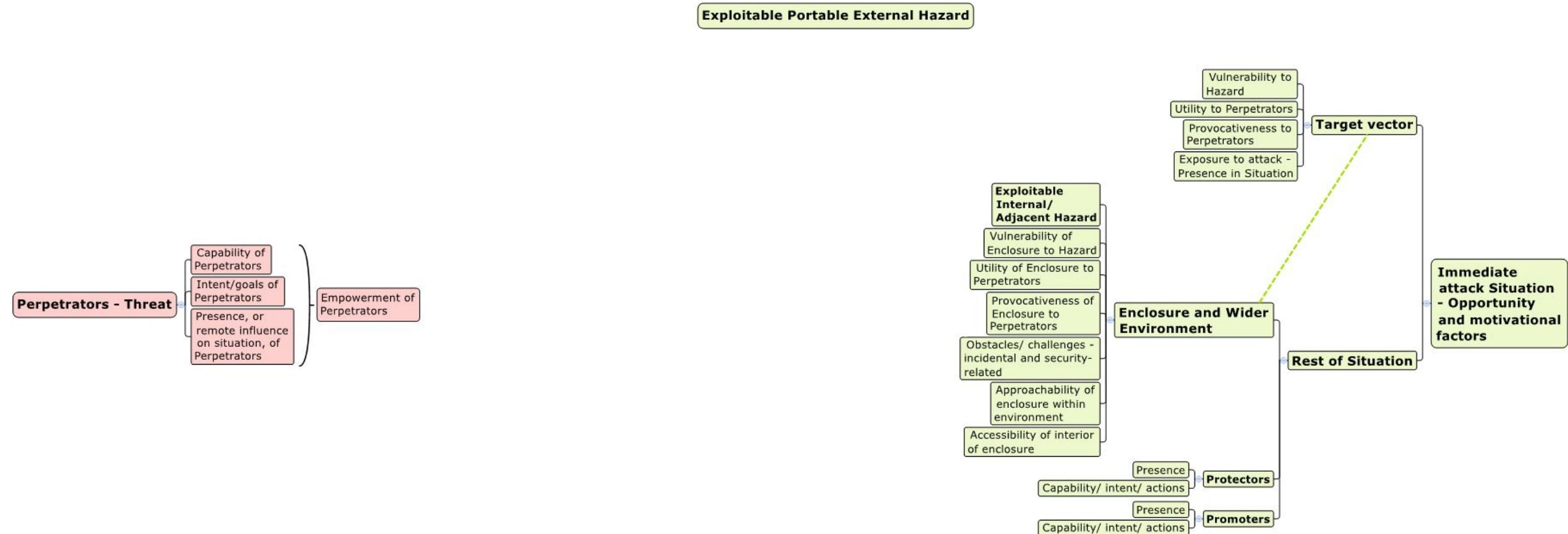
- The Hazard is activated [E] to exploit the Vulnerability of the Target Vector

External direct – importing weapons to directly attack target



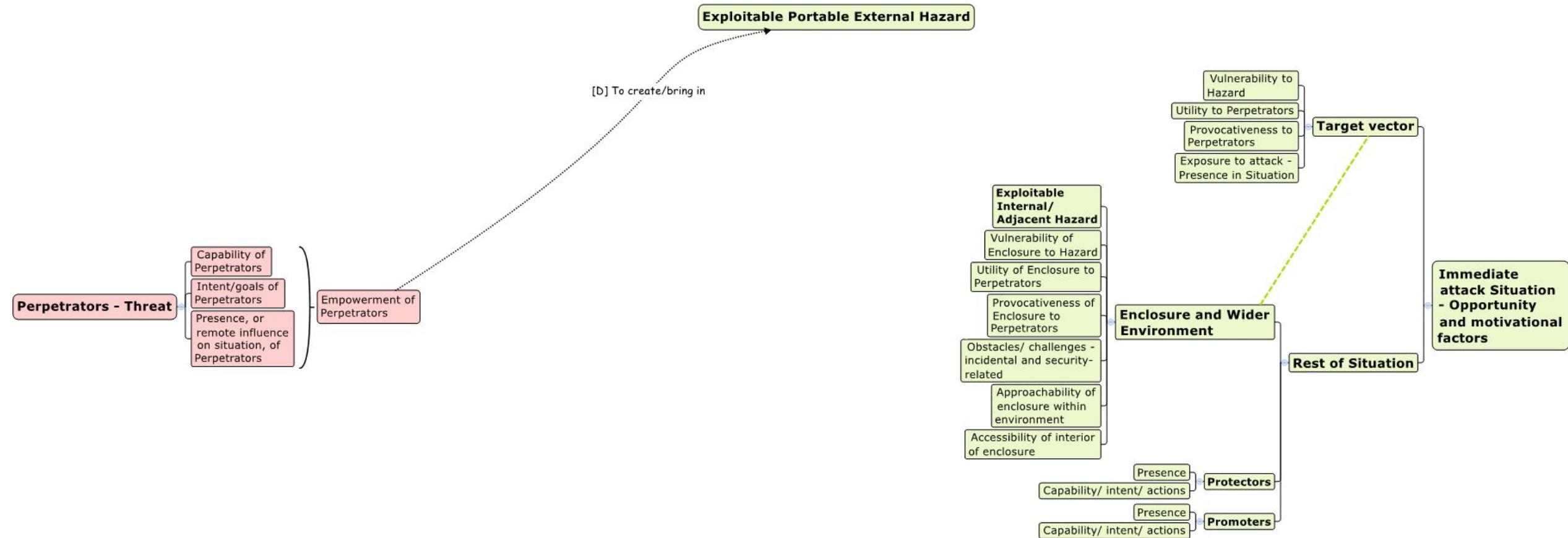
- Enabling an attack on the Target [F]

External indirect – attacking MMPT enclosure to gain access to target



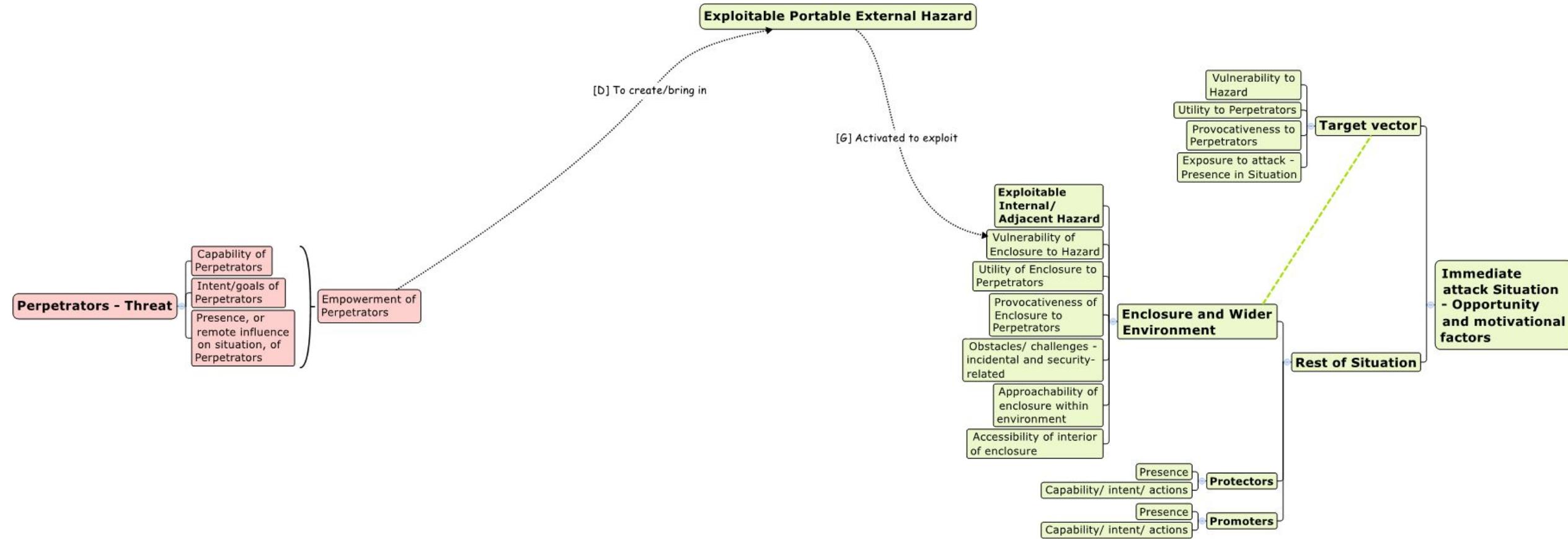
- Alternatively, the attack can be indirect

External indirect – attacking MMPT enclosure to gain access to target



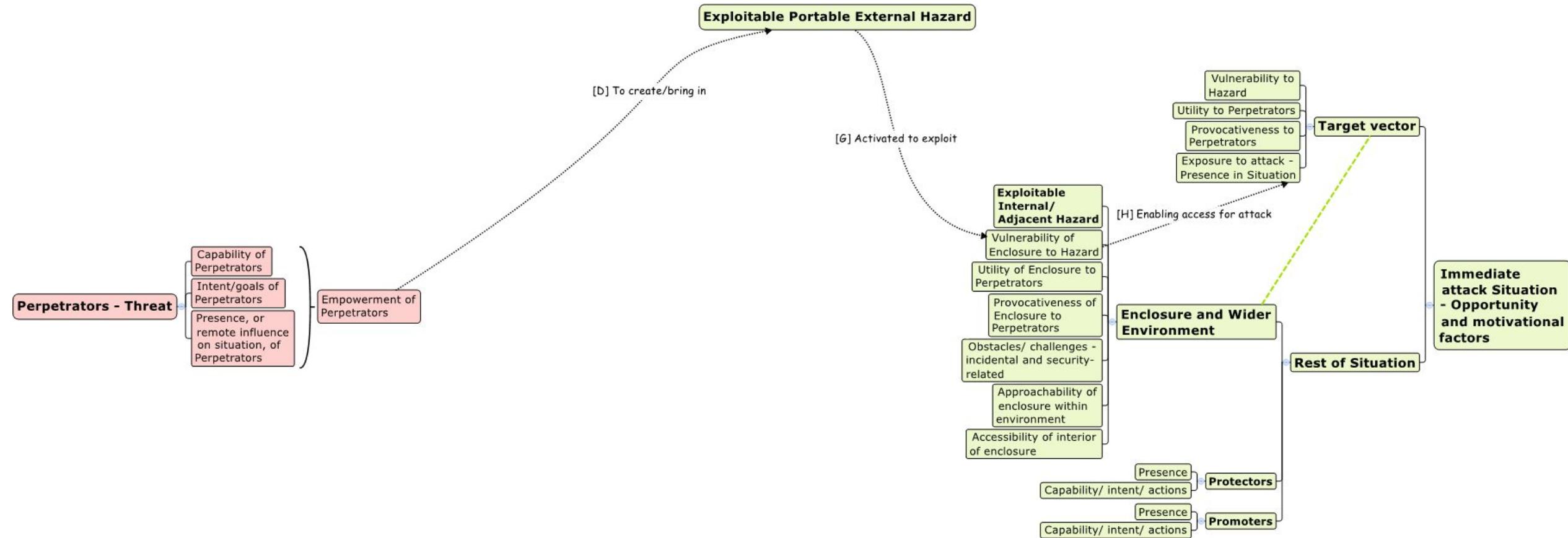
- Again, Perpetrators' Capability, Intent and Presence empower them to acquire, create and bring in some exploitable and portable hazard e.g. a bomb [D]

External indirect – attacking MMPT enclosure to gain access to target



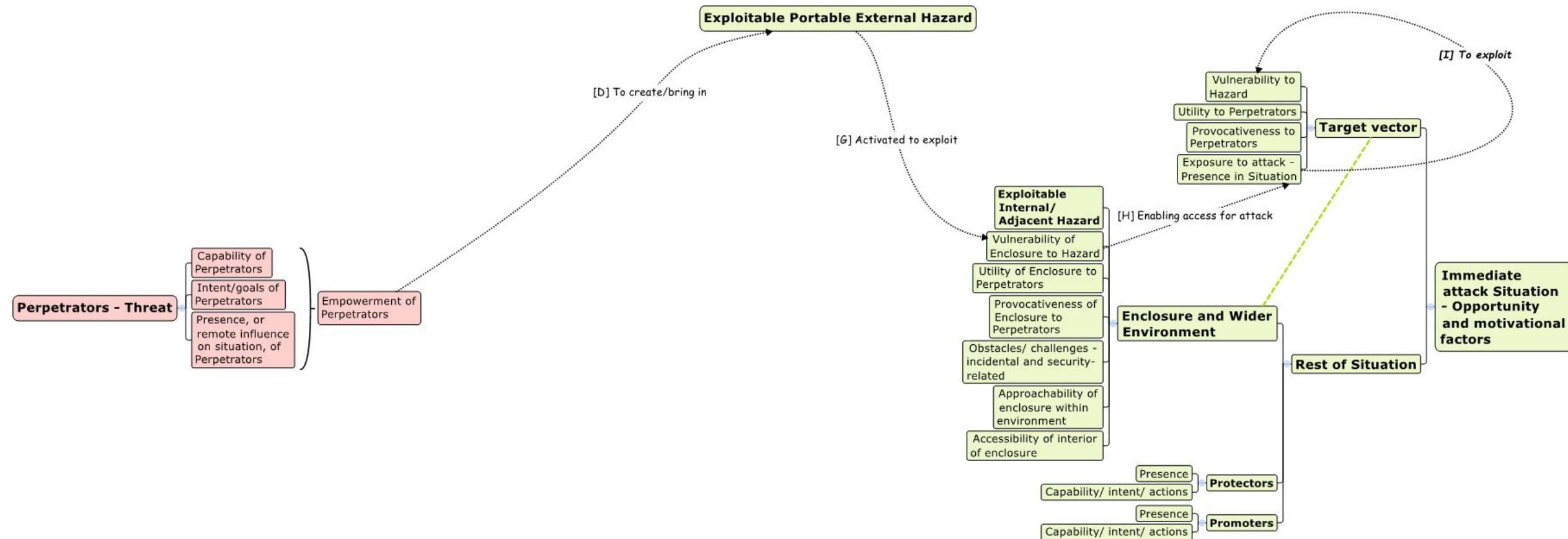
- This time, Perpetrators are empowered to exploit the external Hazard to penetrate the Enclosure (or attack it if the Enclosure itself is the Target Vector) [G]

External indirect – attacking MMPT enclosure to gain access to target



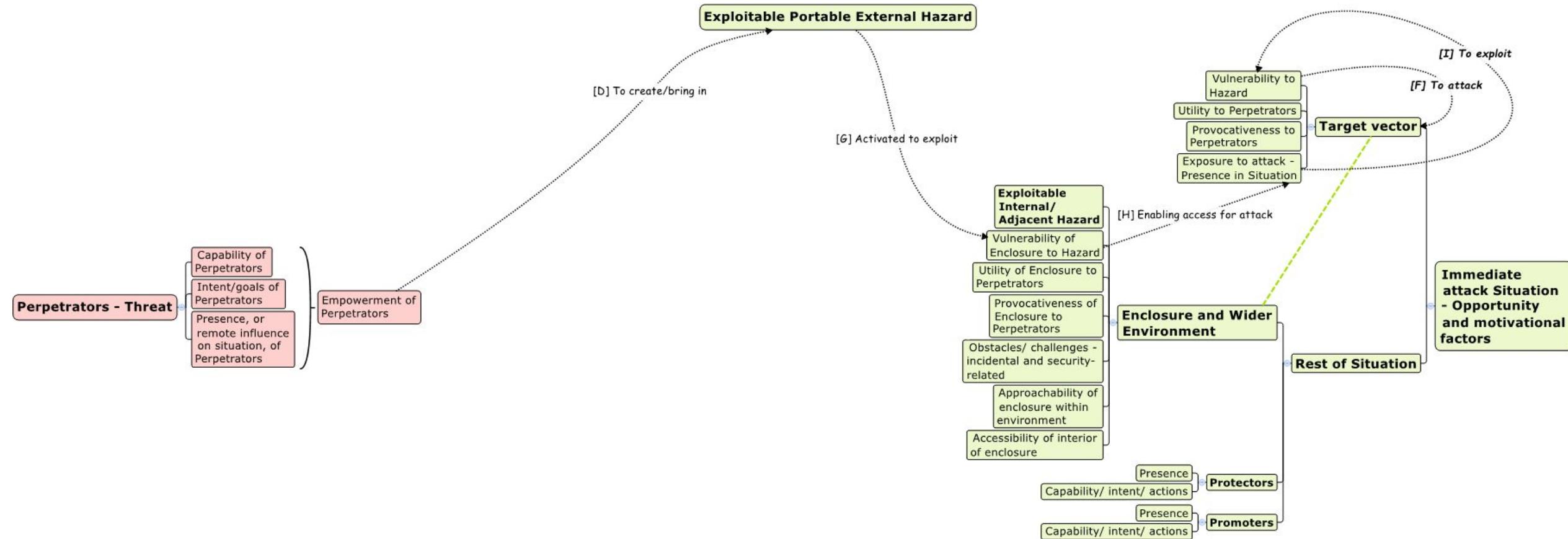
- Penetrating the Enclosure enables them [H] to gain access to the Target Vector for the attack

External indirect – attacking MMPT enclosure to gain access to target



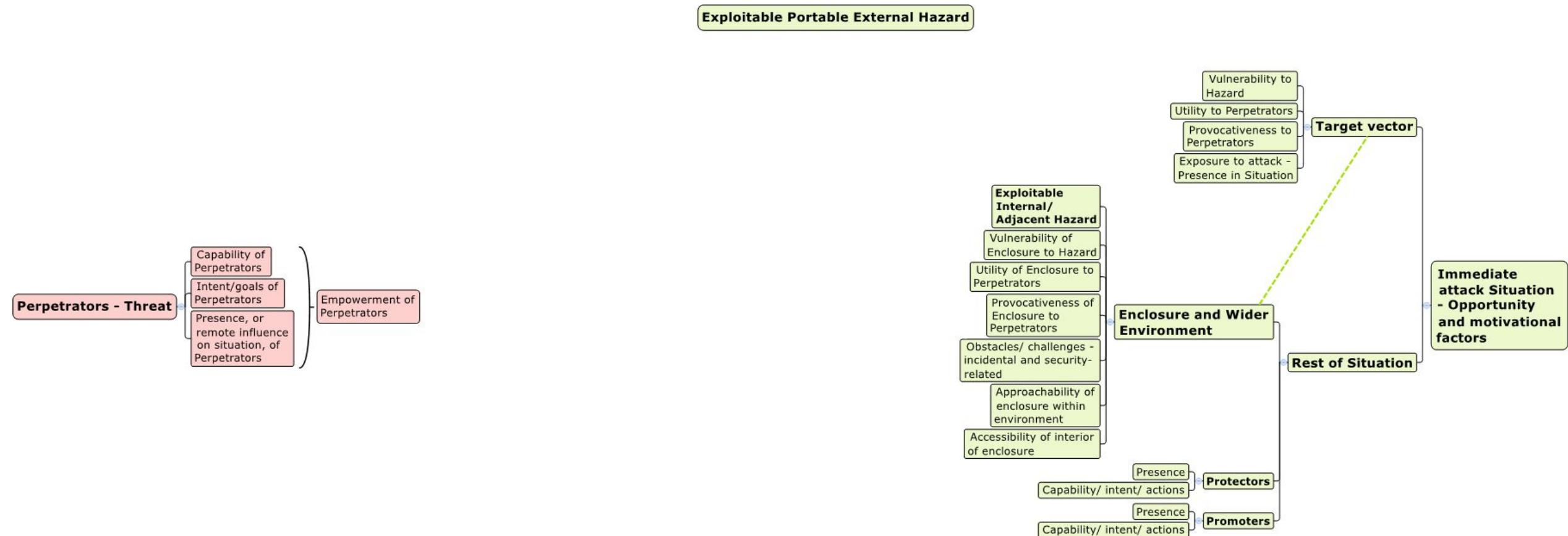
- This access enables them to exploit the Vulnerability of the Target Vector to the Hazard [I]

External indirect – attacking MMPT enclosure to gain access to target



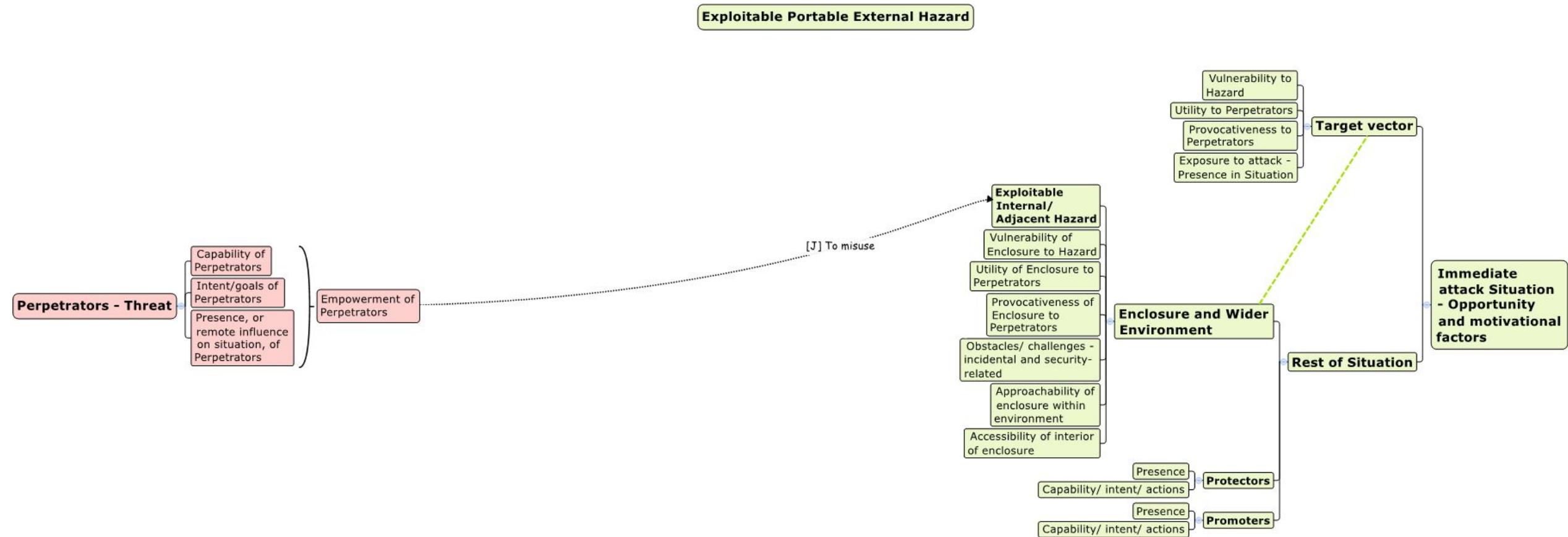
- And again, to attack it [F]

Internal direct – exploiting internal hazard to directly attack target



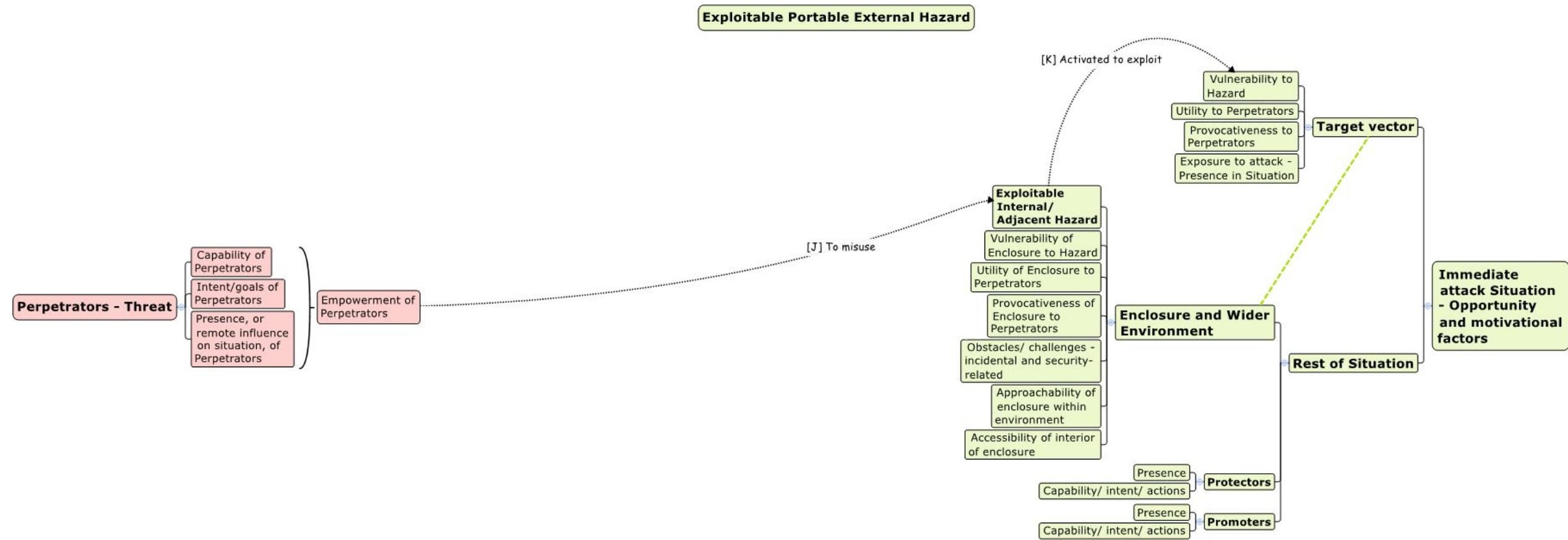
- Now we consider internal attacks, first the direct ones

Internal direct – exploiting internal hazard to directly attack target



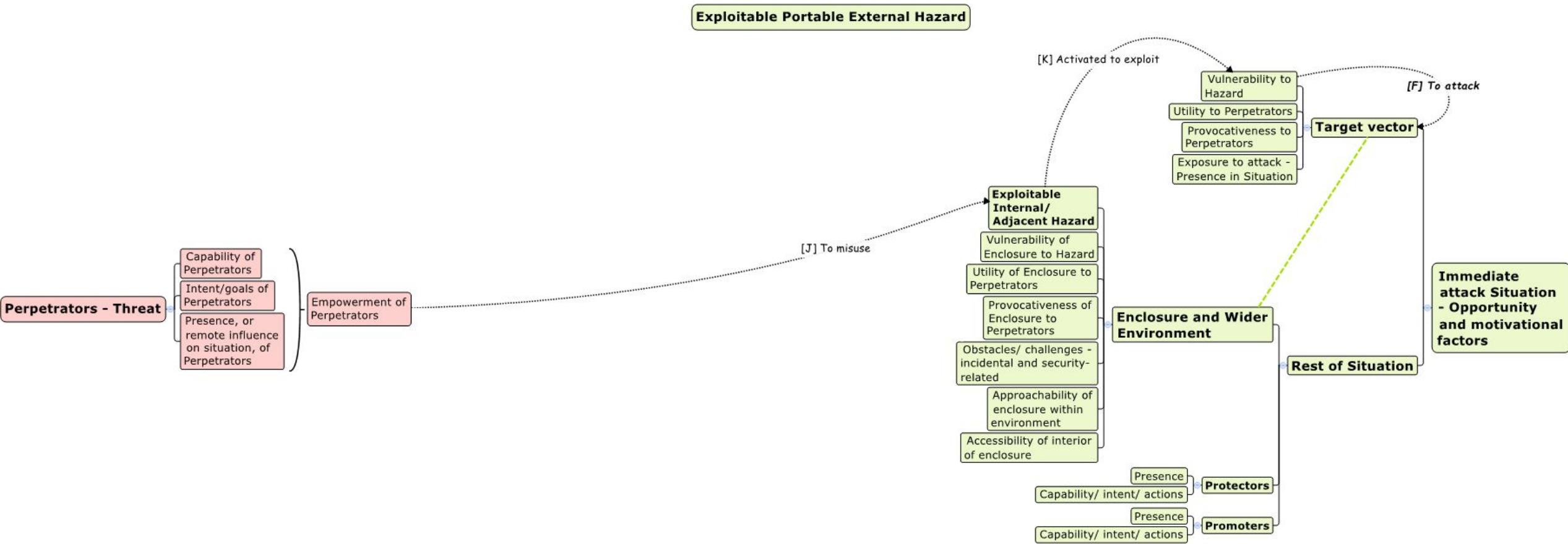
- Again, Perpetrators' Capability, Intent and Presence empower them to misuse some internal Hazard e.g. a steep escalator or a fuel store [J]

Internal direct – exploiting internal hazard to directly attack target



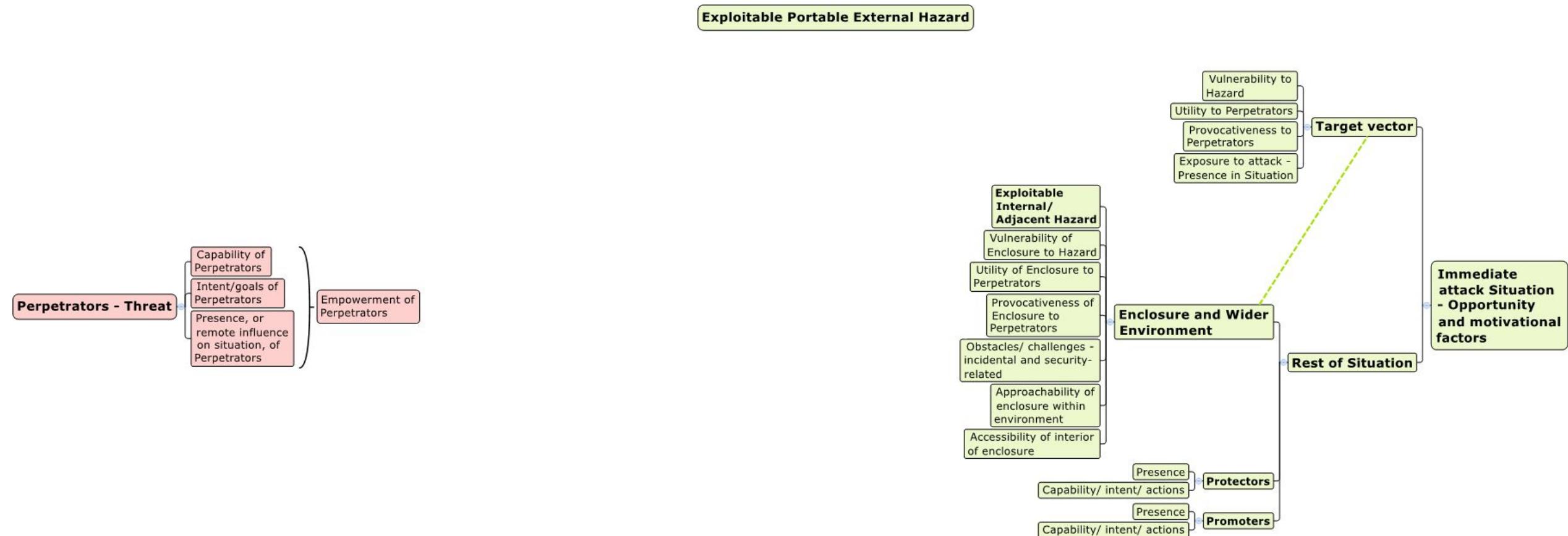
- The internal Hazard is activated to exploit the Vulnerability of the Target Vector [K]

Internal direct – exploiting internal hazard to directly attack target



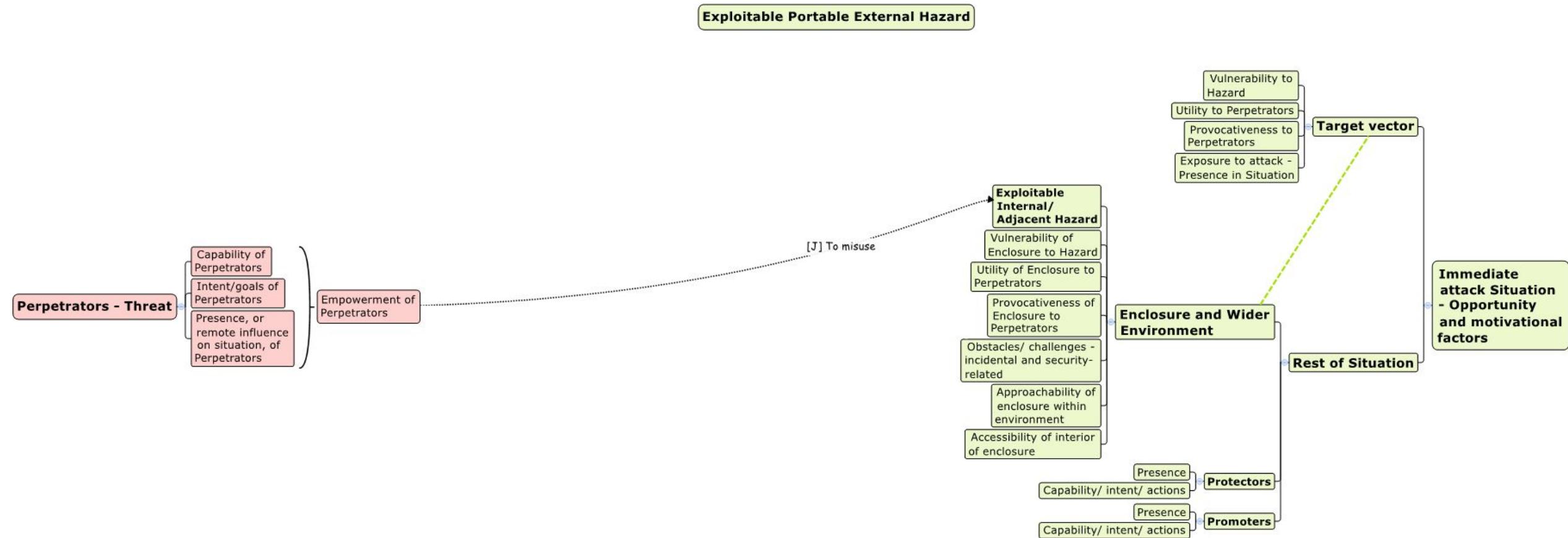
- Enabling direct attack on the Target Vector [F]

Internal indirect – exploiting internal hazard to access MMPT to attack target



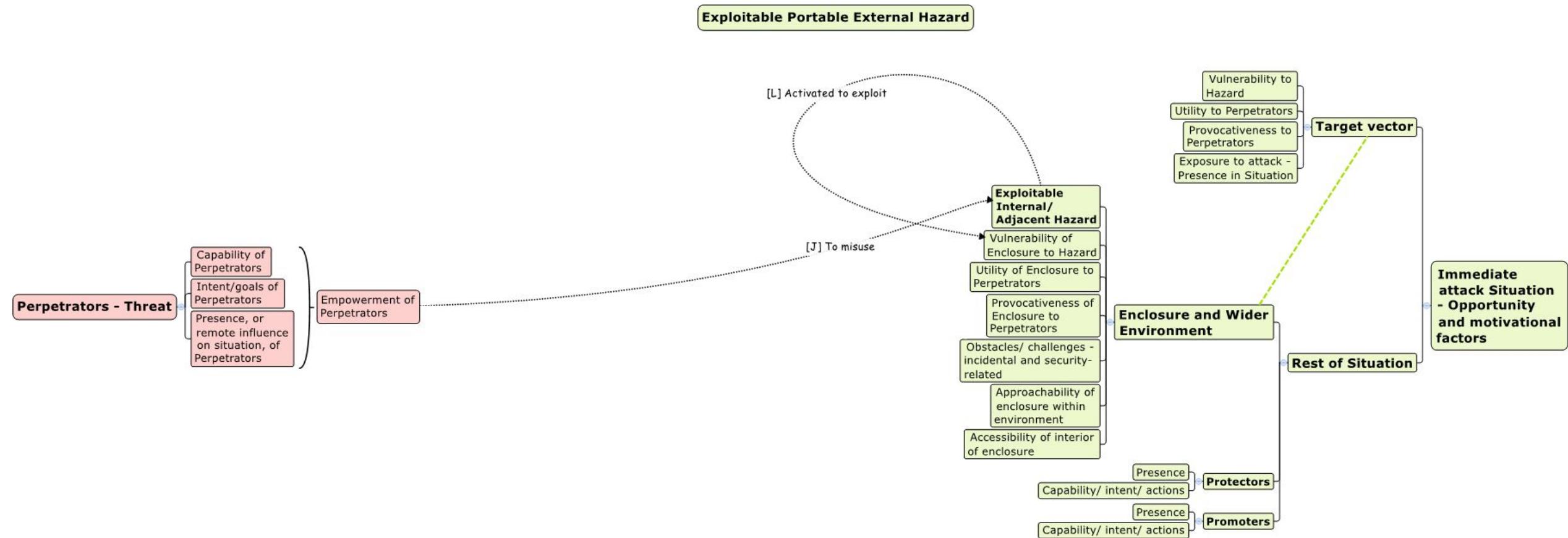
- Finally, Perpetrators may be empowered to mount an indirect internal attack

Internal indirect – exploiting internal hazard to access MMPT to attack target  University of HUDDERSFIELD



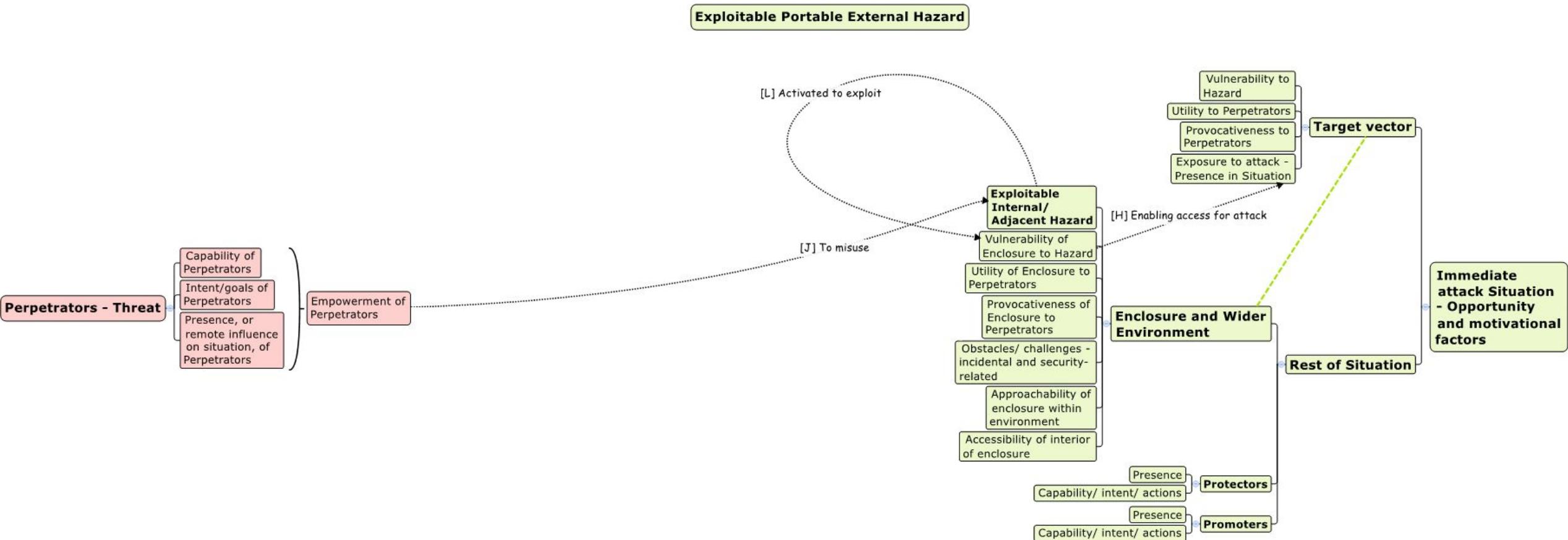
- Once more they misuse internal/adjacent Hazards

Internal indirect – exploiting internal hazard to access MMPT to attack target



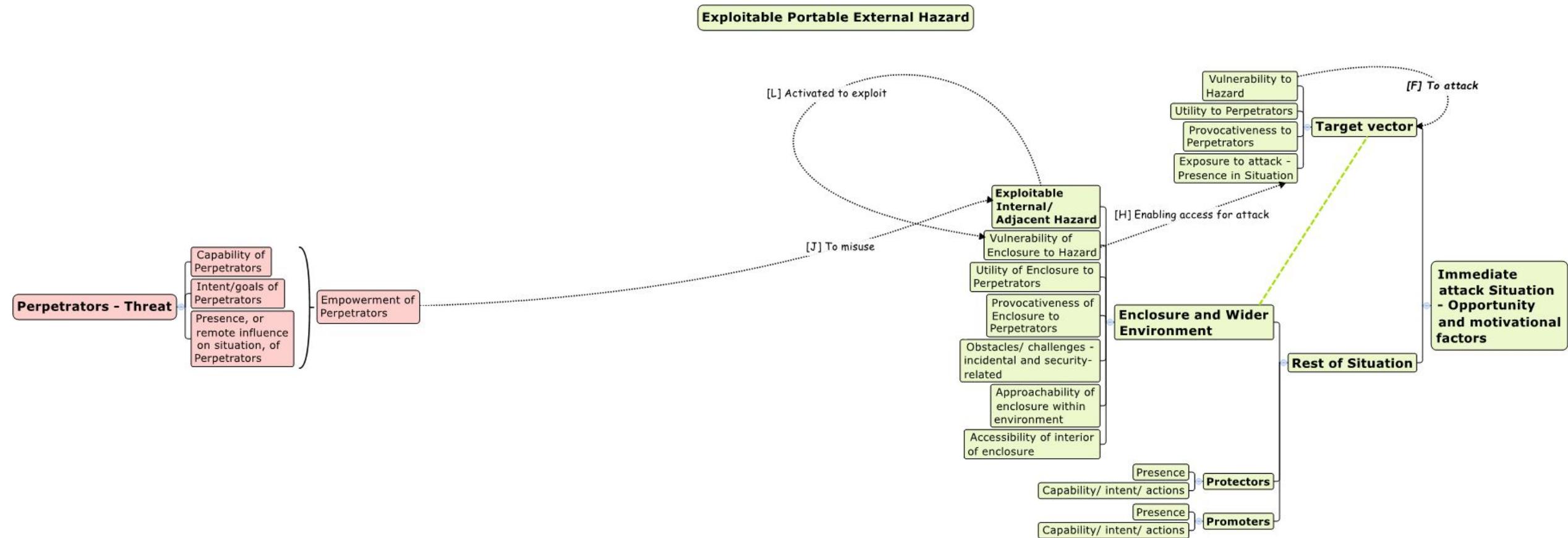
- But this time the Hazards are used to exploit the vulnerability of the Enclosure [L]

Internal indirect – exploiting internal hazard to access MMPT to attack target



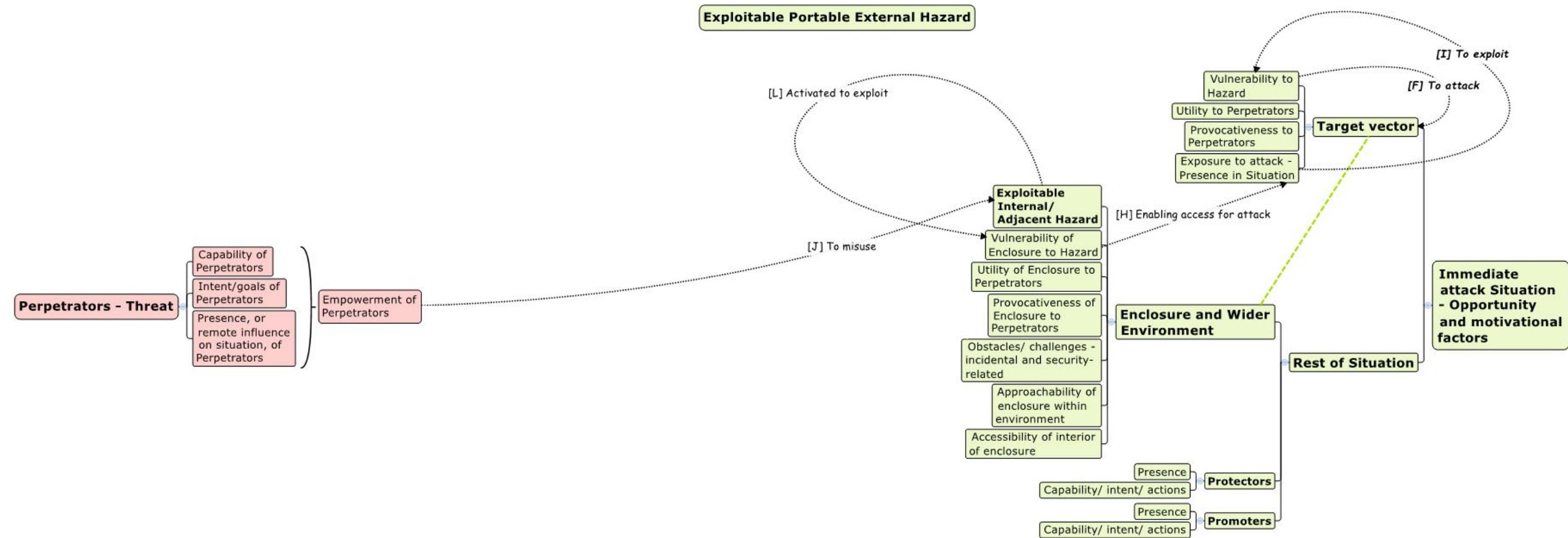
- Penetrating the Enclosure from inside can enable those Perpetrators outside it to gain access for the attack [H]

Internal indirect – exploiting internal hazard to access MMPT to attack target



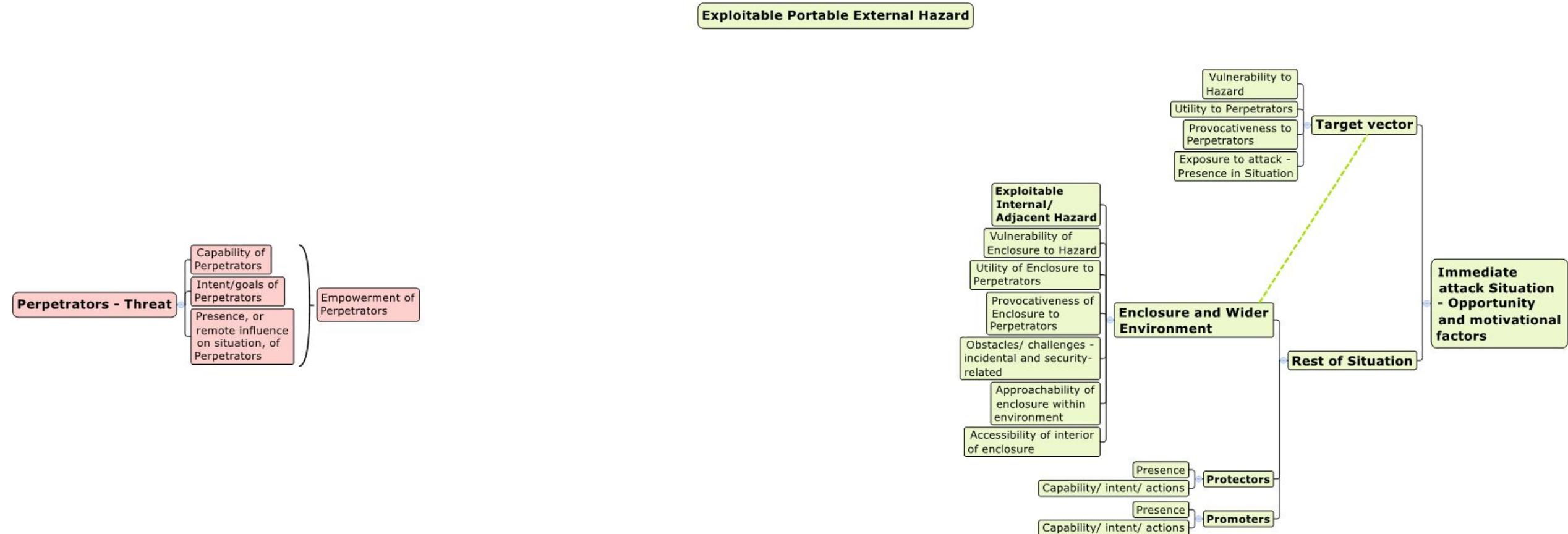
- And the Target Vector is now exposed to attack which could be by bringing to bear some external Hazard (e.g. bombs, gunfire) that the Perpetrators brought with them [I]

Internal Indirect – exploiting internal hazard to access MMPT to attack target



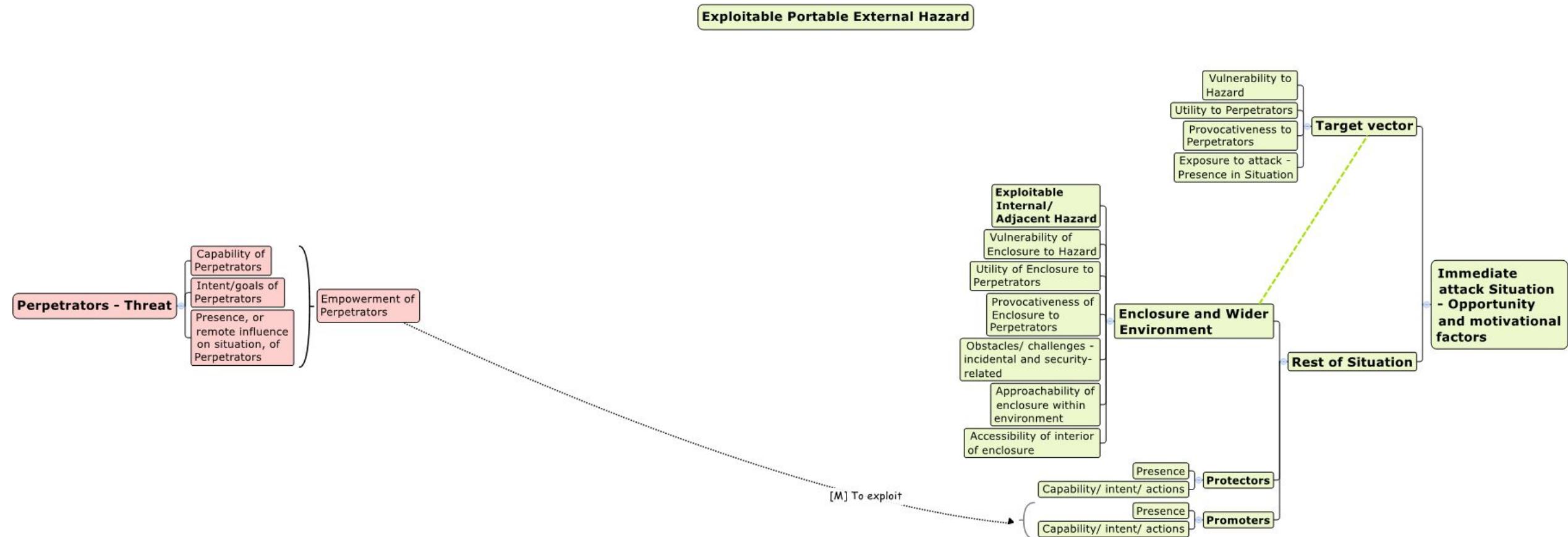
- And the attack on the Target Vector is carried out [F]

Promoters, Protectors, Obstacles and Challenges



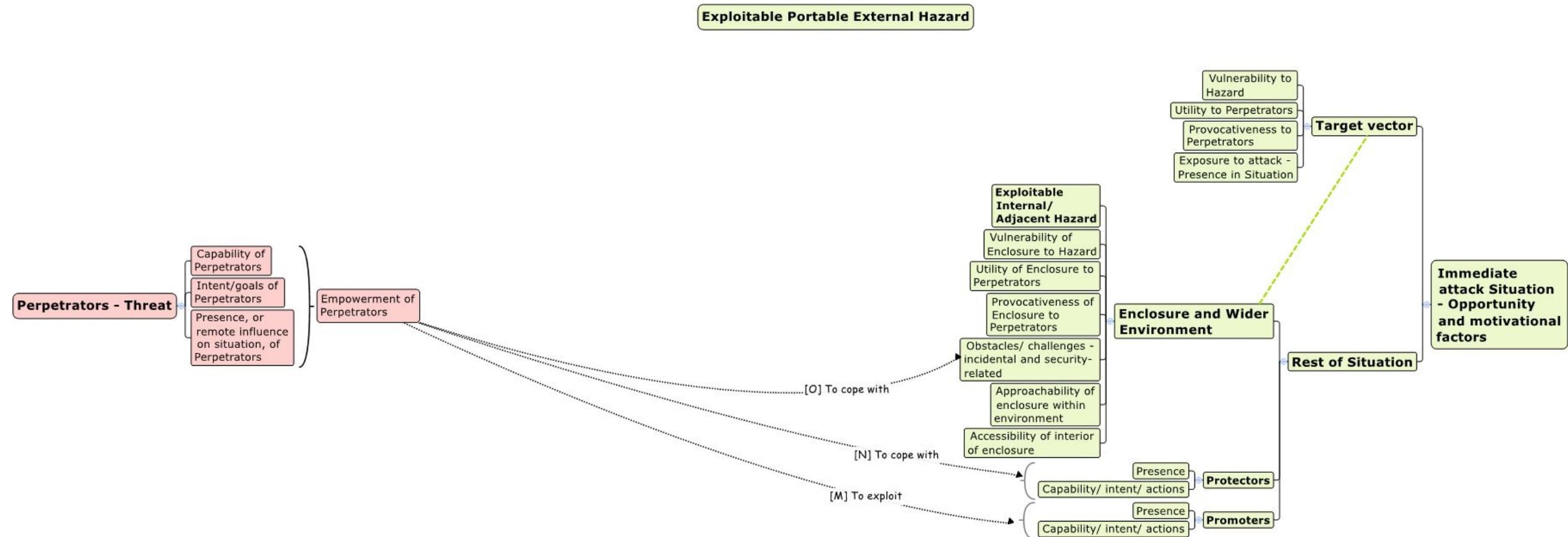
- Perpetrators also have to deal with Promoters, Protectors, and various obstacles and challenges in the course of the attack

Promoters, Protectors, Obstacles and Challenges



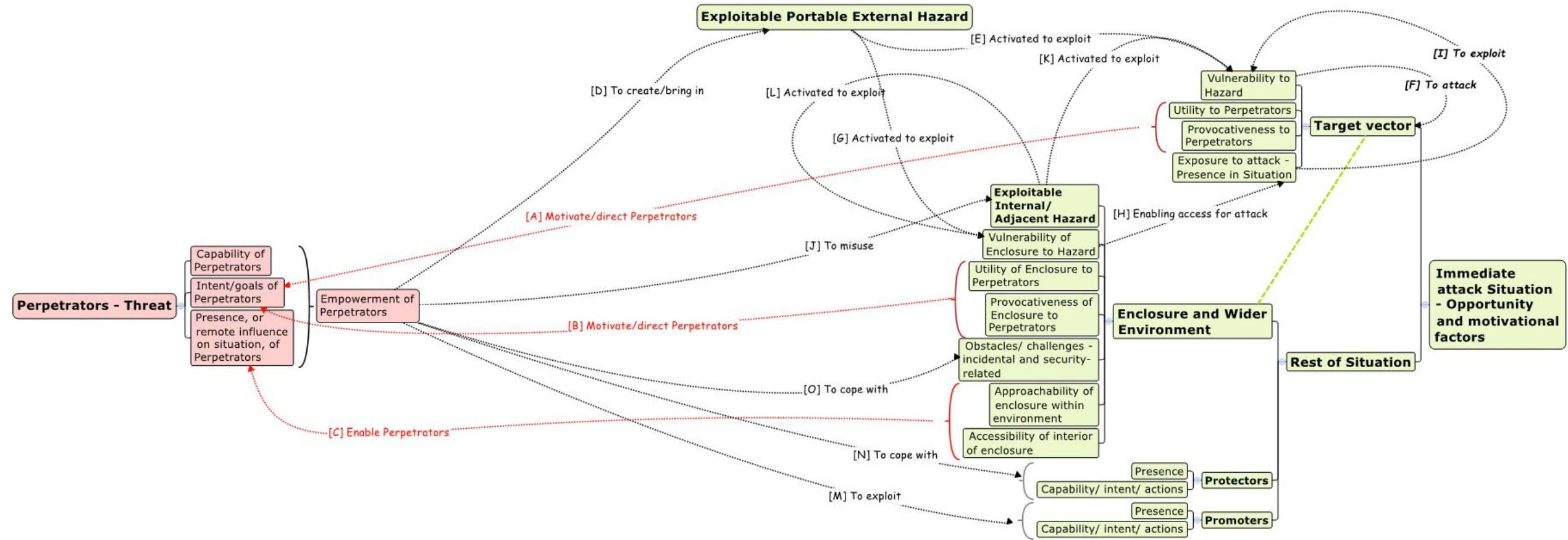
- They can exploit Promoters, e.g. insider accomplices, or merely careless employees who leave doors unlocked [M]

Promoters, Protectors, Obstacles and Challenges

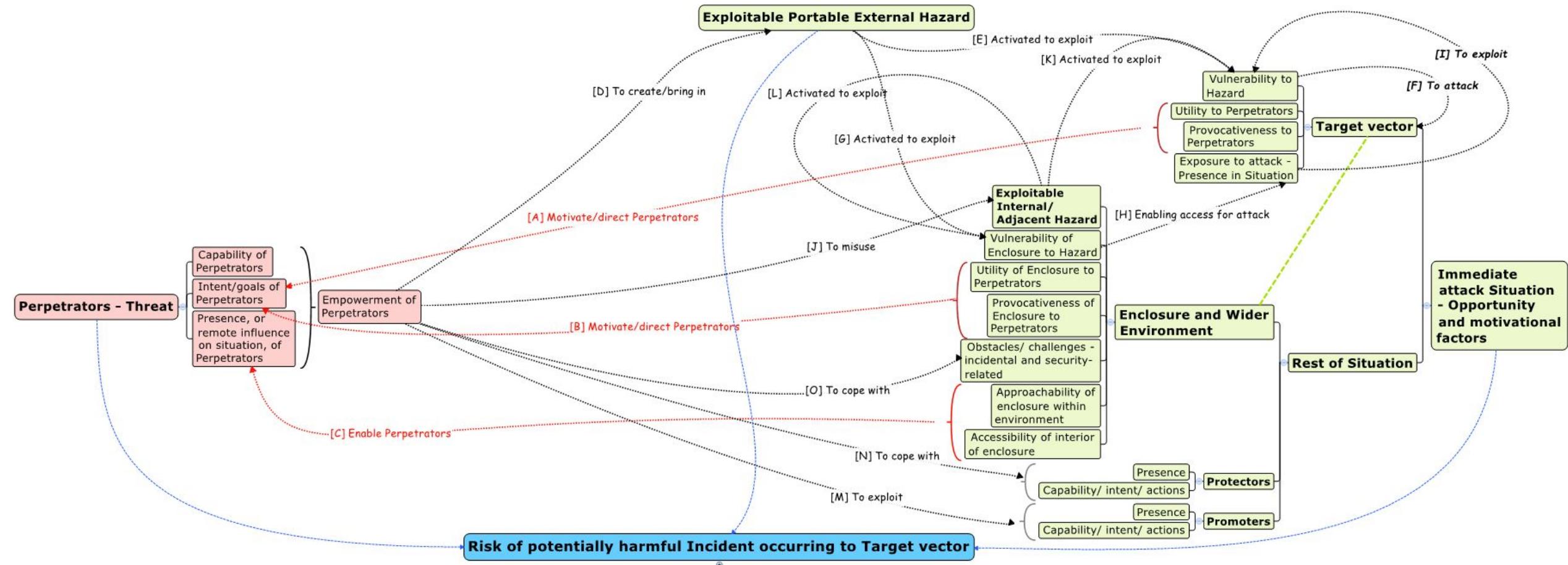


- Perpetrators must also cope with Protectors, such as surveillance or challenges from security staff [N]; and also with a range of obstacles e.g. barriers, card swipes etc [O]

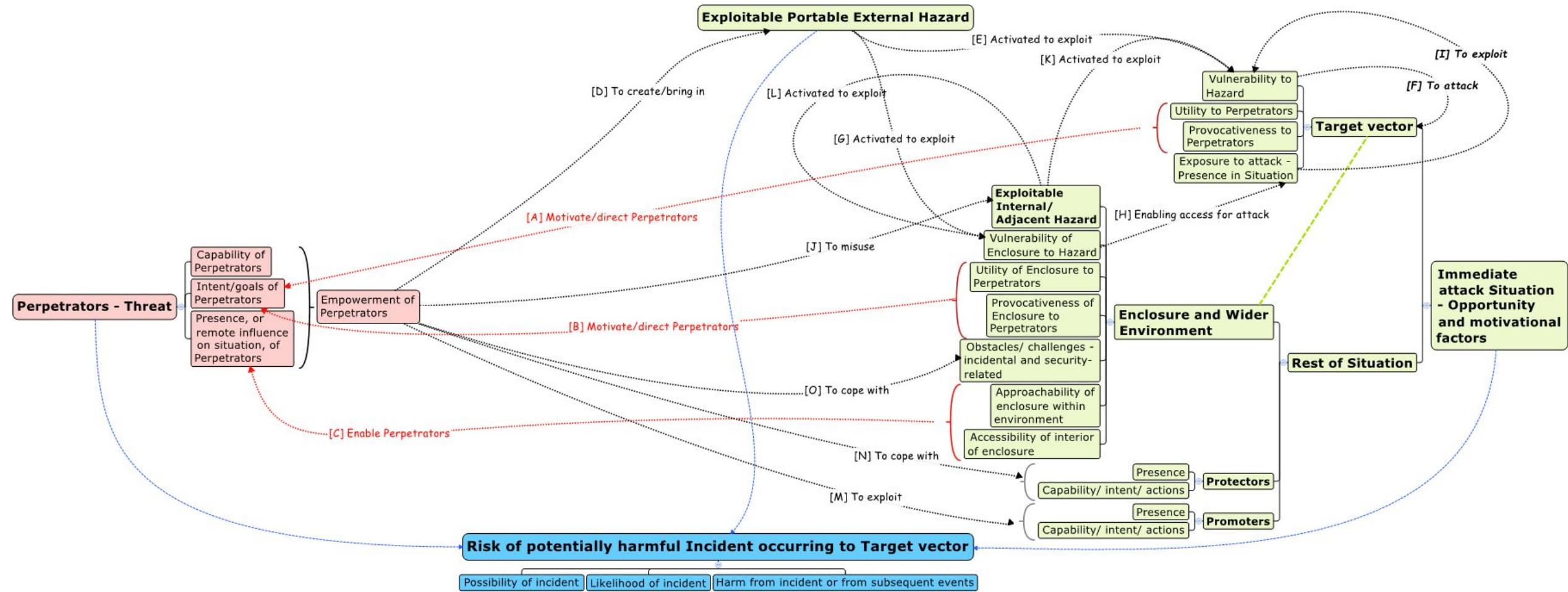
All interactions together



- This shows all these interactions on one diagram

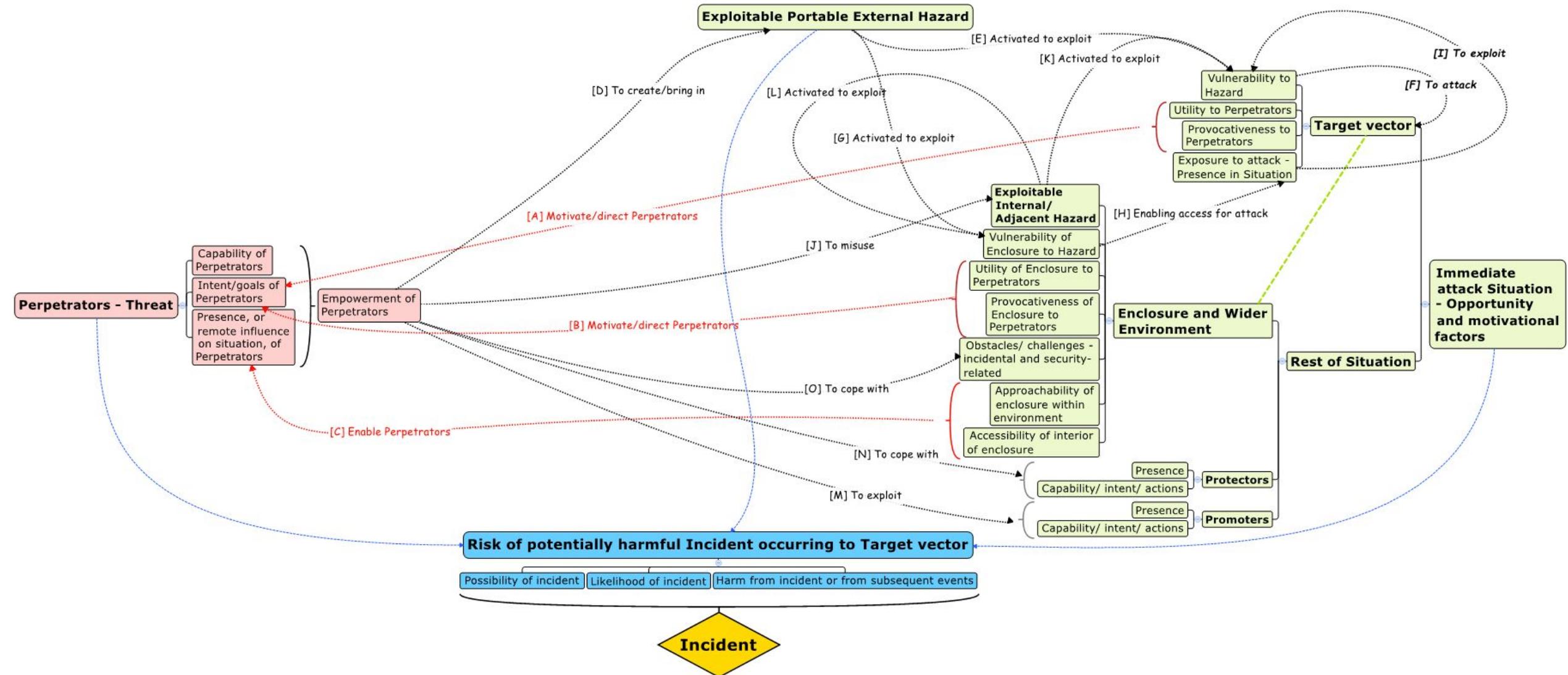


- This represents how all the above factors, entities and procedures combine to generate the Risk of a potentially harmful incident befalling the Target Vector

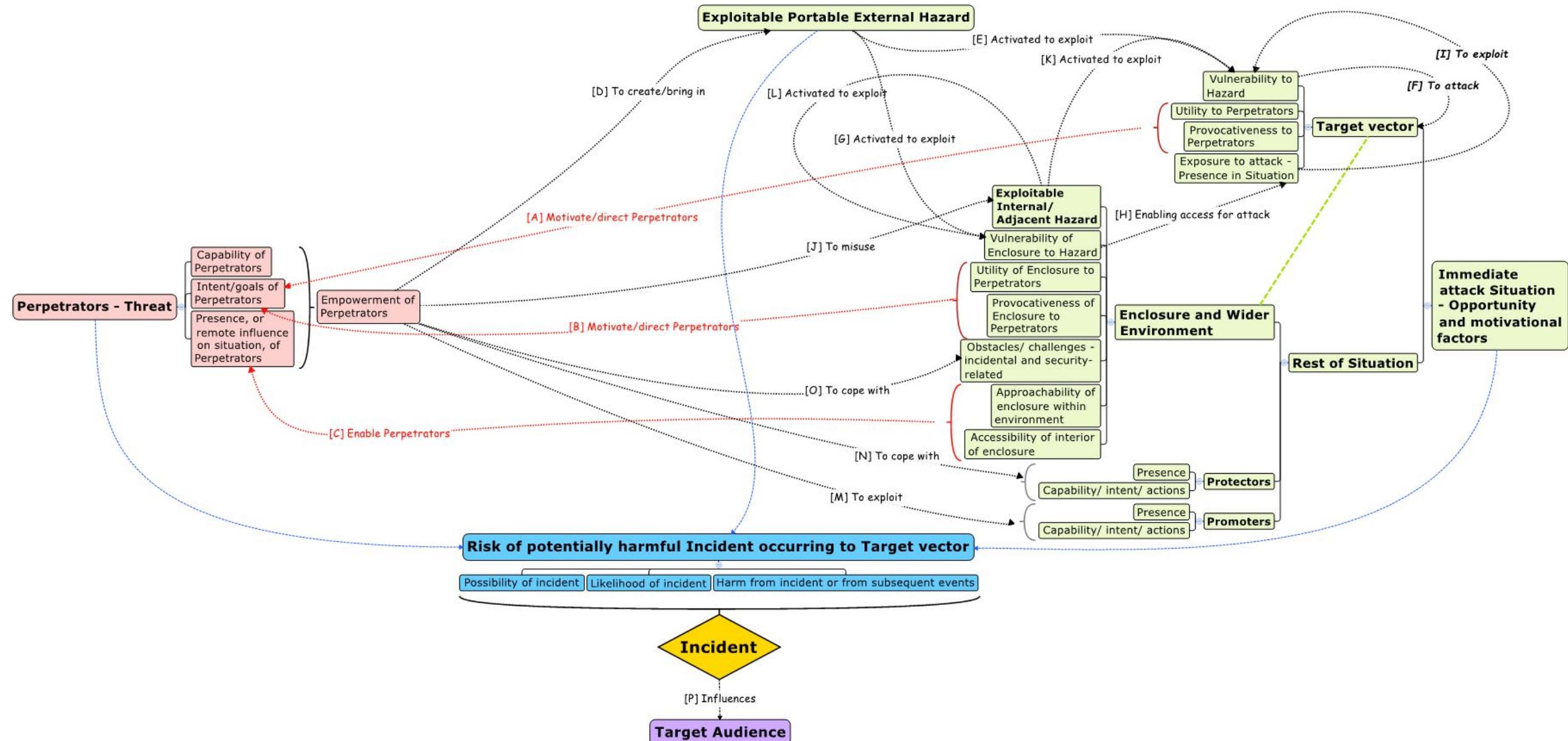


- Risk can be broken down into the Possibility of an Incident (i.e. the nature of the undesired event), Likelihood and Harm whether during the Incident itself or subsequently

Risk realised

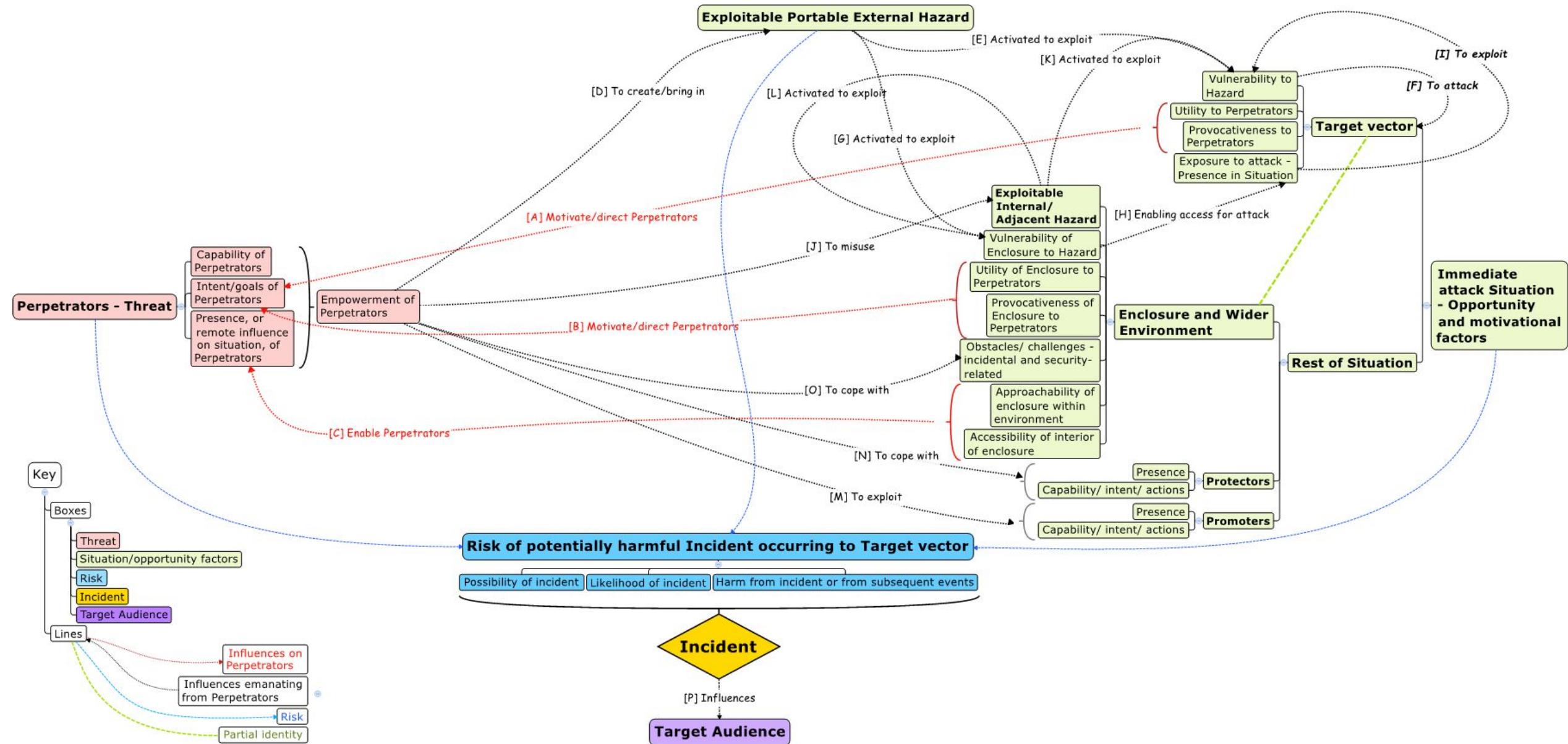


Influencing Target Audience



- When the Incident occurs, and whether or not an attempted attack succeeds from the Perpetrators' perspective, it may well influence the Target Audience – governments, general public or perhaps a private company or organisation [P]

Influencing Target Audience



An ongoing process

- The current version of the Glossary will need revision as new concepts are encountered or feedback is received about intelligibility and utility
- Further development may occur if the ongoing ISO 31000 revision has implications for security risk management (and indeed if the decision is taken to further embed the current indicative toolkit within ISO 31000)
- Development of the toolkit as a practical resource rather than an indicative one will require development of a set of simpler phrasing backed by the fuller technical definitions, and perhaps some examples, as the DHS lexicon does
- Ideally any glossary would need testing for intelligibility, non-ambiguity etc, on an international set of users
- For more on this glossary and the CT toolkit see
<https://crimeframeworks.wordpress.com/preempt-ct/>