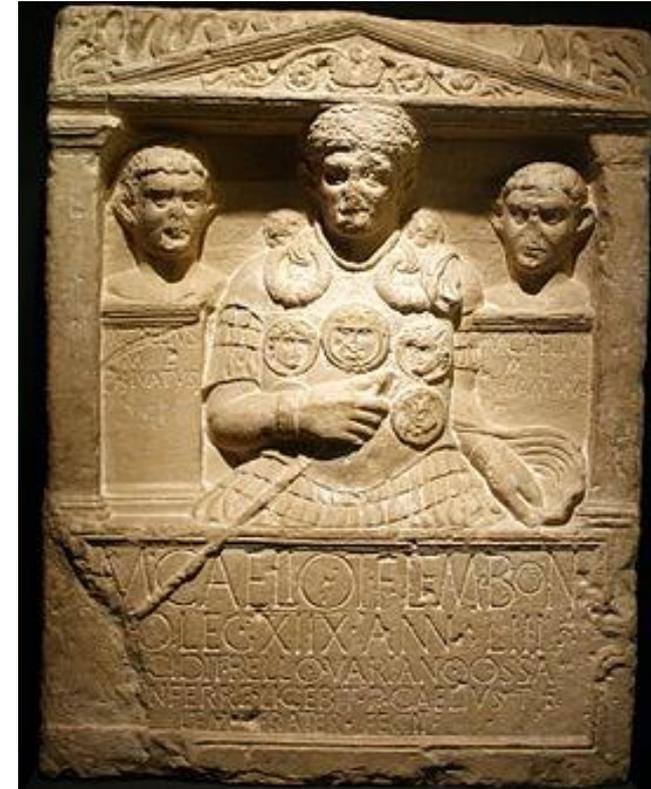# Re-Thinking All Hazards Risk Assessment

Michael Edgerton, CPP

Good Harbour International, LLC

Abu Dhabi, UAE

- All-Hazards Risk Assessments, while relatively easy for safety and security planners to use, lead to an emphasis on reaction and response measures and minimize the prevention aspect of the security spectrum
- Further, since Threats and Hazards are assessed differently, combining them into an All-Hazards Risk Assessment can be problematic and leads to a lower emphasis on threats

- In 9 A.D., outnumbered German tribes annihilated well organized Roman Legions in the Teutoburg Forest.

- The Romans used their traditional tactics while the Germans used unconventional tactics that the Romans did not anticipate.

- This battle was considered one of Rome's worst defeats.

- The Roman commander, Publius Quintillius Varus last words were reportedly, "Not like yesterday, not like yesterday".

- What is an "All-Hazards" Risk Assessment?
- Why has it become popular?
- The challenges and pitfalls of "All-Hazard" Assessments
- Alternatives
- Challenges and Opportunities

- All-hazards risk assessments have been used for years to drive planning processes.

- In the U.S., they became less prominent after 9/11 but then rose again after Hurricane Katrina.

- They are now used extensively by emergency managers and security professionals as well as government agencies.

GOOD HARBOUR
INTERNATIONAL

- All-hazards risk assessments combine all potential threats and hazards into one assessment.
  - Threats: Intentional malevolent actions by humans – Terrorism and crime
  - Hazards: Unintentional or natural events that have a negative impact – Accidents and Natural Disasters
- These are used as part of the risk equation: threat/hazard + criticality+ impact.

- Supports response and contingency plan development:
    - Easier to combine
    - Focuses on quantitative approach
- Allows plans to be multi-functional and responsive to any event vice specific event types
- In the US, national policy drives this approach through direction and grants
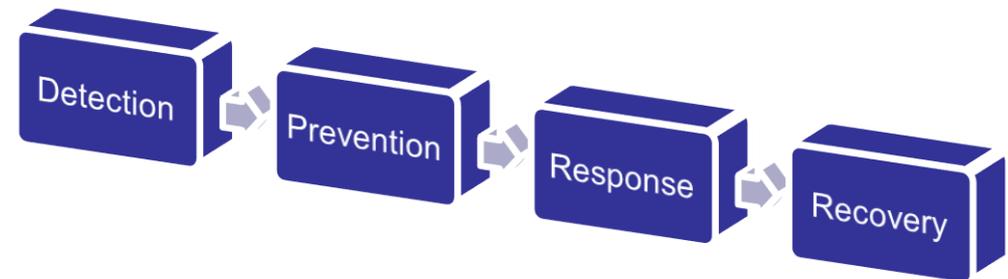- "Safer" approach

- Risks are assessed using different criteria and methodologies which are not always compatible:
  - Hazards: Probability and Likelihood based on science and data. Intent has no role.
  - Threats: Intent and Capability based less on data and more on analytic techniques and predictive study. Less reliance on data. A conscious and adaptive actor.
  - "Apples and Oranges"
- Because All-Hazard Assessments are generally less specifically focused, they encourage preparedness for a wide variety of threats and hazards and therefore de-emphasize detection or prevention activities and place the emphasis on response and recovery activities.
  - Due to the fact that Hazard assessments are more static, these assessments are more suited to hazards.
  - Since Threats are more dynamic, less data-driven, and require more frequent assessments, they are likely to be de-emphasized in All-Hazard assessments. This, in turn, leads to a reduced focus on the Detection and Prevention phases of the Safety and Security spectrum, which are more relevant to threats.

GOOD HARBOUR
INTERNATIONAL

Detection → Prevention → Response → Recovery
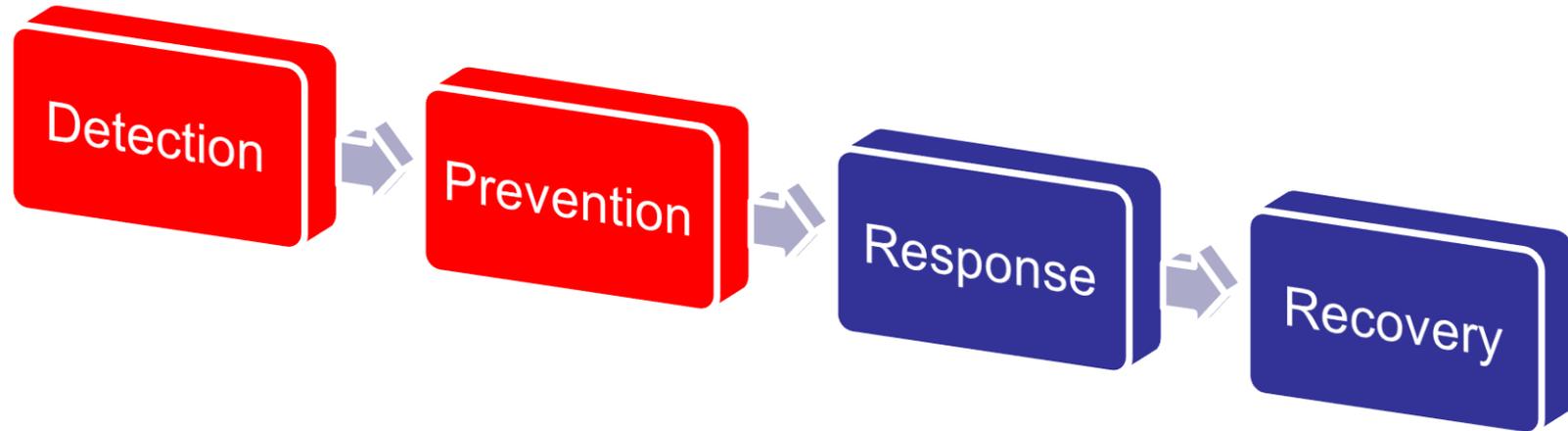
- All-Hazards Assessments may still be relevant in certain cases with some modifications:
  - They are certainly relevant for response planning, but in order to be relevant across the spectrum, certain modifications must be included
  - Perform separate Threat and Hazard assessments
  - Combine into a risk register using a "pair-wise" or similar process
    - This is more intensive and requires subjective analysis by the key stakeholders
  - Ensure the Threat and Hazard assessments are frequently updated

- **Challenges**
  - Convincing planners and decision-makers that detection and prevention planning requires more rigorous threat assessments. Avoid the Teutoborg Forest scenario…."Not like yesterday"
  - Developing a way to combine threat and hazard assessments to maximize utility

GOOD Harbour
INTERNATIONAL

- Opportunities
  - Maintaining efficiencies of an "All-Hazards" approach while reinforcing the need for rigorous prevention and detection planning
  - Recognizing the similarities of Hazard and Threat *response activities* while also recognizing the differences in *prevention* and *detection*

Questions?