A DIVISION OF NERC

E-ISAC

ELECTRICITY INFORMATION SHARING AND ANALYSIS CENTER

Electric-Gas Interdependence Security Perspectives

Sam Chanoski, Director, Threat Intelligence, E-ISAC

Electric-Gas Working Group Meeting

July 30, 2019

TLP:WHITE

RELIABILITY | RESILIENCE | SECURITY

Agenda

- About the E-ISAC
- Security risk analysis model
- “Know the threat, know the net”
- What we’re doing about it

E-ISAC Overview

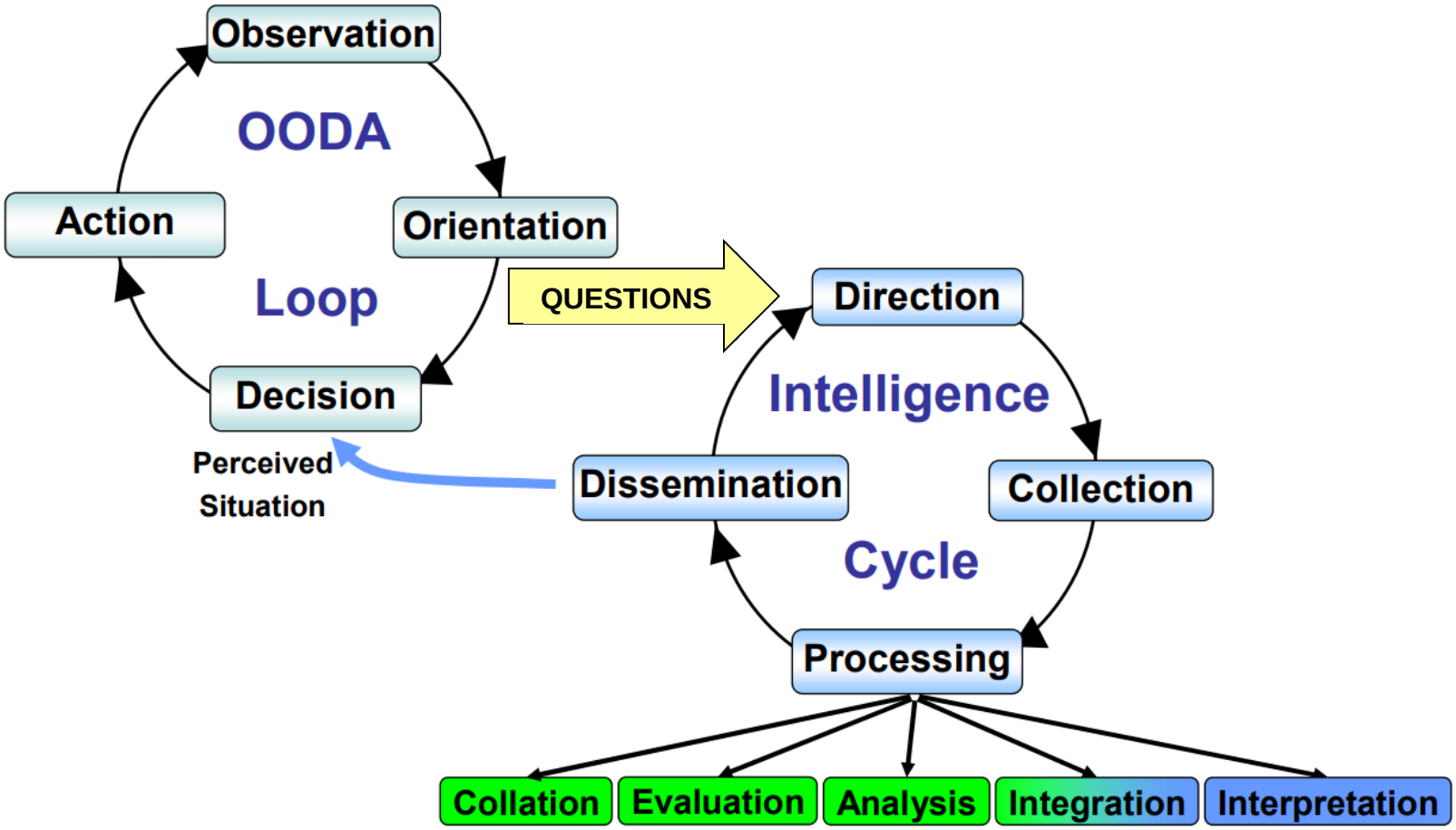
Mission

The E-ISAC reduces cyber and physical security risk to the electricity industry across North America by providing unique insights, leadership, and collaboration

Vision

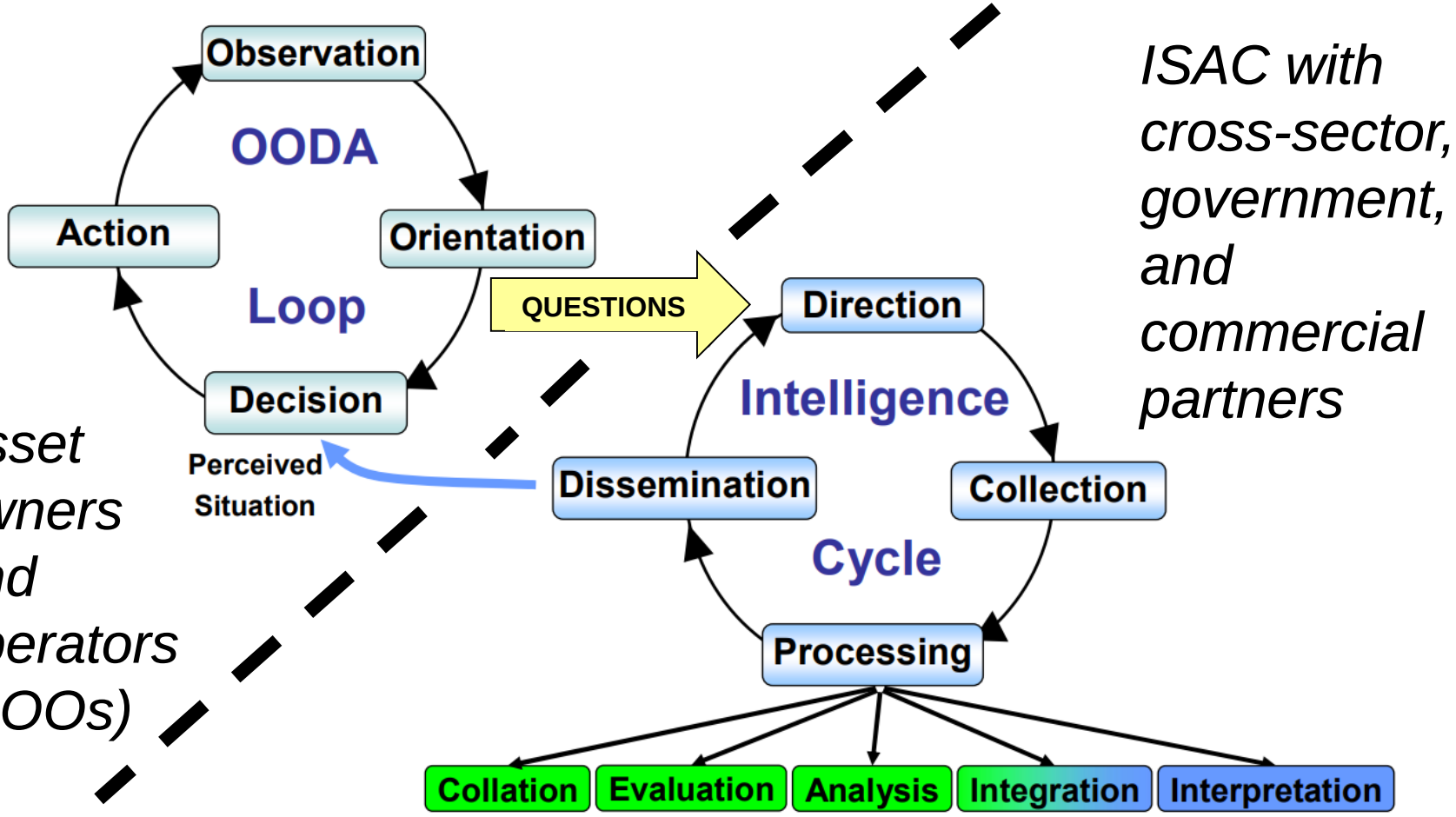
To be a world class, trusted source for quality analysis and rapid sharing of security information for the electricity industry

Analytical Sausage-Making



Adapted from Biermann, Hörling & Snidaro, 2009

Analytical Sausage-Making



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Risks, Threats, Vulnerabilities, oh my!

THREAT

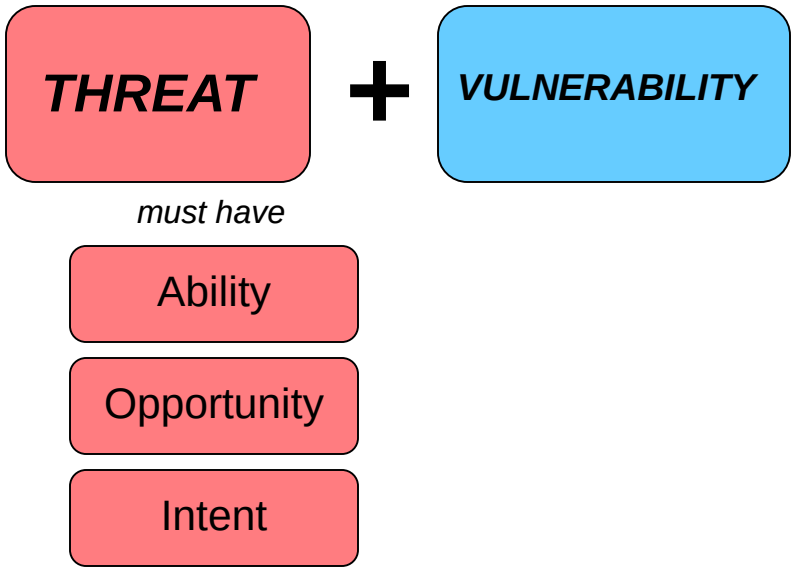
Risks, Threats, Vulnerabilities, oh my!

THREAT

must have

- Ability
- Opportunity
- Intent

Risks, Threats, Vulnerabilities, oh my!



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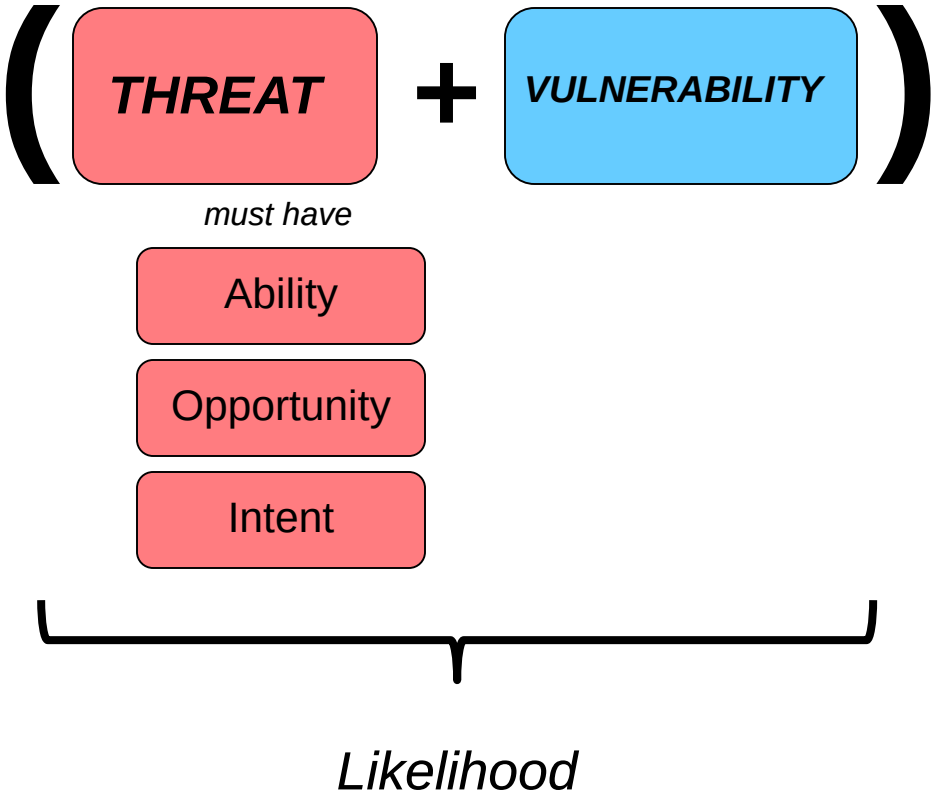

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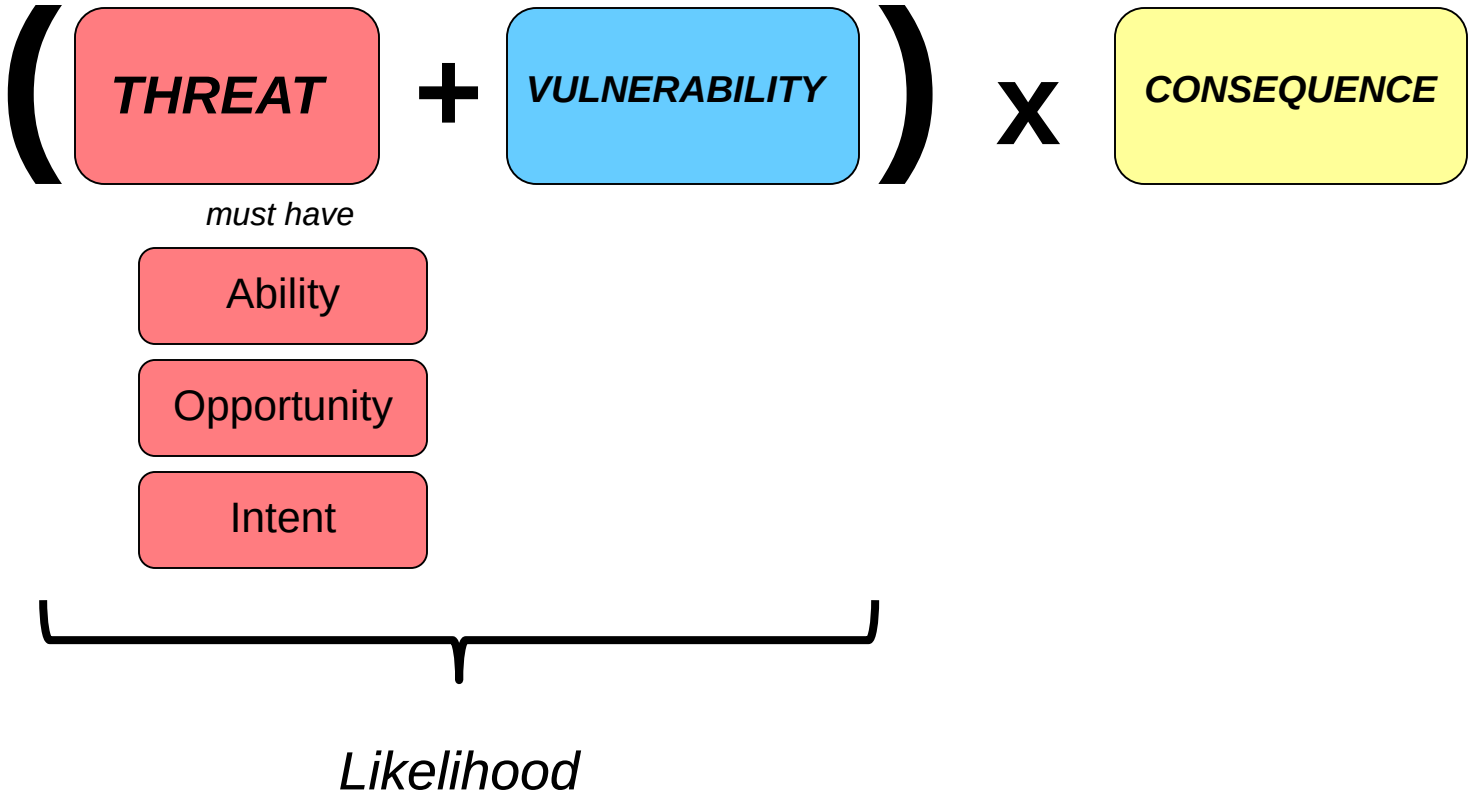

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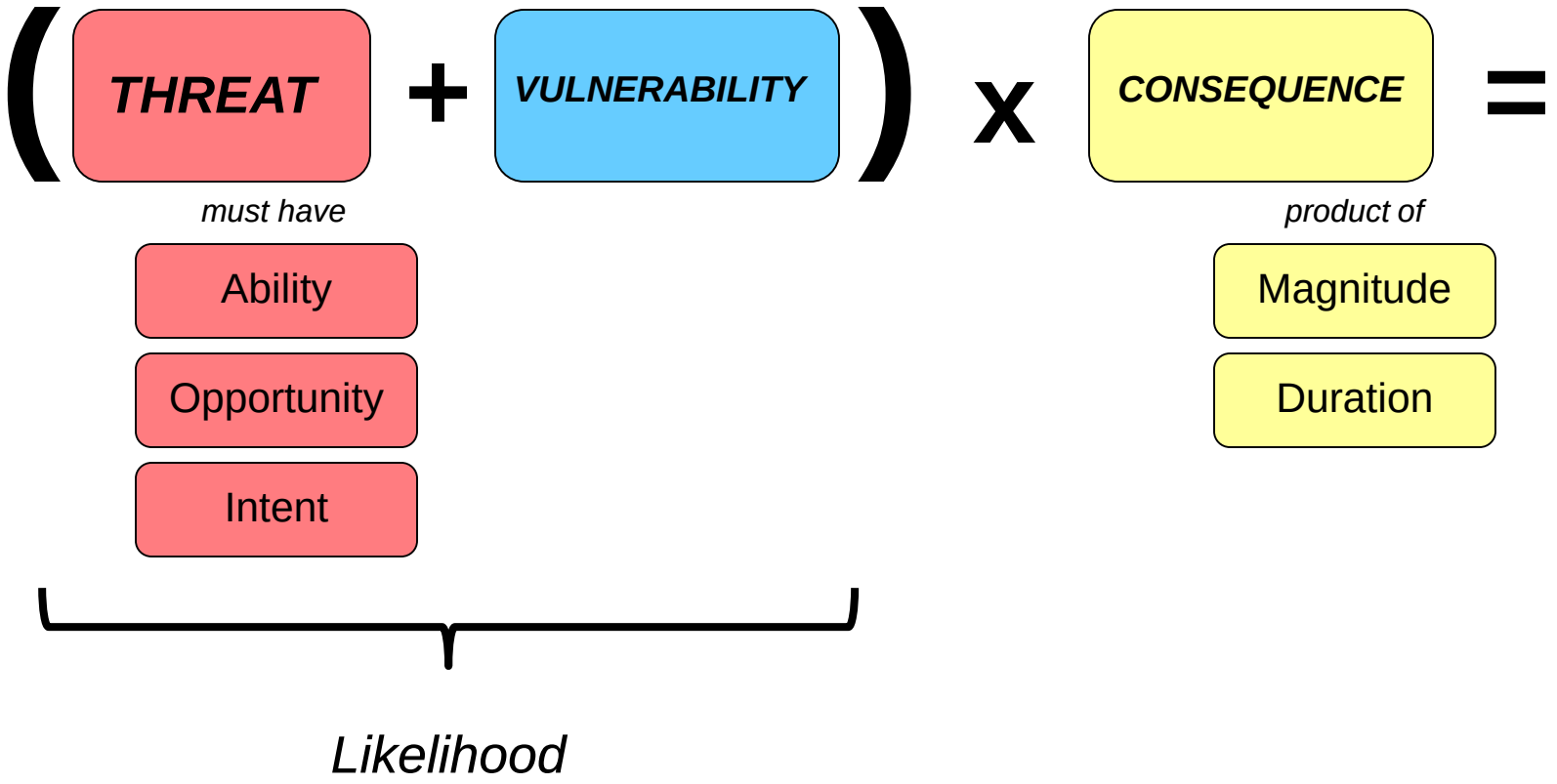

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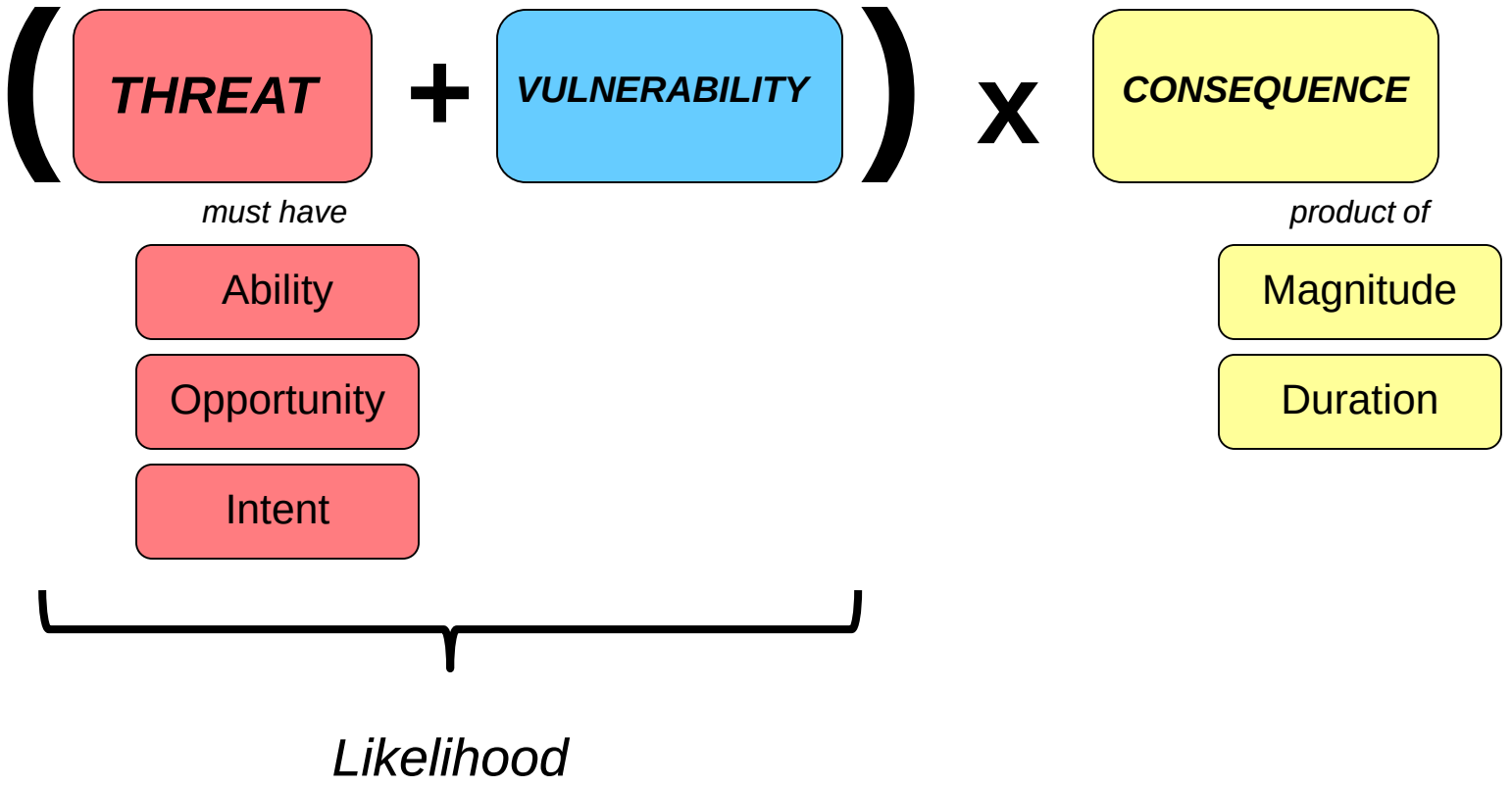

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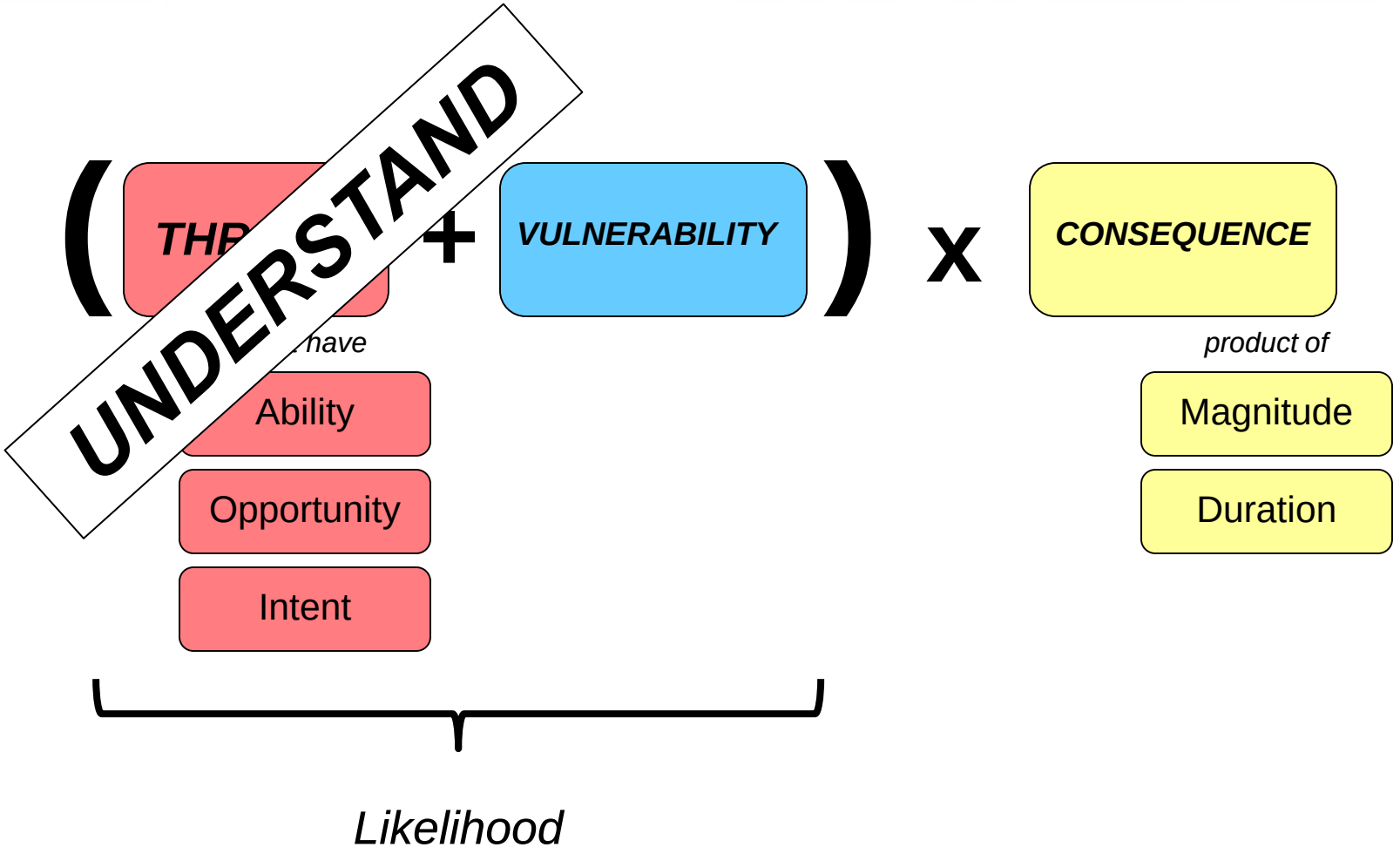

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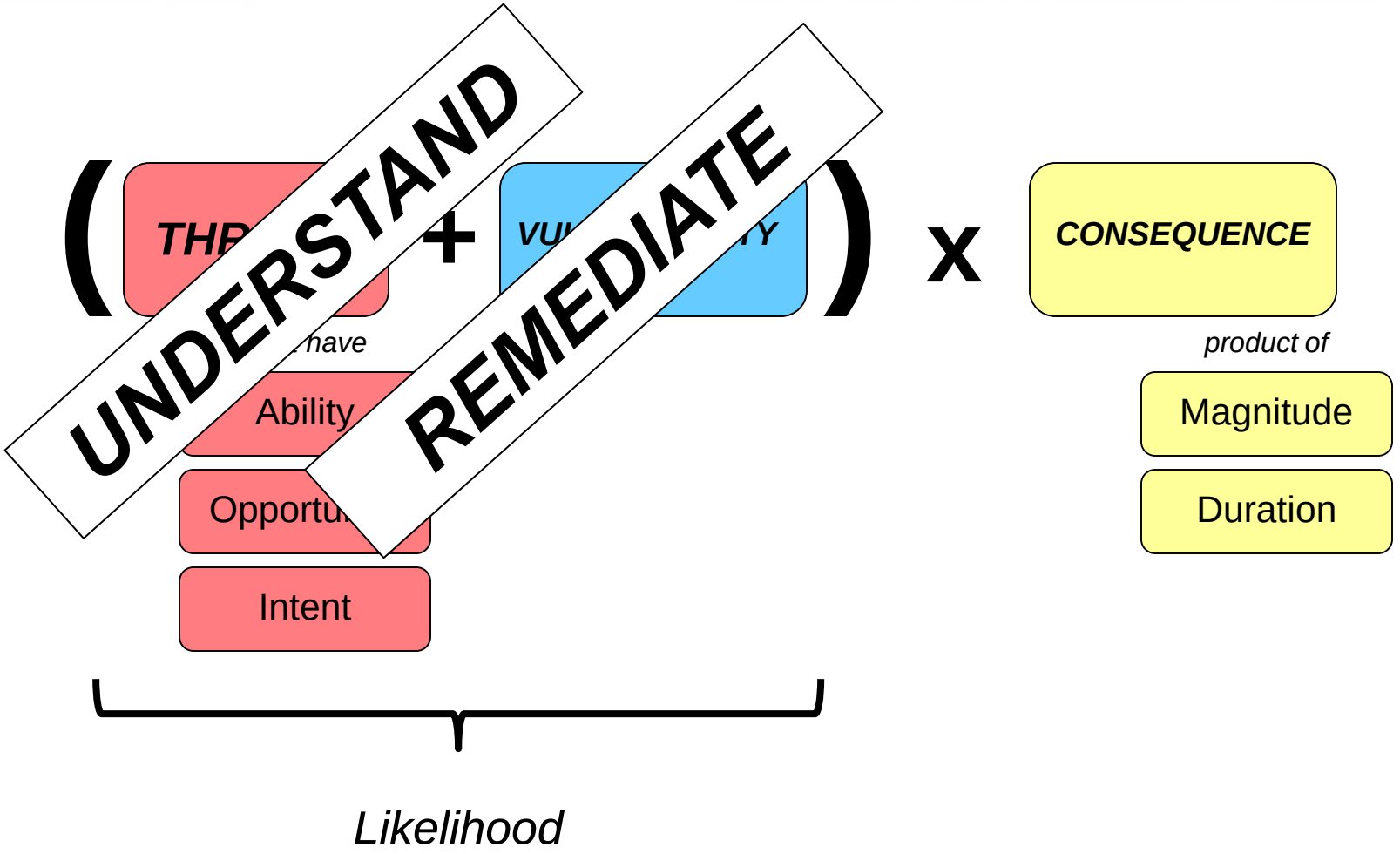

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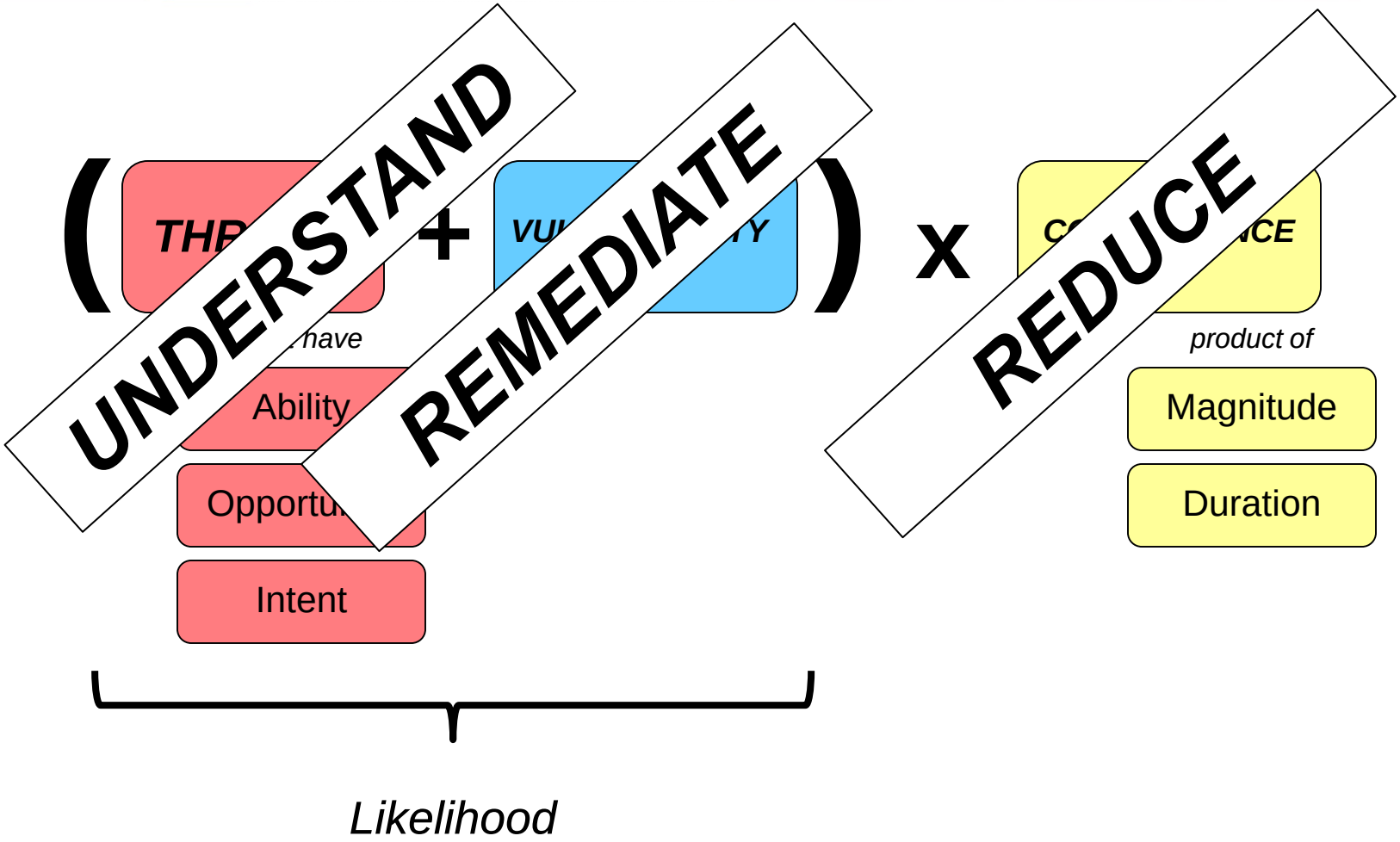
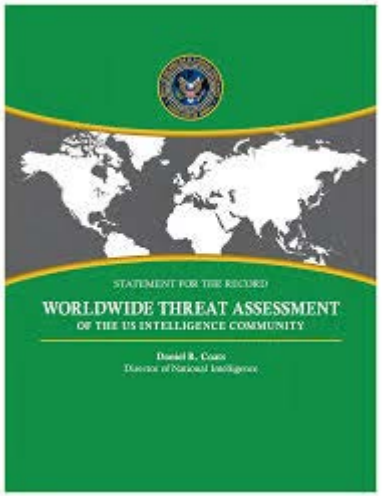


Risks, Threats, Vulnerabilities, oh my!

The risk is real

- 2019 Worldwide Threat Assessment
- 2018 attack on EDI system causes economic and indirect operational impacts
- 2017, 2019 Triton / TRISIS / Hatman attacks on Safety Instrumented Systems



Latitude Technologies

A team of teams

U.S. DEPARTMENT OF ENERGY

Homeland Security

U.S. Government

NationalCouncilofISACs

WATER ISAC

MS-ISAC
Multi-State Information Sharing & Analysis Center

DNG-ISAC

Other ISACs

ELECTRICITY INFORMATION SHARING AND ANALYSIS CENTER
A Division of NERC

International ISACs (Japan and European)

NRECA
America's Electric Cooperatives

AMERICAN PUBLIC POWER ASSOCIATION

EEI
Edison Electric INSTITUTE

Canadian Electricity Association | Association canadienne de l'électricité

Trade Associations

Public Safety Canada | Sécurité publique Canada

CANADIAN CENTRE FOR CYBER SECURITY | CENTRE CANADIEN POUR LA CYBERSÉCURITÉ

Natural Resources Canada | Ressources naturelles Canada

Canadian Government

What to share

Cyber Security

- Unexplained OT device freezes, reboots, or failures
- Sophisticated phishing (spoofed domains, trusted vendors, high value recipients)
- Scanning or reconnaissance of ICS ports and protocols
- Insights and forensic artifacts from incident response and threat hunting
- Abnormal DNS requests or authentication attempts

Physical Security

- Unusual observation or surveillance of facilities
- Misrepresentation of affiliation
- Theft, loss, or diversion of key safety or security items, systems and technologies
- Expressed or implied threats
- Breach or attempted intrusion
- SCADA/EMS anomalies coincident with a physical security event

Context is (almost) everything!

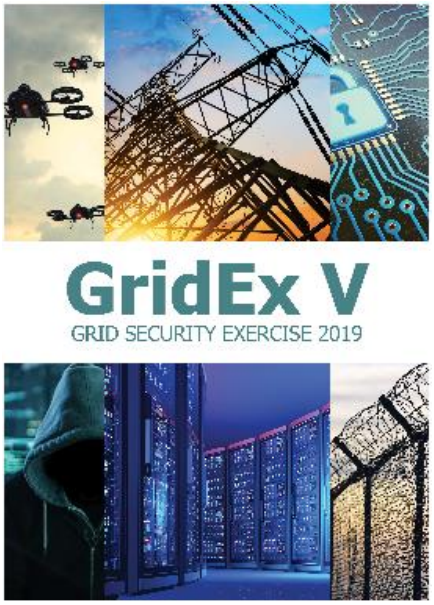
How to exchange information

- Portal, email, phone – whatever works for the member
- No specific forms or formats; use clear language
- *You* control how we further share and attribute the information

E-ISAC	DNG-ISAC	ONG-ISAC
operations@eisac.com	Analyst@DNGISAC.com	info@ongisac.org
www.eisac.com	www.dngisac.com	https://ongisac.org
202-790-6000 (24/7)		

106 days till GridEx V!
November 13-14, 2019

GridEx V objectives



- Exercise incident response plans
- Expand local and regional response
- Engage critical interdependencies
- Increase supply chain participation
- Improve communication
- Gather lessons learned
- Engage senior leadership

The road ahead

- Create more opportunities to collaborate cross sector
- Grow E-ISAC capabilities to serve member needs
- Increase partnership and collaboration with vendors

Questions and Answers

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