



Social Engineering as Emerging Threat for Human Trustworthiness in Nuclear Security

**BADAN PENGAWAS
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Kontak Presenter



Social Media



Social Media



Social Media



Social Media



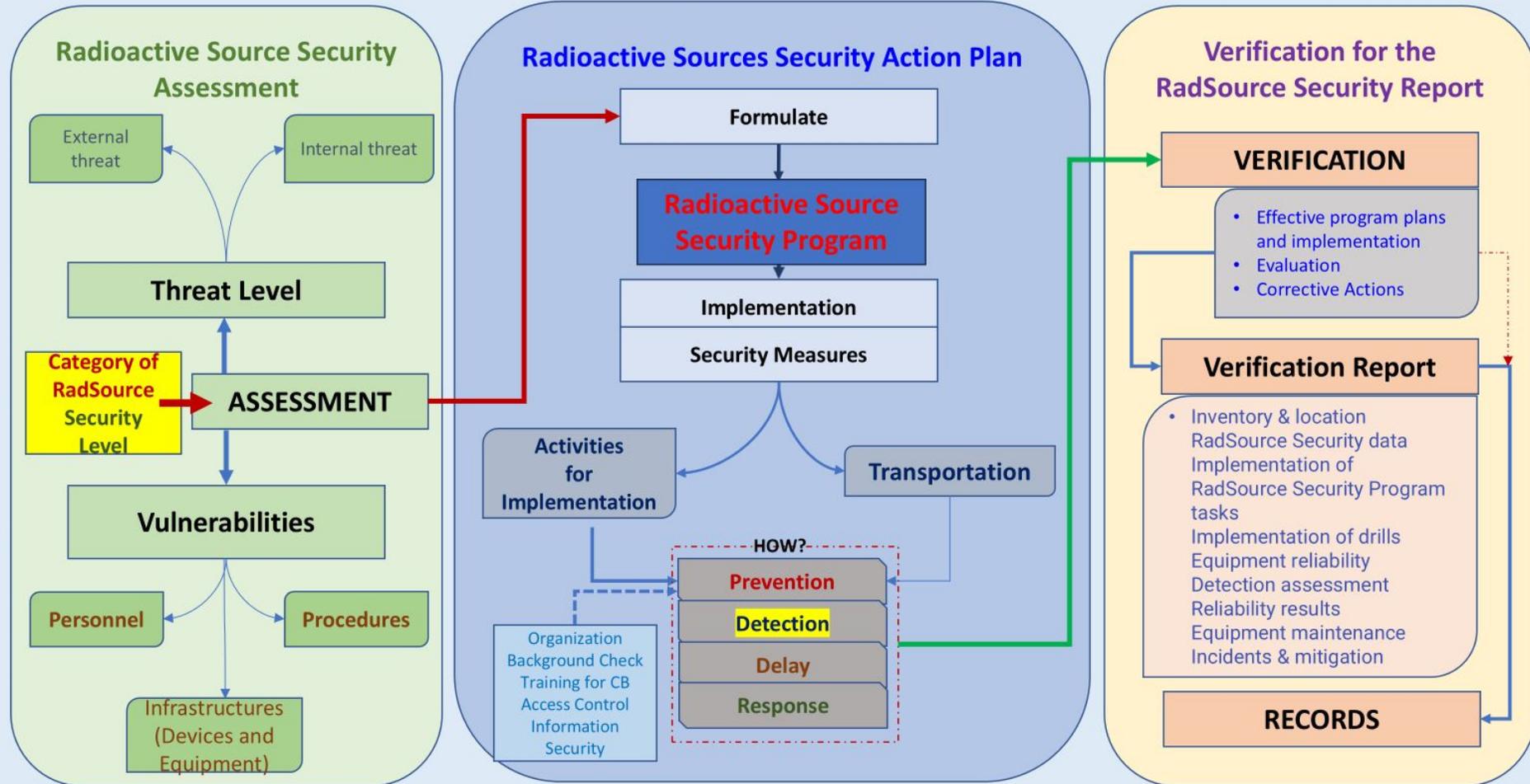
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THE MAP OF NUCLEAR ENERGY UTILIZATION IN INDONESIA



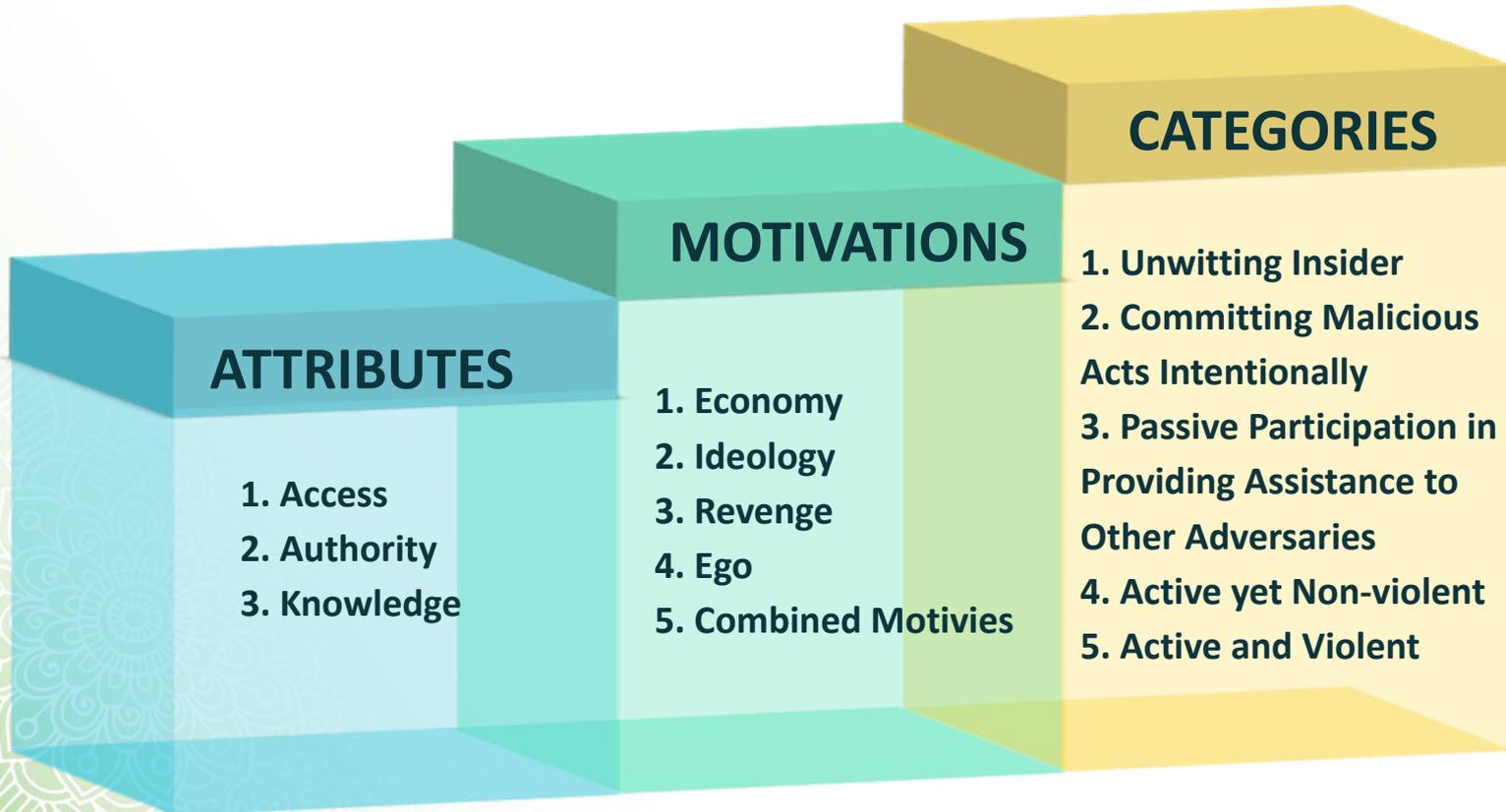
BAPETEN approaches in Regulating Radioactive Source Security Program

Management System





Insider Threats in Human Trustworthiness





What are the insider threats capable of committing?



VIOLENCE

- Workspace / Organizational
- Terrorism

ESPIONAGE

- Economic
- Government – intelligence activities
- Criminal

SABOTAGE

- Physical Sabotage
- Virtual Sabotage

THEFT

- Abrupt Theft
- Protracted Theft

CYBER

- Intentional Threats
- Unintentional Threats

How Social Engineering endanger Human Trustworthiness:

- Social engineering exploits trust and time pressure
- Social engineering bypasses firewalls





Emerging Threats in Social Engineering:



- **Facts of existing risks in Human Trustworthiness:**
 - Personnel exposed to sensitive and restricted information
 - Personnel in charge for vital and strategic infrastructure
 - Insufficient leadership
 - Poor management system
- **Threats in Social Engineering:**
 - Human love to socialize
 - Advanced borderless communication



How to Minimize the Impacts of Social Engineering: Empower the Human Resources



- Promote better communication platform in the teamwork



- Highlight capacity building in nuclear security



- Perform periodic background checking



How to Minimize the Impacts of Social Engineering:

Commitment in Leadership:



- Governance and Policy



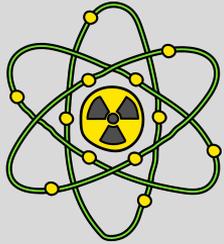
- Role Modeling: setting good examples
- Culture Awareness



- Trust Management
- Encourage Reporting



Reaching out to stakeholders and community to support strengthening the nuclear security



01

Nuclear security may not be a popular issue for those community outside the nuclear field



02

We need to reach out more communities to deliver the importance of nuclear security, in particular, the academics member to prepare the next generation of nuclear security practitioners and experts





Indonesia is engaging the stakeholders in strengthening the nuclear security:



In collaboration with IAEA and other international collaborations, BAPETEN is committed to build the capacity for front liners including the Customs, Police, Army, National Coast Guards, State Intelligence Agency, University representatives, etc



Introducing the nuclear security concept that requires solid collaborations inter agencies



Understanding that front-liner personnel should have optimum capacity in detection, prevention, deterring, and responding to any nuclear security events or incidents

It has been a part of the **I-CoNSEP** (Indonesia Center of Excellence in Nuclear Security and Emergency Preparedness) commitment to enhance the capacity building for supporting the nuclear security



Workshop on Nuclear Security Awareness in University:



- Reaching out the future generation in strengthening nuclear security
- Introducing Human Trustworthiness in Nuclear Security





BAPETEN has initiated to hold annual inter-agencies meeting on Nuclear Security (National Coordinative Meeting on Nuclear Security)

1

Developing the architecture of nuclear security detection in Indonesia

3

Discussion on current issues and arising problems related to nuclear security

2

Identification of required collaborations for strengthening nuclear security

4

Assessment and evaluating the competency of each agency in nuclear security





Me, myself, and my presentation



Professional Experiences

1. Nuclear Regulatory Officer in BAPETEN - Indonesia
2. Lecturer in Universitas Islam Indonesia - Yogyakarta
3. Data Manager for PADCO Washington on Yogyakarta Strategic Action Plan
4. Drilling Services Engineer in Schlumberger (North South America Region)



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I attended these schools:

1. Doctorate Program in Computer Science (Cybersecurity for Nuclear Security)
2. Master in Nuclear Quantum Engineering (KAIST - South Korea)
3. Bachelor in Electrical Engineering (Universitas Gadjah Mada)



Thank You
Questions are welcome for further discussion

