

Employee Engagement in Nuclear Security

- A. Bayu Purnomo
- Directorate of Nuclear Facility Management
- Badan Riset dan Inovasi Nasional



PROFESIONAL
OPTIMIS
PRODUKTIF

Topics

Nuclear security culture milestones

Security competencies and accountabilities

Create champions

Clear security process

Vulnerability assessment

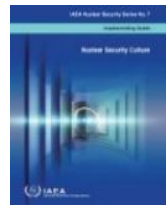
Education and training programmes

Safety and security drills

Effective communications

Employee Support Programme

Nuclear Security Culture Milestones



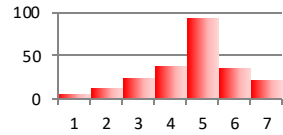
IAEA NSS#7

2008



IAEA RWS on NSC, Yogyakarta

2011



NSC SA pilot project results presented at IAEA TM

2013



2nd NSC SA: full scope, Serpong

2015



BATAN submitted Final report to IAEA, Vienna

2017



PPS Laboratory Launched: National & Reg TC

2019



Reorganization

2021

2010



BATAN promoted NSC, Jakarta

2012



1st NSC SA Trial Serpong

2014



Inauguration of CSCA, Serpong

2016



Workshop on Harmonization of Safety and Security Culture, Jakarta

2018

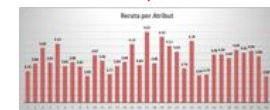
3rd NSC SA: full scope, Pasar Jumat

2020



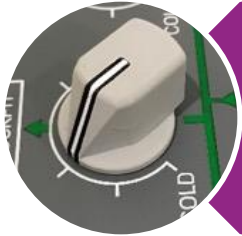
CET/NSSC conducted 1st Training course on Safety & Security Culture, Jakarta

2023



4th NSC SA: full scope, All employees

Security competencies and accountabilities



Management set clear accountabilities and competencies for nuclear security professionals, managers and staff



Staff members have the necessary competencies required by a strong nuclear security culture



Assessment of each staff member's security performance includes participation in security exercises, the completion of training, and other activities.

Create Champions

Staff(s) may be assigned to assist in developing and improving the security system:

- holding security workshops and exercises as trainers
- developing a Continual Security Improvement programme
- encouraging self- assessments.

Train the Trainer



Leadership Awareness Programme



Clear security process



Leadership should create a process to nominate clear rules and make suggestions for alternative approaches.



Management need to cut back rules that are no longer appropriate to the security and operational environment.



Doors should be designed to lock by itself, making security simpler and more convenient.

Vulnerabilities exercise



Staff may identify and fix site vulnerabilities.



Vulnerability found in one place can be addressed and repaired in other places by sharing.



An award be given to the team that finds and contributes to fixing credible vulnerabilities.

Education and training programmes

Establish security training programmes that include:

- real stories about terrorists who have actually tried to obtain nuclear weapons or the materials to make them
- real cases of sabotage or the theft of nuclear and other radioactive material
- examples of adversary teams that have found vulnerabilities in security systems

Safety and security drills



A scenario is given in such a drill, where a security incident initiate radiological accident (s), and followed up by mitigation efforts.



All employees should participate in the event, and afterward the drill will be evaluated for behaviors of employees.

Improving the Security Performances

- Organizing various **in-house training**, sending staff to some regional and international events
- **Joint training exercise on countering terrorism**
 - Conducted annually, Involving all stake holders: police, army, fire brigades, radiological first responder unit, theft and sabotage scenario



CSCA Activities



NSC Programme in BRIN

- BRIN in cooperation with BAPETEN conducted FGD on Nuclear Security involving National Police, National Intelligence Agency
- Reinforce the role of BRIN in nuclear security issues and nuclear security culture



Invite external parties

- Capacity building
- Short internship for students
- Tasks:
 - Develop draft of guide on nuclear security culture implementation
 - participate in self assessment



Effective communications

Senior executives create communications channels such as discussion forums on topics such as:

- emerging threats,
- professional conduct,
- personal responsibility,
- vigilance,
- adherence to procedures,
- opportunities for improvement,
- teamwork and cooperation

Communication tools

Open meetings led by senior management

Briefings by section heads

Lunch-and-learn discussions

An intranet security node

Electronic communications

An awards programme

Promotional items inscribed with security values

Open Meeting with Management



Employee support programme

Employees who have stresses should be offered help via employee support programmes rather than being punished or fired:

Psychological counseling

Care for children and elders

Monetary loans

Addiction treatment

Counseling Programme



Summary

Employee engagement programme is fun

Leadership shall also be involved

Various ways to engage people

Communication is the key

Beneficial to get help from external parties

THANK you



agus051@brin.go.id