

International Workshop on *Understanding and Mitigating the Insider Threat*

16 – 18 December 2018. Abu Dhabi, UAE

Preliminary Agenda (Revised)

DAY 1: SUNDAY 16 DECEMBER 2018

08:30 – 09:00 Registration / Coffee & Tea

OPENING SESSION

09:00 – 09:30 Welcome & opening remarks (FANR, WINS)

09:30 – 10:00 Introduction of participants and discussions to review expectations (Workshop facilitator)

SESSION 1: UNDERSTANDING THE INSIDER THREAT

Key issues:

- ✓ Why are we so concerned by the insider threat?
- ✓ How human attributes and characteristic impact the implementation of security (strengths and weaknesses)?
- ✓ What can we learn from past incidents? What insider scenario is most likely to happen?

10:00 – 10:30 **Human factors in security**
Presentation by Eric Lang, PERSEREC, USA

10:30 – 11:00 **Discussion** to review

- Examples of insider actions in the nuclear industry and other critical sectors;
- What insider scenario is most likely to happen;
- Best practices for learning from past incidents and for developing credible insider scenarios.

11:00 – 11:15 Coffee Break

SESSION 2: ENGAGING ALL STAKEHOLDERS

Key issues:

- ✓ What are the objectives and content of an overall mitigation strategy?
- ✓ Who are the stakeholders involved in the mitigation process? What is their role and contribution?
- ✓ What are the gaps and opportunities for optimising the communication, coordination and cooperation amongst key stakeholders (e.g. the intelligence community, the regulator and the operator)?

11:15 – 11:45 **Developing a comprehensive approach – A regulator perspective**
Presentation by Osama Al Shehhi, FANR, UAE

11:45 – 12:15 **Discussion** to

- Identify the key internal and external stakeholders involved in the insider mitigation strategy;
- Review their roles and contributions;
- Share and discuss good practices for optimising the communication, coordination and cooperation amongst these key stakeholders.

12:15 – 12:45 **IAEA recommendations and guidance for mitigating the insider threat**
Dialogue with Assel Khamzayeva, IAEA Nuclear Security Division

12:45 – 13:45 Lunch

SESSION 3: TABLE-TOP-EXERCISE – SWEETBRIAR NUCLEAR POWER PLANT

13:45 – 15:30 Introduction, Rules and Background to the TTX (Facilitator)

- Phase 1 – The initial information
- Phase 2 – Incident response
- Phase 3 – An evolving situation
- Phase 4 – The recovery phase

Wrap up of the TTX: How could this situation have been prevented? What did they miss? What should have been in place? How does it resonate with our own experience?

15:30 – 15:45 Coffee Break

15:45 – 16:45 Review of the TTX key findings and how they relate to the main sessions of Day 2 and Day 3. What are we good at? What remains challenging?

- *Engaging and communicating with all stakeholders*
- *Designing and implementing mitigation programmes*
- *Employee trustworthiness and reliability; Behavioural observation and reporting concerns.*
- *Cyber insider threat and technologies in support of insider mitigation.*
- *Responding to an insider action*
- *Measuring the effectiveness of insider mitigation programmes.*

16:45 – 17:15 Dealing with the Insider Threat in the Nuclear Sector

Presentation by Rony Dresselaers, FANC, Belgium

17:15 – 17:30 Review of the day (Facilitator)

19:00 Workshop Dinner (hosted by FANR)

DAY 2: MONDAY 17 DECEMBER 2018

09:00 – 09:15 Review of Day 1 key findings and objectives of Day 2 (Facilitator)

SESSION 4: DESIGNING AND IMPLEMENTING MITIGATION PROGRAMMES AGAINST THE INSIDER THREAT

Key issues:

- ✓ What are the essential components of an insider mitigation programme?
- ✓ What is the role a comprehensive human reliability programme (HRP)?
- ✓ How do you ensure that your HRP delivers what you are expecting? What are the practical and legal Issues associated with implementing HRPs?

09:15 – 09:30 Discussion on the key elements of an insider mitigation programme

09:30 – 10:30 Designing and implementing an insider mitigation programme – An operator perspective

- Presentation by Zaid Al Hebshi, ENEC, UAE
- Presentation by Carol Higson, Urenco, UK

10:30 – 11:00 Discussion

- to listen to other experiences and share best practices;
- to review the main challenges and possible solutions when implementing insider mitigation measures.

11:00 – 11:15 Coffee Break

SESSION 5: EMPLOYEE TRUSTWORTHINESS AND RELIABILITY

Key issues:

- ✓ To discuss the process for ensuring the trustworthiness of individuals
- ✓ To share vetting experiences and identify best practices for sharing information with State intelligence services
- ✓ To review factors that may influence the trustworthiness of individuals

11:15 – 12:15 Ensuring the trustworthiness of individuals accessing nuclear materials or sensitive locations and facilities

- **Presentation** by Pinkie Rabali, Necsa, South Africa
- **Presentation** by Christophe Ramu, ITER, International/France

12:15 – 12:45 Discussion on vetting and background checks

- to identify what measures should be taken by a nuclear operator before, during and after employment
- Review the most usual challenges faced when implementing these measures.

12:45 – 13:45 Lunch

SESSION 6: BEHAVIOURAL OBSERVATION PROGRAMMES AND PROCESSES FOR REPORTING SERIOUS CONCERNS

Key issues:

- ✓ What are behavioural observation tools and techniques?
- ✓ What are the usual barriers and challenges for implementing these tools and techniques at facility-level?
- ✓ What are best practices for reporting concerns and what is the role of a whistleblowing programme?

13:45 – 14:15 Behaviour observation programme practices and lessons learned

Presentation by Jeff Steven Bruce Power, Canada

14:15 – 15:00 Case studies on the capabilities of managers and co-workers to detect issues with an employee and how to react to such situations.

15:00 – 15:15 Coffee Break

15:15 – 15:45 Reporting serious concerns

Presentation by Beverley Oliver, SafeCall

15:45 – 16:00 Discussion to identify and discuss best practices for facilitating the reporting of serious concerns and ensure effective follow-up.

SESSION 7: MEASURING THE EFFECTIVENESS OF INSIDER MITIGATION PROGRAMMES

- ✓ How can such programmes be measured for their effectiveness?
- ✓ How can we integrate the insider risk into the overall risk management structure?
- ✓ Is the nuclear industry a leader in managing the insider threat?

16:00 – 17:00 Panel of experts to discuss possible approaches to measure the effectiveness of an Insider Mitigation Programme

Discussion to identify and discuss best practices for conducting evaluations and identify relevant security metrics and key performance indicators *that are achievable and workable for you*

17:00 – 17:30 Review of the day. Key findings and pending issues (Facilitator)

End of Day 2

DAY 3:

07:45 – 08:45 Trip to the IBM Innovation & Industry Solutions Centre & Access to the venue

08:45 – 09:00 Where the innovation starts – Welcome remarks by Mitchel Free – IBM USA

SESSION 8: ADDRESSING THE CYBER INSIDER THREAT

Key issues:

- ✓ What are the best practices for deterring and preventing the cyber insider threat?
- ✓ What are the most common challenges and potential solutions?
- ✓ How can we effectively integrate cyber security with other security measures?

09:00 – 09:30 **Cyber Insider Threat and its relevance to the nuclear industry**

Presentation by Anno Keizer, Urenco Netherlands

09:30 – 10:00 **The Cyber Insider Threat - The experience from another critical infrastructure**

Presentation by Sultan Al Owais, Dubai Prime Minister Office, UAE

10:00 – 10:30 **Discussion** to share experiences and lessons learned in mitigating the cyber insider threat and developing a comprehensive and integrated insider mitigation programme

10:30 – 10:45 Coffee break

IBM PRESENTATIONS AND DEMONSTRATIONS

10:45 – 11:30 **Leveraging IBM Security to help prevent / detect / mitigate security threats**

Presentation by Mike Kehoe, IBM Ireland

11:30 – 12:15 **Leveraging IBM Artificial Intelligence and IBM Analytics to strengthen physical security**

Presentation by Ondrej Szekely, IBM Czech Republic

12:15 – 13:15 Lunch

13:15 – 14:00 **IBM Video Analytics**

Presentation by Ondrej Szekely, IBM Czech Republic

14:00 – 14:15 **Introduction to the IBM corporate video center**

14:15 – 15:45 **Break out groups to attend demonstrations**

- IBM Security to help prevent / detect / mitigate security threats (Mike Kehoe, IBM Ireland)
- Artificial Intelligence and IBM Analytics tools to strengthen physical security (Ondrej Szekely, IBM Czech Republic)
- IBM Video Analytics capabilities and use cases (Dana Abu Ali, IBM UAE)

15:45 – 16:00 Coffee break

CONCLUSION SESSION

16:00 – 16:45 **Way Forward**

- What are the key lessons that arise from this workshop?
- What questions and challenges remain unaddressed?

16:45 – 17:00 **Workshop Evaluation and Closing remarks**

End of The Workshop