

Online Workshop on Operational Experience with Drones in Nuclear Security: Benefits and Threats

(14/04/2026 – 15/04/2026)

14:00–16:30 CEST

DAY 1

14:00–15:00 **Opening Session**

Welcome Remarks by *Lars Van Dassen, Executive Director, WINS*

Objective and Agenda of the workshop

Keynote on Drones and their impact on security by *Geoffrey Moore, Arup, Singapore*

Discussion:

- What do we mean by drones? What is the difference between a drone and UAS or UAV?
- Why are drones considered as a game changer in security?
- How did drones evolve overtime and what further evolution can be expected in short and medium term?
- What myths around drones should be busted?

Discussion on Lessons Learned from real life incidents

15:00–16:20 **Session 1: Drones as a Security Enabler and Threat Vector**

Key Points:

- How can drones strengthen existing security capabilities and bring new operational opportunities?
- How can adversaries exploit drones to compromise security?
- Are drones already a common capacity of adversaries and how accessible are drones for them?

Presentation on drones as a tool to strengthen existing security arrangements by *Ashley Mayle, SNL, USA*

Presentation on Serbia's experience with in-house drone development by *Dragana Žarković, Nuclear Facilities of Serbia, Serbia*

Discussion

- How are drones enhancing surveillance, alarm assessment and response?
- What are the operational advantages and limitations?

(Short break)

Presentation on drones as an adversary tool by *Richard Gill, Drone Defence, UK*

Discussion

- What threat types should operators be prepared for (surveillance, payloads, cyber effects)?
- Which security functions and components are most at risk?
- Will drones require new design concepts for critical infrastructure?

16:20–16:30 **Wrap-up of Day 1**

DAY 2

14:00–15:10 **Session 2: Strengthening Security Arrangements by utilising Drones**

Key Points:

- What experience do we have from nuclear and other critical infrastructure operators already using drones in their security arrangements?
- What are good practices for effectively integrating drones in existing security arrangements?
- What are the main challenges when introducing drones into existing security arrangements?

Case Study from a nuclear operator *by Paul Tonks, NDA, UK*

Panel of experts on lessons learned (2)

- What are major operational gains when using drones?
- What are the usual challenges (administrative, technical, environmental, etc.) for integrating drones in security arrangements and how can one overcome them?
- How have legal and regulatory frameworks evolved to address drone operations?

Presentation on the use of drones for strengthening the security of nuclear material transport *by Andrew Taylor, NTS, UK*

Discussion

- How can drones enhance security during the transport of nuclear material?
- What risks and evaluation criteria should be considered when deploying drones in transport operations?

(Short break)

15:10–16:15 **Session 3: Counter-Drone Measures: Detecting, Tracking & Responding**

Key Points:

- How can one detect, classify, and neutralise hostile drones?
- What are the operational and regulatory constraints for drone response actions?
- What is the role of technologies in countering drones?
- How does one ensure timely decision making during a potential drone attack?

Presentation from a site operator *by Vladimir Yankov, Kozloduy NPP, Bulgaria*

Panel of experts to further discuss detection and neutralization opportunities

- What detection and tracking technologies are available to operators? How do you choose the one(s) you need?



- How well is drone detection and tracking integrated into existing security arrangements?
- What kinetic and non-kinetic methods are available to neutralize drones?
- What are lessons learned from real incidents or exercises?
- How do drones impact the existing response arrangements? How should organizations, including the workforce, and law-enforcement agencies react in case of drone activity over a site?

Vendor presentation on mitigating drone threats through facility design *by Artem Kiktenko, Red Bul, Ukraine*

16:15-16:30 Concluding Session

Summary discussion

- What have we learned and what are the key takeaways?
- What steps are required to integrate drones effectively into existing security architectures?
- What key measures are needed to strengthen facility protection against evolving drone threats?

Closing remarks