

Technical Meeting on Nuclear Security Countermeasures for Uncrewed Aerial Vehicles

Monday, 30 October 2023 - Friday, 3 November 2023

Scientific Programme

UAV Threat Scenarios and DBT Analysis (Day 1)

Presentations in this track would define plausible attack scenario for a specific target type: nuclear facility, nuclear materials in transit, nuclear facility support critical infrastructure. Presentations will be grouped by the target type addressed. Please include a short description of the scenario and target type you will address in the abstract.

It would be most helpful if the presentation applied concepts from IAEA Design Basis Threat Implementing Guide (NSS No. 10) by analyzing shareable intelligence and other threat information from open sources and security events. Analysis would evaluate the credibility of the threat information, identify potential adversaries and their attributes and characteristics, as well as the likelihood of possible adversary actions related to the scenario discussed.

UAV Countermeasures Technology (Day 2)

Presentations in this track would describe and assess the pros and cons of a specific UAV countermeasure technology. The IAEA Handbook on the Design of Physical Protection Systems (PPSs) for Nuclear Material and Nuclear Facilities (NSS No. 40-T) defines key PPS functions in terms of detection, delay, and response measures. Defining the countermeasures in terms a similar set of functions, such as detection, assessment, and mitigation would be helpful. Please include a short description of the technology you will address in the abstract.

UAV Nuclear Security Use Cases (Day 2)

Presentations in this track would describe and assess specific UAV deployment options as part of a PPS and surveillance system. Please reference the IAEA Handbook on the Design of Physical Protection Systems (PPSs) for Nuclear Material and Nuclear Facilities (NSS No. 40-T), which provides an example needs assessment and requirements analysis for UAVs in the appendix. It would be most helpful if the presentation provided example requirements for the deployment option.

Policy Issues (Day 4)

Presentations in this track would address policy issues. Candidate topics consist of countermeasure limitations given different regulatory environments (e.g., urban environment and human safety), what are key regulatory issues related deployment options (e.g., radiofrequency emission limitations), and what legislation and or regulatory changes are needed (e.g., Should UAV operations be restricted beyond a nuclear facility's boarder)? Please include a description of the policy issue you will address in the abstract.