

Technical Meeting on Nuclear Security Countermeasures for Uncrewed Aerial Vehicles

Hosted by the

Government of the United States of America

through the

National Nuclear Security Administration (NNSA)

Albuquerque, NM, United States of America

30 October - 3 November 2023

Ref. No.: EVT2005113

Information Sheet

Introduction

The growing sophistication, availability, and adaptability of Uncrewed Aerial Vehicles (UAVs), commonly referred to as "drones," have made them both an emerging capability and threat for nuclear security. From a nuclear security threat perspective, modern UAVs come in a wide range of sizes, shapes, cost, and capabilities. Given the rapid growth in the drone industry and availability of systems, it is difficult to know how to do design a solution for present threats and even more difficult to determine how effective a solution to the threat today will work for future threats. High endurance, high payload capability, autonomous, single or swarms of UAV(s) will become increasingly difficult to protect against and will require advanced Counter-Uncrewed Aerial Vehicle (CUAV) technology and policies. Security may need to shift their focus from solely ground based threats to both ground and airborne threats, and this requires new physical security methods and technologies to ensure the protection of nuclear facilities or material in transit.

Greater understanding and assessment of UAV threats are needed for the development of threat basis, legal and regulatory approaches, specifications, and deployment and operation of nuclear security countermeasures.

The Technical Meeting on Nuclear Security Countermeasures for Uncrewed Aerial Vehicles will address the current state of UAV platforms, payloads, and capabilities and discuss how a CUAV capability (technology and policy) can be developed and deployed to address current and future nuclear security threats.

Objectives

The primary objective of this technical meeting is to address pressing concerns regarding Nuclear Security Countermeasures for Uncrewed Aerial Vehicles. The meeting will be jointly hosted by the Division of Nuclear Security and Government of the United States of America and will focus on building capacity and understanding within Member States regarding this topic.

Additional objectives include:

- Define the nuclear security scenarios relevant to CUAV (e.g., attack on nuclear facility, attack on nuclear material transport, radiological attack using UAV(s) during a major public event, and smuggling of nuclear material)
- Characterize the capabilities of UAV and CUAV technologies that are currently available on the market and the relevance to current Design Basis Threat assessments;
- Discuss legal, regulatory, policy, and operational issues associated with CUAV technologies;
- Encourage information sharing related to best practices for use and evaluation;
- Discuss future CUAV performance test methods that are related to field and operational environments; and
- Capture Member State needs and functional requirements that can be used to inform guidance and specifications.

Target Audience

Individuals with expertise relative to CUAV issues in terms of policy and regulations; design basis threat and threat analysis; design and operation of physical protection systems; and specification, testing, and use of CUAV technologies. Target participants shall have extensive relevant experience and be capable of making a presentation in English to support discussions and document preparation on the topic.

Working Language

English.

Participation and Registration

All persons wishing to participate in the event have to be designated by an IAEA Member State or should be members of organizations that have been invited to attend.

In order to be designated by an IAEA Member State, participants are requested to send the **Participation** Form (Form A) to their competent national authority (e.g. Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority) for onward transmission to the IAEA by **20 August 2023**. Participants who are members of an organization invited to attend are requested to send the **Participation Form (Form A)** through their organization to the IAEA by the above deadline.

In order to be designated by an IAEA Member State or invited organization, participants are requested to submit their application via the InTouch+ platform (https://intouchplus.iaea.org) to the competent national authority (Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority) or organization for onward transmission to the IAEA by **20 August 2023**, following the registration procedure in InTouch+:

- 1. Access the InTouch+ platform (https://intouchplus.iaea.org):
 - Persons with an existing NUCLEUS account can sign in to the platform with their username and password;
 - Persons without an existing NUCLEUS account can register <u>here</u>.
- 2. Once signed in, prospective participants can use the InTouch+ platform to:
 - Complete or update their personal details under 'Complete Profile' and upload the relevant supporting documents;
 - Search for the relevant event under the 'My Eligible Events' tab;
 - Select the Member State or invited organization they want to represent from the drop-down menu entitled 'Designating Authority' (if an invited organization is not listed, please contact InTouchPlus.Contact-Point@iaea.org);
 - If applicable, indicate whether financial support is requested and complete the relevant information (this is not applicable to participants from invited organizations);
 - Based on the data input, the InTouch+ platform will automatically generate the Participation Form (Form A) and/or the Grant Application Form (Form C);
 - Submit their application.

Once submitted through the InTouch+ platform, the application, together with the auto-generated form(s), will be transmitted automatically to the required authority for approval. If approved, the application, together with the applicable form(s), will automatically be sent to the IAEA through the online platform.

NOTE: The application for financial support should be made, together with the submission of the application, by 20 August 2023.

For additional information on how to apply for an event, please refer to the <u>InTouch+ Help</u> page. Any other issues or queries related to InTouch+ can be sent to <u>InTouchPlus.Contact-Point@iaea.org</u>.

Selected participants will be informed in due course on the procedures to be followed with regard to administrative and financial matters.

Participants are hereby informed that the personal data they submit will be processed in line with the Agency's Personal Data and Privacy Policy and is collected solely for the purpose(s) of reviewing and assessing the application and to complete logistical arrangements where required. The IAEA may also use the contact details of Applicants to inform them of the IAEA's scientific and technical publications, or the latest employment opportunities and current open vacancies at the IAEA. These are secondary purposes are consistent with the IAEA's mandate. Further information can be found in the Data Processing Notice concerning IAEA InTouch+ platform.

Papers and Presentations

The IAEA encourages participants to give presentations on the work of their respective institutions that falls under the topics listed above.

Participants who wish to give presentations are requested to submit an abstract of their work. The abstract will be reviewed as part of the selection process for presentations. The abstract should be in A4 page format, should extend to no more than 1 page (including figures and tables) and should not exceed 500 words in electronic format through the conference's web browser-based file submission system (INDICO). Paper copies cannot be accepted.

Abstracts must be submitted to INDICO at the web address included below, no later than 20 August 2023. Authors will be notified of the acceptance of their proposed presentations by 8 September 2023.

INDICO web address: https://conferences.iaea.org/event/349/

Expenditures and Grants

No registration fee is charged to participants.

The IAEA is generally not in a position to bear the travel and other costs of participants in the event. The IAEA has, however, limited funds at its disposal to help meet the cost of attendance of certain participants. Upon specific request, such assistance may be offered to normally one participant per country, provided that, in the IAEA's view, the participant will make an important contribution to the event.

The application for financial support should be made using the **Grant Application Form (Form C)** which has to be stamped, signed and submitted by the competent national authority to the IAEA together with the **Participation Form (Form A)** by **20 August 2023**.

The application for financial support should be made, together with the submission of the application, by 20 August 2023.

Visas

Participants who require a visa to enter United States of America should submit the necessary application as soon as possible to the nearest diplomatic or consular representative of United States of America.

Organization

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Subsequent correspondence on scientific matters should be sent to the Scientific Secretaries and correspondence on other matters related to the event to the Administrative Secretary.