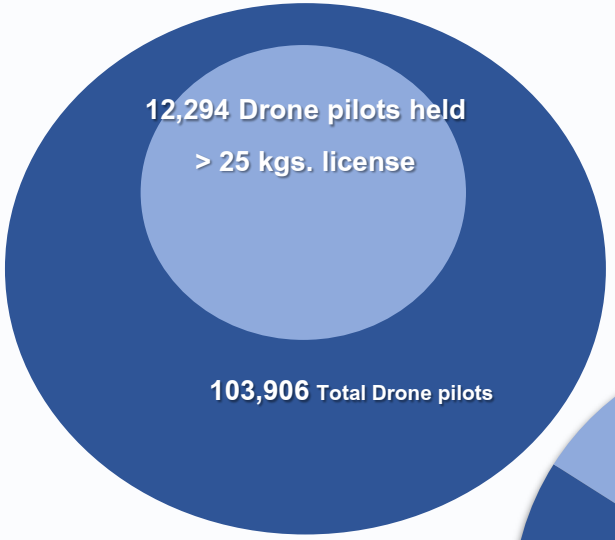
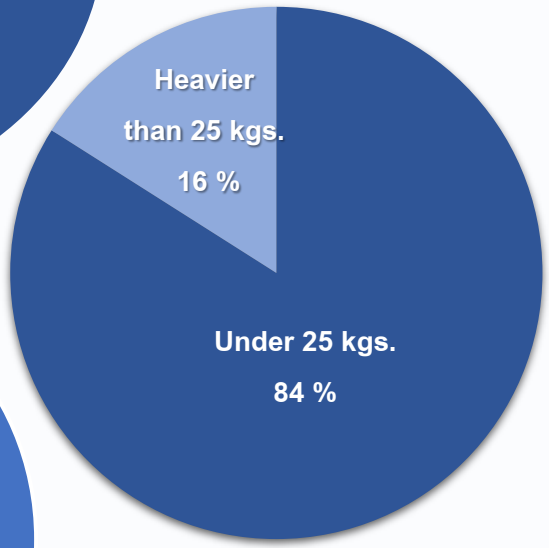
Unmanned Aircraft System Integration in National and High Seas Airspace Workshop

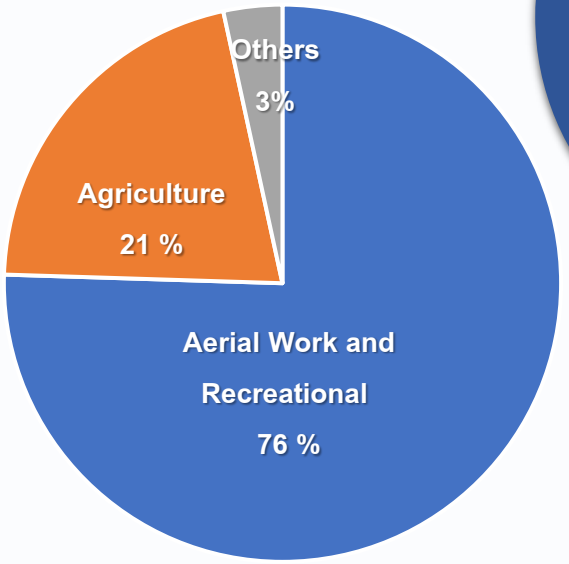
Thailand Regulatory Framework on UAS, RPAS and AAM

Date : 4-6 November 2025

The use of UAS in Thailand







Licensed Drone Pilot	
Under 25 kgs.	103,906 pilots
Under 25 kg. **with** heavier than 25 kgs. license	12,294 pilots

Typed of drones	
Under 25 kgs.	60,255 drones (84%)
Heavier than 25 kgs.	11,809 drones (16%)
Total	**72,064 drones**

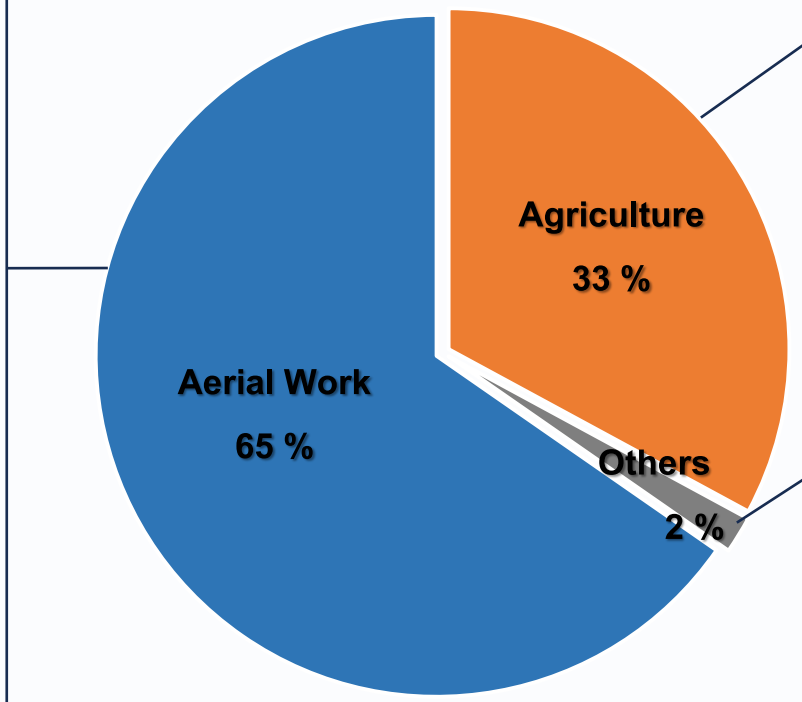
Purpose of drones	
Aerial Work + Recreational	54,406 drones (76%)
Agriculture	15,199 drones (21%)
Others	2,459 drones (3%)

Number of operating permit granted by CAAT

Data following the launch of the UAS Portal (2025)

Aerial Work (11,860)

- Photographing
- Cinematic and Film Production
- Infrastructure Inspection
- Land Surveying and Mapping
- Environmental Observation
- Stockpile Volume Measurement
- Waste Land Temperature Monitoring
- Disaster Assessment
- Emergency Response



Agriculture (5,881)

- Spraying
- Spreading
- Crop Monitoring
- Soil and Field Analysis

Others (315)

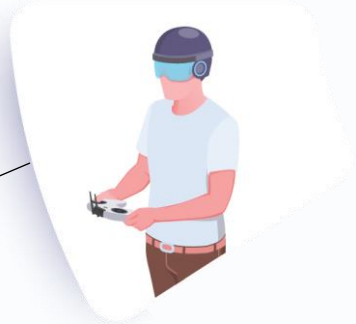
- Research & Development
- Drone Light Show
- Demonstration
- Delivery
- Security

Leveraging Technology

for Effective Oversight

And Public Service Delivery

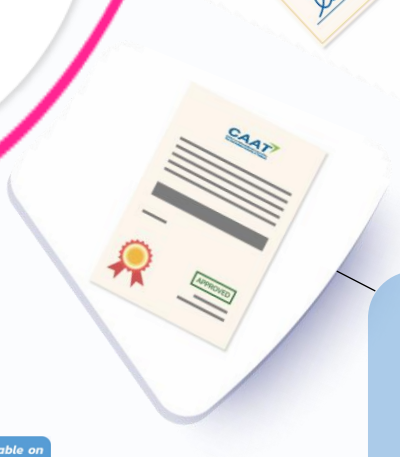
Pilot Registration System



UA Training Organization Certification System
(In Progress)

CAAT UAS PORTAL

Unmanned Aircraft Registration System



UAS Operator Certification System
(In Progress)

Flight Authorisation

Opportunities and Challenges of the UAS/RPAS in Thailand

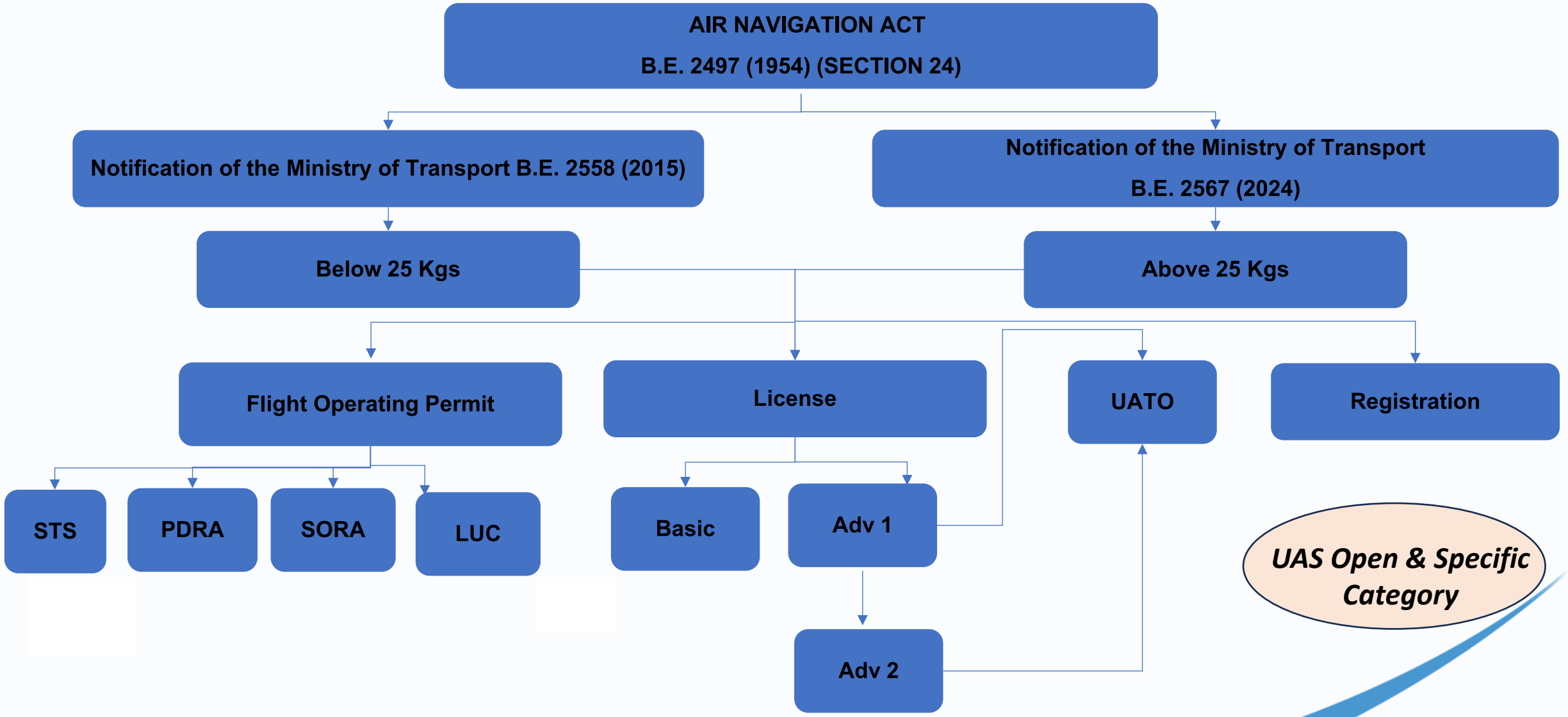
Opportunities:

- Boost key economic sectors: agriculture, logistics, tourism, and industry.
- Create new aviation services and innovation-driven businesses.
- Improve the public service, safety, environmental, and humanitarian applications such as disaster response, traffic monitoring and border surveillance.

Challenges:

1) Legal and regulatory framework The lack of a uniform regulatory framework across different countries such as category, certification, license, etc.	**2) Skilled workforce** Need to build expertise and human capital for RPAS/UAS Sector.
3) Public acceptance Safety, privacy, and national security concerns.	**4) Infrastructure & Airspace** Building infrastructure and Integrate RPAS/UAS in controlled airspace.

UAS Regulatory Framework : Overview



Regulatory Framework on RPAS in Thailand

UAS Certify Category

Air Navigation Act B.E. 2497 (1954)

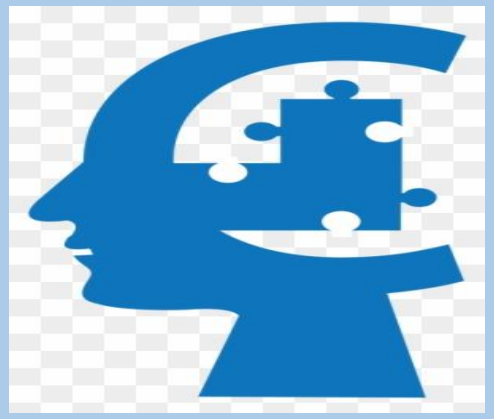
Pilot licensing and Privilege (Annex 1)	Airworthiness and Registration (Annex 7&8)	Operations of RPAS (Annex 6)	Aeronautical Telecommunication (Annex 10)	Safety Management Systems (Annex 19)	Economic Aspects
• RCAAT Regulation No. 24 (RPAS Pilots' Qualifications) • RCAAT Regulation No. 29 (Privilege for RPAS Pilots)	• R2CAAT Regulation No. 27 (RPAS Nationality and Registration Marks) In progress of drafting RPAS Airworthiness regulations	In progress	In collaboration with the National Broadcasting and Telecommunications Commission regarding Aviation Frequency for RPAS	In progress	• RCAB No. 97 RE: Granting Licensing to Civil Aviation Business: Commercial Air Transport and Aerial Work (to be revised)

The procedures and guidance related to all regulations will be developed.

Challenges faced by CAAT in implementing regulatory frameworks

Technology and Innovations	Resource and Expertise	Airspace Management	Public Awareness and Compliance
legislative and rule-making processes are often **significantly slower** than the pace of drone technology development.	A lack of sufficiently expertise and **trained personnel** within the CAA to evaluate novel UAS design and complex UAS applications and a lack of specialized training program for CAA staff.	Safety & Security concern for incorporated UAS operations near high-density areas and airports.	Enforcing regulations is challenging and necessitates cooperation among agencies like the CAAT, police, and other to track, identify, and prosecute non-compliant individuals
Creating technical standards for new and custom-made UAS technology is difficult.	Absence of External Training Ecosystem such as BVLOS, Maintenance, SORA	UTM is required for identify, tracking and manage UAS operations	A lack of aviation and safety knowledge, such as not having a Safety Management System(SMS) or understanding airspace rules

Challenges in approving UAS operations



Expertise

Shortage of Specialized Expertise in UAS technology, system certification, and advanced safety assessment models.

UAS Performance & Safety Data

1. Evaluate airworthiness standard and reliability for new design UAS remains a highly specialized challenge.
2. Insufficient safety data such as population density and Obstruction for proper risk assessment.

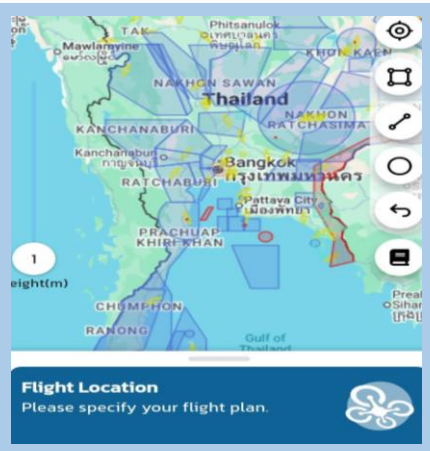
Lack of aviation knowledge-based by operators

Misunderstandings of concepts like SMS, airspace rules, safety risk management, ConOps etc.

Challenges in approving UAS operations

Safety, Security & Privacy Concerned

Approving drone flights in specific areas is challenging due to national security, safety and privacy concerns.

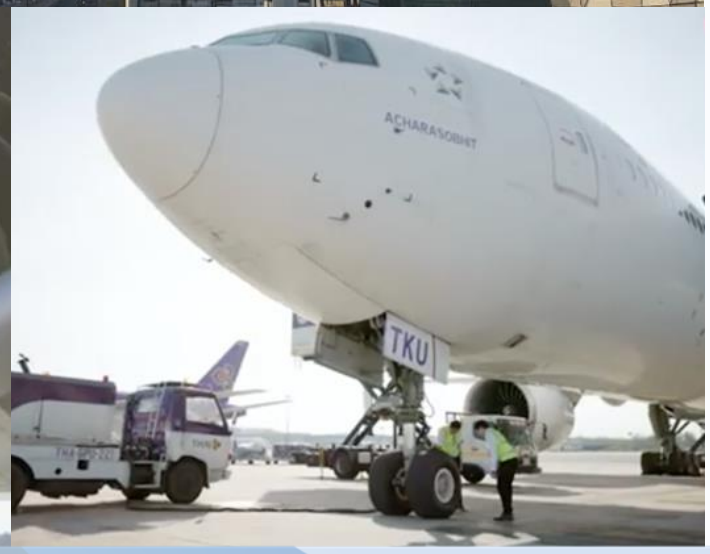


Effective Monitoring

The lack of identification, tracking and manage traffic for the drone. *(CAAT has planned to implement the remote Id and UTM system in the future).*

RPAS/UAS Capability

Verify the safety standards and operational capability of drones for varying risk levels remains a significant challenge.



The Second International Civil Aviation Organization (ICAO) Advanced Air Mobility Symposium (AAM 2026)

30 November 2026 to

4 December 2026

Bangkok, Thailand

Symposium Name

"The Second International Civil Aviation Organization (ICAO) Advanced Air Mobility Symposium

(AAM 2026)"

Location: Bangkok

Proposed Schedule Date:

30 November – 4 December 2026

Symposium Theme

Under the theme “From Vision to Implementation: Enabling the AAM Ecosystem”, the symposium will identify critical pathways from early advanced air mobility (AAM) operations to safe, scalable and globally interoperable systems.

Through world-class expert panels and strategic dialogue with international leaders and decision-makers, the symposium will lay the groundwork for globally harmonized frameworks and multi-stakeholder collaboration essential to facilitate the safe development of AAM.

Activities

Plenary & Technical meetings

Exhibition Booths

Technology Demonstration

CAAT

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The Civil Aviation Authority of Thailand