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INTERNATIONAL CIVIL AVIATION ORGANIZATION

A UN SPECIALIZED AGENCY



EURNAT

Protection Of Infrastructure Against UAS

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AVSECP/36

- Forty-four (44) working papers
- Nine (9) information papers
- Meeting held from **7 to 11 April 2025** (hybrid meeting)
- 32 Panel Members
- 219 participants from:
 - 66 Member States
 - 13 International Organizations
 - 45 ICAO staff, all Regional Offices represented
- **Chairperson**
 - Mr. Hamad S. Al Muhairi, Nominated by the United Arab Emirates
- **Vice-Chairperson**
 - Mr. Ricardo Fernandes, Nominated by Portugal

ICAO risk advice

Risk picture is regularly published in the Aviation Security Global Risk Context Statement document
(Doc 10108, Restricted)



A dedicated WG produces global risk advice, for States and ICAO governing bodies



Risk picture is updated yearly, based on a pre-established risk assessment methodology, which considers a number of risk scenarios



Threat, consequences and vulnerability information are inputs to the assessment



SARPs are created or amended based on risk advice by this WG



Risks identified:

- Attacks using cargo and mail consignments
- Attacks at a distance, especially in conflict zones
- **Attacks using unmanned aircraft systems (UAS)**
- Threat posed by insiders
- Violent extremism, which may include politically motivated acts
- Cyber-attacks
- Acts attributed to unrest and attacks in, or near, conflict zones
- Attacks at airport landside areas
- Communication of false information

Risks under in-depth assessment:

- Liquids, Aerosols and Gels (LAGs)
- Cargo and Mail
- Artificial Intelligence (AI)

Threat to civil aviation posed by UAS

2018

- Gatwick Incursion: multiple drone sightings from 19-21 December 2018, airport closed, over 900 flights cancelled

2019

- Heathrow Pause: Environmental group threatened to disrupt Heathrow Airport
- King Abdullah bin Abdulaziz Airport, Abha International Airport: UAS airport attacks causing casualties

2021
2022

- Abu Dhabi International Airport (OMAA): UAS attack struck an oil facility, causing destruction and casualties
- EasyJet flight diversion due to UAS sighting

UAS Security Risk Assessment

Likelihood

- Smaller UA are easily obtained and widely used. Their purchase and use would not attract suspicion
- Attack planning on civilian targets has been reported in a number of States
- Examples of disruption caused by the use of small UAS around airports has revealed the ease with which incursions can occur
- The capability and ease of use of small and medium-size drones have also increased rapidly over recent years
- There is increasing terrorist interest in using biological and chemical agents

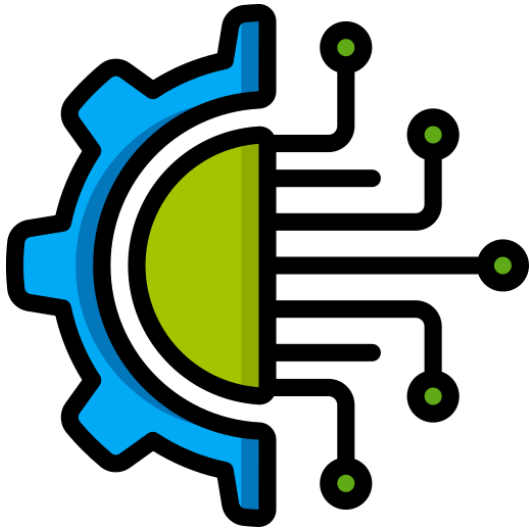
Consequence

- The larger the aircraft, the greater the potential for structural damage caused by explosion, or collision

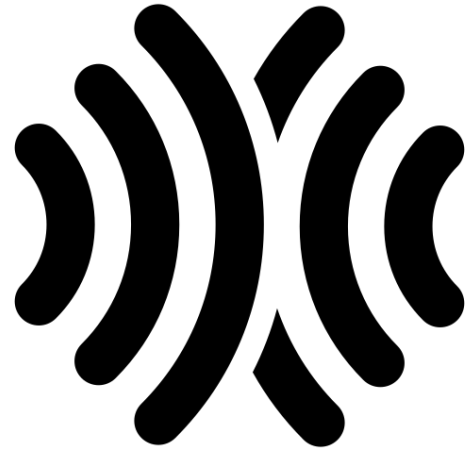
Vulnerability

- The inherent difficulty in preventing the acquisition
- Malicious use of UAS devices
- The increasing range and payload of UAS
- The limited ability to track and prevent use near airports

Counter UAS technologies



Technologies

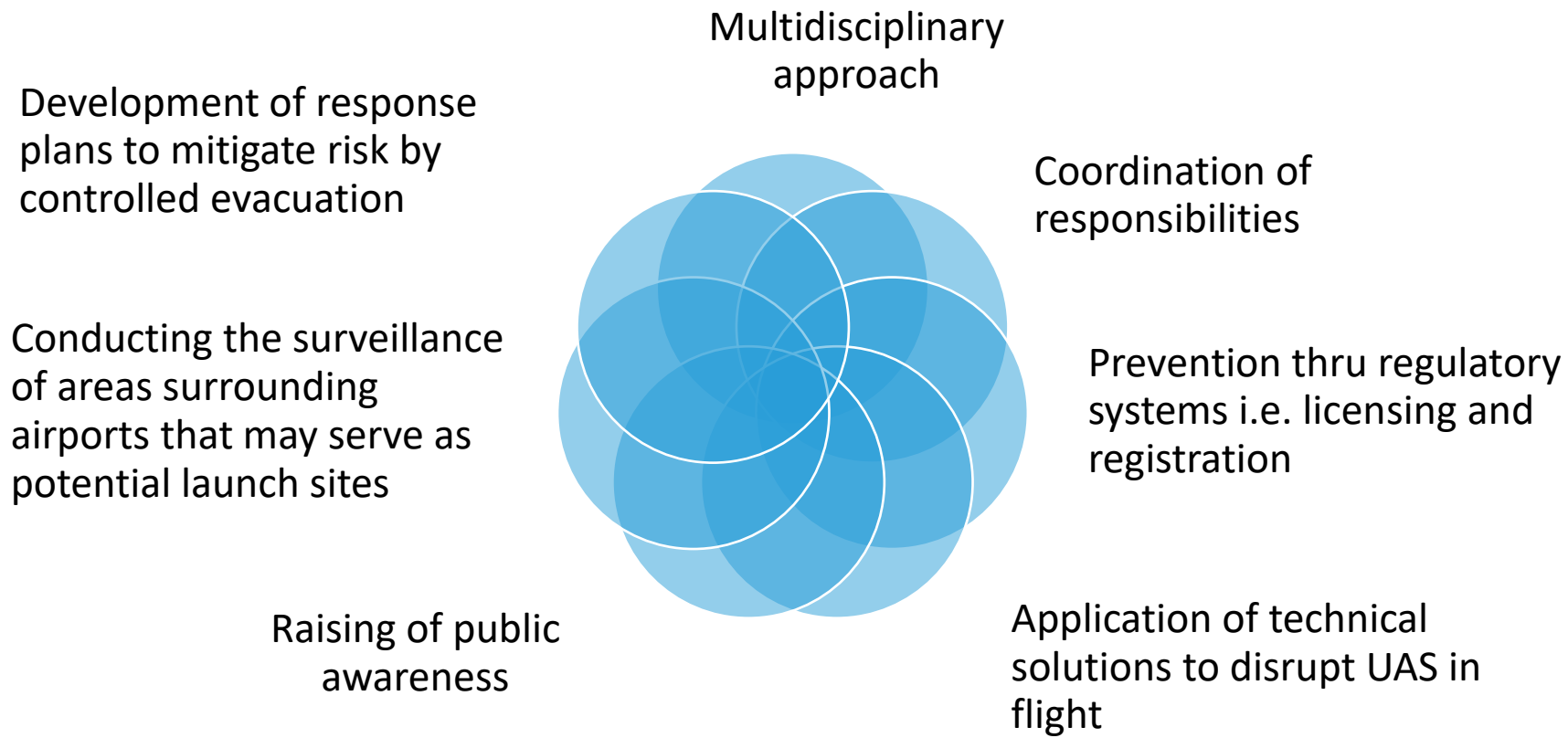


Impacts and interferences



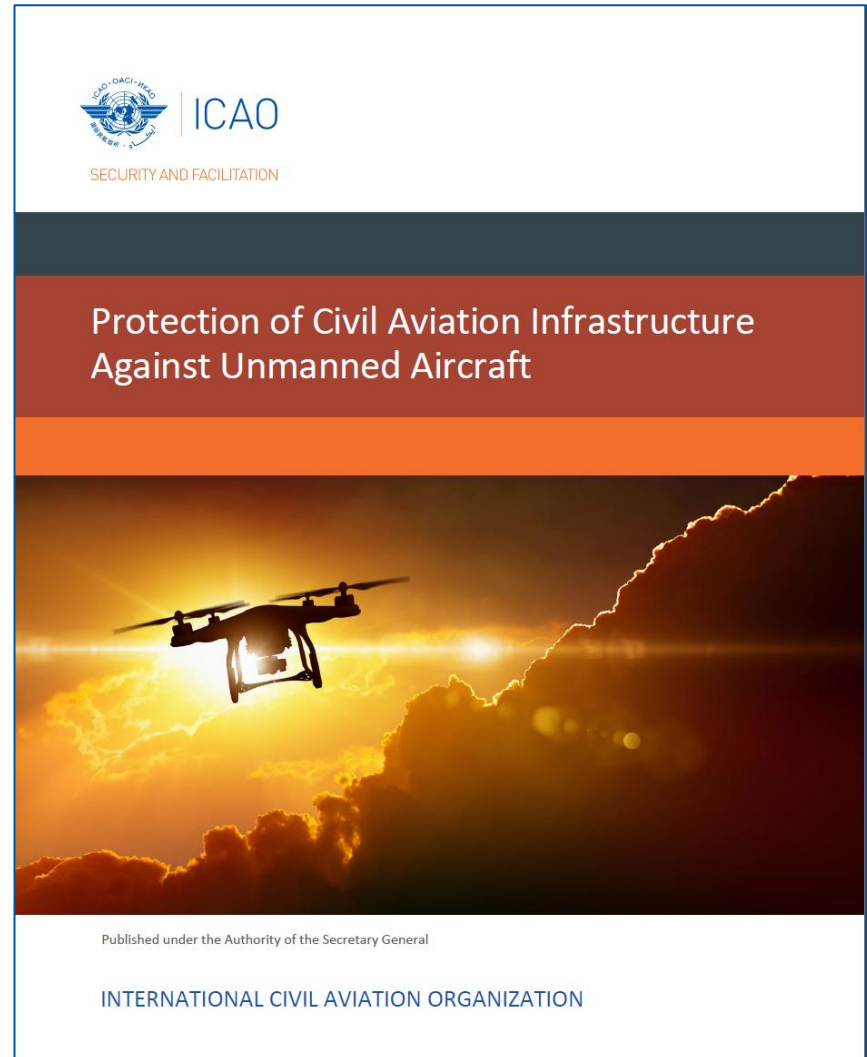
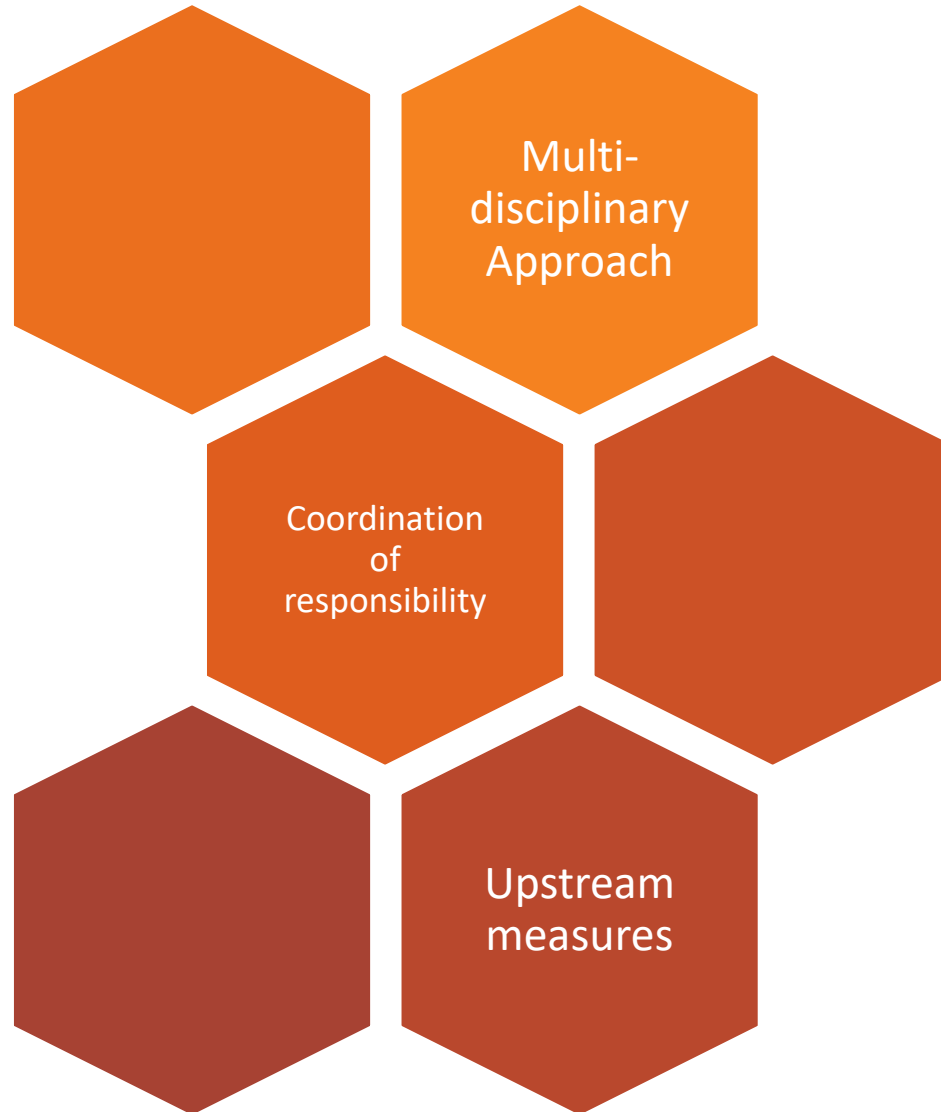
Legal compliance

Protection of aviation infrastructure



Preparedness and incident response

Preparedness and incident response



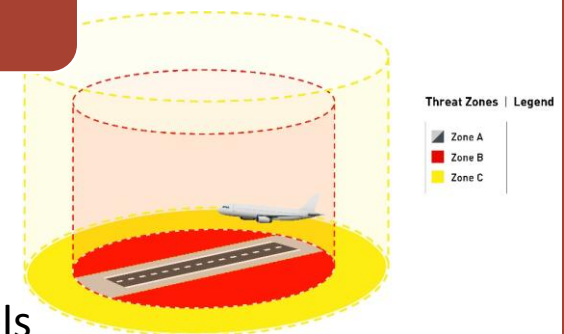
Preparedness and incident response

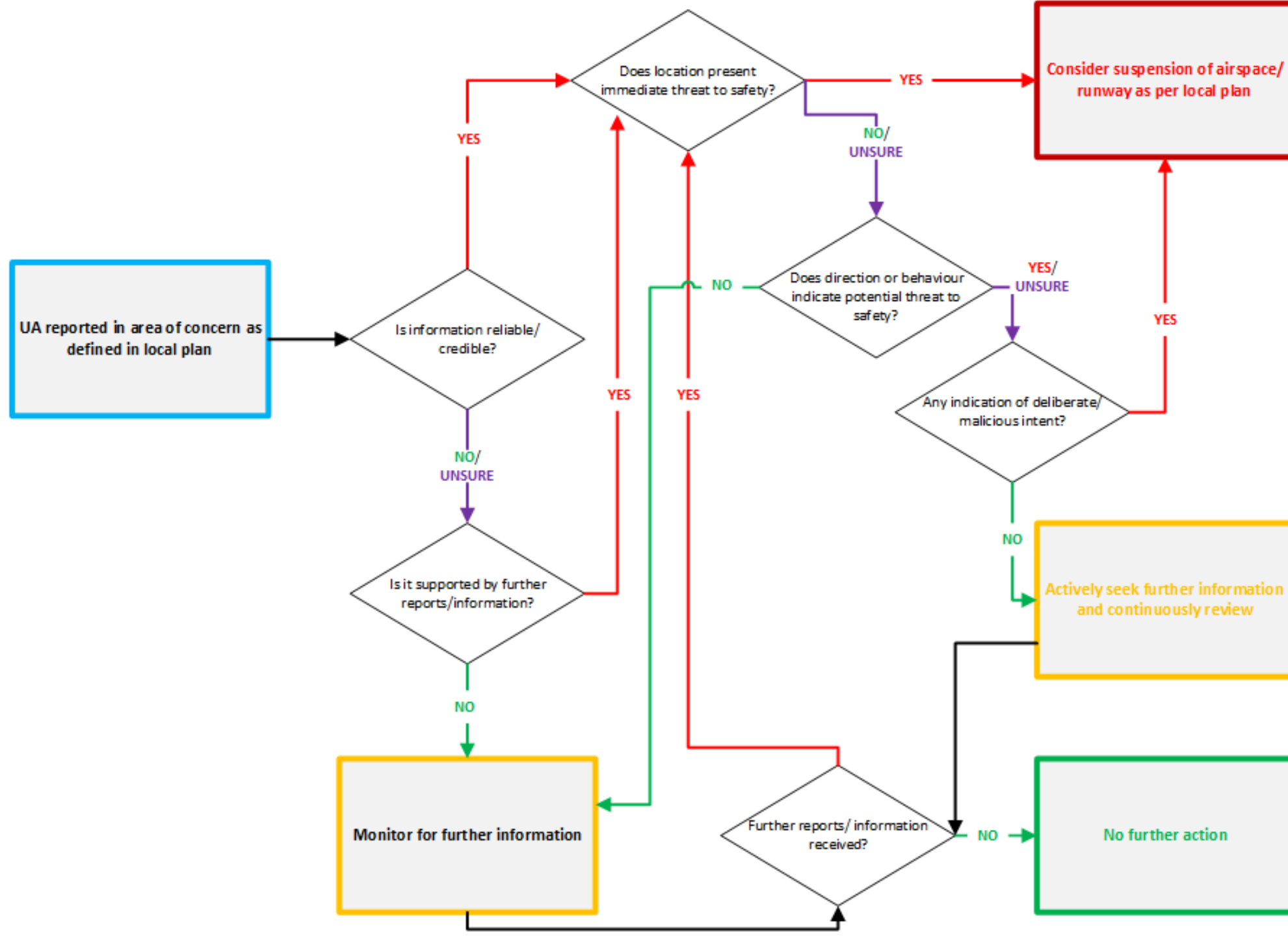
Prioritize civil aviation and public safety

Follow pre-established decision-making process

Respond rapidly, effectively and proportionally:

- Local contingency plan (with threat zone mapping)
- Roles and actions by each entity
- Common threat assessment protocol
- Clear instructions on how to respond according to threat levels
- Training and exercises
- Framework for reporting of sightings





Thank You

