



ICAO

# INTERNATIONAL CIVIL AVIATION ORGANIZATION

A UN SPECIALIZED AGENCY

## DRONE ENABLE Facilitation of UAS operations

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# Chicago Convention / ICAO Facilitation Programme

**Article 10:** Landing at customs airport

**Article 13:** Entry and clearance regulations

**Article 14:** Prevention of spread of disease

**Article 22:** Facilitation of formalities

**Article 23:** Customs and immigration procedures

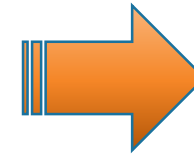
**Article 24:** Customs duty

**Article 29:** Documents carried in aircraft

**Article 35:** Cargo restrictions

**Article 37:** Adoption of international standards and procedures

**Article 38:** Departure from international standards and procedures



# Entry and Departure of Aircraft



- 2.1 – Appropriate measures for clearance of aircraft arriving/departing from another State
- 2.9 – Entry and Departure documents subject to technological capabilities of Member State
- 2.10 – Transmission of relevant document in electronic form
- 2.39 – Single Agency for advance notification of landing of aircraft or application for prior authorization
- 2.48 – States shall accept information in flight plan as adequate advance notification

# Entry and Departure of Cargo and Other Articles

## Standard 4.1

Regulations and procedures for air cargo operations:

- to prevent unnecessary delays
- to facilitate and expedite the release and clearance of goods carried by air

## Standard 4.4

Procedures for the pre-arrival and pre-departure lodgement of an import and export goods declaration to enable expeditious release/clearance of goods

## Standard 4.11

Limit data requirements to only those particulars which are deemed necessary by public authorities to release or clear imported goods or goods intended for exportation

## Standard 4.13

Acceptance of documents for the importation or exportation of goods, including manifest and/or air waybills in electronic form, subject to technological capabilities of the State

## Standard 4.16

Documents for importation or exportation of goods presented in paper form shall be based on the United Nations layout key regarding goods declaration, and Appendix 3 regarding manifest

## Standard 4.17

To promote trade facilitation and for standardization and harmonization of electronic data interchange, all parties concerned are encouraged to implement compatible systems and to use the appropriate internationally accepted standards and protocols

## Standard 4.22

Require documents for export clearance to be limitation of export documents required to a simplified export declaration

## Standard 4.24

Export goods to be presented for clearance at any customs office designated for that purpose  
Transfer from that office to the airport from which the goods are to be exported shall be carried out under the procedures laid down in the laws and regulations of the Contracting State concerned

# Common objectives in air cargo operations

- **Cargo release time**
  - ✓ Risk management
  - ✓ Pre-arrival and pre-departure lodgements of declaration
  - ✓ Electronic information technology
  - ✓ Merge interested public authorities controls (coordinated inspection)
- **Global interoperability of States' and operators' systems**
  - ✓ Standardization; electronic communications
- **Customer satisfaction and the confidence of control authorities**
  - ✓ Customs efficiency and integrity



# Threat to civil aviation posed by UAS

## ARRIVALS The presence of drones causes diversions and delays in Madrid-Barajas for an hour

Five arrival flights had to land at the airports of Valencia, Alicante and Valladolid



## World Drone forces flight diversion to Lisbon

The sighting of a drone this morning near Francisco Sá Carneiro airport, in Porto, forced a flight to be diverted to Lisbon, an official source from ANA - Aeroportos de Portugal told Lusa.

By IPN/Lusa, in News, Portugal - 27 Feb 2022 - 0 Comments



Drone forces flight diversion to Lisbon

## World Drone attack in Abu Dhabi kills 3, wounds 6



Industrial area, airport hit in attack

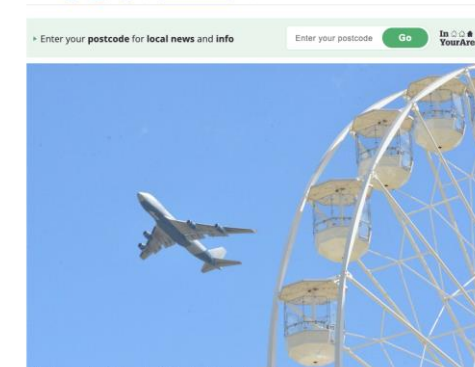
The Associated Press - Posted: Jan 17, 2022 10:30 AM ET | Last Updated: January 19



## News - East Midlands Airport Fury of passengers as drones force East Midlands Airport flight detours

Holidaymakers have told of huge delays - and blame the Download festival

By Shannen Headley Reporter & Carl Slater  
17:55 11 JUN 2022



A plane overhead at Download festival on Saturday, June 11

## Activists to fly drones at Heathrow in attempt to ground flights

Members of Heathrow Pause say action on 13 September will not involve flight paths



## Newark Airport Traffic Is Briefly Halted After Drone Is Spotted



Flights bound for Newark Liberty International Airport were halted on Tuesday evening after a drone was spotted flying nearby. Julio Cortez/Associated Press

## Gatwick Airport: Drones ground flights

20 December 2018



About 10,000 passengers were affected overnight on Wednesday as flights were unable to take off or land

# UAS risk assessment

## Likelihood

- Smaller UA are easily obtained and widely used. Their purchase and use would not attract suspicion
- Attacks on civilian targets has been reported in a number of States
- Examples of disruption caused by the use of small UA 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

## Consequence

- The larger the aircraft, the greater the potential for structural damage caused by explosion, or collision
- If attack carried out against airport facilities, some possible human losses and great operational (flight disruption) and economic impact

## Vulnerability

- Inherent difficulty in preventing the acquisition and malicious use of UA
- Limited ability to track and prevent use near airports

# ICAO Current framework

## Building regulatory framework and best practices:

- *Annex 17 – Aviation Security*
- Aviation Security Global Risk Context Statement (Doc 10108, Restricted)
- The ICAO Aviation Security Manual, Chap.19 (Doc 8973 – Restricted)

## Challenges:

- Legislation needs to be responsive to developments
- Current mitigations appear to be lagging behind the development of the threat
- No universal effective technical counter-UAS technology

# Protection of aviation infrastructure



Multidisciplinary approach



Coordination of responsibilities



Prevention through regulations, technical and public awareness



Use of technical counter-UAS technology



***Preparedness and incident response***



# Way forward

- Need to consider:
  - Continuous assessment of risk posed by UAS on civil aviation security
  - Development of the UAS Strategy
  - Closer partnerships with industry to accelerate the deployment of effective counter-UAS capabilities
  - Working to improve international counter-UAS co-operation
  - Consider how the use of UAS can be practically managed through recognised traffic systems
  - Consider how to include UAS operations into the supply chain concept
  - Sharing of best practice



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# Thank You



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Montréal

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