



الهيئة العامة للطيران المدني  
GENERAL CIVIL AVIATION AUTHORITY



## ICAO MID DGCA/ 6 Meeting

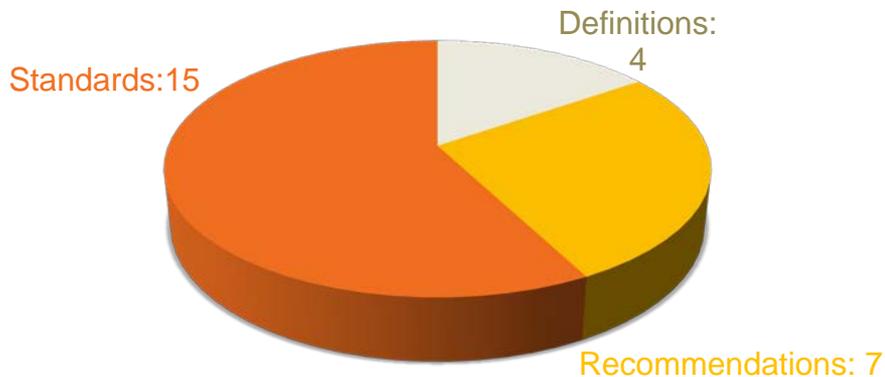
1<sup>st</sup> -3<sup>rd</sup> Nov 2022 Abu Dhabi - UAE



# Aviation Security and Cybersecurity activities

# Amendment 18 to Annex 17

## Content: What's new?



## Dates of effectiveness and applicability



**Date of applicability: 18 November 2022**

# AVIATION SECURITY

- Aviation Security Panel (AVSECP)
  - WG Threat and Risk (WGTR)
  - WG Air Cargo Security (WGACS)
  - WG Guidance Material (WGGM)
  - WG Innovation (WGIAS)
  - WG Annex 17 (WGA17)
  - WG Training (WGT)
  - SG AVSEC Incident Reporting (SG-ASIR)



AVSECP Chairperson: Mr. Bernard Lim (Singapore)

AVSECP Vice-Chairperson: Mr. Hamad Al Muhairi (United Arab Emirates)



# Guidance material

13th Edition of ICAO *Aviation Security Manual* (Doc 8973, Restricted)  
*Scheduled to be published in November 2022 in English, languages to follow*

- **Reporting of aviation security occurrences and incidents**
  - available on ICAO website:  
[www.icao.int/Security/SFP/Pages/Incident-Reporting-Guidance-and-Taxonomy.aspx](http://www.icao.int/Security/SFP/Pages/Incident-Reporting-Guidance-and-Taxonomy.aspx)
- Development and processing of aircraft operator security programmes and supplementary station procedures
- Items or equipment affected by security screening technologies



## Aviation Security Global Risk Context Statement (RCS)

(Doc 10108, Restricted)

### What

- Results of risk assessments are periodically published in the RCS
- Third Edition published on 26 September 2022 (EB 2022-41)
- Available in English today and all 6 ICAO languages by the end of 2022

### Where

- Available to download on ICAO-NET ([ICAO-NET Home](#))

### For whom

- Mainly addressed at Member States, ICAO Governing Bodies, and relevant industry partners



## RCS: What's new?



Risk ratings have been updated, reflecting the most up-to-date threats and trends. Changes to, for example:

- Cyber risks
- Attacks using UAS
- Chemical threats



Some existing scenarios have been modified to better reflect current realities:

- MANPADS to more encompassing Attacks at a distance
- Attacks using UAS now reflects conflict zones
- Biological and Radiological threats are now two separated scenarios



Some new scenarios have been added:

- Airport supplies
- Attacks on ATC Facilities



## Surveys on Aviation Security

### 2023 - States' Survey on how RCS is used

- Feedback from States and industry

### October 2022 - States' Survey on Annex 17 clarity

- Feedback from States
- Task force of the AVSEC Panel to consider this feedback

### 2023 - Consideration of surveys' results

- Next edition of the RCS will build upon obtained feedback

*Input from States is key for the evolution of the AVSEC programme*

# Global Aviation Security Plan (GASeP)

## Roadmap

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Priority Outcome 1

Enhancing risk awareness + response

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Priority Outcome 2

Security Culture

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Priority Outcome 3

Improve technological resources and foster innovation

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Priority Outcome 4

Improve oversight + Quality assurance

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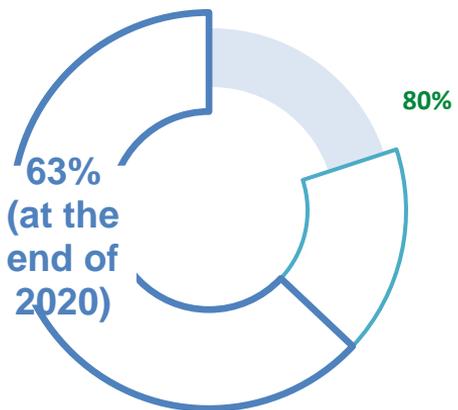
Priority Outcome 5

Increase cooperation + support



# GASeP Aspirational targets

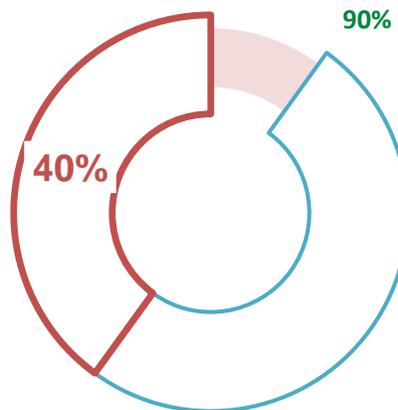
(data as of 31 March 2022)



**2020**

80% States over 65% effective implementation

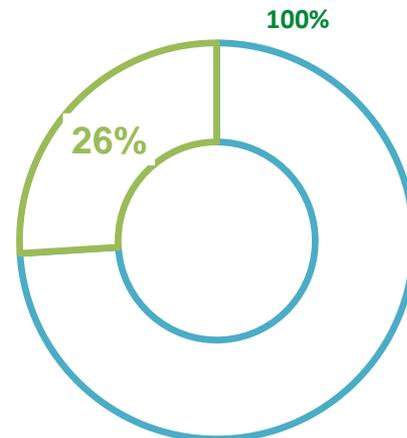
**NOT MET**



**2023**

90% States over 80% effective implementation

**VERY UNLIKELY TO BE MET**



**2030**

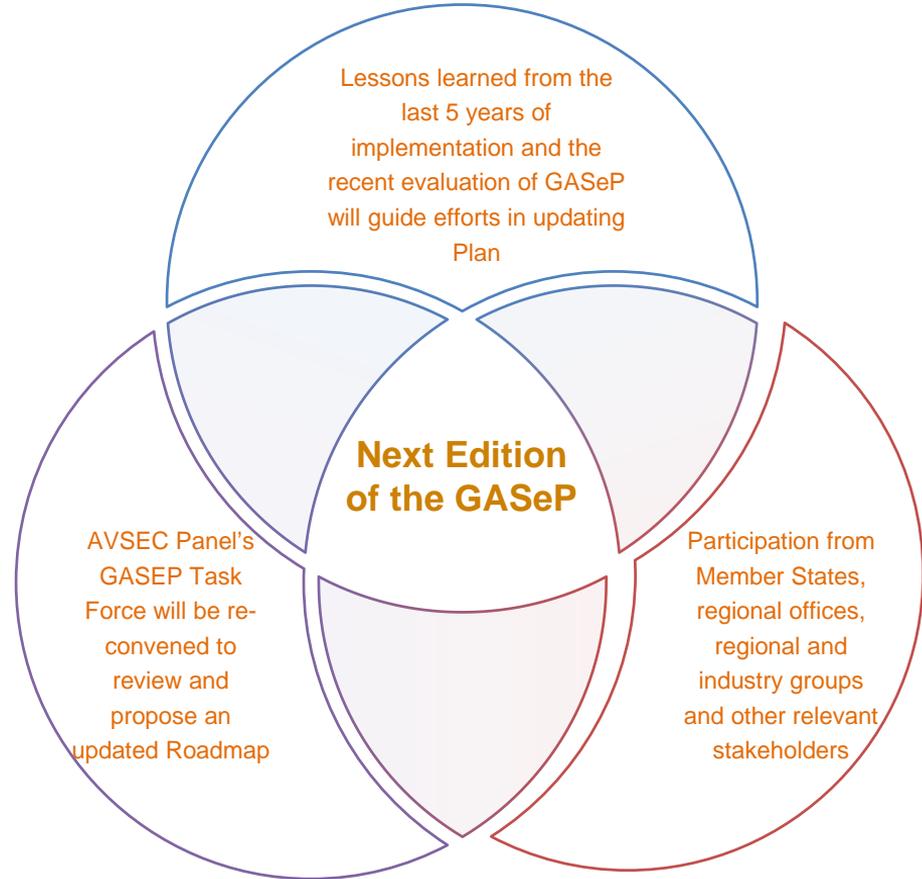
100% States over 90% effective implementation

# Updating the GAsEP



Main review areas  
(as indicated by A41)

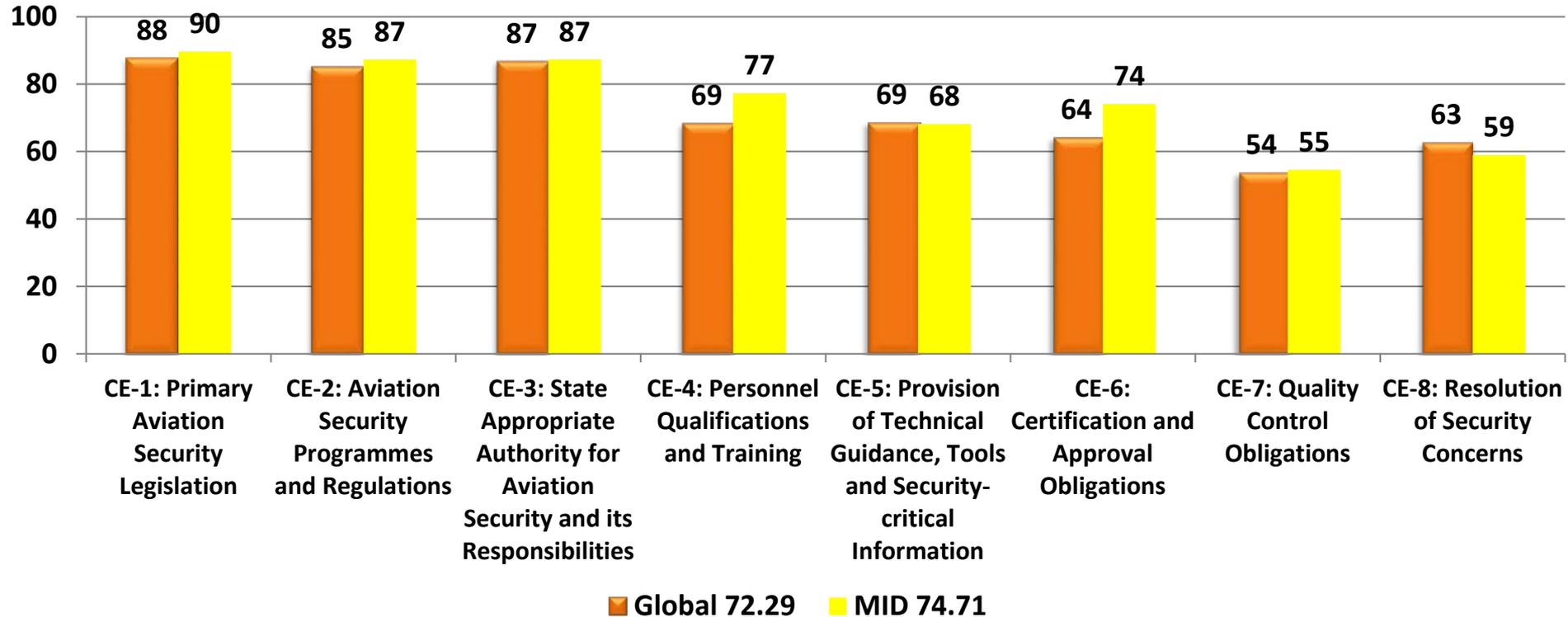
- Aspirational targets
- Roadmap
- Monitoring and reporting processes



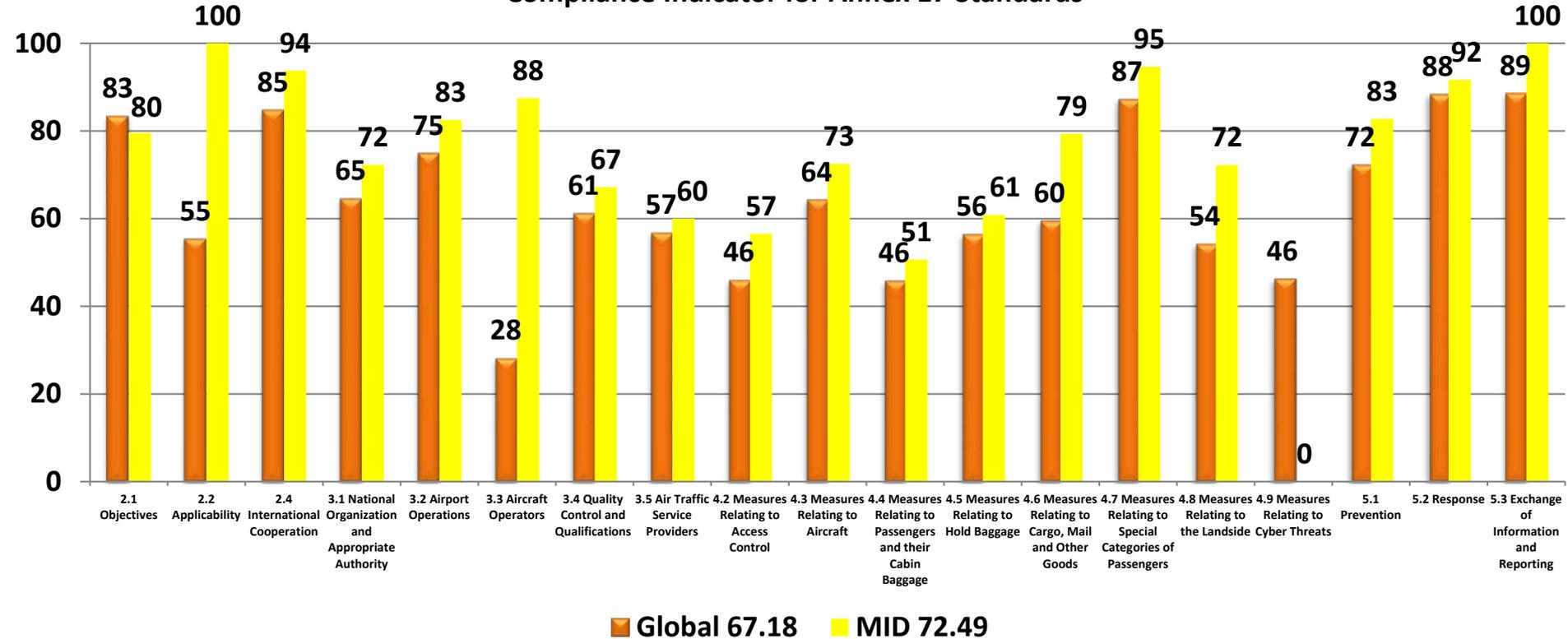


# Results of the USAP-CMA

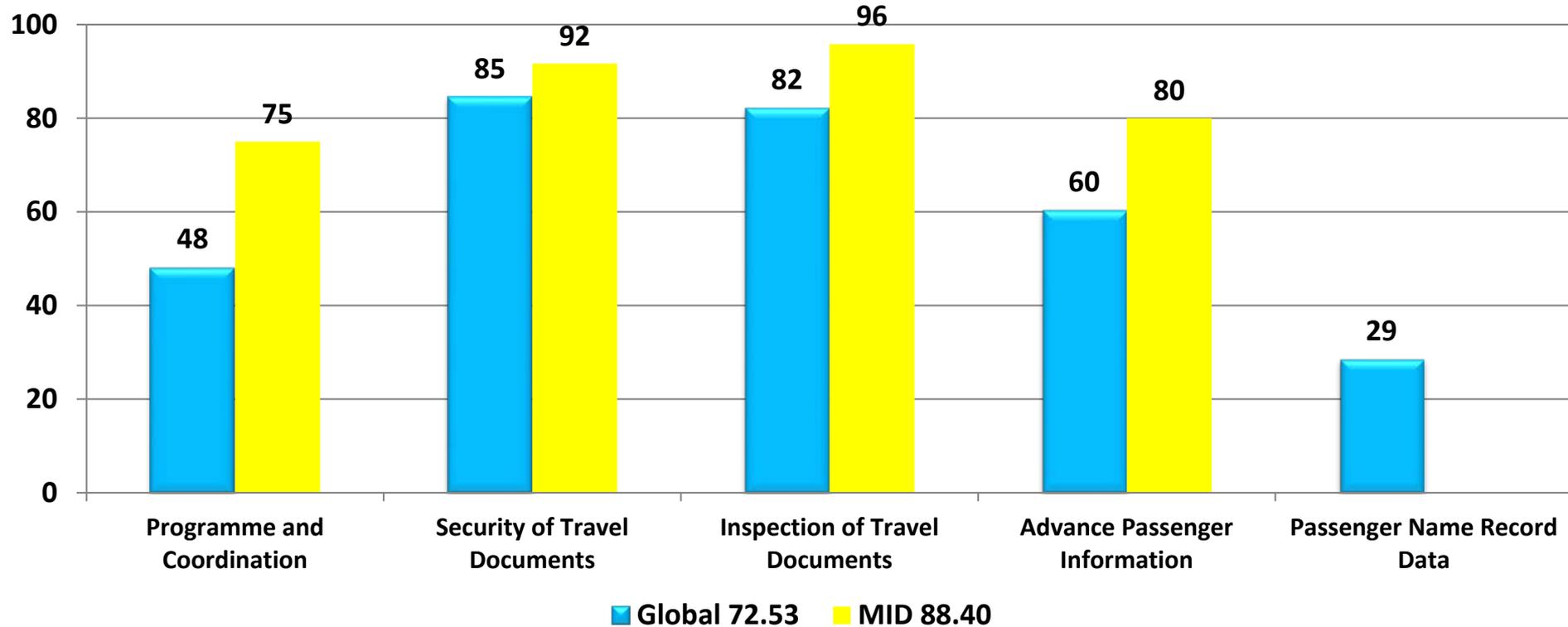
## Sustainability Indicator



## Compliance Indicator for Annex 17 Standards



### Compliance Indicator for Annex 9 Security-related Standards





# Aviation Cybersecurity

# The Aviation Cybersecurity Strategy



<https://www.icao.int/aviationcybersecurity/Pages/Aviation-Cybersecurity-Strategy.aspx>

# The Cybersecurity Action Plan

- **First Edition** published in November 2020
- **Second Edition** published in January 2022
- Available on **ICAO Public Website**
- Provides **the Foundation** for ICAO, States and stakeholders to work together
- **Develops the Seven Pillars** of the Aviation Cybersecurity Strategy into **32 Priority Actions**, which are further broken down into **51 Tasks** to be Implemented by ICAO, States, and Stakeholders

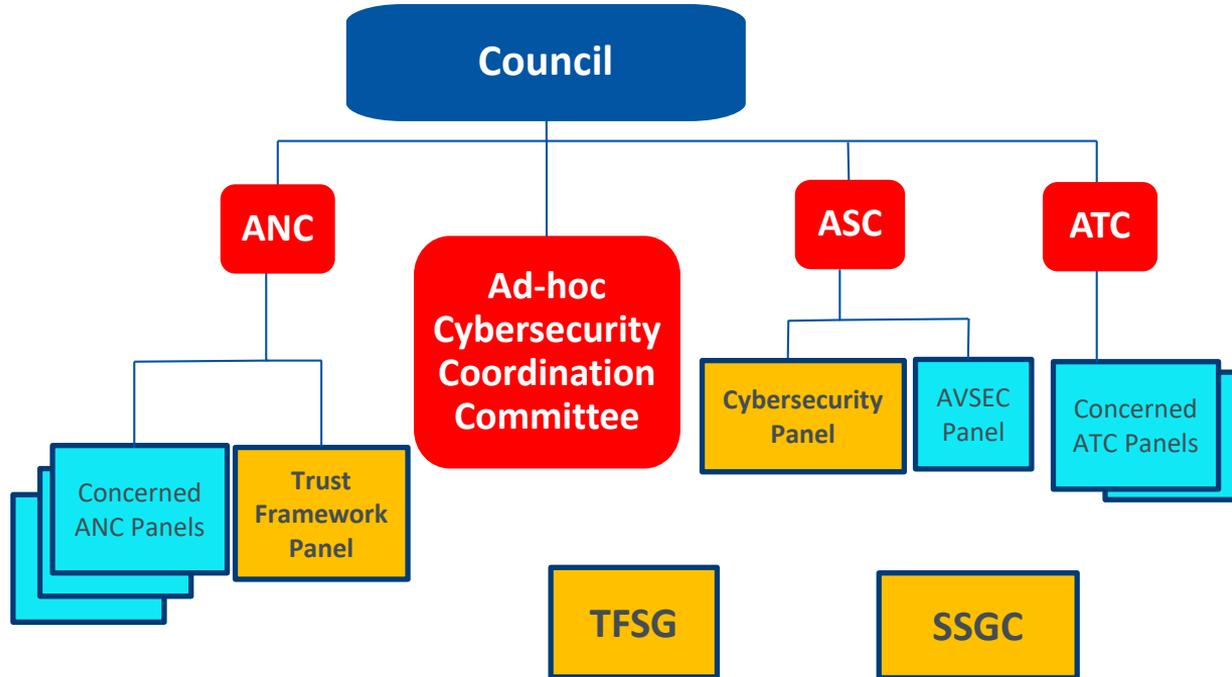
<https://www.icao.int/aviationcybersecurity/Pages/Cybersecurity-Action-Plan.aspx>



## Revised A41 Resolution: *Addressing Cybersecurity in Civil*

- Recognizes the multi-disciplinary nature of cybersecurity challenges and solutions and that cybersecurity risk can simultaneously affect a wide range of areas;
- Reaffirms the obligations States have under the *Convention on International Civil Aviation* (Chicago Convention);
- Reaffirms the importance and urgency of addressing the cybersecurity and cyber resilience of civil aviation's critical systems, data, and information against cyber threats and hazards, including common interfaces between civil and military aviation;
- Highlights the need for global universal adoption and implementation of the *Convention on the Suppression of Unlawful Acts Relating to International Civil Aviation* (Beijing Convention) and *Protocol Supplementary to the Convention for the Suppression of Unlawful Seizure of Aircraft* (Beijing Protocol);
- Recognizes the need for aviation cybersecurity to be harmonized; and
- Recognizes the importance of developing clear national governance and accountability for civil aviation cybersecurity, including the designation of a competent national authority responsible for aviation cybersecurity in coordination with concerned national authorities and agencies.

# Enhanced Governance Structure for Aviation Cybersecurity in ICAO



# Cybersecurity Guidance Material



- ✓ Facilitates Cybersecurity information sharing using Traffic Light Protocol.
- ✓ Minimizes Human Error in sharing sensitive information.
- ✓ Supports cybersecurity & Cyber resilience objectives.

- ✓ Calls to focus resources and actions to achieve a systemic approach to cybersecurity in civil aviation.
- ✓ Supports the protection and resilience of international civil aviation's critical infrastructure against cyber threats.

- ✓ Supports the design and implementation of a robust cybersecurity culture in civil aviation.
- ✓ Builds on civil aviation's record in implementing successful aviation safety & aviation security cultures.

<https://www.icao.int/aviationcybersecurity/Pages/Guidance-material.aspx>



# Training & Capacity Building

## ➤ Foundations of Aviation Cybersecurity Leadership and Technical Management

- ✓ Partnership between ICAO and Embry-Riddle Aeronautical University (ERAU)
- ✓ 8 Sessions Conducted To-date with a very positive feedback from participants

<https://www.enrole.com/erau/jsp/course.jsp?categoryId=5586BD00&courseId=SGC-1102>

## ➤ Managing Security Risk in ATM

- ✓ Partnership between ICAO and EUROCONTROL
- ✓ Combines physical security and cybersecurity in ATM

<https://learningzone.eurocontrol.int/ilp/pages/description.jsf#/users/@self/catalogues/4728296/coursetemplates/11291217/description>

## ➤ Cybersecurity Oversight in Aviation

- ✓ Partnership between ICAO and UK CAAi
- ✓ Focuses on all aspects related to cybersecurity oversight

<https://caainternational.com/course/icao-aviation-cybersecurity-oversight/>

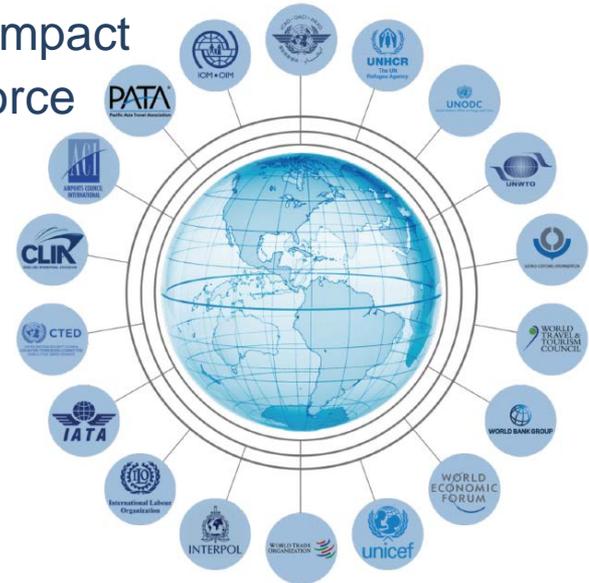




# Other AVSEC Initiatives

# Collaboration with other organizations

- UN Global Counter-terrorism Strategy
  - UN Global Counter-Terrorism Coordination Compact
  - UN Counter-Terrorism Implementation Task Force Working Groups
- Bilateral engagement
  - UNCTED, UNOCT, UNODC, INTERPOL
- Cooperation on cargo and mail
  - EU, UPU, WCO
- Industry relations
  - ACI, CANSO, IATA, IBAC





**AVSEC2022**  
A SERIES OF EVENTS

## AVSEC Events

- 2022 ICAO Innovation Fair - 24 to 26 September 2022
  - Aviation Security and Facilitation Day on 25 September 2022
    - Session 6: The Promise of Open Architecture
    - Session 7: Artificial Intelligence: The Future of Threat Detection?
    - Session 8: Keep Moving Forward - Innovation Towards Seamless and Contactless Travel
  - All sessions available to watch on ICAO TV:  
[www.icao.tv/icao-innovation-fair](http://www.icao.tv/icao-innovation-fair)
- AVSEC2022 Events (interview and webinars)  
[www.icao.int/Meetings/AVSEC2022](http://www.icao.int/Meetings/AVSEC2022)



# A41 SkyTalks



- United Nations Office of Counter-Terrorism:  
An overview of counter-terrorism programmatic activities by UNOCT
- Aviation Security - Managing insider threat and building security culture
- Reporting of Aviation Security Occurrences and Incidents
- ICAO Global Aviation Cybersecurity Framework
- Improving Aviation Security: ICAO Aviation Security Assistance and Training
- 20 Years ICAO Universal Security Audit Programme - Progress & future outlook

All available to watch on ICAO TV: [www.icao.tv/skytalks](http://www.icao.tv/skytalks)



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**Thank You**