

CYBERSECURITY AND RESILIENCE SYMPOSIUM

PROTECTING AVIATION
FROM CYBER ATTACKS

DOHA, QATAR | 6 - 8 NOVEMBER 2023



ICAO MID



Human factors in Cybersecurity

Capacity building, training and cybersecurity culture

November 2023

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Ms. Wafa Abdulla Al Obaidli

Senior Director, Oversight & Inspection Department
Aviation Security Affairs Sector
UAE General Civil Aviation Authority

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Session 7

Human Factors in Cybersecurity

Agenda

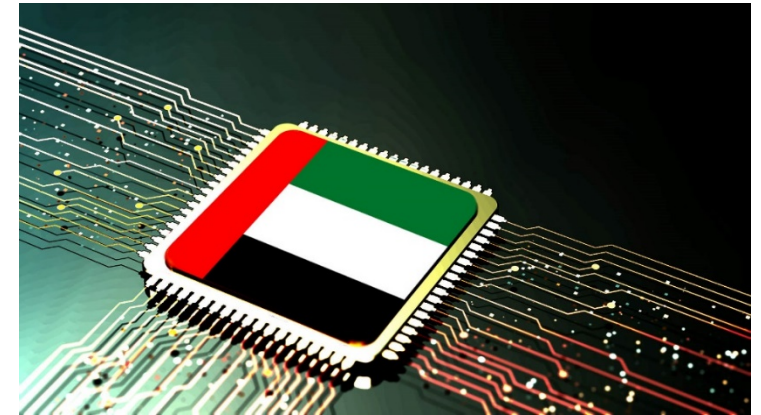
- ICAO Aviation Cybersecurity Strategy
- UAE National Cybersecurity Strategy
- The UAE Cybersecurity Council (CSC)
- The Role of the UAE Cybersecurity Council (CSC)
- GCAA National Civil Aviation Cybersecurity Strategy
- Human Factors in Cybersecurity - GCAA
- The UAE GCAA Cybersecurity Approach
- UAE GCAA Year of Security Culture (YOSC)
- Readiness for the future “Jahiz”
- Largest cyber drill competition “*Guinness World Records*”
- The UAE GCAA Reporting system

ICAO Aviation Cybersecurity Strategy

- Ensure appropriate role-based qualifications of personnel
- Increase awareness of cybersecurity
- Ensure proper curricula on aviation cybersecurity are included in the national educational framework
- Foster cybersecurity innovation and appropriate research and development
- Include cybersecurity in the ICAO Next Generation of Aviation Professionals' strategy

UAE National Cybersecurity Strategy

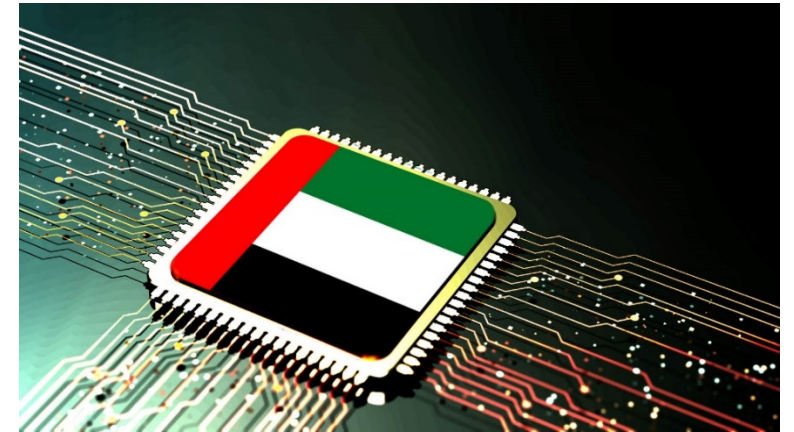
1. To protect the critical infrastructure & information assets of the UAE from cyber threats and risks
2. It is aligned with the guidance from ICAO with regards to Civil Aviation operations in the UAE
3. It provides standards & best practices for enhancing the cyber security of the aviation sector.



UAE National Cybersecurity Strategy

4. The strategy aims to achieve four main objectives:

- Establish a **robust** governance framework;
- To develop the **capabilities** and skills.
- To **foster** a culture of cyber **awareness** and responsibility; and
- To enhance the **cooperation** and coordination.



The UAE Cybersecurity Council (CSC)

- **Establishment** of the UAE Cybersecurity Council
- **World Government Submit 2022** – Dubai
- **A Memorandum of Understanding** with ICAO



The Role of the UAE Cybersecurity Council (CSC)



- Provide **advice & expertise** on cybersecurity;
- Work with all **relevant entities** to ensure the UAE cyberspace is safe and secure;
- **Analyze**, assess and **detect** cyber threats and risks;
- Manage **national cyber incidents**;
- **Provide** cybersecurity **expertise**
- **Support** cybersecurity industry in the development of cyber security skills; and
- Providing **advice** on **physical & personnel security**

GCAA National Civil Aviation Cybersecurity Strategy

- **Development and enforcement** of safety and security regulations.
- **Continuous improvements** of the safety and service standards.
- **Continuous improvements** in the bi-lateral relations.
- **Provision** of GCAA services in accordance with established **standards**.
- Instill **innovation** culture.



Human Factors in Cybersecurity - GCAA

- **Training & development** of personnel in cybersecurity.
- Enhance **awareness of cybersecurity**, including **education, recruitment and training**.
- Support **skills development** amongst **GCAA employees**.
- **Encourage cybersecurity innovation & research**.
- **Develop & maintain cybersecurity culture**.



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الهيئة العامة للطيران المدني
GENERAL CIVIL AVIATION AUTHORITY



The UAE GCAA Cybersecurity Approach

International Approach

- ICAO Cybersecurity Panel
- ICAO Cybersecurity **Working Group on Threat & Risk**
- ICAO Cybersecurity **Working Group on Guidance Material**



ICAO

National Approach

Introduction of the concept of Just Culture in the UAE

1. Encourage **personnel** to report cybersecurity **incidents**.
2. **Highlight** the responsibilities of **personnel towards** their **organizations**.
3. **Educate** personnel about cybersecurity **procedures, awareness, training, & education**.
4. Encourage staff to practice cyber **sterility**.



UAE GCAA Year of Security Culture (YOSC)

- YOSC Webinars and Workshops (more than **1500 participants**)
- **Dedicated Security Culture website**
- **Collaboration** with local & international experts, including **experts from ICAO.**
- No financial implications.
- Planned future cybersecurity events- 2024.

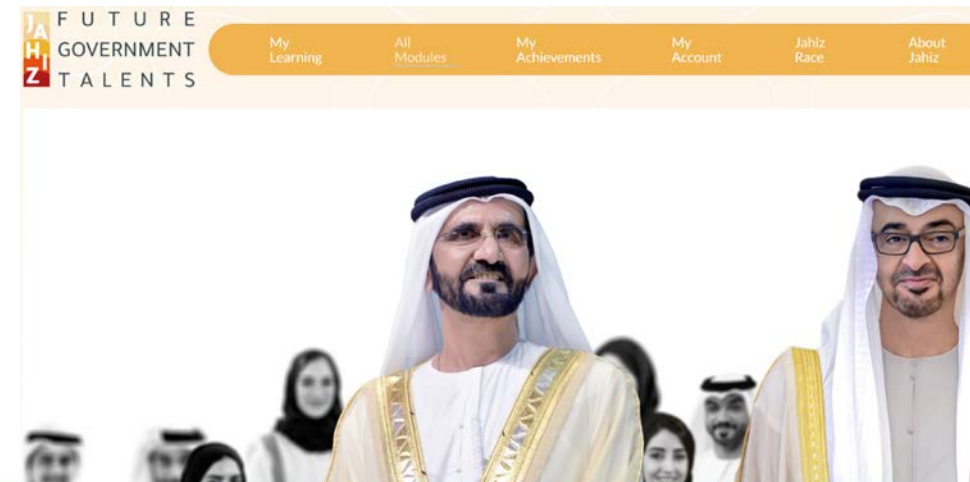


Cyber Security (AR , EN, Urdu, Malyalam)

Readiness for the future “Jahiz”

Cyber Security awareness:

- National Cyber Security
- Data Protection
- Digital Privacy
- Email Security
- Smartphones management & Security
- Social Media



Largest cyber drill competition *“Guinness World Records”*

- The largest cyber drill competition “UAE – Dubai”
19 January 2023.
- Cyber Security Council broke the record with 150 participants.
- Cyber Security Council received the Guinness World Record.



The UAE GCAA Reporting system

- Reporting of Cybersecurity incidents.
- Reporting of Security Breaches (ROSB) System.

The screenshot displays the GCAA Reporting of Security Breach (ROSB) system interface. At the top, the GCAA logo and the text "REPORTING OF SECURITY BREACH" are visible. Below this, a welcome message for "Ahmed Wagih Wahbi" is shown. The interface includes a summary of tasks: "My Open Task : (0)", "My More Info. Required Task : (0)", and "All Closed : (1737)". There are two main sections: "Group Tasks" and "My Tasks". Each section features a table with columns for "Application Ref. No", "Location", "Dept. Airport", "Dest. Airport", "Received", "Status", and "View/Assign/Review". Both sections show "No Group tasks available at the moment." and "No My Tasks" available. Navigation elements like "Change page" and "Page size" are present for both sections.

GCAA
REPORTING OF SECURITY BREACH

Welcome **Ahmed Wagih Wahbi**,

My Open Task : (0)
My More Info. Required Task : (0)
All Closed : (1737)

Group Tasks

Change page: < 1 > Change page: 1 Go Page size: 20 Change Displaying page 1 of 1, items 0 to 0 of 0.

Application Ref. No	Location	Dept. Airport	Dest. Airport	Received	Status	View	Assign
No Group tasks available at the moment.							

My Tasks

Change page: < 1 > Change page: 1 Go Page size: 20 Change Displaying page 1 of 1, items 0 to 0 of 0.

Application Ref. No	Location	Dept. Airport	Dest. Airport	Received	Status	Review
No My Tasks						

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THANK YOU

