CYBERSECURITY AND RESILIENCE SYMPOSIUM

PROTECTING AVIATION FROM CYBER ATTACKS

DOHA, QATAR | 6 – 8 NOVEMBER 2023

ICAO MID

الهيئة العامة للطيران المدني
CIVIL AVIATION AUTHORITY
قطر QATAR

Regional Developments on Cybersecurity (ANS Part)

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Regional Developments on Cybersecurity

- MID Region ANS Cybersecurity Action Plan

- Capacity Building for ANS Cybersecurity

- ANS Cyber Resilience Tabletop Exercise (TTX) Recommendations

- Information Sharing on Cybersecurity

- Air Navigation Cybersecurity Working Group (ACS WG): Meeting Outcomes

- MID States engagement on Cybersecurity

MIDANPIRG CONCLUSION 20/43:
MID REGION ANS CYBERSECURITY ACTION PLAN

That, in order to assist States achieving the objectives of ICAO Cyber Security Strategy seven pillars in ANS area in the MID Region:

> *a) the MID Region ANS Cybersecurity Action Plan at **Appendix 6.6G** is endorsed;*

> *b) urge States to implement identified actions in a timely manner; and*

> *c) ACS WG to develop a survey to establish how States have implemented the identified actions.*

MID Region ANS Cybersecurity Action Plan

Action Number	Specific Measures/Task	by	Start date of Implementation	Traceability to Cybersecurity Action Plan
MID-01	States to develop their own national/organizational Cyber Security policies	MID States	2023	CyAP 0.1
MID-02	Plan, organize and support international and regional events to promote cybersecurity in civil aviation.	MID States ICAO MID	2023 - 2024	CyAP 1.8
MID-03	Establish a governance structure in the civil aviation for ANS cybersecurity field.	MID States	2023	CyAP 2.1
MID-04	Promote coordination mechanisms between civil aviation authorities and cybersecurity authorities.	MID States	2023	CyAP 2.4
MID-05	Establishment of a civil aviation ANS cybersecurity point of contact network.	MID States	2023	CyAP 5.5

MID Region ANS Cybersecurity Action Plan

Action Number	Specific Measures/Task	by	Start date of Implementation	Traceability to Cybersecurity Action Plan
MID-06	To share cybersecurity-related information using ADCS portal	MID States	2023 - 2024	CyAP 5.2
MID-07	develop and implement capabilities and plans for civil aviation cybersecurity incident detection, analysis and response at operational level.	MID States	2023 - 2024	CyAP 6.4
MID-08	Conduct periodically ANS Cyber Resilience table top and live exercises at Regional and national levels	MID States	2023 – 2024	CyAP6.6
MID-09	Organization of ANS Cyber Sec capacity building activities (ANS Cyber Security oversight, Managing Security risks in ATM)	ICAO MID	2023 – 2024	CyAP 7.5
MID-10	Identify potential threats and vulnerabilities for ANS systems	ACS WG MID States	2023 – 2024	-

Capacity Building for ANS Cybersecurity

MIDANPIRG CONCLUSION 20/44:
ANS CYBERSECURITY CAPACITY BUILDING ACTIVITIES

That, to assist States building capacity on ANS cybersecurity & resilience, capacity building activities on ANS Cybersecurity be organized in 2024.

ANS Cyber Resilience Tabletop Exercise (TTX) Recommendations

- States to perform drills, practice and have lessons learned on a regular basis, with the participation of all internal and external Stakeholders including senior management;

- States to ensure regular coordination between regulators, ANSPs, airport operators and airlines regarding Cyber Resilience;

- Contingency plan should be in place which including back up system and condition for manual procedure

ANS Cyber Resilience Tabletop Exercise (TTX) Recommendations

- States to support implementation of Network monitoring, in particular monitoring of:
    - external links (external to the system)
    - security incidents specially during cases of cyber attacks; and
    - fault reporting and advance notification of maintenance activities

- The experts to deal with cyber security/safety issues of ATM systems should be consisted of IT expertise as well as necessary knowledge on ANS and operational process;

Information Sharing on Cybersecurity

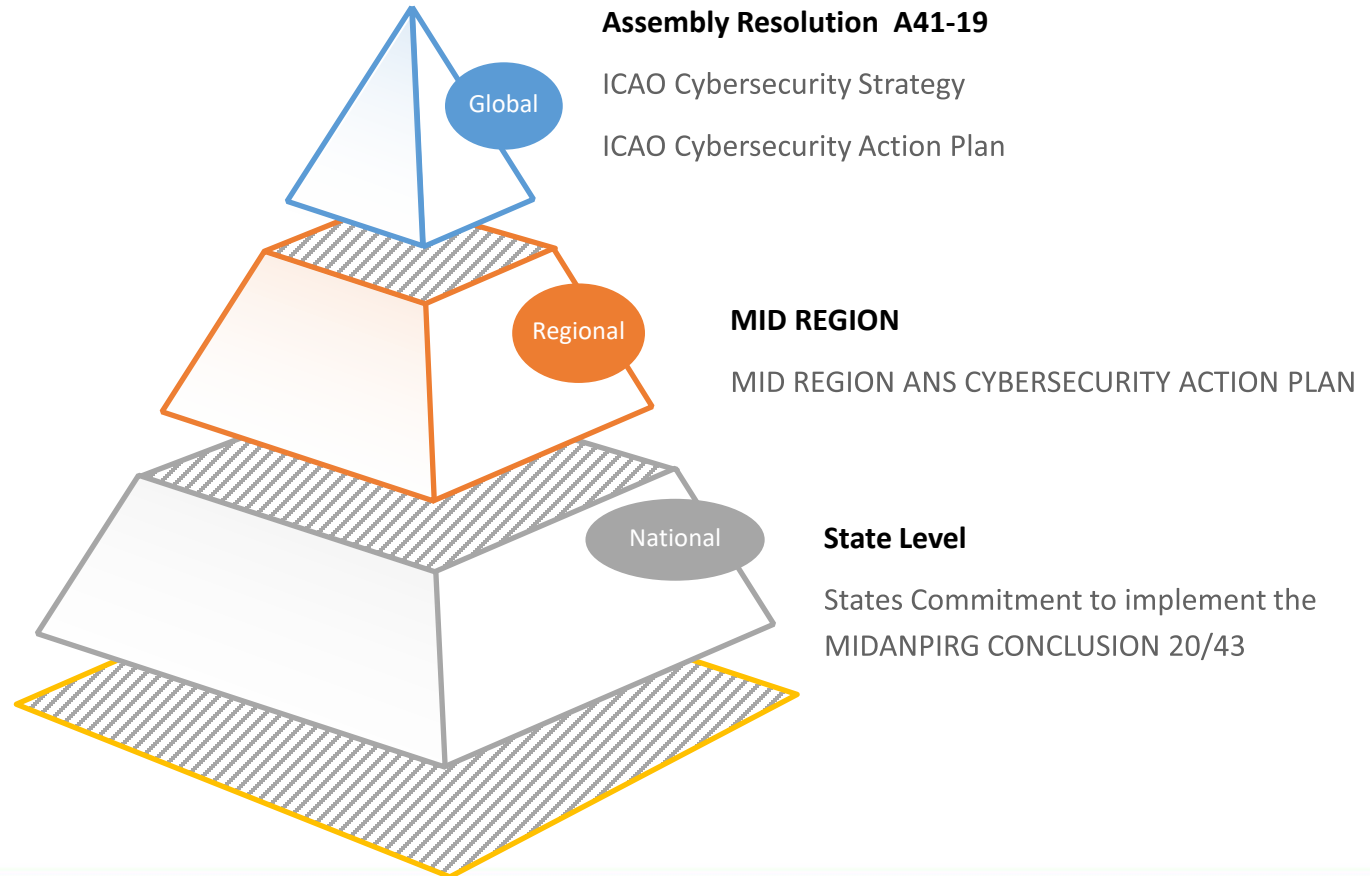## *MIDANPIRG CONCLUSION 20/45: ENHANCEMENT ATM DATA CYBERSECURITY (ADCS) PORTAL*

That, States be urged to:

a) review and update, as deem necessary, ANS Cyber Security focal point(s);
b) provide feedback to the ADCS to Admin by 1 October 2023 for further enhancements; and
c) use the ADCS effectively, share their experience related to cybersecurity, through the ADCS Portal.

ACS WG/1 Meeting Outcomes

- review and update the MID Region ANS Cyber Security Action Plan
- conduct a survey to identify how States have implemented the identified actions
- conduct Cyber TTX at national level periodically for all stakeholders
- use of the ATM Data Cyber Security (ADCS) portal, hosted by UAE as a prototype platform for information sharing

➔ need to establish Security Operation Center (SOC) for ANS cyber resilience

➔ ACS WG/2 Meeting to be conducted on *9 November 2023 (Doha, Qatar)*

MID State engagement on Cybersecurity

Assembly Resolution A41-19

ICAO Cybersecurity Strategy

ICAO Cybersecurity Action Plan

Global

MID REGION

MID REGION ANS CYBERSECURITY ACTION PLAN

Regional

State Level

States Commitment to implement the MIDANPIRG CONCLUSION 20/43

National

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THANK YOU