



WORKING PAPER

THIRTEENTH AIR NAVIGATION CONFERENCE

Montréal, Canada, 9 to 19 October 2018

COMMITTEE A

**Agenda Item 5: Emerging issues
5.4: Cyber resilience**

ATM DATA AND CYBER SECURITY

(Presented by the United Arab Emirates)

EXECUTIVE SUMMARY

This paper presents the air traffic management (ATM) Data and Cyber Security prototype Portal initiative created by the ICAO Middle East (MID) ATM Data and Security Action Group and its capability to share information on cyber security events across the civil aviation industry.

Action: The Conference is invited to agree to the recommendations in paragraph 3.1.

1. INTRODUCTION

1.1 With the continuous evolution of air traffic management (ATM) systems and the interconnectivity enhancements globally it is essential to ensure that adequate cyber security measures are in place to mitigate against an already identified major threat. Sharing of intelligence across States is essential to fully understand the best approaches to be taken in combatting this risk to civil aviation.

1.2 Annex 17 — *Security — Safeguarding International Civil Aviation against Acts of Unlawful Interference*, item 4.9 *Measures relating to cyber security*, highlights specific Standards and Recommended Practices (SARPs) in relation to the threat and recommendations to be adopted by Contracting States.

1.3 The Middle East Air Navigation Planning and Implementation Regional Group (MIDANPIRG) Decision 16/26 established the creation of the ATM Data and Security Action Group (ADSAG) with the United Arab Emirates taking the lead for the MID Region to develop, in co-ordination with the other States, a security baseline for the various systems in use.

DECISION 16/ 26: ATM DATA SECURITY ACTION GROUP

That the ATM Data Security Action Group (ADSAG) be:

- a) Established to develop the MID Region ATM Data Security Plan, to be presented to the CNS SG/8.
- b) Composed of members from Bahrain, Iran, Kuwait, Oman, Saudi Arabia, UAE (Rapporteur), ICAO and IFAIMA

1.4 As part of this security initiative seven Minimum Security Baseline (MSB) documents were created which cover various technologies and systems in use within the industry.

1.5 As a further enhancement to the MSB's, an online prototype portal, known as the ATM Data and Cyber Security (ADCS) Portal, was developed by the United Arab Emirates to allow ANSPs to report cyber events as well as share knowledge and information on cyber security incidents.

2. DISCUSSION

2.1 The ADCS prototype portal is currently available for testing purposes only at this stage and not intended to be a comprehensive solution for cyber security but rather a platform where cyber events can be logged. Information related to cyber-attacks are shared feeding into discussions held on various cyber topics and also provide the bases of evidence for the development of common system solutions. The prototype portal has been developed from scratch and is fully customizable and is now available online.

2.2 To ensure the system is not abused by the public, access is restricted to approved ANSP/industry users only. The site is hosted on a dedicated and secured server at the General Civil Aviation Authority (GCAA) Sheikh Zayed Air Navigation Center and can be accessed through www.adcsportal.ae.

2.3 Access to the portal is requested via a template provided on the website and once approved, will provide user credentials to the respective applicant. Any access or site issues can also be reported through adcs@szc.gcaa.ae.

2.4 Usage of the portal will be monitored to ensure user compliance and prevent misuse. Although developed initially for the ICAO MID Region, all States are encouraged to register on the ADCS Portal and provide feedback to the ADCS Administration for further enhancements.

2.5 States are urged to register and provide feedback on additional enhancements. The use of this portal is to share knowledge and learn from others experiences to ensure a far more robust and secure data connectivity. There is no 100 per cent secure cyber solution available however having the best possible processes and diligence in place will greatly improve resilience to attacks and ensure safe air navigation services.

3. CONCLUSION

3.1 The Conference is invited to agree on the following recommendation:

That the Conference:

- c) support the work achieved by the ICAO Middle East (MID) Air Traffic Management (ATM) Data Security Action Group; and
- d) encourage States to register and provide feedback on the ATM Data and Cyber Security (ADCS) Portal prototype.

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