

International Civil Aviation Organization

MIDANPIRG/17 and RASG-MID/7 Meeting

(Cairo, Egypt, 15 – 18 April 2019)

Agenda Item 6.2: Air Navigation Planning and Implementation

ADSAG DEVELOPMENTS

(Presented by UAE)

SUMMARY

This paper presents the work done by the ATM Data Security Action Group (ADSAG) related to the security enhancements for ATM data security and the reporting of cyber events.

Action by the meeting is at paragraph 3.

REFERENCES

- ADSAG ATM Data Security Action Group
- ADCSPortal ATM Data and Cyber Security Portal
- MSB Minimum Security Baseline
 - Web Application security baseline V1.2
 - Linux security baseline V1.2
 - Switch security baseline V1.1
 - Web Application Firewall baseline V1.1
 - Firewall security baseline V1.1
 - Router security baseline V1.1
 - Third Party Data Sharing And Vendor Access_V1.1

1. Introduction

1.1 The meeting may recall the MIDANPIRG 16/26 decision to establish the ATM Data Security Action Group (ADSAG) to establish a baseline security plan for ATM data services within the MID Region to be presented at the CNS SG8 meeting in 2018.

2. DISCUSSION

2.1 At the CNS SG8 meeting in 2018(WP 12), the UAE presented the minimum security baseline documents as well as the portal that was being developed to form the baseline plan for the ADSAG.

- 2.2 The MSB's are seven volumes developed from ISO 27001 standards as well vendor specific security recommendations such as Cisco and Red Hat Linux (RHEL). Also included is third party access to data and physical security controls at ANSP sites.
- 2.3 While security is considered extremely complex and expensive to implement the MSB's were designed to cover all components of the ATM system and be easy to implement, easy to maintain, scalable and cost effective. This makes a specific, defined level of security available to all with very little investment and not all parts of the baseline are applicable to all ANSP's.
- 2.4 These MSB's can be used for any ANSP system that requires data sharing and interconnectivity with other ANSP's or stakeholders and they cater for all the SWIM requirements as required in by the ICAO ASBU's.
- 2.5 To ensure that these MSB's are current and maintained they are reviewed every six months and updated accordingly, however should a new threat or vulnerability be found, at any time, they will be updated accordingly.
- 2.6 While the MSB's have been developed to cover all ANS data sharing, system and user management, they are not associated with Spectrum security as this is generally dealt with by the respective State's regulatory authority/entity.
- As we know with security, having the respective security solution in place does not mean we are fully protected and a mechanism is required for the reporting of events.
- 2.8 Taking this into consideration the ATM Data and Cyber Security Portal (www.adcsportal.ae) was developed, and subsequently enhanced, to allow ANSP's to report events/attacks on their ATM systems.
- 2.9 This portal provides a page for reporting of cyber events, provides statistical information on the reported events and provides links to various security sites for up to date attack information worldwide.
- 2.10 As an added feature to this website we included a forum are which allows registered users to share knowledge and experiences related to cyber events/attacks. This is an extremely important part of the site and used correctly will provide extremely valuable information to the aviation community regarding new/old cyber events and fixes.
- 2.11 The ADCS Portal is currently hosted on an isolated, dedicated server at the UAE ACC and any feedback or queries regarding this site can be sent to adcs@szc.gcaa.ae.
- 2.12 These are the developments done as per the actions given to the ADSAG however the group is continuing with enhancements to the documentation as well as drawing up the draft Terms of Reference for the group.
- 2.13 Further planned enhancements will be done in November this year after the Cybersecurity and Resilience symposium.
- 2.14 There is a definite need to improve the regulations regarding cyber security and provide clear guidance on specific requirements such as those laid out in ANNEX 10. The longer we operate without clear regulations in place the more vulnerable we leave ourselves.

3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:
 - a) endorse the MSB's as the baseline security guidelines for the MID Region;
 - b) urge States to register and use the ADCS Portal;
 - c) urge States to develop and implement a clear and defined Cyber security/resilience strategy.