



*International Civil Aviation Organization*

**MIDANPIRG Communication, Navigation and Surveillance Sub-Group**

**Eighth Meeting (CNS SG/8)**  
*(Cairo, Egypt, 26 - 28 February 2018)*

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**Agenda Item 4: CNS Planning and Implementation in the MID Region**

**ATM DATA SECURITY IN THE MID REGION**

*(Presented by UAE)*

**SUMMARY**

The aim of this paper is to present the proposed Minimum Security Baseline documents (MSB's), which form part of the ATM Data Security Action Group's deliverables to the MIDANPIRG 1, as well as the proposed portal that has been developed to facilitate the sharing of knowledge and reporting of cyber events.

Action by the meeting is at paragraph 3.

**REFERENCES**

- ED 153 – Guidelines for ANS software safety assurance.
- ISO 27002 Information Security
- ED 109A – Software integrity assurance considerations for CNS and ATM systems.
- MIDANPIRG/16 Report

**1. INTRODUCTION**

1.1 The meeting may recall that MIDANPIRG/16, through Decision 16/26, agreed that the establishment of a MID Region ATM Data security action group was required to establish a baseline security plan for ATM data services within the MID Region.

*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; and*
- b) composed of members from Bahrain, Iran, Kuwait, Oman, Saudi Arabia, UAE (Rapporteur), ICAO and IFAIMA*

**2. DISCUSSION**

2.1 As per the MIDANPIRG Decision 16/26 the establishment of a MID Region ATM Data security action group was required to establish a baseline security plan for ATM data services.

2.2 Security within the current ATM systems is very limited and while many systems are isolated from the internet the risks faced by them are no different as an offline system can be compromised just as easily.

2.3 More and more internet based services are being required by ANS units and along with the future SWIM requirements we need to ensure that we have a robust, scalable security plan, not only in place but implemented throughout the region for harmonized air traffic service provision.

2.4 Security requirements do generally require substantial financial investment however no amount of money can truly protect a system from being compromised and therefore the ATM Data security plan should be developed in such a way that, while some financial investment will still be required, it is affordable and implementable to all the MID Region States.

2.5 To try and ensure that such a plan can be implemented, we have developed the draft Minimum Security Baseline Documents (MSB's) which, if endorsed, will form the backbone of the Mid ATM Data Security plan. These documents have been developed based on current best practices and aligned to suit our daily operational requirements.

2.6 The MSB's consist of 7 documents and are the MINIMUM suggested security requirements for the respective services/technologies. The documents are as follows:

- Web Application security baseline
- Linux security baseline
- Switch security baseline
- Web Application Firewall baseline
- Firewall security baseline
- Router security baseline

2.7 The MSB's is at **Appendix A**.

2.8 As mentioned, the requirements laid out in these documents are based on current best practices and while these are in no way the final solution for all, for the most part these are solutions that can be implemented with minimal impact to the daily operations and service provision.

2.9 Having these baselines in place will provide us as ANSP's, a solid foundation to further enhance our security policies and procedures. These documents are intended to be living documents and should be reviewed at a minimum of once a year to ensure they remain valid.

2.10 As an additional tool for the ANSP's within the MID Region, we are currently developing an online portal that will provide us a database of known attacks/threats as well as provide us reporting mechanism for cyber events. This portal will also include a forum whereby registered users can discuss security related issues on a daily basis, thus allowing a greater sharing of knowledge and better awareness amongst the MID States. The portal is planned to be fully functional by the end of April 2018.

2.11 Additional ISO 27002 and EuroCAE requirements are also currently being looked at to further enhance these baseline documents and will be added to the final documentation that is presented to the MIDANPIRG later this year.

### **3. ACTION BY THE MEETING**

3.1 The meeting is invited to:

- a) urge States to review, the MSB's and provide feedback before the end of April to form a security plan to be presented at MIDANPIRG 17; and
- b) once available, States are urged to register on the ATM data and cyber security portal and provide feedback for further enhancements.

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