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ASIA AND PACIFIC REGIONS**

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**AGENDA ITEM 5 : AVIATION SECURITY AND
FACILITATION**

**AvSecID SYSTEM: A HOLISTIC APPROACH TO AIRPORT
IDENTIFICATION MANAGEMENT**

(Presented by Bangladesh)

SUMMARY

This paper is intended to highlight the challenges and solutions related to airport access control and airport security identification management systems in a holistic approach with an ongoing implementation update of CAAB efforts.

AvSecID SYSTEM: A HOLISTIC APPROACH TO AIRPORT IDENTIFICATION MANAGEMENT

1. INTRODUCTION

1.1 The aviation industry is highly regulated to ensure the safety, security and efficiency of air travel. Regulatory requirements vary depending on the specific roles and responsibilities of aviation professionals. Pilots, flight attendants, aviation inspectors, aircraft maintenance personnel, air traffic controllers, aviation security screeners, supervisors, managers and airline executives are required to obtain different types of licenses, certifications and permits after successful completion of different types of training. All professionals are highly obliged to be compliant in their respective areas in accordance with the regulations of the state. However, all aviation professional, who requires entry into airside and security-restricted areas, are required to comply with the common airport access control requirements that is to obtain airport security identification in accordance with Annex 17 requirements 4.2.3 and other applicable provisions.

1.2 Access to the airside and security-restricted area of an airport should be controlled by using a security identification permit system. A permit system consists of cards or other documentation issued to individuals employed at airports, or those who otherwise have a need for authorized access to an airport, airside or security-restricted area. The system's purpose is to identify the individual and facilitate access. Vehicle permits are issued and used for similar purposes. Permits are sometimes referred to as airport identification cards or passes.

2. DISCUSSION

2.1 Annex 17 of the Chicago Convention, specifically in Standard 4.2.3 along with the ICAO Aviation Security Manual (Doc 8973) provides the basis and guidelines on the airport identification system. As mandated, every Contracting State is obliged to take measures to establish and execute identification systems pertaining to individuals and vehicles. The principal objective of these systems is to prevent unauthorized entry into airside areas and security-restricted areas within airports. Access to these areas should exclusively be granted to those who possess a valid operational requirement or a legitimate justification for being present.

2.2 A critical facet of this process involves confirming the identity and authorization of individuals and vehicles at designated checkpoints before granting them access to airside areas and security-restricted areas. This stringent verification procedure serves as a crucial safeguard against the potential risks associated with unauthorized access.

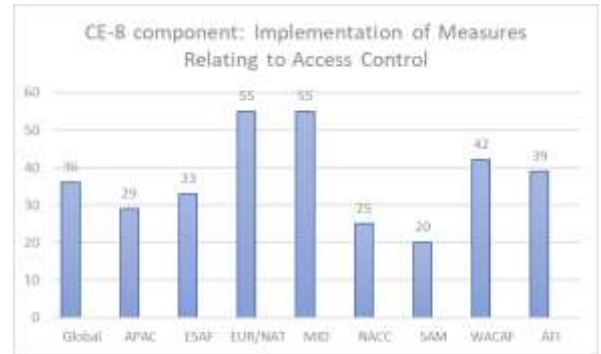
2.3 In addition to the requirements established under standard 4.2.3, in terms of airport identification system, states are obliged to ensure that initial and recurrent security awareness training for personnel authorized to have unescorted access to airside areas is completed In accordance with Annex 17 Standard 3.4.6 and background checks are completed in respect of persons with unescorted access to SRAs and immediate denial of the ability to unescorted access to SRAs, if persons are found unsuitable by any background check in accordance with Annex 17 Standard 3.5.2.

2.4 According to the Analysis of USAP-CMA Audit Results, December 2022, the global and regional indicative compliance with Annex 17 Standards 4.2.3 is very low, which is shown in the chart.



2.5 The percentage of indicative compliance to Standard 4.2.3 of the APAC region is 22 percent. Observations during on-site USAP-CMA audits revealed that procedures for airport personnel identification and vehicle pass systems are generally not consistently and effectively implemented.

2.6 If we look into a more in-depth analysis of the global and regional audit results for the “Implementation of Measures Relating to Access Control” one of the components of CE-8: Resolution of Security Concerns critical element, based on audits conducted under the USAP-CMA as of 31 December 2022, the percentage of effective implementation is very low in APAC, Global and some other regions.



2.7 During the USAP-CMA Audit, most of the findings arise due to a lack of sufficient airport-level procedures and a lack of effective and consistent implementation of such procedures.

2.8. Airports face challenges in setting up procedures for the issuance, control and accountability of airport personnel identification passes. Such challenges vary from airport to airport depending on the airport’s size, operation, and state of security culture. The challenges may include, but are not limited to:

- a) Management and tracking of paper-based written applications, where paper-based application systems still exist;
- b) To ensure that appropriate designated persons have done the proper authorization of the application based on an operational need or other legitimate reason;
- c) Access control and facilitation of national aviation safety and security inspectors;
- d) Access control and facilitation of crew members into airports;
- e) Ensure that the total number of passes issued to an organization remains within the justified limits;
- f) Deciding the actual allocation of number of passes required for the entities for the conduct of the entities’ operation at the airside or SRA;
- g) Lack of empirical understanding and lack of information for the authority on evaluating the justification of different entities’ actual requirement on the number of personnel for those entities operation at the airside;
- h) Ensure that the validity of security awareness training remains valid within the validity of the airport identification card;
- i) Ensure that background checks and criminal history checks remain valid within the period of ID validity;
- j) Management and retrieval of lost, stolen or otherwise unaccountable airport personnel identification passes; and

- k) Unaware of lost/stolen airport personnel identifications that are not reported and removal of such identifications from the airport access control list.

2.9. Moreover, airports frequently face some common operational challenges in control of staff movements and enforcement of access control of persons other than passengers and other security and safety-related requirements, including but not limited to:

- a) Management of updated stop list at checkpoints;
- b) Management of blank cards;
- c) Control unauthorized movements within the airport;
- d) Deactivating identification badges of employees who have left the organization such as resigned, retired and transferred;
- e) Limit access rights to restricted areas for pass holders based on strict operational needs;
- f) Ensure that persons with escorted access are escorted at all times by the right person while within the SRAs;
- g) Enforcing the persons authorized to drive airside;
- h) Enforcing the persons authorized to carry tools of trade;
- i) Enforcement of safety requirements for vehicles and drivers before issuance of airport IDs and during daily operational activities;
- j) Ensuring the control of movement of the personnel involved in protocol duties for VIPs and implementing proper screening of those personnel.

2.10. To increase the compliance rate to the provision of Annex 17 and effective and consistent implementation of access control measures at airports, there is a need for a holistic approach to establish and maintain strict control and accounting procedures over the airport security identification system. The approach should consider the following elements while depending on the size of the operation and the state of security culture within that industry:

- a) A coordinated strong policy on the issuance of airport security identification. The policy may include the enlistment of entities eligible to obtain airport security identification and the enlistment of persons authorized to verify airport identification requests. The policy may include an airport identification system for aviation inspectors and crew members. Also, the policy may integrate some operational enforcement tools into an airport identification system.
- b) A comprehensive system design for software applications based on the concept of operations. Based on the policy requirements, the eligibility criteria for different types of airport identification should be translated into software programming to ensure that the right person applies for the right airport IDs.
- c) A network of properly trained and certified personnel within the industry. The regulator along with the airport operator should establish a mechanism to continuously train and certify a group of personnel covering all aviation stakeholders and maintain a network of such personnel as a sustainable mechanism for promoting security culture. A designated person for authorizing the airport ID requests for individual entity may be selected from those train and certified personnel.
- d) Real-time Integration with the state's Background checks and criminal records database.
- e) Mechanism for ongoing validity checks of security awareness training for different categories of personnel.

- f) Establish a modern mechanism for the enforcement of access control measures other unauthorized activities and airport crime control.
- g) Application of behavior detection for insider risk management.
- h) Use of technologies, artificial intelligence (AI), Internet of Things (IoT) to reduce human efforts.
- i) Ensure the proper security of the system.

2.11 With the vision of “Smart Aviation Security” of “Smart Bangladesh”, the Civil Aviation Authority of Bangladesh (CAAB), with the direction of the Ministry of Civil Aviation and Tourism (MoCAT) introduced a single online and software-based platform to manage airport security identifications under the Airport Security Pass Policy 2020. The platform named as “AvSecID” System. The CAAB AvSecID System comprised of and integrated the following components:

- a) Online application and tracking (User Portal);
 - b) Online designated authorized signatory verification (DAS Portal);
 - c) Software-based airport ID badge approval and issuance system (Admin Portal);
- and
- d) Airport automated access control system [integrated with all access control points integrated with ID readers and a dedicated display system including face recognition, tailgate detector and Automatic Number Plate Recognition system]. Currently, the system has been installed at Hazrat Shahjalal International Airport.

2.12 CAAB has adopted a comprehensive implementation plan with the aim of establishing a state-of-the-art airport ID management solution with a self-enforcement system to be developed with the application of Artificial Intelligence (AI) and the Internet of Things (IoT).

3. ACTION BY THE CONFERENCE

3.1 The Conference is invited to:

- a) Note the challenges in setting up access control procedures and operational implementation of such procedures;
- b) Note the importance of adopting a holistic approach for airport ID management;
- c) Note the efforts and progress made by Bangladesh in establishing the AvSecID System (A single platform for airport ID management); and
- d) Encourage to share experiences of similar initiatives and systems in place.

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