



**DIRECTORS GENERAL OF CIVIL AVIATION-MIDDLE EAST REGION
FIFTH MEETING (DGCA-MID/5)**

(Kuwait, 4-6 November 2019)

Agenda Item 6: Aviation Security and Facilitation

REGIONAL COOPERATION TO ADDRESS CYBERSECURITY THREATS

(Presented by AACO)

SUMMARY

This paper presents a summary of the latest developments with regards to cyber security, presents the outcome of discussions on the topic during AACO/IATA Technical Forum 2019, and proposes a mechanism to address this threat in the MID region.

1. INTRODUCTION

1.1 Cybersecurity is among the emerging threats facing civil aviation on the national, regional, and global levels.

1.2 The continuous evolution of the civil aviation system according to the Global Air Navigation Plan requires an ever increasing level of connectivity and integration between once isolated organizations and systems.

1.3 Such connectivity and integration links a plethora of systems which in turn increases the criticality of a sound cybersecurity plan to address any vulnerabilities across the whole aviation ecosystem.

2. DISCUSSION

2.1 ICAO 40th Assembly agreed on a Resolution and a Strategy to address cybersecurity. The Strategy acknowledges the interconnectivity of the air transport systems. It further acknowledges that aviation is a global industry and the fore mentioned interconnectivity results in the need to address this issue on the global level. Furthermore, the Strategy calls for collaboration between all stakeholders to address this threat.

2.2 With regards to the ICAO Cyber Security Strategy, it is worth mentioning that the Working Group tasked with the development of the Strategy was a high-level group that reported directly to the Secretary General of the organization, highlighting the high profile of engagement required to address this issue.

2.3 The ICAO Cyber Strategy encompasses seven pillars which are essential to address this issue: international cooperation, governance, effective legislation and regulation, cybersecurity policy, information sharing, incident management and emergency planning, capacity building and cybersecurity culture.

2.4 On the other hand, AACO and IATA held their Technical Forum in October 2019. The Forum included a session on cybersecurity. The deliberations during that session identified the following points:

- a) Cyber security is a domain that encompasses the whole air transport landscape, not only aviation security departments, with the speaker agreeing that aviation security functions are possibly the least directly impacted by cyber threats.
- b) Due to the difference between the cyber and physical security domains, AVSEC departments of all stakeholders do not possess the technical know-how necessary to address cyber threats.
- c) Cyber security cannot be addressed in any specific area of the air transport landscape. It however involves the whole supply chain covering aviation safety, landside security, airside security, air navigation, airports, airlines, regulators, airport tenants, in addition to providers such as system developers and aircraft, engine, and system manufacturers.
- d) Moreover, the variables that affect cyber security, i.e. people, processes, and systems, require a top-down approach in every organization involved in this issue such as concerned national agencies, civil aviation authorities, airports, ANSPs, airlines, industry, etc...

2.5 In the Middle East region, cyber security was identified as an important issue to be addressed. This has been highlighted in the instruments adopted over the past few years (Riyadh, Dubai – which specifically addresses cybersecurity, and Sharm El Sheikh declarations), as well as the inclusion of cyber security in ICAO Regional Security and Facilitation Plan, and in the work program of the MID Regional Aviation Security and Facilitation Group (RASFG-MID).

2.6 However, due to the above points, we believe that cyber security is an issue that would best be tackled through a high-level multi-disciplinary and multi-stakeholder regional group under ICAO umbrella. Such group would be tasked with developing a Regional Cybersecurity Strategy in line with the global one, and support the implementation of that strategy in the Middle East States.

2.7 Therefore, we believe that cyber security issues would be best addressed through the following:

- a) Detach cyber security from the mandate of the RASFG-MID.
- b) Establish a high-level regional group gathering representatives from all concerned departments in civil aviation authorities, international and regional organizations, airlines, airports, ANSPs, and industry in addition to representatives from concerned national agencies in the region to develop a Regional cyber security roadmap and to plan and implement projects that raise cyber security capabilities and support all stakeholders' efforts to safeguard aviation against those threats.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) call upon states and stakeholders to enhance collaboration in cyber security through the exchange of information, capabilities, and best practices; and
- b) consider the proposed mechanism in 2.6 and 2.7 to effectively address cyber threats in the region.

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