



WORKING PAPER

ASSEMBLY — 41ST SESSION

EXECUTIVE COMMITTEE

Agenda Item 14: Aviation Security - Policy

PROPOSAL FOR DEVELOPING INTERNATIONAL STANDARDS FOR THE AVIATION SECURITY VOLUNTARY REPORTING (ASVR) SYSTEM AND IMPROVEMENT OF THE CLASSIFICATION SYSTEM

(Presented by the Democratic People's Republic of Korea)

EXECUTIVE SUMMARY

The aviation security incident classification system published by the Sub-Group on Aviation Security Incidents Reporting (SG-ASIR) during the Thirty-third Aviation Security Panel (AVSECP/33) Meeting has limitations in covering the voluntary reporting of potential risks, so the Republic of Korea proposes developing a classification system and analysis mechanism suitable for the Aviation Security Voluntary Reporting (ASVR). At the same time, the Republic of Korea proposes the development of International Standards for the ASVR system to enhance global aviation security based on security culture and requests the Assembly to consider introducing a proactive security management system by utilizing the database accumulated through the reporting system and introducing security performance targets and indicators.

Action: The Assembly is invited to:

- a) consider developing international Standards for voluntary reporting in implementing an aviation security confidential reporting system;
- b) develop a global security classification system even applicable to ASVR;
- c) consider the introduction of a proactive security event prevention system through the utilization of the aviation security reporting event database and the adoption of the concept of Security Performance Target (SePT) and Security Performance Indicators (SePI); and
- d) consider the introduction of an analysis mechanism and classification system according to the location of the event.

<i>Strategic Objectives:</i>	This working paper relates to Strategic Objective: <i>Aviation Security and Facilitation</i>
<i>Financial implications:</i>	Not determined.
<i>References:</i>	Annex 17 – <i>Aviation Security</i> Doc 8973, <i>ICAO Aviation Security Manual</i>

1. INTRODUCTION

1.1 The Aviation Security Confidential Reporting System was adopted as an international standard through the eighth edition of Annex 17 to the Convention on International Civil Aviation in 2006, laying the groundwork for all Contracting States to implement. Accordingly, Annex 17 Standard 3.5.1 d) (formerly Standard 3.4.7 c)) specifies that all Member States should collect and analyse security threat information from passengers and aviation workers through the confidential reporting system to supplement the national-level management program.

1.2 The Republic of Korea (ROK) took a step further from the existing confidential reporting system and introduced the ASVR System based on positive security culture, which has been operating since 2014. By complying with three operating principles (anonymity of the informant, non-punishment, and limited sharing of information), the ROK has been maintaining a proactive aviation security management system by encouraging the voluntary reporting of information on potential security risks, which would've not been reported if it were not for the voluntary report of passengers, flight attendants, and security personnel.

2. CONSIDERATION

2.1 The Aviation Security Panel (AVSECP) SG-ASIR has devised a new aviation security incident reporting mechanism, which can be a tool for the Member States and the aviation industry implementing Annex 17 standard 5.1.6, and introduced it as a working paper on AVSECP/33 in 2022. The draft comprehensive guidance document conceived by SG-ASIR describes the security incident report deadlines, report contents, reporting methods, report analysis, incident information evaluation, information protection, training/awareness, and classification system. It is expected to provide guidelines for standardizing the reporting system to the Member States. However, additional research is required on the event classification system and analysis mechanism for potential risks depending on the reporter's voluntary report, unlike aviation security incidents that are obligated to be reported.

2.2 The Republic of Korea operates a separate voluntary reporting system in addition to the aviation security mandatory reporting system. Particularly for the voluntary reporting system, we have developed our aviation security taxonomy by analysing the reports received through the aviation security voluntary system by different type of information. Our classification system in operation divides the received events into a database for 14 major categories and, 76 medium categories, and it's being utilized for national aviation security level management and preventive security management system.

2.3 The classified event is evaluated for urgency through initial analysis then a multifaceted security risk assessment is performed on threats, vulnerabilities, and consequences from various angles as recommended in the ICAO Doc 8973 – *Aviation Security Manual*. Then a security risk level is classified into four levels: serious, caution, alert, and negligible, which is assigned through the 5x5x5 risk assessment matrix. Such information is presented to the relevant analysis committee and reviewed regularly, and is utilized to secure national aviation security by deriving improvement needs, preparing measures to prevent a recurrence, and providing training to related organizations.

3. DISCUSSION

3.1 The ASVR System supplements the aviation security mandatory reporting system and provides a solid foundation for the enhancement of global aviation security by fostering a positive security culture. Therefore, the international standards of the ASVR system for Member States are required, through which can voluntarily report aviation security events and potential risks, which are mandatory in operating confidential aviation security reporting.

3.2 The current incident classification system (draft) devised by SG-ASIR is mainly for mandatory reporting, and aviation security incident reporting is for reactive measures for events that have already occurred. In contrast, AVSR includes not only events that have already occurred but also proactive and predictive reporting of potential threats that harm or may harm aviation security. Hence, it is necessary to develop a broader classification system than aviation security incidents.

3.3 Events classified according to the aviation security mandatory report and voluntary report classification system should be converted into a database and used in the preventive risk management system. For this purpose, it is possible to examine the borrowing of related indicators and target management concepts operated in aviation safety management systems. It is required to introduce a proactive prevention system that sets SePT (security performance target) suitable for each State's security environment and manages SePI (security performance indicators) for each target.

3.4 Unlawful interference can be classified by the location of occurrence, such as airport landside area, airport security restricted area, airside areas, and in an aircraft. In addition, security measures in response to unlawful acts may also vary depending on these events' location. Accordingly, it is necessary to consider the differences in the location of the events when developing an aviation security mandatory reporting and voluntary reporting analysis mechanism and classification system.

APPENDIX

AVSEC Voluntary Reporting System Taxonomy in ROK

Person	Hold Baggage	Cargo/Mail/ Suppliers	Aircraft
<ul style="list-style-type: none"> ● Passenger ● Crew ● Ground Personnel ● Passenger Acceptance ● False Passport 	<ul style="list-style-type: none"> ● Failure to control restricted items ● Failure to offload or mis-offload ● Failure to control access to security screened bags ● Firearm related irregularity ● Inadequate staffing ● ETD positive reaction when screening ● Failure check bags individually ● Failure to control LAGs ● Discover of unidentified bag ● Obstruction to security screening 	<ul style="list-style-type: none"> ● Cargo ● Mail ● Suppliers 	<ul style="list-style-type: none"> ● ETD positive reaction when screening in the flight ● Failure to control access to aircraft ● Failure to search to aircraft ● Flight loaded security equipment malfunction ● unidentified security unchecked flight

Restricted Area	Threat	Security System & Equipment	Suspicious Item
<ul style="list-style-type: none"> ● Access control into the security restricted area ● Invasion ● Failure to access control SRA ● Prohibited items into SRA ● Obstruction to control SRA 	<ul style="list-style-type: none"> ● Insider threats ● Kidnap warning ● Threatening call to aircraft ● Threatening call to airport ● Threatening by the flight 	<ul style="list-style-type: none"> ● ID system malfunction ● Person screening equipment malfunction ● Hold baggage screening equipment malfunction ● Suppliers screening equipment malfunction ● Cyber security ● Flight Ticket Linkage System Malfunction 	<ul style="list-style-type: none"> ● Suspicious item in the airport terminal ● Suspicious vehicle ● Suspicious item in the flight ● Chemical/Biological/Radioactive material

Terrorism	Criminal Acts	RPAS	Others
<ul style="list-style-type: none"> ● Bomb ● Biochemistry ● Weapon ● Car rushing ● Firearm 	<ul style="list-style-type: none"> ● Unruly passenger ● Airport sabotage ● Aircraft sabotage ● Narcotics trafficking ● Human trafficking ● Theft ● Other criminal acts 	<ul style="list-style-type: none"> ● RPAS invasion <div style="border: 1px solid black; padding: 5px; margin: 10px 0; text-align: center;"> Transportation of Weapon/Armed person </div> <div style="border: 1px solid black; padding: 5px; margin: 10px 0; text-align: center;"> Nonconformity Reports </div>	<ul style="list-style-type: none"> ● Refuse Security Screening ● Laser interference ● Emergency evacuation procedure ● Security information protection ● Security screening ● Security work related ● Inquiry on prohibited items