60th CONFERENCE OF DIRECTORS GENERAL OF CIVIL AVIATION ASIA AND PACIFIC REGIONS

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AGENDA ITEM 5: AVIATION SECURITY AND FACILITATION

ACHIEVEMENTS OF REPUBLIC OF KOREA'S AVIATION SECURITY EQUIPMENT CERTIFICATION PROGRAMME AND ITS QUALITY SYSTEM ASSESSMENT

(Presented by the Republic of Korea)

INFORMATION PAPER

SUMMARY

The Republic of Korea has operated a mandatory aviation security equipment certification program since 2019 which comprises four components: Performance Certification, Qualification Test, On-going Certificate Management, and Ad-hoc Certificate Management. A key feature of this certification system is assessing manufacturers' quality management systems (QMS) during initial certification and through annual assessments to ensure sustained equipment effectiveness.

This approach has led to the establishment of performance standards and testing methodologies, and the revocation of certification when manufacturers fail to maintain production capabilities, highlighting the importance of continuous quality oversight in aviation security.

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1. INTRODUCTION

1.1 The International Civil Aviation Organization (ICAO) published the first edition of the Global Aviation Security Plan (GASeP) in 2017 and released the second edition last year. Under the Global Priority 4 of GASeP, ICAO continues to encourage Member States to innovate and develop new aviation security equipment and procedures.

1.2 Accordingly, some Member States, including the Republic of Korea, the United States (TSA), the European Union (ECAC), France (STAC), the United Kingdom (DfT), Italy (ENAC), and China (CAAC), are operating aviation security equipment certification programs. ICAO recommends that each Member State conduct aviation security risk assessments tailored to their environments to identify and manage prohibited and dangerous items, thereby enhancing global aviation security capabilities.

1.3 This paper presents an overview of the Republic of Korea's aviation security equipment certification programme, with an emphasis on its achievements and the importance of evaluating manufacturers' quality management systems (QMS).

2. DISCUSSION

2.1 The Republic of Korea has been implementing an aviation security equipment certification program since 2019 as a mandatory legal requirement. The programme comprises four key components:

a) **Performance Certification:** The initial certification of aviation security equipment based on compliance with performance evaluation tests and quality system assessments;

b) **Qualification Test**: A system that assesses equipment after its designated service life is expired. If the equipment meets the required standards, its certification may be extended by one year;

c) **On-going Certificate Management:** An annual assessment of the performance of certified equipment and the quality management system of manufacturers; and

d) **Ad-hoc Certificate Management**: Conducted when aviation security incidents or issues arise, enabling the government to promptly verify equipment performance and manufacturer's compliance with criteria.

2.2 Since its establishment, four types of aviation security equipment have been certified, while seven additional types are currently undergoing the certification process.

2.3 The development of Korea's certification system has enabled the establishment of detailed criteria for explosive detection capabilities, minimum performance requirements, and maintenance standards, along with the development of relevant testing methodologies.

2.4 A unique feature of Korea's aviation security equipment certification is the incorporation of manufacturer quality management system (QMS) assessment. This approach ensures that certified equipment not only meets performance criteria at the time of certification but also maintains its effectiveness over time.

2.5 Manufacturers are subject to QMS assessments both during initial certification and through annual assessment. There was a case, where a certification was revoked due to the manufacturer's failure to sustain production capabilities, thereby underscoring the critical importance of continuous quality oversight in maintaining aviation security capabilities at airports.

3. ACTION BY THE CONFERENCE

3.1 The Conference is invited to note the information contained in this Paper.

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