



**WORKING PAPER**

**ASSEMBLY — 40TH SESSION**

**EXECUTIVE COMMITTEE**

**Agenda Item 12: Aviation Security — Policy**

**DESIGN OF TECHNICAL GUIDANCE FOR STATES FOR TO IMPLEMENT ICAO  
CYBERSECURITY REQUIREMENTS**

(Presented by the Bolivarian Republic of Venezuela)

**EXECUTIVE SUMMARY**

The civil aviation system is a highly complex mode of transport that requires the integration of numerous information and communication technologies (ICTs) and systems. The International Civil Aviation Organisation (ICAO) amended Annex 17 – *Security* to the Convention on International Civil Aviation, establishing Standards and Recommended Practices (SARPs) requiring member States to develop and implement measures for protecting critical data and ICT systems used by civil aviation. In this regard, States need more information and guidance material to assist in the implementation of international standards, the design of strategies, and the application of best practices for protecting critical ICT systems from acts of unlawful interference that could threaten the safety of civil aviation.

**Action:** The Assembly is invited to:

Instruct Council to request that the Secretariat develop guidance material, to be amended at appropriate intervals as needed, in order to assist member States in addressing cyber threats and in implementing the specifications and procedures for aviation security contained in Annex 17 – *Security* to the Convention on International Civil Aviation.

<i>Strategic Objectives:</i>	This working paper relates to the <i>Aviation Security</i> Strategic Objective.
<i>Financial implications:</i>	It is proposed that the activities referred to in this paper be undertaken with the resources available in the 2020-2022 Regular Programme Budget and/or from extra budgetary contributions.
<i>References:</i>	Annex 17 – <i>Security</i> Doc 10075 <i>Assembly Resolutions in Force (as of 6 October 2016)</i> , Resolution A39-19 <i>Addressing Cybersecurity in Civil Aviation</i> .

<sup>1</sup> Spanish version provided by the Bolivarian Republic of Venezuela.

## 1. INTRODUCTION

1.1 The aviation industry is becoming increasingly dependent on the availability of information and communications technologies (ICTs) and on more reliable and confidential data from said systems. Meanwhile, cyber threats against civil aviation are evolving quickly and constantly, and perpetrators are attempting to cause damage by attacking critical civil aviation systems and disrupting aviation activities around the world.

1.2 The global civil aviation system is a highly complex and integrated mode of transport that comprises security-critical ICTs that are necessary for the protection of civil aviation operations, on the basis of a common understanding of cyber threats which seeks a flexible, risk-based approach to protecting critical aviation systems.

## 2. DISCUSSION

2.1 The latest amendments to Annex 17 – *Security* to the Convention on International Civil Aviation on cybersecurity measures (Standards and Recommended Practices 4.9.1 and 4.9.2) establish the responsibility of member States to develop and implement measures to protect critical data and ICT systems used by civil aviation.

2.2 Further, the provisions state that said measures must protect the confidentiality, integrity and availability of the critical data and/or systems identified which include, inter alia, security design features, the supply chain, network separation, and the securitisation or limitation of remote access to the systems as required, in accordance with the risk assessment conducted by the relevant national authorities.

2.3 All of the foregoing requires member States to develop policies and implement mechanisms for ensuring that civil aviation does not suffer any disruptions from cyberattacks. Despite the specialised nature of critical data and ICT system security, there is no ICAO literature or detailed, standardised technical guidance material that would assist States in efficiently and effectively complying with the cybersecurity SARPs of Annex 17 – *Security*.

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