

**S59th CONFERENCE OF
DIRECTORS GENERAL OF CIVIL AVIATION
ASIA AND PACIFIC REGIONS**

*Cebu, Philippines
14 to 18 October 2024*

AGENDA ITEM 1: THEME TOPIC

**SUSTAINABLE, RESILIENT, AND INCLUSIVE FUTURE OF
THE APAC REGION'S AIR TRANSPORT**

(Presented by the Republic of Korea)

INFORMATION PAPER

SUMMARY

The Republic of Korea is fully committed to advancing the theme of the 59th DGCA Conference: "Shaping the Future of Aviation: Sustainable, Resilient, and Inclusive." This paper outlines Korea's initiatives and strategies to achieve these objectives in the APAC region, focusing on the activation of Sustainable Aviation Fuel (SAF), enhancing resilience through digital transformation and cybersecurity, and promoting inclusivity in the aviation sector. Drawing from ICAO's Long-Term Aspirational Goal (LTAG) and global frameworks, Korea presents a comprehensive approach for sustainable growth and shared development across the APAC region, emphasizing the importance of regional cooperation and experience sharing.

SUATAINABLE, RESILIENT AND INCLUSIVE FUTURE OF THE APAC REGION'S AIR TRANSPORT

1. INTRODUCTION

1.1 The APAC region, as the fastest-growing aviation market, faces unprecedented challenges, including managing rapid air traffic growth, reducing environmental impacts, and integrating new technologies. These challenges require a coordinated regional response that is sustainable, resilient, and inclusive.

1.2 The Republic of Korea (ROK), a key player in the region's aviation sector, has been advancing ICAO's global goals by embracing sustainability measures, developing resilient infrastructures, and promoting inclusivity. Korea's efforts align with ICAO's LTAG, the Global Framework for Sustainable Aviation, and initiatives such as the Next Generation of Aviation Professionals (NGAP) and Gender Equality Programme.

2. DISCUSSION

Sustainable Growth of the APAC Region's Air Transport

2.1 As the APAC aviation embraces innovative technologies like AAM and UTM, there is a crucial need to ensure that these advancements align with ICAO's global sustainability goals. The Republic of Korea's initiatives in sustainability are part of a broader commitment to ICAO's Strategic Goal of achieving net-zero carbon emissions by 2050. These efforts also position the region as a leader in integrating new technologies while maintaining environmental stewardship

2.2 The Republic of Korea has been actively advancing green technologies to reduce the aviation sector's carbon footprint. The country's SAF activation strategy, introduced in August 2024, marked a significant milestone, making Korea the fourth country in Asia to begin commercial SAF fueling.

2.3 By 2027, SAF use will be mandatory for all international flights departing from Korea, with a 1% blending requirement. This policy aligns with ICAO's Long-Term Aspirational Goal (LTAG), which aims to reduce carbon emissions in international aviation by 5% by 2030. The SAF expansion plan is a cornerstone of the ROK's strategy to maintain sustainable growth while leading the region in aviation environmental protection.

2.4 Korea's experience in SAF implementation can serve as a valuable resource for other APAC member States. By sharing best practices and lessons learned, the Republic of Korea aims to contribute to the acceleration of SAF adoption across the region, supporting ICAO's global environmental goals.

Building Resilience – Fast Bouncing back from the Crisis

2.5 Resilience in the APAC region is crucial due to its geographical diversity and the varying levels of economic development among member States. The Republic of Korea's efforts align with ICAO's goals of ensuring a resilient and adaptable aviation sector. These include preparing for the challenges and opportunities presented by emerging technologies, ensuring that the aviation industry can withstand and thrive in the face of future disruptions.

2.6 The Republic of Korea has demonstrated its ability to build resilience within its aviation infrastructure, particularly during the COVID-19 pandemic. Korea has invested in predictive technologies like artificial intelligence (AI) and big data analytics to improve decision-making, allowing the aviation sector to recover faster from disruptions.

2.7 The integration of new entrants, such as Advanced Air Mobility (AAM), into the

existing aviation ecosystem requires robust regulatory frameworks. The Republic of Korea has made significant strides in this area by developing guidelines for the safe integration of these technologies, ensuring resilience and operational continuity.

2.8 Key initiatives the APAC region could consider to enhance the resilience include:

- a) **Enhanced Safety Protocols:** Adoption of stringent health and safety measures across airports and airlines to protect passengers and staff;
- b) **Technological Advancements:** Investment in digital technologies, such as artificial intelligence, big data analytics, and advanced communications systems, to predict and mitigate potential disruptions;
- c) **Integration of New Entrants:** Development of regulatory frameworks and infrastructure to safely integrate new entrants like AAM into the existing aviation ecosystem; and
- d) **Strategic Partnerships:** Strengthening partnerships with international and regional aviation bodies to enhance collaborative response mechanisms during emergencies.

Inclusive APAC to attract talents and professionals into Aviation

2.9 Inclusiveness is fundamental to the future of aviation. Korea has actively promoted gender equality through policies aimed at increasing the number of female professionals in aviation, including pilots, maintenance engineers, and air traffic controllers. Korea's efforts align with ICAO's Gender Equality Programme and its "No Country Left Behind" initiative.

2.10 Specific initiatives include the development of career paths for women, the promotion of flexible working conditions, and mentorship programs to encourage more women to pursue leadership roles in aviation. These efforts contribute to a more inclusive workforce, which is essential for addressing the shortage of aviation professionals forecasted by ICAO.

2.11 The challenges in promoting gender inclusivity in aviation the region should tackle down include:

- a) **Cultural Barriers:** Societal perceptions on women's entrance in STEMs in some APAC States may discourage women from pursuing careers in aviation. ROK can work with ICAO to launch public awareness campaigns that challenge these perceptions and highlight successful female role models.
- b) **Lack of Access to Training:** Ensuring women have equal access to technical training is critical. Since 2023, ROK has introduced scholarships for women in aviation, encouraging more participation in male-dominated fields like maintenance and piloting.
- c) **Retention of Female Workers:** Many women leave the aviation industry due to a lack of work-life balance. ROK's policies on flexible working hours and child care support should be expanded regionally, with ICAO's support, to ensure retention.

2.12 As the aviation sector evolves with the introduction of new technologies and operational paradigms derived from ASBU projects by GANP, it is vital that all APAC member States and genders are included in these developments. The Republic of Korea's initiatives reflect its commitment to ICAO's principle of leaving no country behind, ensuring that the benefits of these innovations and growth are accessible to and shared by all.

Ways forward to Shape the Future of the APAC's Aviation

2.13 The APAC region faces significant challenges, including managing rapid growth, ensuring environmental sustainability, and building resilience against disruptions. However, these

challenges also present opportunities for innovation and leadership in the global aviation community.

2.14 **Collaboration and Capacity Building.** The APAC region must strengthen collaboration on sustainability, resilience, and inclusivity. Member States should share best practices and pool resources to address the challenges of SAF adoption, resilience to global crises, and gender equality. Korea reaffirms its commitment to supporting developing States in the region through technical assistance, training programs, and knowledge sharing. This will help bridge the technological gap and ensure all member States can participate fully in the global aviation system.

2.15 **Inclusive Policy Development.** Policies that promote gender inclusivity and support the development of the next generation of aviation professionals should be prioritized. ICAO and member States should ensure that equal opportunities are provided to all, including marginalized and underrepresented groups, through targeted recruitment and career development initiatives.

2.16 **Sustainable Practices and Innovation:** The region should embrace new green technologies such as SAF, electric aircraft, and efficient air traffic management systems. Korea's SAF activation strategy can serve as a reference model for other member States considering similar initiatives.

2.17 **Monitoring and Adaptation:** The APAC region should establish mechanisms to monitor global trends in aviation sustainability and resilience. This proactive approach will allow the region to adapt policies as needed, ensuring long-term competitiveness and leadership in global aviation.

CONCLUSION

2.18 APAC member States are encouraged to enhance collaboration on sustainability, resilience, and inclusivity. This includes joint efforts in SAF research and development, sharing best practices in digital transformation and cybersecurity, and promoting inclusive policies across the region

2.19 The Republic of Korea is committed to working collaboratively with all APAC member States to shape a sustainable, resilient, and inclusive future for aviation in the region. By sharing experiences, best practices, and innovative solutions, we can collectively address the challenges facing our industry and seize the opportunities presented by emerging technologies and evolving global dynamics. Korea invites all member States to engage in open dialogue and cooperation to advance our shared goals and ensure the continued growth and success of aviation in the APAC region.

3. ACTION BY THE CONFERENCE

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