



WORKING PAPER

**SEVENTH WORLDWIDE AIR TRANSPORT CONFERENCE
(ATCONF/7)**

Montréal, HQ, 16 to 20 November 2026

Agenda Item 4: Emerging technologies, new business models and other associated aspects

4.1: Economic regulatory frameworks on emerging technologies

**THE FUTURE OF GLOBAL AIR TRANSPORT:
RESILIENCE, SUSTAINABILITY AND INNOVATION**

(Presented by Sudan)

EXECUTIVE SUMMARY

The global air transport sector is undergoing rapid transformation as a result of economic challenges, geopolitical changes, pandemics, the impacts of climate change, as well as significant advances in digital technologies and artificial intelligence (AI). Such developments have underscored the importance of building an air transport sector that is more resilient and capable of withstanding crises, more environmentally sustainable, and more reliant on innovation and modern technology.

This paper highlights the importance of enhancing the resilience of the air transport system, accelerating digital transformation, supporting innovation, and providing equitable financing mechanisms for developing States to enable them to meet the requirements of the transition toward sustainable aviation. These efforts are also consistent with the International Civil Aviation Organization (ICAO) Strategic Goals and the *No Country Left Behind* (NCLB) initiative.

Action: The conference is invited to:

- a) recognize the importance of strengthening global air transport resilience so as to address future crises;
- b) support policies promoting the transition to sustainable aviation, while taking into account the economic circumstances of developing States;
- c) encourage innovation, digital transformation, and the use of AI across the air transport sector;
- d) invite ICAO to continue to provide capacity-building and technical assistance programmes to developing states; and
- e) strengthen international cooperation so as to provide the financing and technology transfer necessary to achieving sustainability objectives.

*Strategic
Goals:*

This working paper relates to ICAO's Strategic Goals: *The Economic Development of Air Transport Assures the Delivery of Economic Prosperity and Societal Well-Being for All; Aviation Delivers Seamless, Accessible, and Reliable Mobility for All; Aviation Is Environmentally Sustainable; Every Flight Is Safe and Secure; and No Country Left Behind.*

*Financial
implications:*

Other than technical support, the implementation of the recommendations outlined in this paper does not entail any financial resources from ICAO.

¹ Arabic version provided by Sudan.

<i>References:</i>	<i>Convention on International Civil Aviation</i> (Chicago, 1944); CORSIA; relevant ICAO documents on the net-zero emissions goal by 2050.
--------------------	--

1. INTRODUCTION

1.1 Recent years have demonstrated that air transport is one of the fundamental pillars of the global economy, contributing to international trade, investment, tourism and connectivity among communities. However, the sector has faced unprecedented challenges arising from airborne diseases, armed conflicts, economic disruptions and climate change. These challenges have highlighted the need to reshape the future of air transport on the foundations of resilience, sustainability and innovation.

1.2 In this context, the International Civil Aviation Organization (ICAO) is leading international efforts to develop policies that ensure the continued growth of air transport in a safe and sustainable manner, while maintaining a balance between economic development and environmental protection.

2. DISCUSSION

2.1 Resilience

2.1.1 Recent crises have demonstrated that it is critical for States to have effective crisis-management and business-continuity plans, comprising developing infrastructure, strengthening international cooperation, updating legislation and improving risk management. That also requires enhancing the ability of Civil Aviation Authorities to respond rapidly to health emergencies, natural disasters, armed conflicts and cyberattacks.

2.2 Sustainability

2.2.1 Achieving environmental sustainability has become one of ICAO's priorities, with Member States adopting the goal of achieving net-zero carbon emissions by 2050. This requires:

- expanding the use of Sustainable Aviation Fuel (SAF);
- improving air navigation efficiency;
- modernizing aircraft fleets;
- investing in low-emission technologies; and
- supporting carbon-removal projects.

2.2.2 Such transition, however, poses a major challenge for developing States because of limited financial and technological resources.

2.3 Innovation and Digital Transformation

2.3.1 Innovation has become a key driver of the future of air transport; it encompasses:

- artificial intelligence (AI);

- big data analytics;
- automation;
- digital passenger services;
- digital identity and electronic travel documents;
- cybersecurity;
- unmanned aircraft systems (UAS); and
- modern air traffic management (ATM).

2.3.2 These technologies contribute to increased operational efficiency, enhanced passenger experience and reduced costs.

2.4 Challenges Facing Developing States

- inadequate financing;
- limited access to technology;
- shortage of technical expertise;
- high costs associated with the environmental transition; and
- difficulties in the production and use of SAF.

2.4.1 This underscores the importance of strengthening international cooperation in order to ensure the implementation of the *No Country Left Behind* (NCLB) strategic goal.

3. RECOMMENDATIONS

3.1 Sudan recommends the following:

- a) strengthening cooperation among Member States to build a more resilient air transport sector;
- b) provide concessional financing mechanisms for developing States to implement sustainability programmes;
- c) support technology transfer and capacity-building initiatives;
- d) promote investment in SAF projects;
- e) expand digital transformation programmes in civil aviation ;
- f) develop regulatory frameworks for AI and cybersecurity;
- g) enhance cooperation between ICAO and international financial institutions to support air transport projects; and
- h) continue implementing the NCLB strategic goal to ensure balanced development for all States.

4. CONCLUSION

4.1 The future of global air transport depends on the ability of the international community to build a system that is more resilient in the face of crises, more sustainable in protecting the environment, and more innovative in adopting modern technologies. Achieving these objectives requires strengthening international cooperation and providing technical and financial support to developing States, enabling them to participate effectively in the future of global civil aviation and ensuring the continued contribution of air transport in sustainable socio-economic development.

— END —