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Agenda Item 16: Environmental Protection – International Aviation and Climate Change

GREEN AIRPORTS – ENHANCING ENVIRONMENTAL SUSTAINABILITY IN CIVIL AVIATION OF KAZAKHSTAN

(Presented by Kazakhstan)

EXECUTIVE SUMMARY

This information paper submits for the consideration of the Assembly the actions taken by Kazakhstan in supporting and promoting the International Civil Aviation Organization (ICAO)'s Green Airports initiative, which focuses on promoting environmental sustainability in airport operations and management in aviation sector.

This information paper relates to ICAO Strategic Goal “*Aviation is Environmentally Sustainable*”, which strives to achieve the global long term aspirational goal of net-zero carbon emissions for international aviation by 2050 and ensure that international aircraft noise and emissions are mitigated to the lowest level possible, in accordance with international provisions.

<i>Strategic Goals:</i>	This working paper relates to the Strategic Goal – <i>Aviation is Environmentally Sustainable</i> .
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<i>Financial implications:</i>	
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<i>References:</i>	Doc 10178, <i>Report of the High-Level Meeting on the Feasibility of a Long-Term Aspirational Goal for International Aviation CO₂ Emissions Reductions</i>
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1. INTRODUCTION

1.1 Airports have traditionally played a vital role in linking people, economies, and ideas across the globe. However, in today's context of escalating environmental challenges and the urgent need for decarbonization, their function is undergoing a significant transformation. Airports are now emerging as key players in the broader shift toward sustainability, reshaping not only their internal operations but also their impact on and contribution to the resilience of surrounding communities.

1.2 The idea of a “green airport” goes beyond basic eco-friendly practices like energy-efficient lighting or recycling programs. It reflects a comprehensive and forward-looking approach - one where airports are intentionally designed and managed to reduce environmental impact, drive innovation, and engage constructively with local ecosystems and communities. This approach includes the integration of renewable energy, sustainable infrastructure, biodiversity protection, climate resilience planning, and strong partnerships with diverse stakeholders. The Green Airports initiative is a crucial part of the International Civil Aviation Organization (ICAO) efforts to make the aviation industry more sustainable and environmentally responsible.

2. ICAO GREEN AIRPORTS INITIATIVE

2.1 The ICAO Green Airports initiative focuses on promoting environmental sustainability in airport operations and management. It involves a range of activities, including reducing carbon emissions, transitioning to cleaner energy sources, and implementing sustainable infrastructure, safeguarding biodiversity while fostering sustainable development within the airport ecosystem etc

2.2 ICAO seminars and other events provide platforms for sharing best practices, showcasing innovations, and fostering collaboration among stakeholders. ICAO's capacity building initiatives such as the Assistance, Capacity-building and Training for Sustainable Aviation Fuels (ACT-SAF) programme also provide support to States in developing and implementing SAF projects, while working with various organizations and governments to drive the green transition in aviation sector.

2.3 ICAO has long acknowledged that reaching net-zero emissions in aviation requires the active participation of airports. As critical hubs within the air transport system, airports directly and indirectly affect emissions across numerous operations, placing them in a strategic position to drive progress, both within their own facilities and across the wider transportation and energy networks they are linked to. Following the adoption of the Long-Term Global Aspirational Goal (LTAG) at the 41st Session of the ICAO Assembly in 2022, and the endorsement of the ICAO Global Framework for SAF, Lower Carbon Aviation Fuels (LCAF), and other cleaner aviation energies at the third ICAO Conference on Aviation and Alternative Fuels (CAAF/3) in 2023, ICAO has continued to strengthen efforts supporting the transition to cleaner energy in aviation.

3. PROMOTION OF THE GREEN AIRPORTS INITIATIVE IN KAZAKHSTAN

3.1 The Green Airports Regional Seminar, hosted in Almaty, Kazakhstan in November 2024 by the ICAO European and North Atlantic Bureau in collaboration with Airports Council International (ACI) Europe served as an important platform to support and promote the implementation of these global initiatives. The seminar's goal was to raise awareness on topics related to clean energy sources for aviation, sustainable infrastructure, operational activities available in the region to facilitate the energy transition in airports, as well as adaptation measures to enhance airport resilience to climate change.

3.2 In 2024, The European Bank for Reconstruction and Development (EBRD) worked on a market study for the production and implementation of SAF in Kazakhstan. The working group consisted of Air Astana JSC, KazMunaiGas JSC and EBRD and, ICF, and the results of the study were presented in a joint presentation by the four Organizations at the ICAO Green Airports Regional Workshop in November 2024 in Almaty. The seminar raised the issues of financing green projects in civil aviation, use and development of SAF, exchange of experience with international airports of the world using advanced technologies in sustainable development and other important issues. The Seminar was attended by more than 120 participants, including more than 20 countries and international organizations from the European and North Atlantic region of ICAO.

3.3 In support of initiatives to reduce the environmental impact of civil aviation, the Republic of Kazakhstan has committed to a number of obligations by ratifying international agreements such as the United Nations Framework Convention on Climate Change (UNFCCC), the Kyoto Protocol, the Paris Agreement, Annex 16 to the Chicago Convention on International Civil Aviation, among others.

3.4 Additionally, at the 41st Session of the ICAO Assembly in 2022, the ICAO Council urged countries to adopt the ICAO Long-Term Aspirational Goal for CO₂ emissions reduction in international aviation (Doc 10178 - LTAG ICAO). As an ICAO Member State, Kazakhstan supports this document and considers it essential to hold such events to build national capacity and facilitate knowledge exchange with other countries and organizations.

3.5 In April 2024, the draft of State Action Plan (SAP) on emissions was prepared and in November 2024 the Working Group consisting of the industry, state entities and KazMunaiGas was created. In December 2024, SAP was signed and submitted by ICAO. Kazakhstan has become the 150th country that has applied this plan on emissions reduction.

3.6 Kazakhstan is the first among the CIS countries to sign an agreement with ICAO and join the ACT-SAF. According to this document, ICAO will assist Kazakhstan in the development and participation in the activities of the ACT-SAF program, including the exchange of best practices and relevant information, participation in training seminars and trainings, technical assistance on issues related to SAF in national action plans and the implementation of specific SAF projects.

4. CONCLUSION

4.1 Kazakhstan's civil aviation authorities reaffirm their strong commitment to global efforts in addressing the environmental challenges confronting the aviation sector. The development of 'green' airports, the adoption of sustainable aviation fuels, and the use of renewable energy are central to Kazakhstan's vision for sustainable aviation.

4.2 Kazakhstan remains committed to strengthening its cooperation with all ICAO Member States to advance the sustainable development of aviation within the ICAO framework. The country also encourages continued collaboration among States on green initiatives as a vital step toward achieving a more sustainable and forward-looking future for global aviation.