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AGENDA ITEM 6: ECONOMIC DEVELOPMENT OF AIR TRANSPORT

AIR TRANSPORT UPDATES

(Presented by the ICAO Secretariat)

INFORMATION PAPER

SUMMARY

The paper provides an update on:

- (i) economic and traffic forecast at global and Asia and Pacific levels; and
- (ii) ICAO's work related to air transport policy and regulation as well as infrastructure management.

AIR TRANSPORT UPDATES

1. INTRODUCTION

- 1.1 The Economic Development of Air Transport is one of the five Strategic Goals of the International Civil Aviation Organization (ICAO). It aims at fostering a sound and economically-viable civil aviation system that generates wealth, employment and numerous socio-economic benefits through its activities. ICAO's air transport policy and regulatory programmes are designed to:
 - (i) reduce the financial and administrative burden on States in fulfilling their economic oversight responsibilities;
 - (ii) enhance consumer benefits and expand travel choices;
 - (iii) strengthen global air connectivity; and
 - (iv) foster a more competitive and dynamic marketplace for aviation businesses.

These efforts collectively support the expansion of trade and tourism, thereby contributing to the broader goal of sustainable economic development for States.

1.2 This paper provides an update on ICAO's ongoing work in the areas of air transport policy, regulatory frameworks, infrastructure management, and traffic forecasting at both global and regional levels.

2. AVIATION DATA AND ANALYSIS

- 2.1 ICAO has made significant progress in advancing the field of aviation statistics, data, and analytics to support evidence-based planning and policy implementation by its Member States. Through sustained collaboration with Member States under the framework of the Aviation Data and Analysis Panel (ADAP) and the Statistics Division, ICAO has achieved near-universal reporting of official statistics reported by Member States. These official data are now seamlessly integrated with big data sources, such as ADS-B (for aircraft tracking) and MIDT (for passenger bookings), resulting in a high-quality analytical foundation and enabling granular, timely insights into global aviation activity.
- 2.2 Multi-Disciplinary Working Group on Long-Term Traffic Forecasts (MDWG-LTF). Through MDWG-LTF, ICAO regularly updates its long-term traffic projections by integrating the latest global economic trends and indicators. These updated forecasts are available to Member States through ICAO's big data analytical dashboards and serve as a strategic tool for long-term planning, capacity building, and investment prioritization.
- 2.3 **ICAO Big Data Dashboard.** The Aviation Data and Analysis Section of ICAO has worked with the United Nations Global Big Data Group to develop business intelligence dashboards for data driven decision making. The online dashboards have been developed using the state-of-the-art Tableau platform, which provide visualization and querying capabilities. Each Member State has been provided with one free license (State Letter 22/67 refers).
- 2.4 Global Aviation Competitiveness Index (GACI). ICAO has developed the methodological framework for the GACI, whose provisional results and underlying data have been shared with Member States. This methodological framework will enable States to assess their capacity to generate and sustain value from civil aviation by aggregating key indicators related to air connectivity, infrastructure quality, regulatory frameworks, and economic conditions. The index allows for transparent benchmarking across States, supporting performance evaluation, indexation and the identification of policy and investment areas for improvement.

- 2.5 **Basic Airmail Conveyance Rate (BACR).** ICAO's economic analysis forms BACR, a key mechanism under the Universal Postal Union (UPU) for settling international mail transport costs. Specifically, this system plays a critical role in enabling cost-efficient international e-commerce, especially for small and lightweight packages. By offering a fallback air transport rate where no bilateral agreements exist, BACR helps maintain predictable and affordable cross-border shipping costs.
- 2.6 **Global aviation gender equality.** ICAO's latest global survey on the status of licensed aviation personnel by gender reveals that the participation of women holding positions as pilots, air traffic controllers, and maintenance technicians has increased on an overall basis from 4.5% globally in 2016, to 4.9% in 2021. ICAO has published new analytical dashboards on the participation of licenced female aviation personnel in the workforce, and it is expected that countries access to and awareness of the new data will lead to better informed targets and policy making to help reduce the still significant aviation gender¹.

3. AIR TRANSPORT LIBERALIZATION AND REGULATORY TOOLS

- 3.1 **ICAO's Long-term Vision for International Air Transport Liberalization.** At the 41st Session of the ICAO Assembly (A41) held in 2022, Member States were urged to give regard to, and apply, the *ICAO Long-term Vision for International Air Transport Liberalization* in their policy-making and regulatory practices. ICAO has therefore embarked on enhancing dialogues and exchange of information amongst Member States and industry on liberalization of market access for passenger and air cargo services through various fora, including the annual ICAO Air Services Negotiation Event (ICAN). The 17th ICAN Event will be held from 10 to 14 November 2025 in Punta Cana, Dominican Republic.
- Barriers to market access. At the Eighteenth Meeting of the Air Transport Regulation Panel (ATRP/18) held in April 2025, the panel deliberated on the outcome of a survey addressing barriers to market access and foreign investment in airlines (State letter 25/10 refers). The survey aimed to identify States' existing domestic laws relating to investment in airlines, their "appetite" for a Convention on Foreign Investment in Airlines, and the "safeguard" measures they might require to be comfortable with such a Convention. The Panel acknowledged one of the outcomes of the survey, which is that, while there is a general willingness by States to further liberalize market access, under certain conditions, there remains far more appetite to do this through a bilateral rather than multilateral approach. The meeting therefore concluded that multilateral instruments could be considered at a later stage. Meanwhile, the Panel would continue to support States in their liberalization approaches through the ongoing review of the ICAO Template Air Services Agreements (TASAs).
- 3.3 ICAO Template Air Services Agreement (TASA). The ATRP/18 considered the revision of the TASA and acknowledged the review of selected TASA articles performed by its Working Group, including provisions on "Designation and Revocation", "User Charges", "Code-sharing" and "Consumer Protection". Additionally, the Panel noted the proposed process for reviewing the TASA, the articles identified for future review, and consideration of expanding the TASA to include associated guidance material and corroborating data. The meeting agreed that the TASA should be developed into a comprehensive toolbox to support Member States' bilateral and multilateral arrangements, and the work should include not only the production of template texts and guidance, but also capacity building options (such as training, mentoring, etc.) to help build understanding throughout ICAO's Member States.
- 3.4 Economic guidance on international operations of unmanned aircraft systems (UAS). In line with Resolution A41-27, the ATRP undertook a comprehensive assessment to determine the need for developing economic regulatory guidance for international operations of UAS. During ATRP/18, the Panel acknowledged industry concerns that premature economic regulation could hinder the growth of international UAS operations, which are still in early commercialization. It recommended instead to examine the possibility of flexible frameworks such as regulatory sandboxes with clear criteria

 $^{1\} https://public.tableau.com/app/profile/icaodataanalytics/viz/RegionalPersonnelByGenderAnalysis/PersonnelbyGenderAnalysis/PersonnelByGenderAnaly$

for implementation and dissolution. A bilateral approach was deemed more appropriate at this stage, with the option of multilateral harmonization to follow as the industry evolves. The WG also proposed future updates to ICAO's Template Air Services Agreements (TASAs) to include UAS economic regulation and emphasized the need to assess its impact on competition and consumers. To support ongoing dialogue, ICAO launched a dedicated UAS portal for ATRP members and observers, featuring a voluntary self-disclosure form on State/region readiness, access to relevant documents, and a platform for sharing developments and best practices.

- Article 15 of the Convention on International Civil Aviation Organization (Chicago Convention). The Economic Commission during A41 agreed that more specific guidance and a legal analysis are required for Member States to better understand and apply Article 15 of the Chicago Convention and, to that end, that the Air Navigation Services Economics Panel (ANSEP) and the ATRP, in consultation with the Legal Committee, should undertake an analysis to look specifically at the question of whether a State's differential conditioning of grants of air space access to other States is consistent with the national treatment standard and the principle of non-discrimination set forth in the Convention. At ATRP/18, the Panel held an in-depth discussion on this matter and subsequently formulated recommendations to the Air Transport Committee (ATC). These included proposed draft guidance material on the interpretation and application of Article 15, as well as a draft State letter aimed at clarifying the obligations of Contracting States under this provision.
- 3.6 Convening of the Seventh Worldwide Air Transport Conference (ATConf/7). The Worldwide Air Transport Conference (ATConf) serves as a global forum for shaping policies that foster the sustainable growth of the air transport industry. Since the last conference (ATConf/6) in March 2013, the sector has undergone significant transformation driven by regulatory evolution, commercial trends, innovation, and resilience in the face of crises, notably the COVID-19 pandemic. Given these developments, the ICAO Council, during the 235th Session, approved the convening of ATConf/7 from 16 to 20 November 2026. ATConf7 will provide a timely opportunity for stakeholders to address emerging challenges, explore policy options, and promote harmonized regulatory frameworks. The conference will support ICAO and Member States in creating an enabling environment for a viable, resilient, and sustainable global air transport system.

Taxation

3.7 **UN Model Double Taxation.** In March 2025, the United Nations Committee of Experts on International Tax Matters approved a significant amendment to Article 8 of the UN Model Double Taxation Convention, marking a notable shift in the taxation framework for international air transport. While the previous model aligned with ICAO's long-standing principle of residence-based taxation where airlines are taxed in the State of their corporate residence, the revised article now permits source-based taxation, allowing States where income is generated (such as through ticket sales) to also impose taxes. This development raises important concerns regarding the risk of double taxation, increased administrative complexity, and potential impacts on global air connectivity. A State letter was issued on 9 January 2025 to invite Member States to note the revision to Article 8 and coordinate with relevant taxation or finance authorities of their States regarding compliance with Assembly Resolution A41-27, urging Member States to follow *ICAO's Policies on Taxation in the Field of International Air Transport* (Doc 8632) to avoid double taxation in the field of air transport.

Competition laws and policies

3.8 **Compendium of Competition Policies and Practices.** In line with recommendations from ATConf/6 and the ATRP, ICAO developed an online Compendium of Competition Policies and Practices². This resource provides valuable insights into Member States' competition laws, policies, and regulatory frameworks, as well as regional cooperation initiatives in the field of competition. To support effective information sharing and maintain the compendium's relevance, Member States and regional organizations are encouraged to regularly submit updates on their respective competition policies and practices.

² https://www.icao.int/sustainability/Compendium/Pages/0-default.aspx

Consumer Protection and Emergency Response Planning

Montreal Convention of 1999 and ICAO Core Principles on Consumer Protection. At A41, Member States that have not yet ratified the Montreal Convention of 1999 were encouraged to consider becoming parties. To date, 139 States have acceded to the Convention. States and relevant stakeholders were also urged to apply the ICAO Core Principles on Consumer Protection in their policy, regulatory, and operational frameworks particularly in situations involving major disruptions to air travel. Member States are invited to share with ICAO their experiences and any challenges encountered in implementing these principles. To promote transparency and knowledge exchange, ICAO continues to update both the Compendium on Consumer Protection and the Compendium on States' Emergency Response Plans, which provide insights into national regulatory regimes and best practices for managing large-scale disruptions in aviation.

Infrastructure management / airports and air navigation services economics

- 3.10 ICAO's infrastructure management programme contributes to the development of a sound and economically viable civil aviation system by promoting the efficient development of aviation infrastructure. The programme focuses on the economics of airport and air navigation services including charges, as well as the funding and financing for aviation infrastructure development.
- 3.11 Among its efforts, ICAO develops policies on charges for airports and air navigation services and addresses funding and financing mechanisms for aviation infrastructure including new infrastructure funding needs to support emerging activities and industry innovation. ICAO also provides States, airports and ANSPs with guidance on the implementation of its policies on charges and cost recovery for the provision of services.
- 3.12 At the Tenth Joint Meeting of the Airport Economics Panel and Air Navigation Services Economics Panel (AEP-ANSEP/10) held from 4 to 6 March 2025, the Meeting made recommendations, which were approved by the Air Transport Committee during the 235th Session, to the following areas:
 - (i) Invoicing practices for aeronautical charges and development of a minimum level of detail in invoices;
 - (ii) Clarification on Article 15 of the Chicago Convention regarding fees and charges for airspace access;
 - (iii) Update of the Airport Economics Manual (Doc 9562);
 - (iv) Enhancing the implementation of ICAO's policies on charges;
 - (v) Sustainable funding for civil aviation authorities and States' oversight functions;
 - (vi) Cost recovery mechanisms for the operations of unmanned aircraft systems (UAS) and for new entrants;
 - (vii) Development of a standalone document on measures to address "black swan events";
 - (viii) Economic oversight of transnational/supranational ownership of airports; and
 - (ix) Cost recovery for the provision of aeronautical meteorological (MET) services and Space Weather Information Services. The ICAO Council will present a working paper to the 42nd Session of the Assembly on this matter.
- 3.13 Invoicing practices for aeronautical charges and development of a minimum level of detail in invoices. The AEP-ANSEP endorsed a proposed list of standard elements for invoicing air navigation services for inclusion in the *Manual on Air Navigation Services* (Doc 9161), which would enable collaboration among users and provide for an effective way to communicate the relevant

information related to invoicing of air navigation services.

- Clarification on Article 15 of the Chicago Convention regarding fees and charges for airspace access. The Panels expressed broad support to the collaboration between AEP-ANSEP and the Air Transport Regulation Panel (ATRP) on clarifying the provisions of Article 15 to enhance the compliance by States. Further work on this matter would be undertaken by a new working group, which would collaborate with the ATRP and would draft an appropriate text with clarifying elements, building on text previously included in Doc 9082, for inclusion in Doc 9161. The joint recommendations of the AEP-ANSEP and ATRP would be submitted to the Air Transport Committee (ATC).
- 3.15 **Update of ICAO's Airport Economics Manual (Doc 9562)**. The AEP-ANSEP endorsed the inclusion of a new definition of "commercial agreements" between airports and users in the Airport Economics Manual (Doc 9562).
- Enhancing the implementation of ICAO's policies on charges. The AEP-ANSEP/10 endorsed a final version of a survey to obtain a comprehensive overview of States' mechanisms for the implementation of ICAO's policies and principles and agreed that the results of the survey should be shared with the Panels for considering mechanisms to enhance the implementation of ICAO's policies by States. In addition, the Panels considered he possibility for the Secretariat to develop a metric to track changes in compliance by States over time with the goal of improving compliance levels.
- 3.17 **Sustainable funding for civil aviation authorities and oversight functions.** The AEP-ANSEP meeting approved a streamlined version of the survey to collect information on sustainable funding mechanisms for civil aviation authorities' oversight functions. Regarding efforts to maximize the response to the survey, the assistance from ICAO Regional Offices will be sought to facilitate more proactive engagement with States across different regions. Finally, the joint meeting agreed that the working group should analyse the results of the survey, conduct a study on the practices on funding oversight.
- 3.18 Cost recovery mechanisms for the operations of unmanned aircraft systems (UAS) and for new entrants. The AEP-ANSEP/10 considered the proposed guidance on cost recovery for the provision of air navigation services to unmanned aircraft operations and new entrants. Diverging views were expressed on the provision of services to UAS through the unmanned aircraft systems traffic management (UTM) versus traditional air traffic management (ATM). Following these discussions, the meeting agreed that further work would continue to develop guidance on cost recovery and charging approaches for service provision to new entrants, including the transition from a segregated to an integrated airspace for UAS operations, as well as standardizing and aligning terminology in Doc 9161 with other relevant ICAO Docs.
- 3.19 In addition, the Panels considered proposed guidance on a) cost recovery aspects of service provision to commercial space launch operations and b) cost recovery mechanisms for the provision of airport services to new airspace entrants. The meeting agreed to continue the work on both aspects and to consider accordingly the work undertaken in other ICAO fora.
- 3.20 **Development of a standalone document on measures to address "black swan events".** The meeting agreed that the document with the list of historical actions adopted by States in response to extreme external events that affected civil aviation, should be published as a living document on the ICAO public website. In this regard, the meeting emphasized the importance of maintaining the document relevant through regular updates to prevent it from being overlooked and encouraged additional contributions from States to be incorporated as appropriate. It was also noted that no judgement should be attached to the listed actions as to whether they were effective or not.
- 3.21 **Economic oversight of transnational/supranational ownership of airports.** The AEP-ANSEP/10 agreed on a survey among Member States to determine what portion of their services providers are owned and operated by a transnational entity; what challenges exist in their regulation/oversight; and what, if any, regulations, or administrative procedures are in place to ensure that the State is able to effectively provide economic oversight. With regard to the scope, the meeting decided

to not include ANSPs in the survey and limit the survey to airports only. The survey will be disseminated by the Secretariat and results will be analysed by the respective working group of the Panels.

- 3.22 Cost recovery for the provision of aeronautical meteorological (MET) services and Space Weather Information Services. The AEP-ANSEP/10 recommended to continue to collaborate with the Meteorological Panel on the issue of cost recovery for the provision of the aeronautical meteorological services and the space weather information services. The ICAO Council will present a working paper to the 42nd Session of the Assembly on this matter.
- 3.23 Pursuant to the recommendations of the AEP-ANSEP/10, five working groups were established to carry out the tasks assigned by the meeting. Results of the working groups will be reported to the Eleventh Joint Meeting of the AEP-ANSEP, which is currently scheduled for 2026.

ICAO's capacity building supports to Member States

3.24 To assist States in enhancing their capacity in air transport economic regulation, ICAO offers support in various forms such as online training, classroom/virtual training and regional workshops/seminars. Five air transport regulation online courses are available including online courses on air transport regulation, air transport regulation issues, air transport economics and air cargo. ICAO is also collaborating with Airports Council International (ACI) to offer training on airport user charges. The training is available either in classroom or format or in virtual format. ICAO has been coordinating with the Regional Offices and industry organizations to organize regional workshops/seminars on economic regulation and economic oversight.

4. ACTION BY THE CONFERENCE

- 4.1 The Conference is invited to note the information contained in this Paper.
- 4.2 The Conference is also invited consult the 42nd Session of the Assembly's website (**here**), in particular, papers that will be presented under Agenda item 26: Economic Development of Air Transport.